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THE 12TH INTERNATIONAL CONGRESS OF SOIL SCIENCE

The 12th International Congress of Soil Science took place at the Viggan Bhavan Congress Centre of New Delhi, India, from 8th to 16th February 1982. The Congress was organized, on behalf of the International Society of Soil Science, by the Indian Society of Soil Science, with the ISSS President Dr. J. S. Kanwar as Chairman of the Organizing Committee. The Indian Council of Agricultural Research (ICAR) co-sponsored the event.

There were 1115 participants, representing 70 countries. Understandably, the largest group was from India itself (about 500); sizeable delegations came from the USA, the People's Republic of China, the USSR, Japan, the Federal Republic of Germany, the Netherlands, Bangla Desh, Canada, and the United Kingdom.

The Opening Session, on Monday 8th February, was very ceremonial indeed. It had the honour of the presence of the President of India, the Hon Shri Neelam Sanjiva Reddy; the Union Minister of Agriculture, Rural Reconstruction and Civil Supplies the Hon. Shri Rao Birendra Singh; and the Minister of State for Communications the Hon. Shri Yogendra Makwana.

After words of introduction by the President of the Congress Dr. Kanwar, a welcome address was given by Dr. O. P. Gautam, Director-General of the co-sponsoring Indian Council of Agricultural Research. Thereupon the Minister of State for Communications presented the first specimens of a postal commemoration stamp, issued especially for the occasion. The Vice-President of the Congress Dr. D. R. Bhumbla then presented the first sets of the Transactions of the Congress.

In his presidential address on the over-all Congress theme 'Managing Soil Resources to Meet the Challenges to Mankind' Dr. Kanwar stressed the urgent need for useful consideration and thoughtful planning of the uses of agricultural resources, particularly the land and soil resource, considering the global problems of hunger, malnutrition, and the quality of life now and in the future. He pointed out that soil was really a non-renewable resource, and identified as major fields of attention: nutrient deficiencies and low efficiency of applied fertilizers; the recycling of organic wastes and crop residues in soil management; soil erosion and degradation; the reclamation and management of problem soils; and the removal of soil-related constraints of the tropics in general (the full text of his address is printed in part 1 of the Congress Transactions).

The Minister of Agriculture then elaborated on the great importance attached by Indian Government authorities to the scientific knowledge and sound management of its soil resources, stressing that soil conservation and environmental protection will form the main planks of India's national soils policy. He also presented first copies of the book 'Benchmark Soils of India' prepared under his authority by the National Bureau for Soil Survey and Land Use Planning.

The President of India, as Chief Guest, delivered the inaugural address. He warned against reckless deforestation and the cultivation of hilly slopes, and stressed the need for adequate drainage of irrigated lands to prevent waterlogging and salinity. During his vote-of-thanks Dr. N. N. Goswami, Secretary of the Organizing Committee presented the President with a souvenir book on the Congress.

After the departure of the official government guests, greetings and messages were delivered by Dr. M. S. Swaminathan for the UN Advisory Committee on Science and Technology for Development; by Dr. M. G. K. Menon for the Indian National Science Academy, and by Dr. Y. Nayudama for the ICSU Committee on Science and Technology for Development. The Secretary-General of ISSS, Dr. W. G. Sombroek then presented a summary of his report over the four years since the 11th Congress (for the full text see Bulletin no. 60). He also transmitted the well wishings of

the International Geographic Union, the International Association for the Study of Clays, the International Council for Research on Agroforestry, the World Meteorological Organization and the International Atomic Energy Agency.

Short addresses were given by representatives of those UN specialized agencies having contributed, financially or otherwise, to the effectuation of the Congress: Dr. R. Dudal of FAO presented copies of its recently approved World Soil Charter; Dr. F. Fournier of Unesco mentioned that organization's involvement in the soil studies for its Man-And-Biosphere programme; Dr. Golubev of UNEP elaborated on its action plan to combat desertification and its efforts to develop a World Soils Policy. Concluding remarks were delivered by Dr. N. S. Randhawa as Chairman of the Indian Society of Soil Science.

The Monday afternoon was devoted to the theme 'Soil Resources for the World's Food Production', with a keynote address by Dr. R. Dudal, Director of FAO's Land and Water Development Division. Thereafter, the Hon. Shri Vasant Sathe, Minister for Information and Broadcasting, opened the Congress Exhibition on 'Soils of India and their Management'. This consisted of a series of 36 panels highlighting all aspects of the subject, including a number of soil monoliths and a model of the new soil map of India at the scale 1:1.000.000 (Soon to appear officially as a publication of the National Bureau of Soil Survey and Land Use Planning).

From Tuesday, February 8th through Monday, February 16th each congress day started with a plenary session on a major topic like: potential of the world soils for agricultural production; soils of the semi-arid tropics; rice soils of the world; soils of mountain areas; and future of arid zones. Also some symposia took place, on respectively: Vertisols; non-symbiotic nitrogen fixation; soil management for rice production in the tropics; dynamics of soil organic matter and its management in the tropics; and desertification. An innovation were the successive Panel Discussions on 'Whither Soil Research'. At these, prominent representatives of the seven scientific Commissions, usually presentday officers, gave introductions on the actual state of knowledge and the likely orientation of future research in each branch of soil science; a lively discussion often followed. It seems certainly worthwhile to repeat such panel sessions in future congresses, as a means to mark the state-of-the-art and to sketch broad lines of research needs.

The last morning of the Congress was fully devoted to a plenary session annex symposium on a World Soils Policy, starting with a keynote speech by India's Minister of Agriculture, Rural Reconstruction and Civil Supplies.

In-between these joint events, Technical Sessions and Poster Sessions of the seven Commissions evolved. A total of 275 voluntary papers and 64 poster presentations were delivered, with those of Commissions IV and V the most proliferous. Unfortunately a number of the papers could not be presented due to absence of the authors.

The texts of all plenary sessions, symposia and panel discussions are printed in full in the Congress Transactions. The voluntary papers and poster presentations are recorded only as abstracts, but in the three official languages of the International Society and with the full address of the authors.

During the evenings of the Congress several social events took place, including an official reception, cultural performances at one of the major congress hotels, and a closing banquet. Advantage was taken of the free Sunday for a touristic trip, by most foreign participants, to ancient Agra city with its famous Taj Mahal palace; others joined a large group of Indian participants in an outing to reclamation works on sodic soils through application of pyrites, followed by a trip through several touristic sites of Delhi town. Throughout the Congress there was also a ladies' programme, much appreciated by participating dependents.

The Closing Session started with a report by the Secretary-General on the ISSS Council meetings that had taken place during the previous days (see this Bulletin) and the awarding, by acclamation, of Honorary Membership to five eminent soil scientists that have retired from active posts: Prof. Dr. Ph. Duchaufour (France); Prof. Dr. W. Flaig (FRG); Prof. Dr. V. Kovda (USSR); Prof. Dr. E. Mückenhausen (FRG); and Prof. Dr. E. W. Russell (UK). Drs. Flaig and Kovda were present at the Congress and both pronounced words of thanks for the honour bestowed on them (see this Bulletin for short eulogies on each of the new Honorary Members).

The Chairman of the seven Commissions then gave brief accounts on their respective activities (see this Bulletin for the texts) and then transferred responsibilities to their successors for the forthcoming four years through a handing over of Commission seals and function tags. Several resolutions were passed, expressing the need for national soil and land use policies; the desirability of international cooperation in land and water research and development; the appreciation for the support given to the running of the ISSS secretariat and treasury; and the feelings of thanks to the Indian hosts. The new ISSS President and Vice-President, Prof. Dr. K. H. Hartge and Prof. Dr. H. Scharpenseel respectively, were introduced and gave short talks on the venue and theme of the next Congress, to be held in Hamburg-FRG in 1986. Dr. N. N. Goswami as the Congress Secretary-General pronounced the vote-of-thanks by the host country for all contributing organisations and all persons that had been engaged in the preparation and the day-to-day running of the Congress; this was punctuated by a standing show-of-hands by all non-Indian participants. Thereupon Dr. Kanwar declared the Congress closed.

Many of the foreign participants then joined in one of the five post-Congress technical tours, studying landscapes, soils and land use, and visiting agricultural research and training institutions; enjoying an ample sprinkling of touristic and cultural elements as well. The tours were as follows:

Tour no. 1: the Indo-Gangetic alluvial plains northwest of Delhi, and the submontane and montane regions north of it (road travel);

Tour no. 2: the Indo-Gangetic alluvial plains north-east of Delhi (road travel);

Tour no. 3: the semi-desert region and semi-arid Deccan plateau between Delhi and Bombay (air travel);

Tour no. 5: the central Deccan plateau and the rolling eastern plains between Delhi, Hyderabad and Calcutta (air travel);

Tour no. 6: the southern Indian plateau and hill regions between Hyderabad and Trivandrum (air and road travel).

Impressions on these tours by some of the participants are recorded in this and the next ISSS Bulletins.

There is no doubt that the 12th Congress, the first to be organized in a so-called developing country, was a success, both technically and socially. The many Indian soil scientists that worked so hard to achieve this are to be commended for their tireless efforts and hospitality. For most foreign participants this was their first visit to the country. The presentation of so many soil research and development data by their Indian colleagues and the tours were an eye-opener for many of them as to the stage of development of this large subcontinent with its huge population and rich cultural heritage.

SG.

Note: For publications relating to the Congress see the section 'New Publications'.

At the Opening Ceremony of the 12th Congress the ISSS Vice-President Dr. D. R. Bhumbla presents a set of the Congress Transactions to the President of India, Hon. Shri N. S. Reddy, with the Indian Minister of Agriculture, Hon. Shri R. B. Singh, and the ISSS President Dr. J. S. Kanwar applauding.

The Indian Minister for Information and Broadcasting, Hon. Shri V. S. Sathe, and Dr. J. S. Kanwar inspecting the model of the new soil map of India, during the opening of the Congress Exhibition.

LE 12ème CONGRÈS INTERNATIONAL DE LA SCIENCE DU SOL

Le 12ème Congrès international de la science du sol a eu lieu au Palais des Congrès Viggan Bhavan de New Delhi, Inde, du 8 au 16 février 1982. Le Congrès était organisé pour le compte de l'AISS par la Société indienne de la science du sol. Le Président de l'AISS le Dr. J. S. Kanwar, était Président du Comité organisateur. Le Conseil indien de la recherche agricole (ICAR) a co-financé cet événement.

Il y avait 1115 participants, représentant 70 pays. On comprendra aisément que le groupe le plus important provenait de l'Inde (environ 500); des délégations bien fournies sont venues des E.U., de la R. P. de Chine, de l'URSS, du Japon, de la RFA, des Pays-Bas, du Bangladesh, du Canada et du Royaume-Uni.

La session d'ouverture, le lundi 8 février, fut très protocolaire. Le Président de l'Inde, son Excellence Shri Neelam Sanjiva Reddy, le Ministre fédéral de l'agriculture, de la reconstruction et des approvisionnements civils, son Excellence Shri Rao Birendra Singh et le Ministre d'Etat des communications, son Excellence Shri Yogendra Makwana, honorèrent la session d'ouverture de leur présence.

Après une introduction par le Président du Congrès, le Dr. Kanwar, le directeur général du Conseil indien de la recherche agricole, le Dr. O. P. Gautam, adressa la bienvenue aux participants. Le Ministre d'Etat des communications présenta les premiers spécimens d'un timbre de commémoration, émis spécialement pour l'occasion. Le Vice-président du Congrès, le Dr. D. R. Bhumbla présenta alors les premières exemplaires des Actes du Congrès.

Dans son adresse présidentielle sur le thème général du Congrés 'Aménagement des ressources du sol pour répondre au défi de l'humanité', le Dr. Kanwar mit l'accent sur le besoin urgent de réflexion utile et d'une planification réfléchie des utilisations des ressources agricoles, particulièrement les ressources en terre et en sol, prenant en considération les problèmes globaux de la faim, de la malnutrition et de la qualité de la vie, actuellement et dans le futur. Il fit remarquer que le sol était vraiment une ressource non-renouvelable et il identifia les domaines importants suivants: les déficiences nutritionnelles et la faible efficacité des engrais epandus; le recyclage des déchets organiques et des résidus de récolte dans la gestion du sol; l'érosion et la dégradation du sol; la mise en valeur et la gestion des sols difficiles et la suppression des contraintes liées au sol des tropiques en général. (Le texte complet de sa communication est imprimé dans la première partie des compte-rendus du Congrès).

Le Ministre de l'agriculture s'est alors étendu sur l'importance qu'attachent les autorités gouvernementales indiennes à la connaissance scientifique de ses ressources en sol et de leur gestion avisée. Il a insisté sur le fait que la conservation du sol et la protection de l'environnement formeront les axes principaux de la politique indienne des sols nationaux. Il a également présenté les premiers exemplaires du livre: 'Les sols-repères de l'Inde' préparé sous son autorité par le Bureau national pour la prospection des sols et la planification de l'utilisation des terres.

Le Président de l'Inde en tant qu'invité d'honneur, a prononcé le discours inaugural. Il a stigmatisé le déboisement anarchique et la culture sur pentes de collines. Il a accentué le besoin d'un drainage adéquat des terres irriguées pour éviter les terrains détrempés et la salinité. Au cours de son remerciement, le Dr. N. N. Goswami, secrétaire du Comité organisateur, offrit au Président un livre-souvenir sur le congrès.

Après le départ des invités gouvernementaux officiels, des souhaits et des messages furent prononcés par le Dr. N. S. Swaminathan pour le Comité consultatif des Nations Unies sur la science et la technologie pour le développement; par le Dr. M. G. K. Menon pour l'Académie nationale indienne des sciences; et par le Dr. Y. Nayudama pour le Comité ICSU sur la science et la technologie pour le développement.

Le Secrétaire général de l'AISS, le Dr. W. G. Sombroek, présenta alors un résumé

de son rapport sur les quatre années passées depuis le 11ème Congrès (pour le texte complet, voir Bulletin no. 60). Il a aussi transmis les souhaits de réussite de l'Union internationale de géographie, de l'Association internationale pour l'étude des argiles, du Conseil international pour la recherche sur la sylviculture agricole, de l'Organisation météorologique mondiale et de l'Agence internationale de l'énergie atomique.

De courtes communications furent données par des représentants des agences spécialisées des N.U. qui ont contribué, financièrement ou d'autre manière, à la bonne conduite du Congrès: le Dr. R. Dudal de la FAO présenta des exemplaires de la Charte des sols du monde, récemment approuvée; le Dr. F. Fournier de l'Unesco mentionna la participation de cette organisation aux études de sols pour son programme 'L'homme et la biosphère'. Le Dr. Golubev de l'UNEP détailla son plan d'action pour combattre la désertification et ses efforts pour développer une Politique mondiale des sols. Des conclusions furent tirées par le Dr. N. S. Randhawa, en tant que Président de la Société indienne des sciences du sol.

Le lundi après-midi fut consacré au thème 'Les ressources du sol pour la production alimentaire mondiale', avec une communication-clé du Dr. R. Dudal, directeur de la Division pour le développement des terres et des eaux de la FAO. Son excellence Shri Vasant Sathe, Ministre de l'information et de la diffusion a ensuite ouvert l'exposition du Congrès sur 'Les sols de l'Inde et leur aménagement'. Elle comportait une série de 36 panneaux éclairant tous les aspects du sujet, en ce compris un nombre de monolithes de sol et un modèle de la nouvelle carte pédologique de l'Inde à l'échelle du 1.000.000ème (cette carte paraîtra bientôt officiellement comme publication du Bureau national de la prospection des sols et de la planification de l'utilisation des terres).

A partir du mardi 8 février jusqu'au lundi 16 février, chaque journée commença pour une session plénière sur un sujet majeur tel que: le potentiel des sols mondiaux pour la production agricole; les sols des régions tropicales semi-arides; les sols de rizière dans le monde; les sols des zones montagneuses; et l'avenir des zones arides. Quelques symposiums ont également eu lieu sur: les 'Vertisols'; la fixation azote non-symbiotique; la gestion du sol pour la production de riz sous les tropiques; la dynamique de la matière organique du sol et sa gestion sous les tropiques; et la désertification. Une innovation étaient les discussions en table ronde. Sur 'par où la recherche sur les sols'. Lors de ces discussions, d'éminents représentants des sept Commissions scientifiques, habituellement des membres du bureau actuel, ont présenté l'état actuel de la connaissance et l'orientation probable des recherches futures dans chaque branche de la science du sol. Une discussion animée a souvent suivi. Il semble certainement valable de refaire de pareilles sessions en table ronde dans les Congrès futurs, comme moyen de marquer l'état d'avancement et de tracer à grands traits les besoins en recherche.

La dernière matinée du Congrès a été entièrement consacrée à un symposium annexe en session plénière sur la politique mondiale des sols, débutant avec un discours-clé par le Ministre indien de l'agriculture, de la reconstruction rurale et des approvisionnements civils.

Entre ces événements connexes, des sessions techniques et des sessions-expositions de sept Commissions ont continué. Au total 275 articles et 64 présentations d'exposition ont été fournis, ceux des Commissions IV et V étant les plus nombreux. Malheureusement, un certain nombre d'articles n'ont pas pu être présentés, leurs auteurs étant absents.

Les textes de toutes les sessions plénières, des symposiums et des discussions en table ronde sont imprimés en entier dans les Actes du Congrès. Les articles et les présentations-exposition sont seulement notés en résumé, mais dans les trois langues officielles de l'Association internationale et avec l'adresse complète des auteurs.

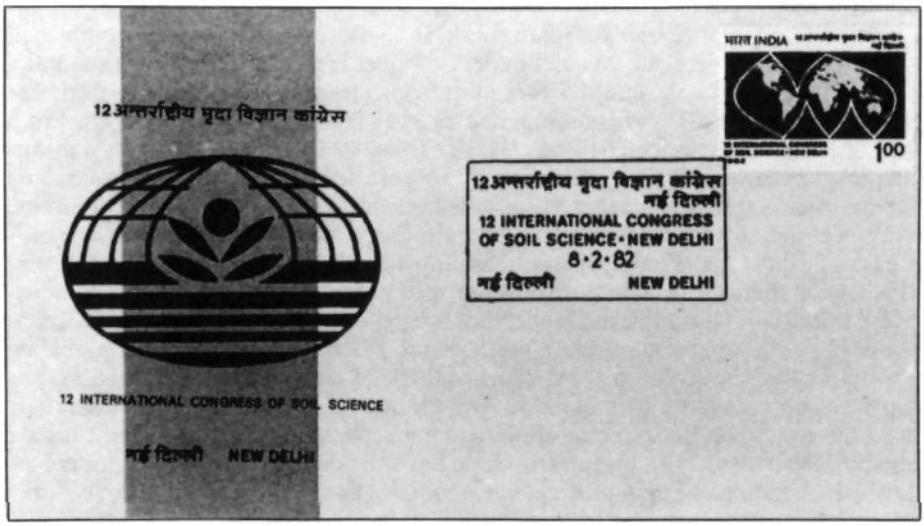
Pendant les soirées du Congrès, des mondanités ont eu lieu, en ce compris une récep-

tion officielle, des représentations Culturelles à l'un des hôtels principaux du Congrès et un repas de clôture. Le dimanche a été mis à profit par les participants étrangers pour effectuer un voyage touristique à l'ancienne cité d'Agra avec son célèbre palais Taj Mahal; d'autres se sont joints à un groupe important de participants indiens dans une visite aux travaux de mise en valeur des sols sodiques par application de pyrite, suivie d'un voyage à travers des sites touristiques de la ville de Delhi. Durant tout le Congrès il y a aussi un programme pour les dames, très apprécié par les participantes.

La session de clôture commença par un rapport du Secrétaire général sur les réunions du Conseil de l'AISS et l'attribution par acclamations du titre de membre honoraire à cinq pédologues éminents qui se sont retirés de la vie active: Prof. Dr. Ph. Duchaufour (France); Prof. Dr. W. Flaig (RFA); Prof. Dr. V. Kovda (URSS); Prof. Dr. E. Mückenhausen (RFA) et Prof. Dr. E. W. Russell (GB). Les Drs Flaig et Kovda étaient présents au Congrès et ont tous les deux prononcé des mots de remerciements pour l'honneur qui leur était fait (Voir ce Bulletin pour de brefs panégyriques sur chacun de nouveaux membres honoraires).

Les présidents des sept Commissions ont alors exposé brièvement leurs activités respectives (voir ce bulletin pour les textes) et ont alors transféré les responsabilités à leurs successeurs pour les quatre années à venir en leur remettant les seaux et marques des commissions.

Plusieurs résolutions ont été adoptées, exprimant la nécessité de politiques nationales d'utilisation des sols et des terres; l'attrait de la coopération internationale pour la recherche et le développement de la terre et de l'eau; l'appréciation pour le support



Le nouvel emblème de l'AISS était omniprésent au Congrès. Il figurait aussi sur la couverture d'un timbre spécial de commémoration.

donné au fonctionnement du secrétariat et de la trésorerie de l'AISS; et les remerciements aux hôtes indiens. Les nouveaux Président et Vice-président de l'AISS, les Prof. Dr. K. H. Hartge et H. Scharpenseel, ont été présentés et ont prononcé de brèves allocutions sur le lieu et le thème du prochain congrès qui aura lieu à Hambourg, RFA, en 1986. Le Dr. N. N. Goswami en tant que secrétaire général du Congrès a remercié de la part du pays accueillant aux organisations participantes et personnes qui ont travaille à la préparation et à la bonne marche du Congrès; cela a été ponctué

par un applaudissement de tous les participants non-indiens. Ci-après le Dr. Kanwar a déclaré le Congrès clos.

Beaucoup des participants étrangers ont alors rejoint une des cinq excursions techniques d'après-Congrès, étudiant les paysages, les sols, l'utilisation des terres et visitant des institutions de recherche agricole et d'enseignement; ils ont profité de l'occasion pour faire du tourisme et visiter des centres culturels nombreux. Les excursions étaient comme suit:

No. 1: les plaines alluviales Indo-Gange au N-O de Delhi et les régions submontagneuses et montagneuses au Nord de Delhi (voyage par route)

No. 2: les plaines alluviales Indo-Gange au N-E de Delhi (voyage par route)

No. 3: la région semi-désertique et le plateau semi-aride du Deccan entre Delhi et Bombay (voyage par avion)

No. 5: le plateau du Deccan central et les plaines accidentées de l'est entre Delhi, Hyderabad et Calcutta (voyage par avion)

No. 6: le plateau indien du sud et les régions des collines entre Hyderabad et Trivandrum (voyage par air et par route).

Les impressions de ces voyages par quelques-uns des participants sont consignées dans le présent bulletin et le suivant.

Il ne fait aucun doute que le 12ème Congrès, le premier à être organisé dans un pays soit-disant en voie de développement, fut un grand succès, à la fois techniquement et socialement. Les nombreux pédologues indiens qui ont tant oeuvré pour accomplir ce travail doivent être felicités pour leurs efforts incessants et leur hospitalité. Pour la plupart des participants, c'etait leur première visite dans ce pays. La présentation de tant de recherches pédologiques et les données de développement par leurs collègues indiens, ainsi que les voyages, ont été un révélateur pour beaucoup d'entre eux quant au degré de développement de ce grand sous-continent avec son énorme population et son héritage culturel très riche.

SG.

Note: Pour les publications en rapport avec le Congrès, vour la section 'Nouvelles publications'.

The Organising Committee of the 1986 Congress requests members to suggest themes suitable for symposia on the occasion of the Hamburg Congress. The suggestions should be in accordance with the motto of the Congress: 'DEMANDS ON SOILS – INCREASING IN VARIETY AND INTENSITY', and should reach the Chairman of the relevant Commission or Subcommission not later then the end of September 1982.

Le Comité d'Organisation du Congrès 1986 demande aux membres de proposer des thèmes convenables pour symposiums à l'occasion du Congrès de Hambourg. Les propositions doivent être en rapport avec la devise du Congrès 'DEMANDES AUX SOLS – CROISSANT EN DIVERSITÉ ET INTENSITÉ, et peuvent être envoyées au Président de la Commission ou Sous-commission pertinente, jusqu'à la fin du septembre 1982.

Das Organisationskomitee des 1986 Kongresses bittet die Mitglieder um Vorschläge für Themen zur Symposien anlässlich des Hamburger Kongresses. Die Vorschläge müssen zum Motto des Kongresses passen: 'BEANSPRÜCHUNGEN DER BÖDEN – IN MANNIGFALTIGKEIT UND INTENSITÄT ZUNEHMEND', und bis zum Ende Septembers 1982 an den Vorsitzenden der fachlich nächstliegenden Kommission oder Subkommission geschickt werden.

DER 12. INTERNATIONALE BODENKUNDLICHE KONGRESS

Der 12. Internationale Bodenkundliche Kongress fand vom 8–16.2.1982 im Vigyan-Bhavan-Kongress-Zentrum in Neu Delhi statt. Er war von der Indischen Bodenkundlichen Gesellschaft für die Internationale Bodenkundliche Gesellschaft organisiert worden. Dr. J. S. Kanwar, Präsident der IBG war Vorsitzender des Organisationskomitees. Der indische 'Beirat für Landwirtschaft' (ICAR) hatte die Ausrichtung unterstützt.

Die Teilnehmerzahl betrug 1115 Personen aus etwa 70 Ländern. Verständlicherweise kamen die meisten der Teilnehmer aus Indien (etwa 500). Kopfstarke Gruppen kamen aus den VSA, der VR China, Japan, der Bundesrepublik Deutschland, den Niederlanden, Bangladesh, Kanada und Großbritannien.

Die Eröffnungssitzung am Montag, 8.2. war eine eindrucksvolle Zeremonie. Sie wurde durch die Anwesenheit des Staatspräsidenten der Indische Union Exz, Shri N.S. Reddy, des Unions-ministers für Landwirtschaft, Landbau und Ernährung Exz. Shri R. B. Singh und des Staatsministers für Verkehr Exz. Shri Y. Makwana geehrt.

Nach einer Einführung durch den Kongress-Präsidenten Dr. Kanwar wurde der Kongress durch Dr. O. P. Gautam, Direktor des Beirates für Landwirtschaft (ICAR) begrüßt. Der Staatsminister für Verkehr präsentierte das erste Exemplar der Kongress-Sondermarke, die eigens für dieses Ereignis herausgebracht worden war. Anschließend präsentierte der Vizepräsident des Kongresses Dr. D. R. Bhumbla den ersten Satz der Kongressberichte.

In seiner Eröffnungsansprache zum Motto des Kongresses 'Die Nutzung der Bodenressourcen als Antwort auf die Herausforderung an die Menschheit' betonte Präsident Dr. Kanwar die Notwendigkeit pfleglicher und weitgeplanter Nutzung der landwirtschaftlichen Möglichkeiten speziell des verfügbaren Bestandes an Böden im Lichte der Gefahren von Hunger, Unterernährung, und im Hinblick auf die allgemeine Lebensqualität heute und morgen. Er wies darauf hin, daß der Boden ein nicht erneuerbares Gut ist und daß Nährstoffmangel, geringe Düngungseffizienz, Rezyclierung organischer Abfallstoffe, Erosion und Degradation dieses Gut verändern (Volltext im Bd I der Kongressberichte).

Der Landwirtschaftsminister führte anschließend aus, welche große Bedeutung die Indische Regierung der wissenschaftlichen Erfassung der Böden und ihrer sachgemäßen Nutzung beimißt, wobei Boden/Umwelterhaltung wesentliche Leitlinien geben.

Er präsentierte sodann das Erstexemplar des Buches 'Leitbodenprofile Indiens', das unter seiner Leitung von der Kartierungsbehörde erstellt worden war. Sodann hielt der Ehrengast – der Präsident von Indien – eine Begrüßungsansprache. Er warnte u. a. vor gewissenloser Waldvernichtung, vor Inkulturnahme zu steiler Hänge und betonte die Bedeutung der Dränung bei bewässertem Land. Der Sekretär des Organisations-Komitees Dr. N. N. Goswami überreichte dem Präsidenten einen Erinnerungsband des Kongresses als Dank.

Nach Auszug der Ehrengäste wurden Grußworte gesprochen von Dr. M. S. Swaminathan für dans UN-Beraterkomitee für Wissenschaft und Technologie, von Dr. M. G. K. Menon für die Indische Akademie der Wissenschaften, von Dr. Y. Nayudama für das ICSU-Komitee für Wissenschaft und Technologie für Entwicklung.

Der Generalsekretär der IBG Dr. W. G. Sombroek gab anschließend einen Kurzbericht über die Geschehnisse seit dem 11. Kongress (Volltext s. Bulletin Nr. 60). Er überbrachte ferner die Grübe der Internationalen geographischen Union, der Internationalen Gesellschaft für Tonmineralforschung, dem Internationalen Rat für Agroforst-Verfahren, der meteorologischen Weltorganisation und der Internationalen Atomenergie Behörde.

Anschließend hielten die Vertreter derjenigen UN-Behörden kurze Aussprachen, die finanziell oder auf andere Art zum Gelingen des Kongresses beigetragen hatten.

Dr. R. Dudal (FAO) präsentierte einige Exemplare ihres kürzlich officiell eingeführten 'Welt-Boden-Charte'.

Dr. F. Fournier (UNESCO) berichtete über die Studien seiner Organisation zum Programm 'Mensch und Biosphäre'. Dr. Golubev (UNEP) erläuterte sein Programm zur Bekämpfung der Verwüstung und seine Bemühungen um eine einheitliche Welt-Boden-Politik. Abschließend begrüßte Dr. N. S. Randhawa als Präsident der Indischen Bodenkundlichen Gesellschaft den Kongress.

Montag Nachmittag war dem Thema 'Bodenreserven für die Nahrungsmittelproduktion' gewidnet, zu dem Dr. R. Dudal, Direktor der FAO Abteilung für Entwicklung von Land and Gewässer, einen Einführungsvortrag hielt. Anschließend eröffnete Exz. Shri Vasant Sathe, Minister für Information und Rundfunk der Ausstelling 'Indische Böden und ihre Bewirtschaftung'. Sie bestand aus 36 Tafeln, einer Anzahl von Monolithen und einem Modell der neuen indischen Bodenkarte 1:1 Mill (Erscheint demnächst beim indische 'Amt für Bodenforschung und -Nutzungsplanung').

Von Dienstag (8.2) bis Montag (16.2) begann jeder Tag mit einer Plenarsitzung zu einem Thema wie: 'Potential der Böden der Welt für Nahrungsmittelproduktion, Böden der semiariden Tropen, Reisböden in allen Weltteilen, Böden der Bergregionen, die Zukunft der ariden Zonen'. Außerdem fanden Symposien statt über Vertisole, nicht-symbiotische N-Bindung, Bodenbewirtschaftung im tropischen Reisanbau, die Dynamik der organischen Substanz und ihre Behandlung in den Tropen. Eine Neuerung bildete die erfolgreiche Podiomsdiskussion zum Thema 'Wohin führt die Bodenforschung'. Zu diesen Thema gaben 7 prominente Teilnehmer, meist die amtierenden Mitglieder der Kommissionsvorstände Einführung und Überblick über Stand und wahrscheinliche Weiterentwicklung der Kenntnisse in ihrem jeweiligen Bereich. Oft folgte darauf eine lebhafte Diskussion. Es erschien vielversprechend, eine derartige Veranstaltung auf künftigen Kongressen zu wiederholen, um den neuesten Stand aufzuzeigen und die weitere Entwicklung in großen Zügen aufzuzeichnen.

Der letzte Vormittag war einer Plenarsitzung zum Thema Welt-Boden-Probleme gewidmet, die durch eine Ansprache des Ministers für Landwirtschaft, Landbau und Ernährung eingeleitet wurde.

Die Texte aller Plenarsitzungen, Symposien und Podiumsdiskussionen sind in den Kongressberichten im vollen Wortlaut abgedruckt. Einzelbeiträge vom Kommissionssitzungen und Posterpräsentationen liegen nur als Abstrakt gedruckt vor, jedoch jeweils in den drei Kongress-Sprachen und mit der vollen Anschrift der Autoren.

Abends fanden während des Kongresses etliche gesellschaftliche Veranstaltungen statt, unter anderen ein offizieller Empfang, kulturelle Veranstaltungen in einem der großen Hotels sowie ein Abschlußbankett. Der freie Sonntag wurde zu einem touristischen Ausflug zur alten Stadt Agra mit dem Taj-Mahal-Palast genutzt, an dem die meisten ausländischen Teilnehmer sich beteiligten. Andere schlossen sich einer größeren Gruppe indischer Kollegen an, die eine Rekultivierung Na-reicher Böden mit Pyrit besuchten und danach Sehenswürdigkeiten in New Delhi besichtigten.

Während des ganzen Kongresses lief ein Rahmenprogramm, das von den begleitenden Damen und Herrn sichtlich genossen wurde.

Die Schlußsitzung begann mit einem Bericht des Generalsekretärs über die Beiratssitzungen der letzten Tage (s. Bull.) und der Ernennung der Ehrenmitglieder, die per Akklamation erfolgte. Fünf bekannten Wissenschaftlern, die sich aus der aktiven Tätigkeit zurückgezogen haben, wurde diese Ehrung zuteil: Prof. Dr. Ph. Duchaufour (Frankreich), Prof. Dr. W. Flaig (BRD), Prof. Dr. V. Kovda (USSR), Prof. Dr. E. Mückenhausen (BRD) und Prof. Dr. E. W. Russell (Großbritannien).

Die Herren Flaig und Kovda waren auf dem Kongress anwesend und bedankten

sich mit herzlichen Worten für die empfangene Ehrung (Laudationes im Bulletin).

Die Vorsitzenden der 7 Kommissionen gaben anschließend Berichte über ihre Tätigkeiten (s. Bulletin) und übertrugen sodann ihre Ämter formell durch Übergabe von Siegel und Ansteckzeichen an ihre Amtsnachfolger.

Danach wurden mehrere Resolutionen angenommen, die der Notwendigkeit nationaler Boden-Nutzungspolitiken und internationaler Zusammenarbeit in Wasser- und Bodenfragen betrafen. Die Unterstützung, die Sekretariat und Schatzamt zuteil wurde, wurde ausdrücklich anerkannt und der Dank and die indischen Gäste ausgesprochen.

Präsident und Vizepräsident der beginnenden Amtsperiode, Prof. Dr. K. H. Hartge und Prof. Dr. H. Scharpenseel wurden vorgestellt und erläuterten in kurzen Worten die Einladung zum nächsten Kongress in Hamburg 1986.

Kongress-Sekretär Dr. N. N. Goswami sprach im Namen der Gastgeber Dankesworte an alle, die an Vorbereitungen und Durchführung des Kongresses beteiligt gewesen waren. Dies wurde durch lebhaftes Beifallklatschen aller nicht-indischen Teilnehmern auf das herzlichste unterstrichen. Danach schloß Dr. Kanwar den Kongress.

Viele ausländische Teilnehmer nahmen and den 5 Nachkongresstouren teil auf denen Landschaften, Böden und ihre Nutzung sowie Forschungs- und Ausbildungsstellen besichtigt wurden und außerdem auch touristische und kulturelle Aspekte zu ihrem Recht kamen.

Folgende Touren wurden durchgeführt:

1. Indo-gangetische Alluvial- Ebenen NW von Neu Delhi, submontane und montane Regionen nördlich davon (Bus)
2. Indo-gangetische Alluvialebenen NO von Neu Delhi (Bus)
3. Halbwüstenregionen und semiarides Deccan Plateau zwischen Neu Delhi und Bombay (Flugzeug).
5. Zentrales Deccan-Plateau und Östliches Hügelland zwischen Neu Delhi, Hyderabad und Kalkutta (Flugzeug).
6. Südindisches Plateau und Bergland zwischen Hyderabad und Trivandrum (Flugzeug-Bus)

Erlebnisberichte über diese Touren durch Teilnehmer waren in diesem und dem nächsten Bulletin abgedruckt.

Es besteht kein Zweifel, daß der 12. Kongress – der erste der in einem sogenannten Entwicklungsland organisiert wurde – sowohl technisch als auch menschlich gesehen ein Erfolg war. Den vielen indischen Bodenkundlern, die hart gearbeitet haben um dies zu erreichen, sei dies gern und ausdrücklich bestätigt. Die meisten ausländischen Gäste waren zum ersten Mal in Indien – für sie war der Einblick in Forschung und Entwicklung in der Bodenkunde ein einmaliges Erlebnis, das den Entwicklungsstand dieses volkreichen Subkontinents mit seiner reichen kulturellen Geschichte eindrucksvoll darstellte.

Gs.

The handing-over of the ISSS Presidency from Dr. J. S. Kanwar to Prof. Dr. K. H. Hartge at the Closing Ceremony of the 12th Congress.

REPORT ON THE 1982 ISSS COUNCIL

The Council met seven times during the Congress. In addition to all Executive Committee members there were representatives of 32 national societies.

The Bureau

The report of the Secretary-General and that of the Treasurer over the period 1978–1982 were approved. The Council also approved the Bye-laws as proposed by the Standing Committee on Rules and published in Bulletin 59.

Finances

Upon recommendation by an ad-hoc Committee of Finances, the Council decided that the Society should ultimately be in a position to cover the costs of functioning of the Secretariat completely from it own means. To reach this the Council decided that:

- Henceforward 10% of the registration fees of the General Congress should be transferred to the ISSS Treasurer. The same applies to all inter-Congress meetings in which ISSS – through its Commissions and Working Groups – is the main organiser.
- Membership fees will be raised from 5 to 9 US Dollars, effective 1st January 1983.
- A voluntary life membership will be instaured at a minimum rate of 200 US Dollars per member (for details see this Bulletin).
- A sustaining membership be instaured at a minimum of 1000 US Dollars.

Bulletin and Membership List

- The Membership list will be published once every four years, in a computerized form.
- The Bulletin should remain essentially a new bulletin, of modest size.
- Negotiations will be pursued with national Societies of substantial ISSS membership on ways and means to reduce postal charges for Bulletin and Membership list, and to ensure that these materials reach members without delay.

Fellows Fund

Upon a proposal by the Dutch Society a fund will be established to promote active participation of young soil scientists of developing countries in Congresses in general, and regional inter-Congress meetings and Workshops in particular.

Initial inlay in the fund would be by ad-hoc increases in membership fees of national Societies, hopefully to be supplemented by donations from organisations, agencies and companies who have a vested interest in the promotion of soil science applications.

Details on the administration of such a fund will be worked out by the Standing Committee on Rules.

Venue of the next Congress

The Council unanimously accepted that the 13th Congress be hosted by the Deutsche Bodenkundliche Gesellschaft and that it take place in Hamburg – FRG in August 1986.

Election of new Officers

Prof. Dr. K. H. Hartge was appointed as the new President of ISSS, and Prof. Dr. H. W. Scharpenseel as new Vice-President. Both are from the Federal Republic of Germany, in accordance with the Rules. Dr. W. G. Sombroek, Prof. Dr. I. Szabolcs and Dr. D. Gabriels, were re-appointed as Secretary-General, Deputy-Secretary General and Treasurer respectively.

After voting for nominated candidates in the Commission sessions, and screening of the results by a Nominating Committee in accordance with the Rules and the Bye-

laws, the following Officers of the existing Commissions and Sub-Commissions were declared elected (see table on page 20).

The third Vice-Presidents and the Secretaries of the Commissions and the third Vice-Presidents of the Subcommissions will be appointed by the host Society of the next Congress, the Deutsche Bodenkundliche Gesellschaft.

Immediately after the confirmation of the election results, the Council decided that additional Bye-laws are to be drawn up by the Committee-on-Rules, giving detailed regulations for the process of election of Officers of Commissions and Sub-Commissions, to ensure both scientific capacity and a fair distribution over countries.

New Sub-Commissions

Upon a proposal from the Brazilian Society a third Sub-Commission was created, with the name 'Soil Conservation and Environment', and a Steering Committee for it was appointed. It is chaired by Dr. K. Flach (USA). The objectives and charges will be published in the next Bulletin and the status of this new subcommission will be formalised at the next Congress.

Working Groups

The mandates of the Working Groups on Soil Conditioning, un Humic Substances, on Cryogenic Soils, and on Nomenclature of Hydromorphic Soils were declared terminated, partly with immediate effect, partly at the end of 1982.

A number of Working Groups continued their mandates and had their Chairman appointed, or re-appointed, as follows:

- Soil Fertility Testing (Comm. IV): Dr. E. Von Boguslavski (FRG)
- Soil Information Systems (Comm. V): Dr. A. Moore (Australia)
- Desertification (Comm. V, to move to the new sub-commission C after a change of name): Dr. H. Dregne (USA)
- Forest Soils (to be renamed; Comm. V for the time being): Dr. R. Saly (Czechoslovakia)
- Paleopedology (Comm. V): Dr. D. Yaalon (Israel)
- Remote Sensing for Soil Survey (Comm. V): Dr. S. Bialousz (Poland)
- Land Evaluation (Comm. VI): Dr. K. Beek (Holland).

New working Groups were created as follows:

- Engineering Properties of Soils (Comm. VI): Dr. G. Wilson (Canada)
- Acid Sulphate Soils (Comm. V): Dr. L. Pons (Holland)
- Soil Colloid Surfaces (Comm. II): Dr. G. Bolt (Holland)
- History, Philosophy and Sociology of Soil Science (Comm. V): Dr. D. Yaalon (Israel)
- Analysis of spatial and temporal variability of moisture in field soils (Comm. I): Dr. D. Nielsen (USA)
- Development of an International Reference Base for Soil Classification (Comm. V): Dr. E. Schlichting (FRG).

Inter-Congress Meetings

The Council approved a total of 28 Inter-Congress activities, of which 7 concern co-sponsoring only.

The 21 meetings where ISSS is a main organiser are as follows (see listing on page 23 of this Bulletin).

Honorary Members

The Council decided to award five new Honorary Memberships, in accordance with the Rules and Bye-laws (see this Bulletin).

Most of the members of the ISSS Council, immediately after its closing session. Front row, left to right: Prof. Dr. I. Szabolcs (Deputy Secretary-General), Dr. D. Gabriels (Treasurer), Prof. Dr. D. H. Yaalon (Israel), Dr. D. R. Nielsen (Chairman Commission I), Prof. Dr. A. Hoyos de Castro (Spain), Prof. Dr. E. Schlichting (Chairman Commission V), Dr. D. R. Bhumbla (Vice President), Dr. J. S. Kanwar (President), Prof. Dr. K. H. Hartge (President-elect), Prof. Dr. H. W. Scharpenseel (Vice President-elect), Dr. T. M. Chaudry (Pakistan), Dr. N. S. Randhawa (India), Prof. Dr. C. F. Bentley (1st Past President), Dr. M. Schnitzer (Chairman Commission II) and Dr. M. Al-Raziq (Sudan).

An informal discussion on the status of Subcommissions. Left to right: Dr. P. Bullock (Subcommission on Soil Micromorphology), Prof. Dr. E. G. Hallsworth (Committee on Rules), Dr. K. Flach (new Subcommission on Soil Conservation and Environment) and Dr. W. G. Sombroek (Secretary-General).

RAPPORT DU CONSEIL DE L'AISS, 1982

Le Conseil s'est rencontré sept fois pendant le Congrès. En plus de tous les membres du Comité exécutif, il y avait des représentatants de 32 Sociétés nationales.

Le Bureau

Le rapport du Secrétaire général et celui du Trésorier pour la période 78–82 ont été approuvés. Le Conseil a aussi approuvé le règlement additionnel proposé par le Comité permanent du règlement, publié dans le Bulletin no. 59.

Finances

Sur recommandation d'un Comité de finances ad-hoc, le Conseil a décidé que l'Association devrait ultérieurement pouvoir couvrir complètement les frais de fonctionnement du Secrétariat, par ses propres moyens. Pour atteindre ce but, le Conseil a décidé que:– Désormais 10% des frais d'inscription au Congrès général doit être transféré au Trésorier de l'AISS. Il en va de même de toutes les réunions internationales pour lesquelles l'AISS – par l'intermédiaire de ses Commissions et Groupes de Travail – est l'organisateur principal.

– Les cotisations passeront de 5 à 8 dollars US, à partir du 1-1-83.

– Une adhésion à vie volontaire sera instaurée au tarif minimum de 200 dollars US par membre (voir ce bulletin pour des détails).

– Une adhésion 'membre protecteur' sera instaurée et vaudra au moins 1000 dollars US.

Bulletin et liste de membres

– La liste de membres sera publiée une fois tous les quatre ans, sous forme informatisée.

– Le Bulletin devrait rester essentiellement un bulletin de nouvelles, de taille modeste.

– Des négociations seront poursuivies avec les sociétés nationales ayant beaucoup de membres AISS sur les moyens de réduire les coûts postaux pour le bulletin et la liste de membres, et pour assurer que ces envois arrivent chez les membres sans délai.

Fonds d'appui

Sur proposition de la Société néerlandaise un fonds sera établi pour promouvoir la participation active de jeunes pédologues des pays en voie de développement dans les congrès en général, et dans les réunions régionales 'entre-congrès' et les réunions de travail en particulier.

La constitution initiale du fonds serait faite par une augmentation ad-hoc des cotisations des Sociétés nationales, et nous l'espérons, augmentées de donations d'organisations, d'agences et de compagnies qui ont un intérêt dévolu à la promotion des applications pédologiques.

Les détails de l'adminstration d'un tel fonds seront mis au point par le Comité permanent du règlement.

Lieu du prochain Congrès

Le Conseil a accepté unanimement que le 13e Congrès soit accueilli par le Deutsche Bodenkundliche Gesellschaft et ait lieu à Hambourg, République fédérale d'Allemagne, en août 1986.

Election de nouveaux Membres du Bureau

Le Prof. Dr. K. H. Hartge a été désigné comme nouveau Président de l'AISS, et le Prof. Dr. H. W. Scharpenseel comme nouveau Vice-président. Tous les deux résident dans le pays invitant, en accord avec les statuts. Le Dr. W. G. Sombroek, le Prof. Dr. I. Szabolcs et le Dr. D. Gabriels ont été redésignés comme, respectivement, Secrétaire général, Secrétaire général adjoint et Trésorier.

Après un vote pour les candidats désignés dans les sessions des Commissions et après avoir passè en revue les résultats d'un Comité de désignation en accord avec les règlements, les membres suivants du bureau des Commissions et Sous-commissions existantes ont été déclarés élus (voir table à page 20).

Les troisièmes Vice-présidents et les Secrétaires des Commissions et les troisièmes Vice-présidents des Sous-commissions seront désignés par la Société invitant du prochain Congrès, le Deutsche Bodenkundliche Gesellschaft.

Immédiatement après confirmation des résultats des élections, le Conseil a décidé qu' un règlement de l'ordre intérieur additionnel devra être élaboré par le Comité du règlement relatif au déroulement d'élection des membres du bureau des Commissions et Sous-commissions, pour assurer à la fois une valeur scientifique et une distibution équitable par pays.

Nouvelle Sous-commission

Sur proposition de la Société brésilienne, une troisième Sous-commission a été créée, avec pour titre 'Conservation du sol et environnement', et un Comité d'organisation a été désigné. Il est présidé par le Dr. K. Flach (EUA). Les objectifs et devoirs seront publiés dans le prochain bulletin et le statut de cette nouvelle Sous-commission sera formalisé lors du prochain Congrès.

Groupes de Travail

Les mandats des Groupes de Travail sur le Conditionnement du sol, les Substances humiques, les Sols cryogéniques et sur la Nomenclature des sols hydromorphes, ont été déclarés terminés, partiellement avec effet immédiat, partiellement à la fin '82.

Un certain nombre de Groupes de Travail ont continué leur mandat et ont vu leur Président désigné ou redésigné, comme suit:

- Essais de fertilité des sols (Co. IV): Dr. E. Von Boguslawski (FRG)
- Informatique en pédologie (Co. V): Dr. A. Moore (Australie)
- Désertification (Co. V, à déplacer vers la nouvelle Sous-commission C après un changement de nom): Dr. H. Dregne (EUA).
- Sols forestiers (à rebabtiser; Co. V pour le moment): Dr. R. Saly (Tchècoslovaquie)
- Paléopédologie (Co. V): Dr. D. Yaalon (Israël)
- Pédologie et télédétection (Co. V): Dr. S. Bialousz (Pologne)
- Evaluation des terres (Co. VI): Dr. K. Beek (Pays-Bas).

De nouveaux Groupes de Travail ont été créés:

- Propriétés constructuelles des sols (Co. VI): Dr. G. Wilson (Canada)
- Sols sulfatés acides (Co. V): Dr. L. Pons (Pays-Bas).
- Surfaces des colloïdes de sol (Co. II): Dr. G. Bolt (Pays-Bas).
- Histoire, philosophie et sociologie de la pédologie (Co. V): Dr. D. Yaalon (Israël)
- Analyse de la variabilité spatiale et temporelle de l'humidité des sols sur le terrain (Co. I): Dr. D. Nielsen (EUA)
- Développement d'une Base internationale de référence pour la classification des sols (Co. V): Dr. E. Schlichting (RFA).

Réunions entre-Congrès

Le Conseil a approuvé un total de 28 activités entre-Congrès, parmi lesquelles sept seulement seront de co-parrainage.

Les 21 réunions où l'AISS est l'organisateur principal sont comme suit (voir p. 23 dans ce bulletin).

Membres honoraires

Le Conseil a décidé de conférer cinq titres nouveaux de Membre honoraire, en accord avec les règlements (voir ce bulletin).

TÄTIGKEITSBERICHT DES IBG-BEIRATES 1982

Der Beirat tagte während des Kongresses 7 mal. Außer den kraft ihres Amtes anwesenden Mitgliedern waren Vertreter von 32 nationalen Gesellschaften anwesend.

Der Vorstand. Die Berichte von Generalsekretär und Schatzmeister wurden gebilligt. Die Ausführungsbestimmungen (By-laws) des Satzungskomitees (Bull. Nr. 59) wurden gebilligt.

Finanzen. Auf Empfehlung eines Finanzkomitees beschloß der Beirat, daß die Gesellschaft in die Lage versetzt werden soll, die Betriebskosten des Sekretariats vollständig aufzubringen.

Zu diesem Zweck beschloß der Beirat:

- Hinfort sollen 10% der Teilnahmegebühr am allgemeinen Kongress an den IBG-Schatzmeister abgeführt werden. Das gleiche gilt für alle zwischenzeitlichen Veranstaltungen, bei denen die IBG durch Kommissionen und Arbeitsgruppen Hauptorganisator ist.
- Mitgliedsbeiträge werden mit Wirkung vom Januar 1983 von 5 auf 8 US-Dollar erhöht.
- Mitgliedschaft auf Lebenszeit wird eingerichtet. Der Mindestbeitrag ist 200 US-Dollar je Person (Details siehe Bulletin).

Förderungsmitgliedschaft wird mit einem Minimalbetrag von 1000 US-Dollar eingerichtet.

Bulletin und Mitgliederverzeichnis

- Mitgliederlisten werden alle 4 Jahre im Computerdruck herausgegeben.
- Das Bulletin soll im wesentlichen ein Nachrichtenblatt mit mäßigem Umfang bleiben.
- Mit den größeren nationalen Gesellschaften soll verhandelt werden, um Postgebühren für Versand und Mitgliederlisten und Bulletins herabzusetzen und sicherzustellen, daß diese den Mitgliedern schnell zukommen.

Stipendien-Fonds

Auf Vorschlag der niederländischen nationalen Gesellschaft soll ein Fonds eingerichtet werden, der aktiven jungen Wissenschaftlern aus Entwicklungsländern die Teilnahme an Kongressen sowie an zwischen-zeitlichen Tagungen und Arbeitssitzungen erleichtern soll.

Einlagen in diesen Fonds sollen durch zweckgebundene Beitragserhöhungen in Nationalen Gesellschaften sowie hoffentlich durch Zuwendungen von Organisationen und Firmen zusammenkommen, die Interesse an der Vertretung und Anwendung der Bodenkunde haben.

Verwaltungsvorschriften für diesen Fonds werden vom ständigen Satzungskomitee erarbeitet.

Zum nächsten Kongress

Der Beirat beschloß einstimmig, daß der IBG-Kongress – einer Einladung der DBG folgend – im August in Hamburg (Bundesrepublik Deutschland) abgehalten wird.

Neue Amtsträger

Satzungsgemäß wurden als Präsident und Vizepräsident die von der einladenden Gesellschaft vorgeschlagenen Mitglieder bestätigt. Es sind als Präsident Prof. Dr. K. H. Hartge, als Vizepräsident Prof. Dr. H. W. Scharpenseel. Dr. W. G. Sombroek, Prof. Dr. I. Szabolcs und Dr. D. Gabriels wurden als Generalsekretär, stellvertretender Generalsekretär und Schatmeister wiedergewählt. Nachdem in der Kommission aus dem Kreise der nominierten Kandidaten gewählt und das Ergebnis satzungsgemäß

vom Nominationskomitee überprüft worden war, wurden die auf Tabelle S. 20 zusammengestellten Mitglieder als Präsident bzw. Vizepräsident der jeweiligen Kommission gewählt erklärt. Die dritten Vizepräsidenten und Sekretäre der Kommission bzw. Subkommission werden durch die Gastgeber des nächsten Kongresses – die DBG – bestimmt.

Sofort nach Bestätigung der Wahlergebnisse beschloß der Beirat, daß das Satzungskomitee detailierte Wahlregeln ausarbeiten soll um sicherzustellen, daß die Amtsträger in Kommission und Subkommission sowohl hinsichtlich der wissenschaftlichen Kapazität als auch hinsichtlich der regionalen Vertretung der Mitgliederländer eine angemessene Verteilung darstellen.

Neue Subkommission

Auf Vorschlag der brasilianischen Gesellschaft wird eine Subkommission 'Bodenerhaltung und Umwelt' eingerichtet und ein Gründungsgremium wurde eingesetzt. Vorsitz ist Dr. Flach (USA). Nähere Ziele und Einzelheiten werden im nächsten Bulletin mitgeteilt. Die Subkommission soll auf dem nächsten Kongress formal eingesetzt werden.

Arbeitsgruppen

Folgende Arbeitsgruppen wurden – teils mit sofortiger Wirkung, teils zum Ende 1982 – aufgelöst: Bodenstrukturverbesserung, Humusbestandteile, Kryogene Böden, Nomenklatur hydromorpher Böden

Die folgenden Arbeitsgruppen wurden bestätigt, ihre Vorsitzenden gewähtl bzw. wiedergewählt:

- Bodenfruchtbarkeitsproben (Kom IV): Dr. E. Von Boguslawski (BRD)
- Informationssysteme i. d. Bodenkunde (Kom. V): Dr. A Moore (Australien)
- Verwüstung (Kom. V) nach Namensänderung zur neuen Subkommission C zuzuschlagen): Dr. H. Dregne (VSA)
- Waldböden (umzubenennen Kom. V vorläufig): Dr. R. Saly, Tschechoslowakei
- Paläeopedologie (Kom. V): Dr. D. Yaalon (Israël)
- Fernerkundung für Bodenkartographie (Kom. V): Dr. S. Bialousz (Polen)
- Landbewertung (Kom. VI): Dr. K. Beek (Niederlande)

Folgende Arbeitsgruppen wurden neu eingerichtet:

- Ziviltechnische Eigenschaften von Böden (Kom. VI): Dr G. Wilson (Kanada)
- Saure Sulfatböden (Kom. V): Dr. L. Pons (Niederlande)
- Kolloidale Oberflächen in Böden (Kom. II): Dr. G. Bolt (Niederlande)
- Geschichte, Philosophie und Soziologie der Bodenkunde (Kom. V): Dr. D. Yaalon (Israël)
- Veränderlichkeit von Bodenfeuchtgehalt im Gelände (Kom. I): Dr. D. Nielsen (VSA).
- Entwicklung einer internationalen Referenzbasis für Bodenklassifikation (Kom. V): Dr. E. Schlichting (BRD).

Interkongress Sitzungen

Der Beirat billigte insgesamt 28 Interkongress Sondersitzungen. Bei 7 von ihnen beschränkt sich die Tätigkeit der IBG auf Annahme einer Patenschaft.

Die 21 Treffen, bei denen die IBG Hauptorganisator ist, sind auf Seite 23 dieses Bulletins aufgelistet.

Ehrenmitglieder

Der Beirat ernannte in Übereinstimmung mit den Regeln und Gesetzen, 5 neue Ehrenmitglieder (siehe dieses Bulletin).

TABLE OF NEW OFFICERS OF ISSS COMMISSIONS
TABLEAU DES NOUVEAUX BUREAUX DES COMMISSIONS
TABELLE DER NEUE VORSTÄNDE DER IBG KOMMISSIONEN

		Chairman Président Vorsitzende	Past Chairman Ancien Président Vorh. Vorsitzende	1st Vice Chairman 1er Vice-Président 1. Vizevorsitzende
I	SOIL PHYSICS PHYSIQUE DU SOL BODENPHYSIK	Dr. S. S. Prihar India	Dr. D. R. Nielsen USA	Dr. D. Hillel USA
II	SOIL CHEMISTRY CHIMIE DU SOL BODENCHEMIE	Prof. M. Hayes UK	Dr. M. Schnitzer Canada	Prof. J. K. Syers New Zealand
III	SOIL BIOLOGY BIOLOGIE DU SOL BODENBIOLOGIE	Prof. P. B. Tinker UK	Prof. E. A. Paul USA	Dr. M. K. Sinha India
IV	SOIL FERTILITY AND PLANT NUTRITON FERTILITÉ DU SOL ET NUTR. DES PLANTES B.FRUCHTBARKEIT U PFL. ERNÄHRUNG	Dr. N. Randhawa India	Prof. C. Hera Romania	Dr. D. A. Rennie Canada
V	SOIL GENESIS, CLASS. AND CARTOGRAPHY GENÈSE DU SOL, CLASS. ET CARTOGRAPHIE B.GENETIK, KLASS. U KARTOGRAPHIE	Prof. R. W. Arnold USA	Prof. E. Schlichting BRD	Dr. L. D. Swindale India
VI	SOIL TECHNOLOGY TECHNOLOGIE DU SOL BODENTECHNOLOGIE	Dr. G. Várallyay Hungary	Prof. C. Sys Belgium	Dr. J. S. P. Yadav India
VII	SOIL MINERALOGY MINERALOGIE DU SOL BODENMINERALOGIE	Dr. J. B. Dixon USA	Prof. U. Schwertmann BRD	Prof. A. Herbillon Belgique
A	SALT AFFECTED SOILS SOLS SALINS SALZBÖDEN	Dr. I. P. Abrol India	Prof. I. Szabolcs Hungary	Dr. A. Osman Syria
B	SOIL MICROMORPHOL. MICROMORPH. DU SOL BODENMIKROMORPH.	Prof. C. Stoops Belgium	Dr. P. Bullock UK	Dr.J.A.McKeague Canada
C	SOIL CONSERVATION AND ENVIRONMENT CONSERV. DU SOL ET ENVIRONNEMENT BODENERHALTUNG UND UMWELT	Dr. K. W. Flach USA	Dr. T. De-Meester (Kenya), Dr. F. Fournier	

AND SUBCOMMISSIONS, 1982–1986
ET SOUS-COMMISSIONS DE L'AISS, 1982–1986
UND SUBKOMMISSIONEN, 1982–1986

2nd Vice Chairman 2ème Vice-Président 2. Vizevorsitzende	3rd Vice Chairman 3ème Vice-Président 3. Vizevorsitzende	Secretary Secrétaire Sekretär	Assessor Assesseur Assessor
Dr. M. L. Sharma Australia	Dr. W. Ehlers BRD	Dr. R. R. van der Ploeg BRD	
Dr. N. N. Goswami India	Dr. G. Brümmer BRD	Dr. H. Wiechmann BRD	
Dr. S. P. Mathur Canada	Prof. J. C. G. Ottow BRD	Dr. G. Trolldenier BRD	
Prof. A. Agboola Nigeria	Prof. A. Jungk BRD	Prof. K. Mengel BRD	
Prof. B. Rozanov USSR	Dr. D. Heide BRD	Prof. G. Schröder BRD	
Dr. W. E. Larson USA	Dr. Th. Diez BRD	Dr. T. Harrach BRD	
Dr. C. W. C. Childs New Zealand	Dr. E. A. Niederbudde BRD	Dr. K. Stahr BRD	
Prof. I. Pla Sentis Venezuela	Dr. J. Breburda BRD	Dr. W. E. Hanna Iraq	Dr. B. Yaron Israel
Dr. J. L. Sehgal India	Dr. H. J. Altemüller BRD	Mr. R. Miedema Holland	Dr. N. Fedoroff France
(France), Dr. R. Lal (Nigeria) and Dr. F. Lombardi (Brazil)			Dr. S. A. El-Swaifi USA

Notes to Officers Table/Comments sur le Tableau des Bureaux/Hinweise zum Vorstandstabelle

- The Chairmen and 1st and 2nd Vice Chairmen of all Commissions and the Subcommissions A and B as well as the Secretaries of Subcommissions A and B were elected at the 12th Congress. The 3rd Vice Chairmen and the Secretaries of the Commissions as well as the 3rd Vice Chairmen of the Subcommissions A and B were appointed by the Organising committee of the host country of the next Congress (FRG). The organising Chairmen/Secretaries of the respective inter-Congress meetings of the Subcommissions are identified informally as Assessors. The officers of the new Subcomm. C were appointed by the ISSS Council, as Steering Committee.
- *Les Présidents et les premiers et seconds Vice-Présidents de toutes les Commissions et des Sous-commissions A et B, de même que les Secrétaires des Sous-commissions A et B ont été élus au cours du 12e Congrés. Les 3e Vice-Présidents et les Secrétaires des Commissions de même que les 3e Vice-Présidents des Sous-commissions A et B ont été désignés par le Comité d'organisation du pays où aura lieu le prochain congrès (R.F.A.). Les Présidents ou Secrétaires des réunions inter-congrès des Sous-commissions sont indiqués informellement, comme Assesseurs. Les membres du bureau de la nouvelle Sous-commission C ont été désignés par le Conseil de l'AISS, comme Comité d'Organisation.*
- Die Vorsitzenden und die 1. und 2. stellvertretenden Vorsitzenden aller Kommissionen und der Unterkommissionen A und B sowie die Sekretäre der Unterkommissionen A und B wurden auf dem 12. Kongreß gewählt. Der 3. stellvertretende Vorsitzende und die Sekretäre der Kommissionen sowie die 3. stellvertretenden Vorsitzenden der Unterkommissionen A und B wurden von dem Organisationskomitee des Gastgeberlandes des nächsten Kongresses (BRD) ernannt. Die organisierenden Vorsitzenden/Sekretäre der entsprechenden Treffen der Unterkommissionen zwischen den Kongressen werden informell als Beisitzer gekennzeichnet. Die Verantwortlichen der neuen Unterkomm. C wurden durch den IBG-Beirat ernannt, als Organisationsausschuß.

- For the Addresses of the Chairmen see cover pages of this Bulletin/*Les adresses des Présidents sont indiquées sur les pages de couverture de ce Bulletin*/Für die Adressen der Vorsitzenden siehe Umschlagseiten dieses Mitteilungsblatt.
- For the addresses of the Past Chairmen and Vice Chairmen, see the new ISSS Membership List/*Les adresses des Anciens Présidents et Vice-Présidents figureront dans la nouvelle Liste des Membres de l'AISS*/Für die Adressen der vorherigen Vorsitzenden und stellvertretenden Vorsitzenden siehe neue IBG-Mitgliederliste.
- The addresses of the Commission Secretaries are as follows/*Les adresses des Secrétaires de Commission sont les suivantes*/Die Adressen der Kommissionssekretäre sind folgende:

I Dr. R. R. van der Ploeg, Institut f. Bodenkunde und Standortslehre, Univ. Hohenheim, Emil-Wolff-Str. 27, 7000 Stuttgart 70, BRD.

II Prof. Dr. H. Wiechmann, Inst. f. Bodenkunde, Nussallee 13, 5300 Bonn 1, BRD.

III Dr. G. Trolldenier, Landwirtschaftliche Forschungsanstalt Büntehof, Bünteweg 8, 3000 Hannover 71, BRD.

IV Prof. Dr. K. Mengel, Inst. f. Pflanzenernährung, Südanlage 6, 6000 Giessen, BRD.

V Prof. Dr. D. Schröder, Universität Trier, FB III Geographie, Abt. Bodenkunde, Postfach 3825, 5500 Trier, BRD.

VI Prof. Dr. T. Harrach, Institut f. Bodenkunde und Bodenerhaltung, Wiesenstr. 3–5, 6300 Giessen, BRD.

VII Prof. Dr. K. Stahr, Institut f. Ökologie, FG Bodenkunde, Englerallee 19–21, 1000 Berlin 33, BRD.

APPROVED ISSS INTER-CONGRESS MEETINGS, PERIOD 1982–1986
RÉUNIONS ENTRE-CONGRÈS APPROUVÉE PAR L'AISS, PÉRIODE 1982–1986
GEBILLIGTE IBG INTERKONGRESS TAGUNGEN, ZEITRAUM 1982–1986

September/septembre 1982 – Louvain-la-Neuve, Belgium/Belgique/Belgien:
- 8th International Colloquium on Soil Zoology: Commission III
- *8ème Colloque international sur la zoologie du sol: Commission III*
- 8. Internationales Kolloquium über Bodenzoologie: Kommission III.

February/février/Februar 1983 – Maracai, Venezuela:
- International Workshop on Salt-affected Soils of Latin America: Subcomm. A
- *Réunion internationale de travail sur les sols salins d'Amérique latine: Sousc. A*
- Internationale Arbeitssitzung über Salzböden Lateinamerikas: Subkommission A

July/juillet/Juli 1983 – Reading, England/Angleterre:
- International Meeting on Biological Processes and Sol Fertility: Commissions III and IV
- *Réunion internationale sur les processus biologiques et la fertilité du sol: Commissions III et IV*
- Internationale Sitzung über biologische Prozesse und Bodenfruchtbarkeit: Kommissionen III und IV

November/novembre 1983 – Karnal, India/Inde/Indien:
- International Workshop on afforestation of Salt-affected Soils: Subcommission A
- *Réunion internationale de travail sur le reboisement des sols salins: Souscomm. A*
- Internationale Arbeitssitzung über Aufforstung von Salzböden: Subkommission A

End/fin/Ende 1983 – Dakar, Senegal/Sénégal:
- 4th Symposium on Remote Sensing for Soil Survey: Working Group RS
- *4ème Symp. sur la télédétection pour la cartographie des sols: Groupe de Trav. RS*
- 4. Symposium über Fernerkundung für Bodenkartographie: Arbeitsgruppe RS

End/fin/Ende 1983 – Addis Abeda, Ethiopia/Ethiopie/Äthiopien:
- International Workshop on Land Evaluation for Range Management and Nomadic Grazing: Working Group LE
- *Réunion internationale de travail sur l'évaluation des terres pour le ranching et la transhumance: Groupe de Travail LE*
- Internationale Arbeitssitzung über Landbewertung für Grünlandwirtschaft und nomadische Viehhaltung: Arbeitsgruppe LE

February/février/Februar 1984 – Dacca, Bangladesh:
- International Symposium Soil Test and Crop Response Correlation Studies: Commission IV
- *Symposium international sur les études sur la corrélation des analyses du sol avec la réponse des plantes: Commission IV*
- Internationales Symposium über Studien zur Korrelation von Bodenuntersuchung und Verhalten der Kulturplanzen: Kommission IV

March/mars/März 1984 – Tel Aviv, Israel/Israël:
- International Symposium on the Management of Soil Salinity under Irrigation: Subcommission A

– *Symposium internationale sur la maîtrise de la salinité du sol sous irrigation: Sous-commission A*
– Internationales Symposium über die Behandlung von Bodensalinität unter Bewässerung: Subkommission A

August/août 1984 – Budapest/Boudapest, Hungary/Hongrie/Ungarn:
– International Symposium on the Mapping of the Soil-Water Balance: Commissions I, V and VI, in cooperation with the International Society of Agricultural Engineering (CIGR)
– *Symposium international sur la cartographie du balance hydrique des sols: Commissions I, V et VI en collaboration avec la Commission internationale de génie rural (CIGR)*
– Internationales Symposium über Kartierung der Bodenwasserhaushaltung: Kommissionen I, V und VI, in Zusammenarbeit mit der Internationalen Gesellschaft für Landtechnik (CIGR)

End/fin/Ende 1984 – Enschede, Netherlands/Pays-Bas/Niederlande:
– International Workshop on Land Evaluation for Assessment of Soil Erosion Hazards: Working Group LE
– *Réunion internationale de travail sur l'évaluation des terres pour l'estimation des risques d'érosion des sols: Groupe de Travail LE*
– Internationale Arbeitssitzung über Landbewerttng zur Feststellung von Bodenerosionsrisiken: Arbeitsgruppe LE

January/janvier/Januar 1985 – Dakar, Senegal/Sénégal:
– 3rd International Symposium on Acid Sulphate Soils: Working Group AS
– *3ème Symposium international sur les sols sulfatés acides: Groupe de Travail AS*
– 3. Internationales Symposium über saure Sulfatböden: Arbeitsgruppe AS

March/mars/März 1985 – Brasilia, Brazil/Brésil/Brasilien:
– International Conference on the Characterization and Management of Soils originally under Tropical Savannah Vegetation: Commissions IV, V and VI
– *Conférence internationale sur la caractérisation et l'aménagement des sols couverts originellement par une savane tropicale: Commissions IV, V et VI*
– Internationale Konferenze über Beschreibung und Bewirtschaftung von Böden ursprüngl. unter tropischer Savannenvegetation: Kommissionen IV, V und VI

July/juillet/Juli 1985 – Denver, Colorado, U.S.A./E.U.A./V.S.:
– International Conference on Minerals in Various Soil Environments and their Use in Soil Classification: Commission V and VII, in cooperation with the International Clay Mineral Society (AIPEA)
– *Conférence internationale sur les minéraux rencontrés dans différents milieux pédologiques et leur application dans la classification des sols: Commissions V et VII, en collaboration avec l'Association Internationale pour l'Etude des Argiles (AIPEA)*
– Internationale Konferenz über Minerale in verschiedener Bodenumwelt und ihre Benutzung für die Bodenklassifizierung: Kommissionen V und VII, in Zusammenarbeit mit der Internationalen Gesellschaft f. Tonminerale (AIPEA)

Mid/mi/Mitte 1985 – Hungary/Hongrie/Ungarn:
– International Symposium on Soil Biology and Conservation of the Biosphere: Commission III
– *Symposium international sur la biologie du sol et la conservation de la biosphère: Commission III*

– Internationales Symposium über Bodenbiologie und Erhaltung der Biosphäre: Kommission III

May/mai/Mai 1985 – Reims, France/Frankreich:
– 7th International Meeting on Soil Micromorphology: Subcommission B
– *7ème Réunion internationale sur la micromorphologie des sols: Sous-commission B*
– 7. Internationale Sitzung über bodenmikromorphologie: Subkommission B

July/juillet/Juli 1985 – Ibadan, Nigeria:
– International Conference on Land Clearing and Post-clearing Management for Soils of the Humid Tropics: Commissions IV and VI
– *Conférence internationale sur le défrichement des terres et l'aménagement ultérieur des sols des tropiques humides: Commissions IV et VI*
– Internationale Konferenz über Rodung und anschliessende Bodenbewirtschaftung für Böden der humiden Tropen: Kommissionen IV und VI

September/septembre 1985 – Wageningen, Netherlands/Pays-Bas/Niederlande:
– International Symposium on Water Movement in Heavy-clay Soils: Comm. I and V
– *Symposium international sur le mouvement de l'eau dans les sols argileux lourds: Commissions I et V*
– Internationales Symposium über Wasserbewegung in schweren Tonböden: Kommissionen I und V
Note: After the Congress the date of this meeting was changed to august 1984.

November/novembre 1985 – Khartoum, Sudan/Soudan:
– International Symposium on Desertification: Commission V and Subcomm. C
– *Symposium international sur la désertification: Commission V et Sous-comm. C*
– Internationales Symposium über Verwüstung: Kommission V und Subkomm. C

Undated/non daté/ohne Termin – India/Inde/Indien:
– International Symposium on Sandy Soils Amelioration: Commission VI
– *Symposium international sur l'amélioration des sols sableux: Commission VI*
– Internationales Symposium über die Melioration von Sandböden: Kommission VI

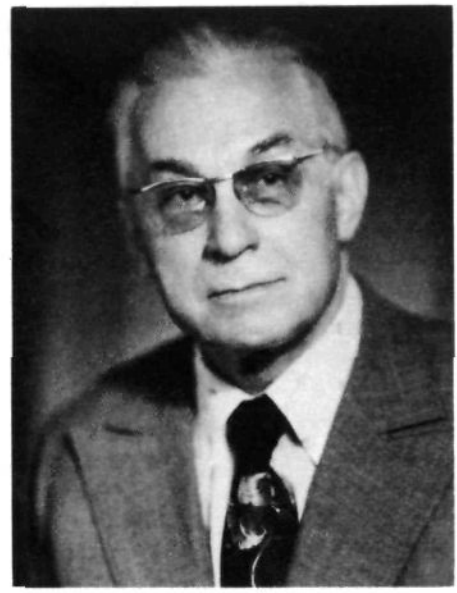
Undated/non daté/ohne Termin – Bulgaria/Bulgarie/Bulgarien:
– International Working Meeting on Classification and Management of Soils of Mountainous Areas: Commissions V and VI
– *Réunion internationale de travail sur la classification et l'aménagement des sols des régions montagneuses: Commissions V et VI*
– Internationales Arbeitssitzung über Klassifizierung und Bewirtschaftung von Böden gebirgiger Regionen: Kommissionen V und VI

Undated/non daté/ohne Termin – China/Chine:
– International Symposium on the Genesis, Classification and Management of Soils of the Humid Subtropics: Commissions V and VI
– *Symposium international sur la genèse, la classification et l'aménagement des sols des régions subtropicales humides: Commissions V et VI*
– Internationales Symposium über Genese, Klassifizierung und Nutzung von Böden der humiden Subtropen: Kommissionen V und VI

For addresses see list of Meetings, etc./*Pour les adresses, voir la liste des Réunions, etc.*/ Adressen finden sich auf der Liste Tagungen, usw.

THE NEWLY ELECTED HONORARY MEMBERS OF ISSS
LES MEMBRES HONORAIRES DE L'AISS NOUVELLEMENT ELUS
DIE NEUGEWAHLTEN EHRENMITGLIEDER DER IBG

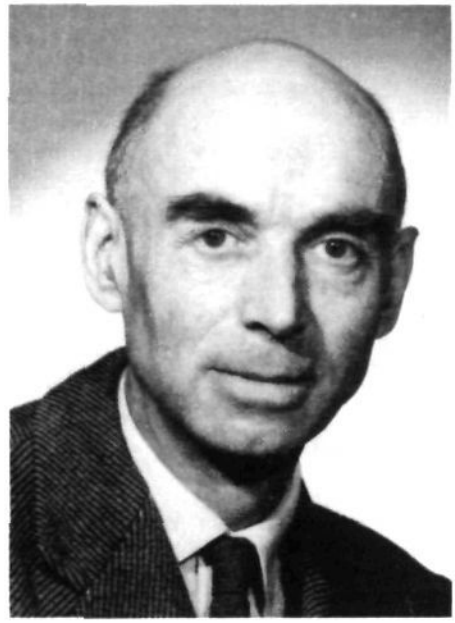
Victor Kovda (USSR)
Prof. Dr. V. A. Kovda has been a member of the ISSS for nearly half a century. During his active service, as Professor of Moscow University and Director of UNESCO's Division of Natural Sciences, he assisted and supported the International Society of Soil Science in many ways. He had a large share in the establishment of the International Soil Museum as well as in the preparation of the FAO-Unesco Soil Map of the World. His achievements in the field of soil salinity as well as in soil geochemistry and genetics are well known internationally. He was Chairman of Commission V from 1956 to 1960 and President of ISSS from 1970 to 1974.



Wilhelm Flaig (BRD)
Herrn Prof. Dr. Wilhelm Flaig, ehemaliger Direktor des Instituts für Biochemie in Braunschweig, ist einer der Mitbegrundern der modernen Bodenbiochemie.

Seine Forschungsarbeiten widmete er hauptsächlich die organische Substanze des Bodens. Wegen seine neue Erkenntnisse auf diesem Gebiet erlangte er internationale Anerkennung. Er lieferte Beiträge in der Isotopenforschung als auch in andere moderne Techniken der experimentelle Bodenkunde. Im laufe der Zeit ist eine recht eindrucksvolle Reihe von Publikationen erschienen, manchmal in Zusammenarbeit mit andere Forschern, zum Beispiel: 'Chemical composition and physical properties of humic substances' (1975, Springer-Verlag), und 'Organic materials and soil productivity' (1977, FAO). Prof. Flaig war Vorsitzende und Vice-Vorsitzende der 2. Kommission der IBG, in welcher Eigenschaft er manche Kongresse und Konferenzen miterlebte.

Philippe Duchaufour (France)
Prof. Dr. Ph. Duchaufour, ancien Chef du Département des Sols à l'Université de Nancy et Directeur honoraire du Centre de pédologie du CNRS, Nancy, est arrivé à des résultats éclatants dans les domaines de la théorie et de l'application des sciences du sol. Il a étudié notamment le transport de masse et d'énergie dans les processus du pédogenèse et il était à l'origine de nouvelles interprétations concernant le génèse, la physique et la chimie de plusieurs types de sol importants. Il a aussi contribué d'une façon éminente à la classification des sols. Il rédigeait plusieurs manuels et beaucoup d'articles. Les ouvrages qui lui ont donnés une réputation mondiale ont paru sous les titres suivants: 'Précis de pédologie' (1960, 1965 et 1970), 'L'évolution des sols' (1968), 'Atlas écologique des sols du monde' (1976) qui est d'ailleurs traduit en anglais, et tout dernièrement 'Pédologie' destiné à remplacer l'ancien 'Précis'.
Depuis longtemps Prof. Duchaufour etait un membre de l'AISS qui a pris part dans ses activités.



Edward Walter Russell (UK)
Prof. Dr. E. W. Russell, until his retirement in 1970 held the Chair of Soil Science at the University of Reading, and served on numerous UK government and international committees. His achievements in the study of soils and their fertility are outstanding. Throughout his career he travelled widely and he is well known to soil scientists throughout the world. He always shared his encyclopedic knowledge with colleagues young and old. He wrote and edited a large number of publications and his book 'Soil Conditions and Plant Growth' (8th, 9th and 10th editions) is one of the most known books of the subjects all over the world. Prof. Russell has been member of ISSS since 1935 and served as Chairman of Commission IV and as Vice Chairman of Commission VI.

Prof. Dr. phil., Dr. rer. techn., Dr. rer. nat. h. c. Eduard Mückenhausen 75 Jahre alt und neues Ehrenmitglied

Seinen Geburtstag, der am Mittwoch, den 17. Februar 1982 war, feierte Kollege Mückenhausen im Kreis der Institutsangehörigen. Am gleichen Tag ernannte ihn auch die Internationale Bodenkundliche Gesellschaft in Neu Delhi zum Ehrenmitglied.

Das Institut für Bodenkunde an der Universität Bonn war von ihm 1955 begründet und bis 1975 geleitet worden. Auch bis heute noch ist er fast täglich im Institut tätig und dem Hause nach wie vor eng verbunden.

Die Verdienste Mückenhausens um die Bodenkunde sind groß. So hat er u.a. von 1946 bis 1955 maßgeblich und richtungsweisend in der bodenkundlichen Landesaufnahme im Geologischen Landesdienst gewirkt. Danach wandte er sich in Bonn der bodenkundlichen Forschung und Lehre zu. Von dieser Tätigkeit zeugen mehr als 120 Schriften, die Mitarbeit in neun Handbüchern und drei eigene Bücher. Bis jetzt hat er mehr als 30 Schüler promoviert. Schüler Mückenhausens befinden sich in maßgeblichen Stellen der Verwaltung und Forschung des In- und Auslandes. Vor und nach seiner Berufung wurden Mückenhausen zwei weitere Ordinariate und hohe Stellen in der Verwaltung angeboten. Diese Angebote nahm er nicht an, weil er die Arbeiten in Bonn fortsetzen wollte.

Der Schwerpunkt seiner Arbeit war und ist die Systematik der mitteleuropäischen Böden. Hierzu legte er bereits 1952 den ersten Entwurf vor und gründete in der Deutschen Bodenkundlichen Gesellschaft den 'Arbeitskreis für Bodensystematik', dessen Federführender er wurde und ohne Unterbrechung auch heute noch ist. Aus dieser Tätigkeit gingen u.a. seine Bücher 'Die wichtigsten Böden der Bundesrepublik Deutschland' (1957, 1959) und die ergänzte Neuauflage 'Entstehung, Eigenschaften und Systematik der Böden der Bundesrepublik Deutschland' hervor (1962, 1977). In diesen Werken ist nicht nur die gültige wissenschaftliche Systematik der mitteleuropäischen Böden niedergelegt, sondern Mückenhausen hat sich auch stets und erfolgreich für die praktische Anwendbarkeit seiner Systematik eingesetzt.

In den vergangenen Jahren hat er außerdem einen umfassenden Überblick über die gesamte Bodenkunde in dem Werk 'Die Bodenkunde und ihre geologischen, geomorphologischen, mineralogischen und petrologischen Grundlagen' (1975) verfaßt, einen aus der Geologie gewachsenen Grundriß dieses Faches.

Mückenhausen hat in zahlreichen Gremien mitgearbeitet. So u.a. in einer Arbeitsgruppe der FAO, als Dekan der Landwirtschaftlichen Fakultät, Senator der Universität Bonn, Vizepräsident und Präsident der Deutschen Bodenkundlichen Gesellschaft, Vizepräsident der IBG 1954/56 (Kommission V) und 1964/66 (Kommission VII).

In Anerkennung seiner Verdienste wurden ihm Ehrungen zuteil, u.a. von der Polnischen Bodenkundlichen Gesellschaft und den Universitäten Gent und Helsinki. Er ist Mitglied der Königlichen Schwedischen Akademie der Land- und Forstwirtschaft, der Königlichen Akademie von Belgien und der Finnischen Akademie der Wissenschaften, Ehrenmitglied der Deutschen und der Sowjetischen Bodenkundlichen Gesellschaft sowie Ehrendoktor der Universität Mainz.

Dem neuen Ehrenmitglied und dem bedeutenden Forscher und Lehrer, vor allem aber auch dem sympathischen und stets hilfsbereiten Menschen Eduard Mückenhausen gratuliert die Internationale Bodenkundliche Gesellschaft recht herzlich und wünscht ihm weiterhin Gesundheit und Erfolg.

H. Zakosek, Bonn, BRD

ECHOS FROM THE TOURS
ÉCHOS DES EXCURSIONS
BERICHTE ÜBER STUDIENREISEN

Post-Congress Tour No. 6, to Penninsular India

Tour 6 (February 17–25, 1982) took its 49 participants across four states of the Pennisular India. It covered the dryland agriculture in the Anhra Pradesh and Karnataka; the tea plantations and potato terraces on the steep slopes in the scenic tropical highlands of Tamil Nadu; and the lush green rice paddies and coconut groves in the lowland humid tropics of Kerala.

The presence of many prominent ISSS members and their wives, such as Dr. and Mrs. C. F. Bentley, Dr. and Mrs. H. W. Scharpenseel, Dr. Udo Schwertmann, Dr. Zhu Zuxiang, Dr. W. G. Sombroek, Dr. Joe Dixon, and Dr. Hari Eswaran to name a few, added extra enthusiasm among the participants and hosts alike.

The tour began at Hyderabad on February 17th. Participants visited the headquarters of the All-India Coordinated Rice Improvement Project (AICRIP), AP Agricultural University and the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT). Soil fertility management research at AICRIP gave emphasis on nitrogen use efficiency of irrigated paddy rice. We visited field experiments with lysimeter installation using N-15 tagged fertilizers. AP agricultural University at Hyderabad has close collaboration with ICRISAT on graduate research and training.

Dr. S. M. Virmani gave us a brief but excellent tour of ICRISAT. As Vertisols are the most abundant soils in the semi-arid region of central India, ICRISAT Farming Systems staff are conducting useful research on water, tillage and fertility management on Vertisols which enable farmers to plant two seasons of upland crops such as sorghum, millet, pigeon pea and maize. Traditionally, farmers in this region cultivate Vertisols only during the dry season, whereas the land is left uncropped during the rainy season. Such practice often causes serious soil erosion due to lack of ground cover. The group also examined two well-prepared profile pits at the ICRISAT Farm. The well-drained profile was classified as Udic Rhodustalf; clayey, mixed, isohyperthermic (Soil Taxonomy), or Chromic Luvisol (FAO/Unesco). The soil contains 'high activity clay' as NH_4OAc-CEC amounts to 45 meq/100 g of clay. Most part of the A horizon of such Alfisol landscapes has been eroded as the land has been under cultivation for thousands of years. The Vertisol pedon was classified as Typic Paleustert (Soil Taxonomy), or Pellic Vertisol (FAO).

Dr. Fred Bentley noted that industrialization has taken place in a fast pace arround ICRISAT and Panacheru during the past 10 years. Like what has happened in Europe and North America, prime agricultural land is being used for factory sites. Such uncontrolled land changes in use will certainly affect future food production in many developing countries with a large population to feed. 'We need a soil policy!' he said.

The tour of Karnataka state was highlighted by the visit to the Regional Center of National Bureau of Soil Survey and Landuse Planning at Bangalore. Participants examined the excellent display of soil monoliths of bench-mark soils of India. The center is also responsible for national soil correlation. An unusual monolith (Subramanya Series) drew strong attention to both pedologists and mineralogists. The profile has a yellowish appearance; but a closer examination reveals that it contains high amount of reddish iron concretions (mainly hematite) throughout the profile. According to Udo Schwertmann, the reddish hematite-rich concretions are apparently coated with yellowish goethite particles formed as a result of the present wetter climate and soil moisture regime that favour the dissolution of hematite and reprecipitation of goethite.

At Bangalore, the group also visited Gandhi Krishi Vigyan Kendra (GKVK) or the Gandhi University of Agricultural Sciences, the Horticulture Research Institute, and the All-India Coordinated Project on Dryland Agriculture (AICRPDA) at Hayatnagar. At the AICRPDA research farm, we examined an Alfisol pedon derived from granitic gneiss (Oxic Haplustalf or Ferric Luvisol). Again it is a highly eroded profile as a result of long-term cultivation. Micromorphological observations by Dr. Maja Kooistra indicated some clay movement but it was interrupted by strong soil animal activities (e.g. termites and ants), a common phenomenon occuring in soils in the tropical regions which may be considered as part of the soil forming process. The soil may be of kaolinitic mineralogy judging from its low clay activity (NH_4OAc-CEC less than 24 meq/100g clay). Major management problems are surface crusting, low soil organic matter level (0.6% organic C in the surface soil) and soil moisture stress due to unreliable rainfall distribution. Finger millet (ragi) and groundnuts are the major crops grown on such soils. Deep tillage is a recommended practice as it improves seedling establishment, crop root growth and soil moisture conservation. Maize is also grown in areas when rainfall distribution is favourable. Ragi is an excellent dry land crop. The crop is well-adapted to erratic rainfall and poor soils. It has an ability of continuing headformation whenever rainfall is favourable. This also allows farmers to harvest the crop several times during the growing season.

Bangalore is a well-planned city with tree-lined boulevards. On the way from Bangalore to Mysore, we visited the irrigated farming of paddy rice and sugarcane centered around Mandya and made a brief stop at the GKVK University Research Farm near Mandya. This area has extensive flood plains and river terraces situated among scenic granite and granodiorite hills. Irrigated rice farming is common in this area wherever there is ample water supply. It was rice transplanting season and it was done by teams of women dressed in colorful sari. In contrast to the endless rice paddies and distant granite hills, it was such a beautiful scene that it made all the cameras clicking.

The Bangalore-Mysore region is situated on a granitic plateau with an average altitude about 1000m. Besides the irrigated agriculture of rice and sugarcane in the flat lowland, upland rainfed agriculture includes ragi, sorghum, cowpea, grape vines supported by hand-cut granite poles, and mulberry for silkworm feed. Farmers in the region appear prosperous and enjoy a fairly high standard of living.

At Mysore, we paid a brief visit to the majestic Mysore Palace and were exposed to a bit of Indian and British history through viewing the colourful large wall paintings inside the Palace.

On February 21st, the group drove through the breath-taking Nilgiri Hills, the tropical highland region (altitude 1500m to 2500m) of the Tamil Nadu State. We visited the Silver Cloud tea plantation and process facilities near Gudalur. Tea were planted between rows of silver oak trees to provide shading. We were told that tea plantation in the region started around 1820 and high-quality tea grows between altitudes of 1400 to 2000 m. Small farmers in the highland also cultivate potatoes, wheat, barley and vegetables on well-constructed terraces on slopes. The hills are covered with well-weathered, fine-textured soils (Humitropepts or Humic Cambisols) derived from chernockite. The soils seem to have good physical properties and we observed few signs of soil erosion even on steep slopes. The group stayed overnight at a lovely guest house in the resort town of Ooty which is situated 2270 m above sea level. The town was built about 100 years ago. The neat and white-washed houses with red tiled roofs reflect a certain Portugese flavour. We also visited two large Botanical gardens near Ooty and the Tropical Fruits and Spices Research Institute at Barliar in the foothills (altitude 800 m) on the way to Coimbatore.

On February 22, we visited Tamil Nadu Agriculture University at Coimbatore. The University Farm maintained three long-term soil fertility trials on an Alfisol (Udic Haplustalf) with the following rotations: cotton-cholam (since 1909), ragi-cholam-cotton(since 1929) and ragi-cowpea-maize (since 1972). Participants also examined an interesting profile pit at the farm. The pedon was classified as Vertic Ustropept or Vertic Cambisol.

Hari Eswaran's quick observation of large gypsum crystals at a depth around 50 cm raised considerable discussion. Thin-section study by Maja Kooistra also showed the presence of gypsum crystals but they occurred mainly in voids. This suggested its secondary formation due to longterm irrigation and fertilization practices rather than a pedogenic origin. Participants were entertained by the Bharata Natyam Indian Classical Dance Group at the University Assembly Hall that evening.

On February 23, the group began its last part of the journey to Kerala state. The lush green rice paddies and endless coconut groves dotted with banana and cashewnut plantations in this lowland humid tropical region of India gave us a delightful impression of the good life in the tropics.

The intensive and systematic agriculture of tree crops, root crops and paddy rice planted in sequential order along soil toposequences provided excellent examples of how highly weathered soils in the humid tropics can be best managed to sustain food production in one of the world's most densely populated areas such as Kerala.

We made a brief stop-over at the Kerala Kalamandalam, a training institute for Indian classical performing arts. On the way to the seaport of Cochin, we examined a laterite quarry – a historical spot where geologist F. Buchanan first described 'laterite' in the English language 175 years ago, in 1807.* There was a small monument to mark the event in the compound of a government guest house nearby.

On February 24th, the staff of the Kerala Agriculture Department arranged for us to tour the well-known Kuttanad area by motor boat. Kuttanad is an extensive coastal lake-lagoon-backwater system. Land in the area is about 6 m above sea level and under extensive rice cultivation. There has been various theories on the formation of Kuttanad. A comprehensive report on soil and water management of the area was prepared by V. B. Nair, L. Prabhakran and G. Varghese (Soil Survey Bull. No. 2, Agriculture Dept., Kerala). Soils in the area according to Dr. N. K. Barde, our tour leader, generally have a mineral surface layer derived from alluvial materials and an acidic peat layer often occurs at approximately 60 cm depth. The surface soils have pH values of 6.5 (in water) when moist and gave pH values around 3 after air-dried for one month. Subsoil horizons beyond approximately 20 cm have moist pH values between 3 and 4 and contain approximately 30% O.M. The pedon observed near Ambalapuzha was classified as Sulfohemist by Hari Eswaran.

We reached Trivandrum late in the afternoon. Though a crowded city like Cochin, we are greatly impressed by its clean streets. People seem to move around with great ease. We are accommodated at the Ashok Beach Hotel 10 km south of the city. The

* Mr. V. A. K. Sarma reports on an earlier western reference to the building material, by Jacobus Canter Visscher of the Dutch East India Company. He was Chaplain at Colhin for the five years 1717 to 1723, when he wrote the Letters to his friends at home (english version of the Letters edited by Major Heber Drury, assistant to General W. Cullen, British Resident in Travancore, and published in 1862):
'... the coast of Quilon is steep and rocky, or rather it is merely a rock covered with a stratum of soil... While I am on the subject of this rocky district, I must add that the local stone is very well adapted for building. There are quarries here from which the stone is hewn; and I have seen a piece of this stone when being cut from the rock, split like wood under the stroke of the axe. The stone is reddish-yellow and spotted, very porous and full of holes, in which the lime used in building gets mixed up, and the whole gets so well consolidated that old stone is often preferred to new. The East India Company finds this stone very serviceable for erecting their fortresses and factories, and the inhabitants use it for building their houses...'

The monument in honour of Dr. Buchanan, with Dr. Hari Eswaran explaining, and the locus tipicus *of Buchanan's laterite in Kerala State, India.*

hotel consisted of a number of lovely bungalows on the coconut tree-lined beach. Regretably we did not have the time for the good life.

In the morning of February 25, the group visited the National Tuber Crop Research Institute and examined a truncated profile in a leveled cassava field in the mid-slope of a laterite hill. The soil materials was derived from biotite-gneiss. The pedon was classified as Troporthent (Soil Taxonomy) or Plinthic Acrisol (FAO). According to Eswaran and Sombroek, the original pedon may well be a Plinthic Tropudult/Acrisol but the A and B horizons may have been completely eroded away as a result of terracing and ages of cultivation.

The tour ended in the afternoon and participants departed Trivandrum by air for Bombay.

In summary, it has been a very educational as well as enjoyable tour. Many participants visited India for the first time and arrived with an impression of India described by those who made a brief stop-over and visited the back alleys of Calcutta and Bombay. After touring India's heartland, we have witnessed the intensive and prosperous agriculture in the countryside. Moreover, the industrial development in the urban areas has taken place in an accelerated pace which seems to be a phenomenon in many countries after achieving self-sufficiency in food production.

I would like to express my admiration and sincere thanks to our Tour leaders Dr. N. K. Barde, Dr. S. R. Naga Bhushana and Dr. V. A. K. Sarma of National Soils Bureau, who accompanied us throughout the nine days with great patience and endurance.

A. S. R. Juo, IITA, Ibadan.

ACTIVITIES OF THE COMMISSIONS AND WORKING GROUPS
ACTIVITÉS DES COMMISSIONS ET GROUPES DE TRAVAIL
TÄTIGKEIT DER KOMMISSIONEN UND ARBEITSGRUPPEN

Review of the Activities of the Commissions at the 12th Congress, as presented at the Closing Session on Tuesday 16th February, 1982.
Résumé des activités des Commissions au 12ème Congrès, comme présenté au séance final, le mardi, 16 février, 1982.
Übersicht der Aktivitäten der Kommissionen auf dem 12. Kongress, wie präsentiert während der Schluszsitzung am Dienstag, den 16. Februar 1982.

COMMISSION I. Soil Physics/Physique du sol/Bodenphysik

Members of Commission I participated in technical sessions, one poster session, 2 panel discussions and 2 business meetings. Four technical sessions involving only Commission I were devoted to the topics, soil water retention, water flow in soils, water and thermal regimes of soils, and salt and water transport. Soil water characteristic curves were examined in light of different degree polynomial equations relating soil water content to soil water potential. Statistical models were presented for estimating the soil water characteristic which included particle size distribution, organic matter content and soil bulk density as other independent variables. Water flow in swelling and non-swelling soils was investigated for infiltration and outflow experiments using laboratory packed soil columns. The influence of the sodium adsorption ratio and electrolyte concentration on hydraulic conductivity values was ascertained for different clays. And as a result, the presence of smectitic clay appears important in the process of reclaiming saline sodic soils. New field techniques were reported for characterizing water flow in swelling soils with macropores. Non-isothermal soil water transfer was studied in both the laboratory and the field with practical considerations focused on the effects of various kinds of mulches on seedling emergence and crop production under rainfed conditions. One dimensional mathematical models were used to describe the movement of inorganic and organic solutes in field soils as a result of successive irrigation/rainfall and drying events. The models presented ranged from a simple procedure to calculate the position of the peak concentration of nitrate in a soil profile to a complex convective-diffusive equation that included adsorption-desorption processes as well as chemical and/or biological transformations. Methodology was presented that accounted for the spatial variability of the solute and water parameters in field soils.

In a joint session between Commissions I and II, on nutrient transformation and movement, the behavior and fate of nitrogenous and phosphorus fertilizers added to soils was examined for different laboratory and field conditions. Tracer studies utilizing ^{32}P and ^{15}N allowed close examination of the fertilizer elements in the presence of a crop under different soil moisture regimes, available carbon sources, thermal regimes, and soil reactions.

Three joint sessions with Commission VI addressed the topic of water use – evapotranspiration, tillage and soil physical properties, and physical soil properties and erosion. Evapotranspiration for sorghum, wheat and rice was reported and compared with theoretical estimates for several different climatic conditions. The choice of tillage implements and their operational sequence was found to influence the quality of seed bed, root bed and crop yield. Techniques and new machines were developed to loosen compacted soils and stabilize soil structure. Several contributions dealt with specific soil properties in relation to water table levels and management practices. The energetics of water drop impact on soil surfaces was examined in relation to break down of aggregates, infiltration rates, and soil erosion losses.

Two excellent poster sessions allowed scientists to explain their results in detail during several hours on topics that embraced complex crop-soil interactions. The effect of crop rotations on soil physical properties, yields of crops in relation to soil depth and rooting patterns, crop yield and water use studies, hydrologic variability of soils and water management for agricultural development were the major issues.

Commission I provided the first of seven panel discussions on Whither Soils Research thoughout the Congress. Dr. Prihar (India) called for better management of the soil physical environment with the development of better measures of the reference state of field soils. Dr. Hillel (USA) emphasized that research priorities should neither be left to the administrators nor the whims of the scientists with greater attention given to teams of researchers. Dr. Vachaud (France) stressed that we have yet to develop a reliable field technology in soil physics with greater effort given to the reconciliation between mathematical models and field measurements. The Moderator encouraged soil physicists to leave small plots for entire fields and regions, and change deterministic concepts to include stochastic considerations. Regionalized variable analyses, geostatistics, and other methods have great potential. He urged that soil physicists leap into the future without the academia of the past.

A new Working Group 'The Analysis of Spatial and Temporal Variability of Field Soil Properties' chaired by D. R. Nielsen (USA) was established with a goal to promote programs for Inter-Congress Meetings and the next two four-year Congresses. Anyone interested in being a member of the Group should write Nielsen as well as suggest opportunities for the Group to be effective. Within a year, a full set of objectives and potential programs will be announced in the Bulletin.

Another new Working Group, 'The Physical Rating of Soils,' is being contemplated. An initial meeting took place toward the end of the Congress. Those interested should contact Dr. R. Gupta (India) for details.

Dr. D. R. Nielsen, Chairman

COMMISSION II. Soil Chemistry/Chimie du sol/Bodenchemie

I am pleased to report that Commission II is alive and well. At New Delhi we had 4 independent sessions and 5 joint sessions with Commissions I, IV and VII. A total of 43 scientific papers were presented. These dealt with various aspects of soil chemistry such as cation exchange equilibria, adsorption of cations, anions and organics (herbicides and insecticides) on soils, the structure and reactions of metal-organic matter complexes, extraction of organic matter, the chemistry of humic substances, the relation between acid soils and crop growth, and heavy metals in the soil-plant environment.

The highlight of our meetings was a panel discussion on the state of the art and likely future developments in three key areas of soil chemistry: (a) soil organic matter, especially humic substances; (b) soil physical chemistry; and (c) on the more practical side, the relationship between soil chemistry and food production. The panel discussion was attended by a large and enthusiastic audience. Following presentation of the papers by the three experts – M. Schnitzer (Canada), M. Raupach (Australia) and N. N. Goswami (India) –, a lively discussion ensued in which many scientists in the audience participated. Hopefully, organizers of future Congresses will assign more time to panel discussions of this nature so that members of the audience have the opportunity to participate more actively in the discussions. On the whole, our sessions were well attended and many questions were asked following each presentation. One observation that bodes well for the future is that many scientists who presented papers and participated in the discussion were young. Soil Chemistry continues to be an attractive and interesting field of soil science.

On the scientific side, considerable progress was reported in many areas but especially in the fields of the chemistry of humic materials and metal – organic interactions. Finally, I wish my successor, M. H. B. Hayes (United Kingdom) and his two vice-chairmen J. K. Syers (New Zealand) and N. N. Goswami (India) much success in their work on behalf of Commission II. Last but not least, I thank J. Venkateswarlu for his excellent contributions to the organization of our sessions.

Dr. M. Schnitzer, Chairman

COMMISSION III. Soil Biology/Biologie du sol/Bodenbiologie

Commission III met in well-organized panel discussions, symposia, technical and poster sessions and most useful private discussions. The availability of specialized assay methods and tracer techniques together with a better knowledge of the biology and biochemistry of soil processes is leading to an increased understanding of organic matter and nitrogen, phosphorus and sulphur transformations. We are pleased to note that specific management techniques for controlling nitrogen losses and improving nitrogen fixation are now being incorporated into practical management programs in many areas of the world.

Plant microbial interactions such as associative and symbiotic nitrogen fixation and mycorrhizal uptake of phosphorus hold great promise. This is accented by the molecular engineering techniques now being developed to study and enhance the symbiotic aspects of these associations. The technical sessions showed a wide range of interest in microorganisms and the processes they mediate. The absence of discussions on soil zoology was noted and discussions are underway to hold symposia on soil fauna relative to nutrient transformations and soil transformation at the next congress.

Prof. Dr. E. A. Paul, Chairman

COMMISSION IV. Soil Fertility and Plant Nutrition/Fertilité du sol et nutrition des plantes/Bodenfruchtbarkeit und Pflanzenernährung

Commission IV had ten Technical Sessions and listed a total of 61 contributory papers. In addition quite a few papers on soil fertility and plant nutrition were listed jointly with Commissions II, III and VI; 17 papers were also presented at the Poster Sessions. Except for a few, all the contributed papers listed in the Commission were presented by the authors. The standard of the papers was generally of high order and the audio-visuals were of rather good quality. Some technical sessions of the Commission were rather thinly attended because the subject matter of the commission was split and presentations were being made concurrently in more than one room. This could, however, not be avoided to ensure full attendance at each session.

A panel discussion on Soil Fertility was held. This included four papers on different aspects on soil fertility and fertilisers including the role of fertilisers as pollutants. The results of recent researches on the availability of macro and micro nutrients elements in soils and their use in soil-plant-environment system were discussed.

Three commission meetings were held and it was decided to adopt four topics for inter-Congress meetings, viz. on biological processes and soil fertility (jointly with Comm. III), on soil test-crop response correlation studies, on characteristics and management of soils originally under tropical savannah vegetation (with Comm. V), and on land clearing and post-clearing management on soils of the humid tropics (with Comm. VI).

The salient recommendations from various sessions of the Commission are:

(i) Intensive research should be conducted to find ways and means to increase the efficiency of applied macro and micro nutrient elements, since fertilisers are the most costly and energy consuming input in today's agriculture.
During the technical session, low coefficients of utilization of nutrients consuming from the fertilisers were reported. Therefore, the use of stable and radioactive isotopes are required, to find the best method, time and rate of application of the fertilisers. Coating of fertilisers and use of inhibitors has to be also taken into consideration.

(ii) In evaluating nutrition of crops, experiments at cultivators' fields should be preferred.

(iii) At the studies on responses to fertilisers in the field, basic information on soils and climate is generally lacking. They should invariably be given.

(iv) There is an urgent need to evaluate nutrition of cropping systems rather than individual crops as related to soil tests. The work on monitoring of changes in nutrients in soils with cropping deserves equally attention.

(v) Research on the possibility of using indigenous sources for supply of nutrients, including the use of FYM and the role of green manuring, are to be intensified. The aspect of biological fixation of Nitrogen in nutrition of crops needs also be intensively evaluated.

(vi) More research should be conducted on nutrition of oilseeds, pulses, forest plants and pasture lands.

(vii) Research should be reoriented so as to consider soil-plant-environment as one system. There is also a need to use quantitative approach for evaluating the effect of soil-plant-relationship on environment.

I should like to mention that almost all of the farmers are looking for high yield, not for environmental control. Therefore, the scientist working in soil fertility, plant nutrition and fertiliser usage has to make the right and realistic recommendation for maximizing yield without environment pollution.

Dr. Ch. Hera, Chairman

COMMISSION V. Soil Genesis, Classification and Cartography/Genèse du sol, classification et cartographie/Bodengenetik, Klassifikation und Kartographie

Activities before the 12th Congress

Well attended International Conferences took place on 'Soils with Variable Charge' (held jointly with Comm. IV and VI in Palmerston North, New Zealand, see Bulletin *59*, 5–8) and on 'Aridic Soils' (with Comm. VI in Jerusalem, Israel, see *59*, 12–14); International Symposia were held in cooperation with other Institutions on 'Acid Sulphate Soils' (Bangkok, Thailand, see *59*, 15–16) and on 'Soil Problems in Urban Areas' (West-Berlin, see *60*, 23). These showed an increasing orientation towards objects rather than methods, according to which the ISSS is mainly structured. The equal importance of developing new tools can be derived from the special activity of the Working Groups for Soil Information Systems (3 Workshops, see *58*, 32–36, and *60*, 27–29) and Remote Sensing and for Soil Surveys (2 workshops, see *58*, 32–36, and *60*, 31–33). In view of the increasing need for a World Soils Policy Comm. V was also involved in the respective Experts Meetings (see *57*, 14–18, and *59*, 25–29) and in Consultations on an International Reference Base for Soil Classification (IRB, see *57*, 19–20, and *59*, 9–11).

Activities during the 12th Congress

Commission V was involved in two Symposia (Vertisols, Desertification), held one Panel Discussion (Whither Pedology Research?) and ten technical sessions (in which,

according to the location and the motto of the Congress, the speakers dealt mainly with soils of dry and/or warm regions and with soil inventory and/or management), and contributed to five poster sessions. The Symposia and the Panel Discussion papers and abstracts of the voluntary papers were available (résumés and Kurzfassungen not yet). Joint sessions with other (Sub-) Commissions (three with VI, one with VII and one with B, unfortunately none with II or IV) favoured the interdisciplinary contacts, but sometimes broadened the topics too much (e.g. soil genesis was discussed in nine sessions but there was no session dealing with soil forming processes). Poster sessions were no longer regarded as 'second class lectures'; they would be the appropriate form of presentation for papers mainly demonstrating the results of soil inventory, thus leaving more time for the discussion of topics with over-regional importance. In a special meeting the new IRB-project (see above) was explained and discussed.

In two business meetings the mandate of some Working Groups was terminated (CS and NO); that of some prolonged for the time until their transfer into other Commissions (FS to IV or VI, DS to the new Subcommission C) or for four years (DP, PP and RS); that of new ones established (for Acid Sulphate Soils; History, Philosophy and Sociology of Soil Science; International Reference Base for Soil Classification), and the new officers were elected.

Plans for the future

In the period 1982–1986 there are plans for two International Conferences on subtropical soils (jointly with Comm. IV); one on water movement in clay soils (with I); one on soils of mountainous regions (with VI); one on soil minerals (with VII) and one one desertification (with C). It is hoped that the new project IRB will stimulate the work of Comm. V in the next years as did the Soil Map of the World-project several years ago.

Prof. Dr. E. Schlichting, Chairman

COMMISSION VI. Soil Technology/Technology du sol/Bodentechnologie

The main theme of the Congress 'Managing soil resources to meet challenge to mankind' emphasized the importance of the activities in Commission VI, because most of the scientific achievements of soil science are applied to the agricultural practice through soil technology. Consequently, the technical programme of Commission VI was closely related to the plenary sessions and gave a wide spectrum of problems and results on the national use, optimum management and conservation of soil resources, in the various regions of the World.

During the 11 technical sessions of Commission VI, 61 papers were scheduled and 44 were presented. In addition to this 20 papers were demonstrated in 4 Poster Sessions. The main subject of the Congress promoted a closer and more effective relationship between the theoretical research in the various fields of soil science and their practical applications. It was very clearly reflected by the joint Technical and Poster Sessions of Commission VI with other Commissions (four with Comm. I; one with Comm. IV; and two with Comm. V).

Special attention was paid to the problems of agricultural water management. The necessity of the establishment of a comprehensive information basis of hydrophysical properties and moisture regimes of soils (including survey, mapping, monitoring) was emphasized. On the basis of theme discussions practical recommendations were presented and formulated for optimum watershed management and for the improvement of water use efficiency.

A considerable part of the Commission activities was focused to the various technological aspects of the creation of favourable soil ecological environment for the cultivated crops. These include:

(i) special tillage practices;
(ii) amelioration of soils with limited fertility (salt-affected soils, gypsiferous soils, sandy soils, some of the rice soils);
(iii) prevention of unfavourable soil processes (rainfall-erosion; salinization-alkalization, over-compaction, water-logging, desertification, etc.).

Special problems of irrigation (use of saline waters; low-rate irrigation techniques, etc.) were also discussed.

Data were presented on the influence of various land management practices on the growth, root development, water and nutrient uptake and the yield of different crops, and also on the physical properties, and the moisture and nutrient regimes of different soils.

It can be concluded that world food prospects depend to a great extent upon the applicability of our new scientific achievements. Consequently, Commission VI of ISSS has particular responsibility for the transfer of theory into technology. It was the reason that technical sessions, the Panel Meeting and the poster presentation induced great interest among the Congress participants. The presentations were followed by detailed discussions and fruitful changes of experiences. Commission VI has to serve as a good linkage between theory and practice in its future activities.

Dr. G. Várallyay, 1st Vice-Chairman

COMMISSION VII. Soil Mineralogy/Minéralogie du sol/Bodenmineralogie

Past Activity

In September 1980, the 4th European Clay Conference was held, jointly with Commission VII of the ISSS, in Freising, Federal Republic of Germany. Several members of ISSS participated and 3 sessions were held on topics dealing with clay mineralogy of soils. A soil clay mineralogy field trip was organised (see also the separate report in this Bulletin).

Although Commission VII was not one of the organisers of the Conference on Soils with Variable Charge', many soil mineralogists participated in that meeting and topics on soil mineralogy formed an important part of the meeting and its field trip.

Activities during the Congress

Two sessions of Commission VII and two joint sessions, with Commissions II & V, were held during this Conference. Additionally, a panel discussion was organised around the topic 'soil mineralogy – a key to understand soils'. Finally, two half-days were set aside for ad-hoc discussions on certain mineralogical topics, in a very free and informal manner. This latter activity was well accepted and is therefore strongly recommended for future congresses.

Future activites

A joint meeting of Commissions VII and V is schedules in association with the 8th International Clay Conference in July '85 in Denver, Colorado. The theme is: 'Soil Mineralogy in various pedogenic environments and its use for soil classification'.

A working project was proposed in cooperation with the new working group of ISSS on 'Surface Properties of Soil Colloids'. The title of the project is 'Crystallinity of soil minerals and its significance for soil properties and soil genesis.'

Prof. Dr. U. Schwertmann, Chairman

Report on the

SEVENTH INTERNATIONAL CLAY CONFERENCE

The 7th International Clay Conference, organized by the Italian Group of AIPEA, headed by Prof. F. Veniale, took place in Bologna and Pavia, Italy, from September 6–12, 1981.

The Conference was attended by more than 350 scientists, representing 44 countries. The circa 300 papers that were presented, partly in the form of posters, were delivered within the framework of six normal and seven special sessions. Normal sessions: 1. Crystal Chemistry and Structure; 2. Surface Chemistry and Interactions; 3. Colloidal Properties; 4. Genesis and Synthesis; 5. Geology and Geochemistry; 6. Industrial and Technological Applications; 7. Investigation Techniques. Special sessions: 1. Clays in Petroleum Generation; 2. Clays as Catalysts; 3. Clays in Ceramics; 4. Clays in Engineering and Soil Mechanics; 5. Clay and Nuclear Waste Disposal Problems; 6. Weathering Sequences: Recent and ancient; 7. Amorphous and ill-crystallized Components of Soils and Sediments.

The Conference also included a seminary on Palygorskite-Sepiolite Occurrences and Genesis and the presentation of monographs on advanced methods in clay mineral research. These monographs were published in bookform by Elsevier under the editorship of Prof. J. J. Fripiat. A volume containing about 60 selected papers will be edited by Prof. van Olphen and published by Elsevier. The papers presented in the Palygorskite-Sepiolite Seminary will constitute the nucleus for a volume dedicated to that subject to be published also by Elsevier.

During the Conference, a number of business meetings took place, such as those of the Council of AIPEA (Association Internationale pour l'Etude d'Argiles) and of the European Clay groups. At the General Assembly of AIPEA, held on the last day of the Conference, a new Council was elected. President of the new Council is Prof. L. Heller-Kallai from Jerusalem, Israel. The next International Clay Conference will be held in Denver, Colorado, in 1985. Nor did the Italian organizers neglect the social facets of the Conference. The participlants and accompanying persons were entertained lavishly, and in style, at the various parties and dinners. A highlight was the 'laurea honoris causa' award ceremony for Prof. G. Millot from Strasbourg.

While very many papers discussed during the Conference had direct or indirect bearing on soil science, and particularly soil mineralogy, several aspects received particular attention. Among these, mineral alteration processes and products and weathering phenomena in general were treated in great detail. Of interest for soil chemists were also the numerous papers on clay-organic molecules interactions.

An afternoon field trip was conducted to demonstrate two soil profiles in the vicinity of Bologna. These were on younger river sediments in the river plain and on Tertiary material in the hill land. In the latter area steep slopes and highly erodible Tertiary silty and clayey sediments have led to severe soil erosion.

Interesting clay deposits of various kinds but no soils were demonstrated during a 4 days field trip to Sardinia and Mid Italy. Weathering of younger volcanic material have led to smectitic bottom land soils akin to vertisols in the drier climate of Southern Sardinia and to allophanic soils in the somewhat moister region of Latium. As the first one this trip was very well prepared and successfully conducted and offered a great variety of interesting problems of clay mineral genesis.

A. Singer, Rehovot, Israel and U. Schwertmann, Freising-Weihenstephan, BRD

New Subcommission C/Nouvelle Sous-commission C/Neue Subkommission C

SOIL CONSERVATION AND ENVIRONMENT
CONSERVATION DU SOL ET ENVIRONNEMENT
BODENERHALTUNG UND UMWELT

Objective

To enhance the understanding of soil degradation, its impact on soil productivity and on the environment, and to promote the development of technology for combating soil degradation.

Charges

(i) Enhance the understanding of processes of soil degradation and develop improved methods for the objective assessment of its magnitude.
(ii) Encourage the development of methods for assessing the impact of soil degradation on the productivity of soils and on the quality of the physical and biotic environment.
(iii) Encourage and support national, regional and global inventories of actual and potential soil degradation.
(iv) Develop the technical background for the implementation of land use policies that further soil conservation objectives.
(v) Promote the cooperation among the several commissions of ISSS and between ISSS and other International and National Societies and institutions concerned with soil conservation and environmental quality.

Steering Committee

Dr. Klaus W. Flach (USA, Chairman; c/o USDA-SCS, P.O. Box 2890, Washington, D.C. 20013), Dr. Titus De-Meester (Netherlands), Dr. Sami A. El-Swaifi (Hawaii-USA), Dr. Frédéric Fournier (France), Dr. Rattan Lal (Nigeria), Dr. Francesco Lombardi (Brazil), and Dr. N. S. Randhawa (India).

ISSS Working Group DP, Soil Information Systems

Membership

A business meeting during the 12th Congress of the Working Group took place. The meeting was attended by 11 members of the Working Group. The following changes have taken place in the Steering Group:
Chairman: Dr. A. W. Moore, Australia (replacing Dr. J. Schelling, Netherlands)
Secretary: Dr. P. A. Burrough, Netherlands (replacing Dr. S. W. Bie, Norway)
Member: Dr. M. C. Girard, France (replacing Dr. J. P. Legros, France).

The new Chairman thanked Dr. Schelling and Bie for their work and enthousiasm in setting up the Working Group and for their productive efforts since 1975 that had laid a firm basis for the future.

The meeting agreed that the Working Group should invite Dr. J. Lamp of the Institute für Pflanzenernährung und Bodenkunde, Kiel, West Germany to be a member of the Steering Group. Dr. Lamp is the initiator and contact person for a newly formed 'Informationssysteme in der Bodenkunde'-group in Germany. Dr. Lamp had written to the Secretary offering help with organizing activities of the International Working Group at the next ISSS Congress, that should take place in Germany in 1986.

The meeting also agreed that at least 2 members of the Steering Group should be invited from Developing Countries, but no names were immediately forthcoming (ISSS members concerned, please write!).

Future meetings

In addition to the proposal already made for a meeting on geographic information systems in 1986, there were the following suggestions:
a) Australia 1985
b) A meeting with special attention to the needs of developing countries
c) Europe. There will be a meeting in Norway in febr./march 1983, organised by S. W. Bie
d) USA. Together with the Soil Conservation Society of America, Prof. Baumgardner is organizing a meeting for August 1983 on 'Usable soil information systems'.

P. A. Burrough, Wageningen, the Netherlands

New Working Group HP/Nouveau Groupe de Travail HP/Neue Arbeitsgruppe HP

HISTORY, PHILOSOPHY AND SOCIOLOGY OF SOIL SCIENCE
HISTOIRE, PHILOSOPHIE ET SOCIOLOGIE DE LA SCIENCE DU SOL
GESCHICHTE, PHILOSOPHIE UND SOZIOLOGIE DER BODENKUNDE

At the suggestion of D. H. Yaalon (Jerusalem, Israel) and a number of colleagues, the ISSS Council has established a new Working Group on the History, Philosophy and Sociology of Soil Science. though the subject matter naturally encompasses the subjects of all the existing Commissions, to comply with the ISSS rules the new WG has been attached to Commission V.

The WG will collect biographical material on prominent soil scientists and their careers in the various countries, and prepare a chronological list of milestones in the development of soil science. It will consider the establishment of biographical archives and historical libraries at some University and/or the ISM. Questions like when was the term pedology used for the first time, the concepts of soil, their recognition and definition as natural bodies in ancient times will also be dealt with. Questions falling within the realm of sociology will include aspects of manpower – the number of soil scientists in the various countries, their training and employment possibilities.

Prof. D. H. Yaalon (Dept. of Geology, Hebrew Univ., Jerusalem, 91000, Israel) will serve as the first Chairman of the WG. Prof. E. Schlichting (Hohenheim, West Germany) has consented to serve as chairman after he completes his service with another Working Group. Mr. E. J. B. Cutler (Dept. of Soil Science, Lincoln College, Canterbury, New Zealand) has agreed to serve as Secretary of the WG. Colleagues wishing to contribute actively to the program of the WG are requested to make this known to one of the above members.

New Working Group AS/Nouveau Groupe de Travail AS/Neue Arbeitsgruppe AS

ACID SULPHATE SOILS/SOLS SULFATÉS ACIDES/SAURE SULFATBÖDEN

At the 12th Congress of Soil Science in New Delhi, India, a Working Group on acid sulphate soils has been formally established. It will function under the aegis of Commission V.

The general objective of the Working Group is to promote basic research on acid sulphate soils. To this aim the group considers to give priority to the following items:

- Standardization of descriptive and experimental methods that take into account the dynamic character of soil/water/plant relations in the soils.
- Contributing to a sound and useful classification of the soils concerned, for incorporation in the forthcoming international reference base for soil classification.
- Raising support for the convening of a third international symposium on acid sulphate soils in 1984 or 1985 in West Africa.
- Organization of a network for exchange of experience and coordination of research efforts, among field- and laboratory workers involved in studying acid sulphate soils.

Members who are interested to participate in the above mentioned communicative network are invited to send their names and addresses, with an indication of their involvement in acid sulphate soil research, to the undersigned Chairman of the Working Group.

L. J. Pons, Wageningen, The Netherlands

New Working Group RB/Nouveau Groupe de travail RB/Neue Arbeitsgruppe RB
DEVELOPMENT OF AN INTERNATIONAL REFERENCE BASE FOR SOIL CLASSIFICATION
DÉVELOPPEMENT D'UNE BASE INTERNATIONALE DE RÉFÉRENCE POUR LA CLASSIFICATION DES SOLS
ENTWICKLUNG EINER INTERNATIONALEN REFERENZBASIS FÜR BODENKLASSIFIKATION

After meetings at Sofia in 1980 and 1981 (cf. Bulletin *57*, 19–20, and *59*, 9–11) it was decided to inform the delegates of the 12th International Congress of Soil Science at New Delhi in February 1982 in a special meeting about the aims of the IRB-project. After this a Working Group was established in the frame of Commission V and the undersigned was appointed as Chairman.

For the work the following steps are foreseen:

1. Clarification of the rationale, e.g. purpose, nature of diagnostic features, overriding principles.
2. Selection of diagnostic features for certain groups of soils; e.g. a) shallow or weakly developed, b) swelling (shrinking), c) surface or ground water, d) saline/alkaline or aridic, e) mollic, f) umbric, andic or spodic, g) sialic or fersialic, h) ferralic, i) organic or permafrost soils.
3. Quantification of diagnostic features for different levels.
4. Arrangement of soils at different categoric levels.

The necessity of a feed-back for reconsideration from step 4 (4→3→2→1) is anticipated.

The work in the steps (2) – 3 – 4 will have to be carried out mainly by correspondence and in subgroups consisting of those ISSS-members interested in the project. Some of them were already nominated by the Presidents of the National Societies in reply to a circular letter of the Chairman of Commission V, dated 8-1-1981; many inscribed in a list circulated during the meeting at New Delhi and others are welcome. For these subgroups (corresponding with those under 2) convenors will have to be chosen on the basis of their personal experience and a fair geographical distribution. These convenors and the chairmen of the Working Group and of Commission V will act as a Steering Committee for the work in the steps (1) – 2 – 3 – 4 and may meet occasionally. The latter two persons will prepare drafts for the steps 1 and 2. For the necessary funds an application will be submitted to (a) possible sponsor(s).

E. Schlichting, Hohenheim, BRD

ISSS Working Group PP/INQUA Paleopedology Commission

At the request of the Paleopedology Commission, Dr. A. Bronger (Kiel, West Germany) has prepared a new Bibliography of Paleopedology for the period since the publication of the previous bibliography in 1972. The volume is published within the series of Mitteilgn. Dtsch. Bodenkundl. Gesellschaft and will be ready for the next meeting of the group during the INQUA Congress, Moscow August 1982. At this congress a joint meeting with the INQUA Loess Commission will cover the subjects: morphogenesis and catenary associations of loessial paleosols, and stratigraphy and dating of loesses and their paleosols.

Chairman of the WG on Soil Stratigraphy, and on the Nature and Origin of Paleosols have prepared detailed reports on their activity which have been included in the last Paleopedology Newsletter.

D. H. Yaalon, Jerusalem, Israel

ISSS Subcommission B

ENQUIRY FOR SOIL MICROMORPHOLOGISTS

The participants to the International Working Meeting on Soil Micromorphology (London, August 1981) recommended that a list be made of scientists working in this field together with their specialization. Therefore all persons interested in soil micromorphology are kindly requested to complete the attached enquiry and return it to the Subcommission Chairman: **Prof. Dr. G. Stoops, Geologisch Instituut, RUG, Krijgslaan 281, B-9000 Gent, Belgium.**

Name: .....

Function: .....

Address: .....

Country: .....

Indicate involvement in soil micromorphology:
(. . .) (actively working = 1; using data = 2; general interest = 3)

Indicate order of interest in each aspect of soil micromorphology (main interest = 1, second interest = 2, etc.; if no interest fill in 0)

(. . .)	microstructure (aggregation, porosity)		
(. . .)	general fabric analysis	(. . .)	mineralogy
(. . .)	humus forms	(. . .)	weathering

Indicate with a number the order of importance of the fields, where the soil micromorphological data find their application:

(. . .)	soil classification	(. . .)	geomorphology
(. . .)	soil genesis	(. . .)	geology
(. . .)	agronomy	(. . .)	weathering
(. . .)	archaeology	(. . .)	.....

Are you teaching soil micromorphology? (yes)/(no)

Could you help other laboratories in their soil micromorphological research: on a commercial basis? (yes)/(no), as free service? (yes)/(no)
If yes, in which way (e.g. impregnation of soil samples, preparation of thin sections, quantitatitve analysis, microprobe, etc.)?

. .....

What size of thin sections do you use? .....

Would you be interested in a publication 'Micromorphological Abstracts', abstracting regularly micromorphological papers? (yes)/(no)
or giving only the titles and a few key words? (yes)/(no)
Would you be willing to collaborate as a regional abstracter? (yes)/(no)

Comments (please feel free to use either English, French, German or Spanish; use additional sheet if necessary). .....

. .....

. .....

Second Announcement

MEETING ON BIOLOGICAL PROCESSES AND SOIL FERTILITY

University of Reading - England, 4–8 July 1983

A meeting of Commissions III and IV of the ISSS in collaboration with the British Society of Soil Science.

The programme will include three days of paper reading sessions and one and a half days of visits. For the paper reading sessions the following have accepted invitations to give Keynote Addresses:

Dr. G. W. Cooke, FRS (UK):	Welcome and introductory lecture
Prof. T. Rosswall (Sweden):	Cycling of nitrogen in modern agricultural systems
Dr. P. B. Tinker (UK):	The role of microorganisms in mediating and facilitating the uptake of plant nutrients from soil
Dr. J. M. Lynch (UK):	Interactions between biological processes, cultivation and soil structure
Prof. Dr. K. H. Domsch (FRG):	Effects of pesticides and toxic materials on biological processes in soils
Dr. J. M. Tiedje (USA):	Anaerobic processes in soils

Introductory Lectures to some of the paper reading sessions will be given by Prof. E. A. Paul, Prof. J. S. Waid, Prof. J. K. Syers, Dr. K. R. Tate and Dr. J. A. van Veen. Papers presented by participants will be offered as a lecture or in a poster session, the Publications Committee exercising the right of final selection.

Visits will be arranged to Rothamsted Experimental Station, the Agricultural Research Council Letcombe Laboratory, Jealott's Hill Research Station (IC), the Grassland Research Institute, the Weed Research Organisation laboratories, and the Agricultural Development and Advisory Service Laboratories at Reading. Full-day excursions for accompanying persons on four days may include Eton and Windsor, Stratford-upon-Avon, Kew Gardens and Hampton Court, and an archeological tour.

Accommodation will be arranged in Halls of Residence of the Univ. of Reading.

For Further Details, and also for a booking form, please write to Dr. P.J. Harris, Department of Soil Science, University of Reading, London Road, Reading, Berks, RG1 5AQ, U.K.

The booking forms and deposit should be returned to Dr. Harris before 1st January 1983: forms and deposits arriving later might be subject to an additional charge.

FAO-UNESCO SOIL MAP OF THE WORLD – CARTE MONDIALE DES SOLS – WELTBODENKARTE 1:5.000.000

Now also available the explanatory text of the two Europe sheets, in both English and French editions. This completes the series (for details see ISSS Bulletin 58, page 24).

The whole set of map sheets (19) and explanatory texts (10) can now be obtained from Unesco-Paris at a 15 percent reduced price of FF 1100.—.
Orders: PUB, Unesco, Place de Fontenoy, 75700 Paris, France; *or* National Unesco Distributors.

Also available at the International Soil Museum, P.O. Box 353, Wageningen, the Netherlands.

NEW FROM THE NATIONAL AND REGIONAL SOCIETIES
NOUVELLES DES ASSOCIATIONS NATIONALES ET REGIONALES
BERICHTE DER NATIONALEN UND REGIONALEN GESELLSCHAFTEN

Hungarian Society of Soil Science

The Soil Biology Section held its 8th meeting at the Gödöllö University of Agricultural Sciences on August 26–28, 1981. The general topic was on 'Soil Biology and the Conservation of the Biosphere', and the meeting was jointly carried by the Hungarian Academies of Sciences and of Agricultural Sciences as well as by the host University. Six sessions dealt with interactions between pesticides and soil micro-organisms (10 contributions), effects of fertilizers on soil biological processes (13), microbial N_2-fixation (8), soil biological problems in reclamation areas (6), the role of micro-organisms in the transformation of soil organic matter (10), and microbial population dynamics (21). During a final half-day excursion efforts in the Gyöngyösvisonta open cut pit area were demonstrated.

With 112 scientists representing 12 countries the meeting was well attended.

The proceedings will be produced by the Publishing House of the Hungarian Academy of Sciences.

K. H. Domsch

All-Union Society of Soil Science of the U.S.S.R.

The Sixth Congress of the All-Union Society of Soil Science was held from 16 to 20 September 1981 at Tbilisi, Georgia. The Congress was devoted to problems of the food production programme as outlined at the XXVI Congress of Communist Party of the Soviet Union and was carried out under the title 'Soviet Soil Science at the Service of Agriculture of the USSR'. About 1000 delegates and guests participated in the work of the Congress, which was divided between plenary sessions, several synposia and seven commissions of the Society.

Two principal reports at the first plenary sessions were made by Dr. V. S. Shevelukha, Deputy Minister of Agriculture of the USSR, and Prof. V. A. Kovda, President of the AUSSS, both dealing with the problems of utilization of the achievements of soil science and agrochemistry. Problems of theory and practices of soil fertility increase and rational land use in different natural zones of the country were considered at the main symposium 'Role of soil investigations in food production programme'. Three other symposia were devoted to problems of soil utilization for cultivation of field and plantation fruit crops, increase of productivity of mountain soils and soils of intermountain depressions. The proceedings of the Congress were published in ten issues (in Russian).

A new Central Council of AUSSS was elected at the Congress to serve the term up to the 7th Congress which will take place in 1985. The new officers are:

President:	Prof. Victor A. Kovda, Institute of Agrochemistry and Soil Science of the USSR Academy of Sciences
Vice-Presidents:	Prof. Valentin V. Egorov, Dokuchaev's Soil Institute
	Dr. Evgeni I. Gaidamaka, Ministry of Agriculture of the USSR
	Prof. Vladimir M. Fridland, Dokuchaev's Soil Institute
	Prof. Boris G. Rozanov, Faculty of Soil Science of Moscow State University
	Prof. Lev L. Shishov, Dokuchaev's Soil Institute
	Prof. Sergei V. Zonn, Institute of Geography of the USSR Academy of Sciences
Scientific Secretary:	Dr. Tatjana P. Kokovina, Dokuchaev's Soil Institute.

Address: Pygevski 7, 109 017 Moscow, USSR.

Bulgarian Soil Science Society

The new officers of the Society are as follows:

President:	Dr. L. Raikov
Honorary President:	Prof. V. Koinov
Vice-President:	M. Iolevsky
Secretary:	Mrs. R. Dilkova
Committee Members:	S. Kristanov, T. Totev, D. Stoianov, N. Onchev, H. Shopsky, K. Stoinev, D. Stoichev.

Address: C/o Institute of Soil Science, 5 Shosse Bankya, Sofia 24, Bulgaria.

Soil Science Society of Bangladesh

The Bangladesh Society, founded in 1958, has now about 125 members. It publishes twice a year the 'Bangladesh Journal of Soil Science'. The President for the period 1982/1983 is Dr. Mohammed Abdul Mannan, and the Secretary Dr. Zahurul Karim.
Address: C/o Bangladesh Agricultural Research Council, New Airport Road, Farm Gate, Dacca, Bangladesh.

Soil Science Society of Iran

A new Committee has been elected to run the Iranian Society of Soil Science Inc. for the period 1982–1983:

President:	Prof. Dr. M. Zarrinekafche
Vice-President:	Dr. M. Bayebordi
Treasurer:	Dr. M. D. Rafi
Secretary:	Ing. D. Mansouri
Member:	Inge. H. Molassade

Address: C/o Soil Science Dept., College of Agriculture, Karadj, Iran.

Sociedad Colombiana de la Ciencia del Suelo

La nueva Junta Directiva de la Sociedad para el periodo 1982–1983 fue elegido como sigue:

Presidente:	Dr. Ricardo Guerrero R.
Vicepresidente:	Dr. Alfredo León Sarmiento
Vocales principales y suplentes:	
	Dr. Ricardo Guerrero R. y Dr. Rodrigo Munoz
	Dr. Alfredo Leon S. y Dr. Amparo Rojas
	Dr. Gloria de Benavides y Dr. Oscar Ospina
	Dr. Erick Owen y Dr. Rodrigo Lora
	Dr. Jose Pichott y Dr. Adela Correa S.
Revisor fiscal, principal y suplente:	
	Dr. Maria Cristina Forero y Dr. Fabio Calvo
Secretario ejecutivo:	Dr. Francisco Silva Mojica
Tesorero:	Dr. Pedro A. Ramirez S.
Secretaria de la junta:	Dr. Amparo Rojas

Direccion del Secretario Executivo: SCCS, Ap. Aereo 51791, Bogotá, D. E., Colombia

Sociedad Venezolana de la Ciencia del Suelo

The sixth National meeting of the Soil Science Society of Venezuela elected a new Directory for 1981–1982 period. The new members of the directory are:

President:	Angel V. Chirinos
Vice-President:	Eduardo Casanova
Secretary:	Adriana Florentino
Treasurer:	Fernando J. Granados
Vocal:	Francisco Ovalles

Address: Mr. Angel V. Chirinos, Ap. 1208, Santa Rosa, Maracay, Aragua, Venezuela.

The Soil Science Society of East Africa

The Soil Science Society of East Africa had its fifth annual general meeting at Egerton College, Njoro, Kenya from November 30 to December 2, 1981. This year the theme was 'Soil Management Under Intensive Cultivation'. Thirteen papers on the following subjects soil fertility and plant nutrition, soil survey, soil water, soil temperature, nitrogen fixation and environmental hazards in agriculture were presented. There were about 45 participants from Kenya, Tanzania and Uganda. A full day excursion was organized to Kisii where participants had the opportunity to see land being utilized to the maximum under smallholders management practices.

At the Business Meeting of the Society, the following office-bearers were elected for the year 1982:

Chairman: Mr. F. N. Muchena, Nairobi, Kenya
Vice-Chairman: Dr. J. Y. Kitungulu-Zake, Kampala, Uganda
Secretary: Mr. J. N. Qureshi, Nairobi, Kenya
Regional Treasurers:
Uganda: Dr. D. S. Muduuli, Makerere Univ., P.O. Box 7062, Kampala (also over-all Treasurer)
Kenya: Mrs. S. M. Mugambi, CRF, P.O. Box 4, Ruiru
Tanzania: Dr. J. M. R. Semoka, Univ. of Dar-es-Salaam, P.O. Box 643, Morogoro
Committee Members:
Dr. A. J. Shayo-Ngowi, Morogoro, Tanzania, Mr. E. L. N. Ngatunga, Tanga, Tanzania, Mr. John Matovu, Kampala, Uganda, Mr. Njogu Njeru, Kitale, Kenya

Uganda would host the next meeting. Membership still stands at about 100.
Address of the Secretary: C/o National Agricultural Laboratories, P.O. Box 14733, Nairobi, Kenya.

Sociedad Chilena de la Ciencia del Suelo

The Third National Symposium on Soil Science was held at the Agronomy Faculty, Catholic University of Chile, from 9 to 13 November 1981. Nearly 60 papers were presented through 3 Commissions: I – Soil Fertility; II – Mineralogy, Soil Genesis and Classification, and III – Forestry and Soil Technology.

On the occasion of the Symposium the SCCS had the visit of three distinguished guests: Prof. A. Van Wambeke from Cornell University, Dr. Phillipe Culot from FAO, and Dr. Graham M. Will from the Forest Research Institute, New Zealand.

The Fourth National Symposium will be organized by the Universidad Austral de Chile in the city of Valdivia, during 1984.

During the third Symposium the General Assembly of the Society elected the new Board of the Chilean Society of Soil Science. It is now composed as follows:

President: Prof. Walter Luzio L., Universidad de Chile, Santiago
Vice-President: Prof. Ricardo Honorato, Universidad Católica de Chile, Santiago
Secretary-Treasurer: Prof. Renato Grez., Universidad Austral de Chile, Casilla 567, Valdivia, Chile.

Presidents of the Commissions:

I – Soil Fertility: Prof. Inés Pino, Universidad de Chile, Santiago
II – Soil Chemistry: Prof. Gerardo Galindo, Universidad de Santiago, Santiago
III – Soil Genesis and Classification: Prof. Sergio Alcayaga, Universidad Católica, Santiago
IV – Soil Technology: Prof. Fernando Santibánez Q., Univ. de Chile, Santiago.

Sociedade Brasileira de Ciencia do Solo

The Brazilian Soil Science Society and the Secretary of Agriculture of Sao Paulo State sponsored the '4th Brazilian Congress of Soil Conservation' and '4th National Meeting on Soil Conservation Research'. They were held July 25–30, 1982, in Campinas, Sao Paulo, Brazil. The theme for the Congress was 'Conservation: Policy and Legislation', and for the Meeting it was 'Research on Soil Management in the Tropics'. Technical and scientific field trips were included. *For more information, contact:* Dr. Francisco Lombardi Neto and Dr. Ricardo Bellinazzi Junior, Brazilian Soil Science Society, C.P. 28–13.000 Campinas, Sao Paulo, Brazil.

The 15th Brazilian Meeting on Soil Fertility will take place in Campinas, from August 30 to September 3, 1982. The activities scheduled include a meeting of representants of the laboratories of soil testing and plant analysis, the presentation of scientific papers and a symposium on soil acidity and liming. For more information contact: Dr. Bernardo van Raij, at the same address as above.

Asociación Argentina de la Ciencia del Suelo

La Comision Directiva de la AACS és composto como sigue:

Presidente:	Ichiro Mizuno
Vicepresidente:	Carlos A. Puricelli
Secretario:	Oscar I. Santanatoglia
Prosecretario:	Carlos A. W. Vollert
Secretario de Actas:	Luis A. Berasategui
Tesorero:	Amalia A. Bolano de Daniel
Protesorero:	María E. Brandinelli de Sardi
Vocales:	Horacio E. Del Campo
	Raúl S. Lavado y Pablo Serpa

Officiales de las Subcomisiones:

I – Física y Físico Química: Ana F. Garay y Elvira Suero
II – Química: Luis Barberis y Peter Daniel
III – Biología: Carlos De Lorenzini y María A. Monzón de Asconegui
IV – Fertilidad y Nutrición Vegetal: Angel Berardo y Néstor Darwich
V – Génesis, Clasificación y Cartografía: Luis De Léon y José A. Ferrer
VI – Tecnología: Oscar Santanatoglia y Carlos Puricelli
VII – Mineralogía: Antonio De Petre y Silvia Perman

Dirección de la AACS: Cervino 3101 – 1425 Buenos Aires – Argentina.

Desde 1967 la Asociación edita un Boletin Informativo, tres vezes por ano (Marzo 1982: no. 43).

A partir de 1959, fecha de realización de la Primera Reunión Argentina de la Ciencia del Suelo, el caudal de trabajos realizados en Argentina no ha sido posible canalisarlos, hasta el presente, a través de un medio de difusión único y especializado. Con el objeto de superar esa falencia, la Asociación comenzará a editar en el primer trimestre de 1983 una Revista periódica denominada: 'Ciencia del Suelo'. La apertura de recepción de trabajos será a partir del 1° de Abril de 1982, quedando la páginas de la revista a disposición de los professionalles interessados, Argentinos y otros.

Contributions are invited, in Spanish or English, for a new scientific journal 'Ciencia del Suelo' which the Argentinian Society will start publishing as from the first trimester of 1983.

Address: Comité Editor del Boletin Informativo y de la Revista 'Ciencia del Suelo': Raúl S. Lavado – Perla A. Imbellone. Secretaria Ejecutiva: Marta B. Pineiro 532 (esq. 14) 1900, La Plata – Argentina.

IN MEMORIAM

Auguste Oudin (1886–1979), Membre honoraire de l'AISS

La disposition d'Auguste Oudin, le 15 décembre 1979, a laissé un grand vide parmi les membres de l'Association française pour l'étude du sol et de l'AISS dont il était membre d'honneur.

Oudin, ancien Directeur de l'Ecole Nle des Eaux et Forêts a consacré cinquante ans de son existence au développement de l'enseignement et de la recherche forestière en France; en outre dès 1927 il s'interessa à la pédologie et devint membre actif de l'Association française pour l'étude du sol.

Sorti de l'Ecole Polytechnique en 1908, puis élève à l'Ecole Forestiere de Nancy, licencié en droit et ès sciences, A. Oudin fut d'abord ingénieur forestier de Terrain à Rennes, Saumur et Tours avant d'être nommé en 1924 chef de la section de sylviculture à la Station de recherches forestières de Nancy; en 1941 il fut nommé Directeur de l'Ecole forestière.

Dès 1930, il fut le premier en France à enseigner la 'Pédologie', en sens moderne du mot: il contribua à l'élaboration de la première classification, dite génétique des sols de France, qui a été utilisée par l'établissement, sous son égide, de la première carte pédologique de France au millionième, présentée au Congrès internationale à Amsterdam en 1950.

L'activité scientifique d'Auguste Oudin, interrompue par la guerre, reprit ses droits dès 1946: nommé président de l'AISS en 1954, lors du congrès de Leopoldville, il présida le Congrès international à Paris en 1956; ce fut là sans conteste l'apogée de sa carrière scientifique.

Mais il convient de mentionner aussi l'activité scientifique d' Oudin dans des domaines plus spécifiquement forestiers: il participa, en particulier à diverse congrès de l'Union internationale des organisations de recherche forestière (IUFRO), dont il fut membre du bureau exécutif en 1961.

Titulaire de nombreuses décorations françaises et étrangères, A. Oudin faisait partie de plusieurs sociétés scientifiques, l'Académie d'Agriculture de France, qu'il présida en 1971, en aussi la Société forestière de Finlande, l'Académie d'Agriculture de Suède, l'Académie forestière de Florence, et enfin la Société des forestiers américains.

La contribution apportée par Oudin au développement de la pédologie française est importante: sa conception de la science du sol était essentiellement dynamique; il considérait que, si beaucoup de propriétés du sol sont héritées du matériau minéral, d'autres et non des moindres ont été acquises au cours d'une longue évolution, orientée par les facteurs du milieu. La végétation naturelle, essentiellement forestière en France, a exercé un rôle actif sur cette évolution, liée en particulier au type d'humus, à l'économie de l'eau et de l'air, qui l'un et l'autre dépendent étroitement de cette végétation naturelle: toute mise en valeur du sol, qu'elle soit forestière ou agricole doit tenir compte des étapes de son histoire, de façon à sauvegarder les propriétés acquises lorsqu'elles sont favorables ou les corriger lorsqu'elles sont défavorables.

En développant et en enseignant ces notions, Auguste Oudin a fait école: il peut être considéré comme le fondateur de la pédologie biologique et écologique, qui a connu, en France et dans de nombreux pays, un important développement.

J-C. Begon, Versailles, France

John Kingsley Taylor (1898–1982)

John Kingsley Taylor, a former Chief of the Division of Soils CSIRO, died in Adelaide on January 11, 1982. Born August 6, 1898, he graduated B. Sc. Agr. 1920 and B.A. 1924 from the University of Sydney, where he was appointed Demonstrator in Agricultural Chemistry 1920. From 1921 to 1923 he held an agricultural research fellowship at the Universities of Sydney and California, graduating M.Sc. from the latter university. In 1924 he became a lecturer at Hawkesbury Agricultural College, New South Wales. In 1927 he was appointed as the CSIR research officer to work with Professor J. A. Prescott on the joint investigation by the University of Adelaide and CSIR of soil problems in irrigated areas of the Murray Valley. He thus became one of the first officers of the Division of Soils, established in 1929.

As the pioneer of detailed soil surveys in Australia, firstly at Renmark, South Australia, Mr. Taylor was deeply involved with standards for soil description, soil taxonomy, and mapping techniques, including the use of aerial photographs in 1928. He had unrivalled knowledge of soils irrigated for horticulture and viticulture in Australia and his advice was often needed in judging suitable extensions of irrigation.

John Taylor succeeded Professor Prescott as chief of the Division of Soils when he resigned from that post in 1947. The Division then grew considerably in numbers and stature. Strong research groups were developed to deal with the chemistry, physics, and microbiology of soils, and with clay mineralogy, pedology and soil survey. Considerable attention was also given to the engineering properties of soils until the transfer of this work from the Division in 1960, to form the basis of a new CSIRO Division. Regional centres in different parts of Australia were also strongly developed. The Divisional headquarters moved in 1958 to new buildings in Adelaide from its previous accommodation in the Waite Agricultural Research Institute.

John Taylor had long association with international soil science. He was a contributor to the session on soil problems held at the 2nd Pacific Science Congress in Australia, 1923. He was active in meetings on soil classification and land utilisation held at Pacific Science Congresses in California 1939 and the Philippines 1953. Taylor was also an Australian delegate to the 4th and 9th ISSS congresses, and to joint meetings of ISSS Commissions – II and IV in Hamburg 1958 and IV and V in Palmerston North 1962.

After the 4th ISSS Congress in 1950, when the ISSS was re-established, John Taylor enlisted local support for the Society, initiated the Australian Conferences in Soil Science, and was largely instrumental in establishing the Australian Society of Soil Science (1956), the Australian Journal of Soil Research (1963), and in obtaining the 9th ISSS Congress for Adelaide (1968).

On retirement from CSIRO in 1963, John became soil consultant to the Department of Mines, South Australia, until 1975, and helped to publish new detailed information on the soils of Adelaide. He also then wrote a long review, published 1970, of soil survey and field pedology in Australia 1927–67.

He was awarded Honorary Life Membership of the Australian S.S.S. in 1964 and in 1978 he won the Society's Prescott Medal for outstanding contributions to soil science. He was appointed O.B.E. in 1979 in recognition of his services to soil science in Australia.

John Taylor was a firm but tolerant and modest man who gave inspiration and

encouragement, not only in his Division. He took guidance from a keen sense of responsibility to the community. As the years went by he found increasing satisfaction in the achievements of his younger associates, and he remembered with gratitude the help and advice given by his seniors.

Soil scientists remember him with respect and affection.

G. Blackburn, Adelaide, Australia.

Dr. A. Jongerius (1925–1982)

Dr. A. Jongerius, founder of the Working Group on Micromorphology, and a driving force behind its elevation to a subcommission in the International Society of Soil Science, died suddenly on 28 March 1982, at the age of 56 years.

Since 1957 he had been Head of the Department of Micromorphology and Mineralogy in the Soil Survey Institute in Wageningen, the Netherlands. He studied at the Agricultural University in Wageningen under the stimulating guidance of Prof. C. H. Edelman, who employed him in his laboratory from 1950 to 1957. In 1957 he received a doctorate for his thesis 'Morphologic investigations of soil structure'.

He was a pioneer in micromorphology and made major contributions to the development of this new branch of pedology and to its international recognition. Among his innovations were techniques for preparing thin sections ('mammoth sections') and for measuring their micromorphological characteristics. He was one of the founders of micromorphometry and the first to apply electro-optical methods and image analysis in this field. His theoretical work embraced the classification, nomenclature and genesis of micromorphological features (humus forms, microstructure and regrouping phenomena). Throughout his investigations Dr. Jongerius always sought for ways to apply micromorphology in agricultural research.

His efforts to acquire international recognition for micromorphology began in 1964, with the organization of an international 'Working Meeting on Soil Micromorphology' in Arnhem (Netherlands). His zeal led to the ISSS Working Group on Soil Micromorphology being set up at the third Working meeting, in Wroclaw in 1969.

For eight years he was closely involved in the functioning of this group, first as its secretary, later as chairman. It was largely through his efforts that the Working Group was elevated to a Subcommission of the I.S.S.S. in 1978 at Edmonton.

Dr. Jongerius published many articles, congress papers and several Soil Survey papers, and he stimulated many more. He was editor of two important books: 'Soil Micromorphology' (1964) and 'Glossary of Soil Micromorphology' (1979). He recently completed several chapters for the 'Handbook for Describing Thin Sections of Soils', to be published later this year.

Dr. Jongerius also had a large indirect impact on the propagation and development of soil micromorphology through his contact with the M.Sc. students he taught in Wageningen and at I.T.C. (Enschede), and with the numerous scientists who came to his laboratory to be trained.

We have lost a good friend and colleague, but his achievements in micromorphology form a sound basis for the future development of this science.

G. Stoops, Gent, Belgium and
J. Schelling, Wageningen, the Netherlands

Dr. Bodo Bretschneider-Herrmann (1924–1981)

Unerwartet, am Arbeitsplatz seiner vielseitigen wissenschaftlichen und pädagogischen Tätigkeit ist Dr. Bodo Bretschneider-Herrmann, Akad. Dir. am Institut für Pflanzenbau und Pflanzenzüchtung der Justus-Liebig-Universität – Versuchsstation Rauisch-Holzhausen, am 24.11.1981 gestorben. Geboren am 11.8.1924 in Prenzlau-Uckermark entstammte Herr Bretschneider-Herrmann einer Gutsbesitzerfamilie. Im Anschluß an die Grundschule besuchte der junge Bretschneider-Herrmann das Realgymnasium in Nordhausen/Harz, wo er 1942 den Reifevermerk erhielt.

Die weitere Ausbildung wurde durch die Kriegsereignisse unterbrochen. 1942 zunächst zum Reichsarbeitsdienst eingezogen war er 1943–1944 Angehöriger der Kriegsmarine und geriet in Kriegsgefangenschaft in USA und England, aus welcher er erst 1948 entlassen wurde.

Nach einer praktischen Ausbildung als Landwirtschaftsgehilfe 1948/49 begann Bretschneider-Herrmann 1949 das Studium der Landwirtschaft in Gießen, welches er 1952 mit dem Diplom abschloß. Nach einer in der Zeit von 1952–1954 durchgeführten Tätigkeit als Wirtschafsberater und stellvertretender Ringleiter in Braunschweig kehrte Bretschneider-Herrmann 1954 an die Universität zurück. Am Institut für Pflanzenbau und Pflanzenzüchtung war er als Doktorand und als Versuchsfeldleiter tätig, 1958 erfolgte die Promotion zum Dr. agr.

Seit 1958 ist Dr. Bretschneider-Herrmann als wissenschaftlicher Assistent, als Akad. Rat und zuletzt als Akad. dir. in Rauisch-Holzhausen tätig gewesen. Der Schwerpunkt seiner Forschungsarbeit lag in der Wachstums- und Ertragsphysiologie der Kulturpflanzen. Ein besonderes Verdienst des Verstorbenen war die entscheidende Mitwirkung bei der Entwicklung und dem Aufbau des Phytotrons in Rauisch-Holzhausen, dessen Leiter er gewesen ist. Zahlreiche wissenschaftliche Veröffentlichungen zeugen von der Konsequenz und dem Erfolg seiner Arbeit. Bei dieser Aufgabe verband ihn eine Zusammenarbeit mit vielen Kollegen. Gleichzeitig oblag ihm die Betreuung von Doktoranden und Diplomanden.

Eine weitere Sonderaufgabe lag in der Organisation und pädagogischen Mitwirkung bei den fortlaufend durchgeführten Ausbildungskursen für Landwirtschaftlich Technische Assistenten und Assistentinnen.

Seit dem Bestehen der Internationalen Arbeitsgemeinschaft für Bodenfruchtbarkeit war Bretschneider-Herrmann aktiv an der Durchführung der ökologischen Dauerversuche beteiligt. Seit 1973 oblag ihm als Sekratär der Internationalen Arbeitsgemeinschaft für Bodenfruchtbarkeit die Leitung der Geschäftsführung, der Dokumentation des umfangreichen Datenmaterials und die Auswertung desselben.

Wir verlieren in Dr. Bretschneider-Herrmann einen versierten und erfolgreichen Forscher und Lehrer. Die Mitarbeiter des Instituts und zahlreiche Kollegen in aller Welt verlieren in Dr. Bretschneider-Herrmann einen wertvollen, stets hilfsbereiten Kollegen und Freund.

E. v. Boguslawski, Gießen, BRD

Dr. J. N. Luthin (1915–1981)

James N. Luthin, professor of water science and agricultural engineering at the University of California, Davis, died December 24 in Sutter Memorial Hospital after a brief illness. He was 66.

A member of the UCD faculty since 1949, Mr. Luthin earlier this year was inducted into Ohio State University's 'Drainage Hall of Fame' for his contributions to the development and use of drainage in agricultural production. He applied drainage theory to the solution of field problems, especially those involving salinity control for irrigated lands. His studies have included soil water movement, drainage of layered soils, seepage through dams, gravel and synthetic envelopes, drainage of sloping land, and sand tank and electric models for water flow through soils.

Mr. Luthin was in demand around the world as a drainage consultant, with assignments in many foreign countries. He was a Fulbright scholar to Australia in 1958, an associate with the Ford Foundation in India in 1974, and a research scholar with the Japan Society for Promotion of Science in 1978. In early December, Mr. Luthin and his wife returned from the Peoples' Republic of China where he taught at Quinghua University in Peking, the University of Wuchang and the East China Technical College of Water Resources in Nanking.

Much of his recent research involved computer solutions for drainage problems on sloping land, leading to a breakthrough in demonstrating how many practical and theoretical problems of groundwater flow can be solved by computer methods. Since 1972 his research emphasized coupled heat and water transfer in arctic and subarctic soil. He did collaborative research at the Institute of Water Research at the University of Alaska in Fairbanks and the Institute of Low Temperature Science at Sapporo, Japan.

He published numerous scientific articles and a classical textbook 'Drainage engineering' which has been translated into many languages, including Russian and Chinese. Mr. Luthin co-authored with Miguel Marino a second textbook, 'Seepage and Groundwater,' that just has been published. At the time of his death, Mr. Luthin was preparing a third textbook, 'Physical Properties of Soil and Drainage,' in Japanese with a colleague from Kyoto University.

Mr. Luthin was a fellow of the American Society of Agricultural Engineers, the American Society of Agronomy and the Soil Science Society of America. He was particularly active in the American Society of Civil Engineers and was serving as the chairman-elect of its executive committee for the society's Irrigation and Drainage Division. In the American Geophysical Union, he chaired the Special Task Force on Soil-water Problems in Cold Regions and organized several international conferences and symposia. Also he was a member of Sigma Xi, British Society of Soil Science, International Water Resources Association and International Commission on Irrigation and Drainage. He received the Hancock Soil and Water Engineering Award from the American Society of Agricultural Engineering in 1969.

A native of Berkeley, he received his B.S. degree in soil science from UC Berkeley in 1938, his M.S. in soil physics from Michigan State University in 1947 and his Ph.D. in soil physics from Iowa State University in 1949. He served as chair of the UCD department of water science and engineering from 1970 to 1974.

In 1977 the Luthins moved to Winters where Mr. Luthin became an active member of Rotary, International. He is survived by his widow, Adalyn; sons, James J. and William; and brothers, John and Harry.

The family prefers memorials to the James N. Luthin Memorial Scholarship Fund, which has as its objective providing scholarship support to students from mainland China. Contributions should be sent c/o Department of Land, Air and Water Resources, University of California, Davis, 95616, USA.

Dr. P. Bruin (1902–1981)

Pieter Bruin, retired Director of the Institute for Soil Fertility, Haren, The Netherlands, died suddenly in Groningen on 22 October 1981 at the age of 79. He was an exceptionally active and inventive soil scientist who continued working until the last moment of his life.

Bruin was born in 1902 as the son of a roper in Graft, a small village in the province of North-Holland, where he finished his elementary education. After having finished grammar school in Alkmaar in 1921, he graduated in 1929 from the University of Amsterdam, Faculty of Chemistry. In that year he was appointed as chemist at the Agricultural Experiment Station in Groningen, later as head of the chemistry Department. After having been promoted to Assistent Director (1943) and Deputy Director (1944) of the same institute with the new name Agricultural Experiment Station and Institute for Soil Research, he became its director in 1957 after a subsequent reorganization and another change of name to Institute for Soil Fertility. During his directorship the construction of a new building in Haren was started. His scientific activities resulted in a large number of lectures and in more than 70 papers. Through his work he proved to be a real leader of the soil fertility research in The Netherlands.

Bruin was convinced that intensive international contact between soil scientists is a 'must'. The science of soil fertility is strongly connected with regional and local problems. A close contact and an exchange of experience among research workers in the various countries is necessary to go beyond these limits and to give the science of soil fertility the impetus to introduce new principles in order to explain the diversity of experiences. Considering our society as an excellent forum for this purpose he frequented our international congresses. Therefore it is not surprising that he was one of the founders of the Working Committee on International Cooperation in Field Trials on Soil Fertility, started under the auspices of the ISSS in 1956 (see the Bulletins No 7 of 1955 and No 9 of 1956) to make a 'Study of the influence of physical, biological and climatological factors on the nitrogen conditions of the soil and the supply of the crops'. He was the stimulating President of this Committee from 1956 to 1980 and published a number of reports on its activities in our bulletin. For his scientific work he received the Doctor of Science Degree (honoris causa) in Agricultural Science from the Justus von Liebig University in Giessen (F.R.G.) on 1 July 1967.

The life of an outstanding man in many respects has come to an end. He was stimulating, spirited, friendly and courteous. His never failing readiness to help all who approached him will always be remembered with deep gratitude. Dr. Bruin is survived by his wife and three children and we sympathize with them in their loss.

Th. J. Ferrari, Haren (Gr), The Netherlands

INTERNATIONAL TRAINING COURSES
COURS INTERNATIONAUX DE FORMATION
INTERNATIONALE FORTBILDUNGSKURSE

New MSc course in Resource Assessment for Development Planning

The University of East Anglia, Norwich, U.K., offers a twelve-month programme which combines instruction in the techniques of soil survey, land evaluation and land use planning with a study of the applications of natural resource information in development planning. It is taught jointly by two Schools of the University, Environmental Sciences and Development Studies.

The techniques and applications of soil survey and land evaluation form a focus to the course. Detailed practical instruction is given in the techniques of soil survey, including identification of requirements for soil survey, planning a survey, mapping units, field survey methods, selection of required laboratory analyses, scale and intensity in relation to predictive ability, and presentation of results. Surveys for the planning of irrigation schemes are included. Associated techniques of remote sensing and data analysis are included.

Instruction in land evaluation covers land capability classification, land classification for irrigation, and land suitability evaluation, in both physical and economic terms. There are two distinctive features: a step-by-step instruction in the procedures of the new approach developed by the FAO based on the 'Framework of Land Evaluation', and the attention given to the economics of land evaluation.

The course will be offered for the first time commencing October 1982. A description brochure is available on request.

Enquiries to: Professor A. Young, School of Environmental Sciences, University of East Anglia, Norwich, NR4 7TJ, U.K.

Short Course in Soil and Plant Analysis

A second six-week course in Soil and Plant Analysis will be held in Reading, England, from 13th June to 22nd July 1983. Details on the first course are given in ISSS Bulletin 59, page 39.

Enquiries to: Prof. A. Wild, Department of Soil Science, University of Reading, London Road, Reading, RG1 5AQ, England.

N.B.: For information on other international training courses see ISSS Bulletins no. 56 et seq. A new list will be published in a forthcoming issue. The Secretary-General hereby requests the organisers of the courses concerned to supply him with the updated particulars.

N.B.: Voir les bulletins de l'AISS à partir du numéro 56 pour information sur d'autres cours internationaux de formation. Une nouvelle liste sera publiée dans un des prochains numéros. Les organisateurs des cours concernés sont priés de fournir de nouveaux détails au Secrétaire général.

Achtung! Information über weitere internationale Fortbildungskurse findet man ab IBG Mitteilungsblatt No. 56. Eine neue Liste wird in eine nachfolgende Ausgabe enthalten sein.

Der Generalsekretär bittet den Veranstaltern dieser Kurse ihm zu versehen mit aktuellen Sonderheiten.

MEETINGS, CONFERENCES, SYMPOSIA
REUNIONS, CONFERENCES, SYMPOSIUMS
TAGUNGEN, KONFERENZEN, SYMPOSIEN

Meetings etc., marked with*, are organized or sponsored by the ISSS
Réunions etc., indiquées avec, sont organisées ou favorisées par l'AISS*
Tagungen usw., angezeigt mit*, werden organisiert oder unterstützt von der IBG.

1982

***8th International Colloquium of Soil Zoology,** Louvain-la-Neuve, Belgium, 30 August – 2 September 1982.
Information: Prof. Ph. Lebrun, Ecologie animale, Place Croix du Sud 5, B1348 Louvain-la-Neuve, Belgium

15th Brazilian Meeting on Soil Fertility, Campinas, Sao Paulo, Brazil, 30 August – 3 September 1982.
Information: B. Van Raij, C.P. 28, 13100 Campinas – SP, Brazil.

***2nd International Symposium on N_2-fixation with Non-Legumes,** Banff, Alberta, Canada, 5–10 September 1982.
Information: Dr. R. J. Rennie, CAN-FIX, Box 7000, Lethbridge, Alberta, TIJ-4A9 Canada.

***13th Meeting of the European Society of Nuclear Methods in Agriculture,** Brno, Czechoslovakia, 6–11 September 1982.
Information: Dr. S. Prochazka, Univ. of Agric., 662 65 Brno, 1. Zemedelská, Czechoslovakia – CSSR; *or* ENSA Secretariat, P.O. Box 48, 6700 A Wageningen, Netherlands.

Seminario Internacional sobre Materia Organica y Utilizacion de Residuos Agropecuarios y Industriales, Medellin, Colombia, 8–10 Septiembre 1982.
Informacion: F. H. Orozco, SCCS, AA 3840, Medellin, Colombia.

Autumn Meeting and A.G.M. of the British Society of Soil Science. Theme: The Changing Landscape, Aberystwyth, U.K., 13–16 September 1982.
Information: Dr. D. V. Crawford, University of Nottingham, School of Agriculture, sutton Bonington, Loughborough LE12 5RD, U.K.

19th General Assembly of the ICSU, Cambridge, U.K., 20–24 September 1982.
Information: Secr. General, ICSU, 51 Bd. de Montmorency, 75016 Paris, France.

***2nd Workshop on Land Evaluation for Forest Resources Use,** Rome, Italy, 4–8 Octobre 1982.
Information: M. E. Stevens, Forest Resources Division, FAO, Via delle Terme di Caracalla, Rome 00100, Italy.

***International Symposium on Polders of the World,** Agora, Lelystad, Netherlands, 4–9 October 1982.
Information: Ir. J. Luijendijk, Delft University of Technology, Dept. of Civil Engineering, Stevinweg 1, P.O. Box 5048, 2600 GA Delft, Netherlands.

***International Conference on Chemistry and World Food Supplies – The New Frontiers** (CHEMRAWN II), Manila, Philippines, 6–10 December 1982.
Information: Dr. Joyce C. Torio, CHEMRAWN II, International Food Policy Research Institute, 1766 Massachussetts Av. N.W. Washington, DC 20036, USA.

4th International Congress of the International Association of Engineering Geology, New Delhi, India, 1–6 December 1982.
Information: K. N. Srivastava, 47–48. Pragati House, Nehru Place, New Delhi 110019, India.

1983

***2nd International Conference on Soil Erosion and Conservation,** Honolulu, Hawaii, USA, 16–22 January 1983.
Information: Dr. S. A. El-Swaify, Dept. of Agron. and Soil Sci., Coll. of Trop. Agric. and Human Resources, Univ. of Hawaii, 3190 Maile Way, Honolulu, HI 96822, USA.

Combined National Congress Crops - Weeds - Soils, Stellenbosch, South Africa, 25–27 January 1983.
Information: H. A. van de Venter, Chairman Central Organising Committee, P.O. Box 27552, Sunnyside 0132, South Africa.

***International Workshop on Salt-affected Soils of Latin America,** Maracai, Venezuela, 20–26 February 1983.
Information: Prof. A. Florentino, Apartado 1208, Santa Rosa, Maracay, Venezuela.

***International Symposium on Peat and Peat Soils,** Israel, 24–30 April 1983.
Information: Dr. K. M. Schallinger, Volcani Centre, P.O. Box 6, Bet-Dagan 20–500, Israel.

International Symposium on Methods and Instruments for the Investigation of Groundwater Systems, Noordwijkerhout, Netherlands, 2–6 May 1983.
Information: Congress Bureau of the Corporate Communication Dept. TNO, P.O. Box 297, 2501 BD The Hague, Netherlands.

9th World Fertilizer Congress of the International Centre of Fertilizers (C.I.E.C.), Uppsala, Sweden, 14–18 June 1983.
Information: Organizing Committee, Dept. of Soil Science, Un. of Agric. Sci., P.O. Box 7014, S-750 07 Uppsala, Sweden.

***Meeting on Biological Processes and Soil Fertility,** Reading, England, 4–9 July 1983. (Joint meeting of ISSS Commissions III and IV).
Information: Dr. D. S. Jenkinson, Rothamsted Exp. Station, Harpenden, Herts, AL5 2JQ, U.K.

4th International Permafrost Conference, Fairbanks, Alaska, USA, 18–22 July 1983.
Information: L. De Goes, Polar Research Board, Nat. Ac. of Sci., 2101 Constitution Av., N.W., Washington DC 20418, USA.

2nd International Symposium on Iron Nutrition in Plants, Logan, Utah, USA, 2–5 August 1983.
Information: D. W. James, Dept. of Soil Sci. and Biometeorology, Utah State Univ., Logan, Utah 84322, USA.

6th International Zeolite Conference, Reno, Nevada, USA, 10–15 July 1983.
Information: Dr. John W. Ward, c/o Union Oil Company of California, P.O. Box 76, Brea, CA 92621, USA.

3rd International Symposium on Microbial Ecology, East Lansing, Michigan, USA, 7–12 August 1983.
Information: The Kellogg Center for Continuing Education, Michigan State Univ., East Lansing, MI 48824, USA.

International Symposium on Hydrological Applications of Remote Sensing and Remote Data Transmission, Hamburg, F.R.G. 15–27 August 1983
Information: A. Ivan Johnson, President, International Committee on Remote Sensing and Data Transmission, c/o Woodward-Clyde Consultants, Harlequin Plaza-North, 7600 East Orchard Road, Engewood, CO 8011, USA.

18th General Assembly of Intern. Union of Geodesy and Geophysics (IUGG), Hamburg, Fed. Rep. of Germany, 15–26 august 1983. (With Symposia and Workshops on Remote sensing and data transmission; Groundwater; Hydrology of humid tropical regions with particular reference to the hydrological effects of agriculture and forestry practices.
Information: J. C. Rodda, Water Data Unit, Reading Bridge House, Reading, Berks, RG1 8PS, U.K.

***8th International Symposium 'Humus et Planta',** Prague, Czechoslovakia, 28 August–3 September 1983 (ISSS Commission II).
Information: Dr. J. Damaška, Secretary Organising Committee, c/o Research Institute for Amelioration of Agricultural Soils VUZZP, 16106 Prague 6 - Ruzyně, Czechoslovakia.

Geomaterials: Rocks, Concretes, Soils, Evanston, Illinois, USA, September 1983.
Information: Secretary-General IUTAM, Chalmers Univ. of Technology, Fack, S-40220 Gothenburg 5, Sweden.

6th International Symposium on Environmental Biochemistry, Santa Fe, New Mexico, USA, 9–14 October 1983.
Information: Dr. D. E. Caldwell, Dept. of Biology, Univ. of New Mexico, Albuquerque, NM 87131, USA.

***International Workshop on Afforestation of salt-affected soils,** Karnal, India, November 1983.
Information: Dr. I. P. Abrol, Central Soil Salinity Research Institute, Karnal, 132001, Haryana, India.

***4th Symposium on Remote Sensing for Soil Survey,** Dakar, Senegal, end 1983
Information: F. Hilwig, Projet USAID/RSI, BP 6267, Dakar-Etoile, Senegal.

Centennial Commemoration of the Mount Krakatau Explosion, Indonesia.
Information: Committee on 100th Anniversary of Mt. Krakatau Explosion, Lipi, Jl. Tenku Chik Ditiro 43, Jakarta, Indonesia.

***International Workshop on Land Evaluation for Range Management and Nomadic Grazing,** ILCA, Addis Abeba, Ethopia, end 1983.
Information: P. J. Brumby, ILCA, P.O. Box 5689, Addis Abeba, Ethiopia.

1984

***International Symposium on Soil Test and Crop Response Correlation Studies,** Dacca, Bangladesh, 7–10 February 1984.
Information: Prof. I. U. Ahmed, c/o Dr. M. A. Mannan, Bangladesh Agric. Res. Council, Farm Gate, New Airport Road, Dacca-15, Bangladesh.

***International Symposium on the Management of Soil Salinity under Irrigation,** Tel Aviv, Israel, March 1984.
Information: Dr. B. Yaron, Chairman Organizing Committee, P.O. Box 3054, Tel Aviv 61030, Israel.

International Panel on Volcanic Soils, Tenerife, Canary Islands, Spain, July 1984.
Information: M. E. Fernandez Caldas, Dpto. de Edafologiá, Univ. de la Laguna, Tenerife, Islas Canarias, Spain.

***International Symposium on the Mapping of the Soil-Water Balance,** Budapest, Hungary, August 1984.
Information: Dr. G. Várallyay, Research Inst. of Soil Science & Agric. Chemistry, Herman Otto út 15, Budapest 11, Hungary.

12th International Congress on Irrigation and Drainage, Fort Collins, Denver Colorado, USA, 3–10 October 1984.
Information: Secr. ICID, 48 Nyaya Marg. Chanakyapuri, New Delhi 110012, India.

***International Symposium on Water Movement in Heavy-clay Soils,** Wageningen, the Netherlands, 27–31 August 1984 (ISSS Commissions I and V).
Information: Dr. J. Bouma, c/o Dutch Soil Survey Institute STIBOKA, P.O. Box 98, 6700 AB Wageningen, the Netherlands.

10th International Congress of Agricultural Engineering, Budapest, Hungary.
Information: Gy. Szalai, CIGR Congress Coordinator, Comité National Hongrois de la CIGR, *Kossuth Lajos tér 6–8. IV. 425, H-1372 Budapest, V., Hungary.*

***International Workshop on Land Evaluation for Soil Erosion Hazard Assessment,** Enschede, Netherlands, end 1984.
Information: Prof. Dr. K. J. Beek, ITC, P.O. Box 6, 7500 AA Enschede, Netherlands.

1985

***3rd International Symposium on Acid-Sulphate Soils,** Dakar, Senegal, January, 1985.
Information: Prof. Dr. L. Pons, Dept. of Soil Sci. and Geology, Agric. Univ., P.O. Box 37, 6700 AA Wageningen, Netherlands.

***International conference on Characterization and Management of Soils originally under Tropical Savannah Vegetation,** Brasilia, Brazil, March 1985
Information: Dr. W. L. Goedert, EMBRAPA-CPAC, Caixa Postal 70/0023, CEP 73300 Planaltura, DF, Brazil.

1986

***13th International Congress of Soil Science,** Hamburg, Fed. Rep. of Germany, 13–20 August 1986.
Information: Prof. Dr. K. H. Hartge, Inst. f. Bodenkunde, Univ. Hannover, Herrenhäuserstrasse 2, D-3000 Hannover 21, f. R. Germany, *or* M. Rieger, Hamburg Messe u. Kongress GmbH, Jungiusstrasse 13, 2000 Hamburg 36, F.R. Germany.

NEW PUBLICATIONS
NOUVELLES PUBLICATIONS
NEUE VERÖFFENTLICHUNGEN

Titles of new publications are listed here for information. Orders can not be handled by the ISSS Secretariat but should be placed through a bookstore or directly with the publishers. Nearly all publications mentioned can however be viewed at the seat of the Society, c/o the International Soil Museum (ISM) in Wageningen, the Netherlands.

Les titres de nouvelles publications sont mentionnés à titre d'information. Le Secrétariat de l'AISS ne peut pas se charger de commandes, celles-ci devant être adressées à une librairie ou directement aux éditeurs. Presque toutes les publications mentionnées peuvent toutefois être inspectées au siège de l'AISS, p/a the International Soil Museum (ISM) à Wageningen, Hollande.

Die Titel neuer Veröffentlichungen sind hier zur Information angeführt. Bitte richten Sie Ihre Bestellungen nicht an das IBG Sekretariat sondern an den Buchhandel oder direkt an die Verlage. Fast alle Veröffentlichungen sind jedoch zu besichtigen an der Stelle der IBG, p/A International Soil Museum (ISM) in Wageningen, Holland.

Peat Stratigraphy and Climatic Change. A palaeoecological test of the theory of cyclic peat bog regeneration. K. E. Barber. A. A. Balkema, Rotterdam, 1981 231 p. ISBN 90-6191-087-0.

This study examines the relationship between bog growth and climatic change. This was done by palaeoecological methods involving the recording of several sections of peat stratigraphy, the analysis of macrofossil remains from 21 monolith profiles and the dating and correlation of stratigraphic changes by pollen analysis and radiocarbon dating. A distinct link between peat stratigraphy and climatic change over the last 2000 years was demonstrated. The cyclic theory is rejected and replaced by a phasic model. The book starts with a chapter on previous research and the old and newer ideas about bog growth. The author's research was mostly carried out in Cumbria, England, and some other areas mainly in the U.K.. Ireland and continental Europe are briefly mentioned. After a chapter on the methods used to investigate the history of vegetation, the results are given in detail.

Many photographs and drawings illustrate the sites and stratigraphy of the sections studied. The author concludes that raised bog growth is controlled above all by climate and that the phase-shifts in peat growth are a result of climatic shifts. The factors of hydrology and drainage, life-cycles of plants, pool-size, etc. are all subordinate to climate.

Price: Dfl. 60.00; $ 23.50.

Orders to: A. A. Balkema Publishers, P.O. Box 1675, Rotterdam, the Netherlands; or: A. A. Balkema, 99 Main Street, Salem NH 03079, U.S.A.

Slide-set. The Decomposer Food Web: Ecology of Organisms of Compost and Soil Litter. D. L. Dindal, Syracuse, 1980. 70 slides.

This set of 70 mounted colourslides of 5 × 5 cm on some of the intricacies of compost and soil ecology is designed to assist in a better understanding of the biotic portion of the soil. Thirty six microphotographs of invertebrates that aid in organic matter decomposition processes are included along with thirty photos related to composting and soil microhabitats.

A script of 13 pages contains basic information on each slide. A developmental framework of the subject matter is also built into the script as a suggestion of one way the material can be presented.

The slides are of high quality. This set will be followed by additional ones on more specific details and ecological dynamics of soil invertebrates and persons interested in the subject may contact the author Professor D. L. Dindal, Professor in Soil Ecology, College of Environmental Science and Forestry. State University of New York, Syracuse, NY 13210, U.S.A.

Price: $ 45.00 + $ 4.00 for orders outside the U.S.A. If prepaid postage free.

Orders to: The J. G. Press, Box 351, Emmaus, PA 18049, U.S.A.

Red-brown Earths of Australia. J. M. Oades, D. G. Lewis and K. Norrish, editors. Waite Agr. Res. Institute and CSIRO, 1981, 168 p. ISBN 0-909688-91-5.

This book contains nine chapters dealing with various aspects of Red-brown earths, eight of which are based on addresses given at the Symposium held to honour the 90th birthday of Professor J. A. Prescott, CBE, DSc, FRS, FAA. The importance of the Red-brown earths as a major soil used for the production of wheat in southern Australia is illustrated by the fact that more than 100 scientific papers dealing with Red-brown earths have been published.

These soils have their affinities with soils elsewhere in the world, notably Rhodustalfs, Natrustalfs, Rhodoxeralfs and Natrixeralfs/Chromic Luvisols and Orthic Solonetzes, but appear somewhat unique to Australia in extent and importance, if not entirely in characteristics.

Price: surface mail A$ 11.00, airmail A$ 16.00, prepayment required.

Orders to: Department of Soil Science, Waite Agricultural Research Institute, Glen Osmond, SA 5064, Australia.

Soils and the Environment. A Guide to Soil Surveys and their Applications. G. W. Olson. Chapman & Hall, New York and London and Methuen, New York, 1982, 178 p. ISBN 0-412-23750-4 (hardback), 0-412-23760-1 (paperback).

This publication provides an introductory account of soil surveys and their applications in improving soil utilization. The first part of the book explains how useful information about soils is prepared through soil profile descriptions, laboratory analyses and soil mapping, and illustrates the principles of soil classification for practical purposes. The second part of the book discusses the most important applications – engineering interpretations, land classifications, erosion control, agricultural yield correlations, archaeological considerations, and environmental protection and enhancement.

Mainly written in non-technical language, this book will be helpful as a reference for basic soils courses and to persons with a limited background in soils, who are dealing with aspects of soil use and resource management. Example given are mostly confined to the U.S.A., some attention has been given to the FAO-Unesco Soil Map of the World and other international activities in soil science.

Price: $ 29.50 or £ 15.00 hardback. $ 16.95 or £ 6.50 paperback.

Orders to: Methuen, 733 Third Avenue, New York, NY 10017, U.S.A.; or: Chapman & Hall, 11 New Fetter Lane, London EC4P 4EE, England.

Heavy Metal Pollution in Soils of Japan. K. Kitagishi and I. Yamane, editors. Japan Scientific Societies Press, Tokyo, 1981, 302 p. ISBN 4-7622-02576.

In the 1960's, Japanese agriculture experienced serious problems of soil pollution by cadmium and other heavy metals due to the rapid increase in industrial activites in that period. Accordingly, comprehensive investigations have been carried out by research workers in Japan concerning the soil pollution by heavy metals and related subjects. However, most of the papers concerned were published in Japanese. This collection of papers, written by experts in their fields, presents a critical and comprehensive review of the studies carried out in Japan in these fields mainly during the last decade.

The introduction provides some of the background features of heavy metal pollution in Japan. The main text is arranged into five parts.

Part I is concerned solely with the basic aspects of heavy metal problems in Japanese soils, such as base levels, chemical forms and behavior in soils. Some characteristic features of heavy metal problems in paddy soils and grasslands are discussed. Part II is devoted to the response of rice plants to toxic levels of heavy metals and to the behaviour of heavy metals in rice plants. Particular attention is focused on the process of heavy metal accumulation in brown rice, the basic food in Japan.

Part III presents a critical review of case studies on the main polluted areas throughout Japan by heavy metals discharged from various sources. Arsenic pollution problems in arable lands, heavy metal pollution problems of the urban environment through industrial as well as city activities and ecological studies of the vegetation in major mining areas are also presented. Part IV presents some promising selected methods and approaches for future studies in these neglected areas. Finally, Part V presents some comments on the legal critical values, especially on the maximum allowable limit of cadmium in rice grains.

These papers will serve as an aid to overseas research scientists and advanced students in environmental sciences as well as being useful in such disciplines as soil chemistry, soil fertility and plant ecology.

Price: $ 36.00.

Orders to: Business Center for Academic Societies Japan, 20–6 Mukogaoka 1-chome, Bunkyo-ku, Tokyo 113, Japan; or: Int. Scholarly Book Services, P.O. Box 1632, Beaverton, Oregon 97075, U.S.A.

Water and Fertilizer Use for Food Production in Arid and Semi-arid Zones. E. Welte, editor. Centre International des Engrais Chimiques (C.I.E.C.), Vienna and University of Garyounis, Benghazi, 1981, 357 p. ISBN 3-88452-603-0.

This publication contains the proceedings of the Third Symposium of C.I.E.C., held in Benghazi, Libya, 25 November to 1 December 1979. It deals with the most important irrigation problems with respect to water quality and a well balanced nutrition of the various agricultural crops cultivated mainly in the arid and semi-arid zones. It contains papers in the following sections: methods of irrigation (4 papers); water quality for irrigation including salinity problems (10 papers); water and nutrient requirements of various crops (21 papers); use of fertilizers for different crops and soils (17 papers); economic problems concerning irrigation and fertilizer use (2 papers). In all five sections one introductory main lecture was given.

The symposium was attended by more than 110 scientists from 18 countries and international organizations and many participants from Libya.

These proceedings offer valuable experiences, experimental results and important hints for a proper use of fertilizers in the arid and semi-arid regions where the solution of food problems is a real challenge to science and research.

Price: DM 68.00

Orders to: E. Goltze Verlag, Stresemannstrasse 28, 3400 Göttingen, Fed. Rep. of Germany.

I. Szabolcs, Budapest and
J. van Baren, Wageningen.

Natural Resources and the Environment Series. M. R. Biswas and A. K. Biswas, series directors. Tycooly International Publishing Ltd., Dun Laoghaire, Ireland.

This new important series takes a multidisciplinary approach to the environmental sciences and management, and contains both research work and applications.

The series will be of interest to all those involved in and with natural resources and the environment: specialists; researchers; decision-makers; administrators and planners. Some texts cover a wide subjects spectrum whilst others will have a tighter focus. Texts will approach problems from the point of view of the development process, and will therefore be of interest to all professionals concerned by these fields, universities, libraries and those involved in development aid.

The editorial board consists of Messrs. E. El-Hinnawi, M. Kassas, V. Kovda, W. Manshard, W. Matthews, M. Swaminanthan and H. Ping Wei.

Volume 1. Environmental Impacts of Production and Use of Energy. Essam El-Hinnawi. Published for UNEP. 1981, 340 p.

The production, transformation and use of different sources of energy raise a number of important environmental issues. UNEP has undertaken a number of in-depth reviews having so far been carried out on fossil fuels, nuclear energy and renewable sources of energy. The present volume consolidates these studies into one text summarizing the state of knowledge at the end of the 1970s.

Hardback: ISBN 0-907-567-00-2, US$ 51.00, £ 30.00;
Softcover: ISBN 0-907-567-15-0, US$ 33.00, £ 17.50

Volume 2. Renewable Natural Resources and the Environment. K. Ruddle and W. Manshard. Published for the United Nations University, 1982, 409 p.

This volume focusses on the most important interactions among poverty, development, renewable natural resources and the environment. The problems resulting from the use and management of natural resources in developing countries are treated on a geographical zonal basis.

In the first chapter the humid tropics are discussed with regard to the priority problem of deforestation. Then the ecological characteristics of tropical and subtropical drylands are defined and the problems of desertification are presented along with the subject of water resources and irrigation. Chapter three focusses on the environment and resource use problems of mediterranean zones. In a chapter on the coastal zones, environmental problems connected with the use of fishery and mineral resources are dealt with. The fifth chapter discusses the principal management tasks required to promote environmentally sound, sustained development in each of the zones previously examined. The concluding chapter emphasises the necessity of matching development policy with different resource systems and proposes guidelines for research programmes on renewable natural resources.

Hardback: ISBN 0-907-567-01-0, US$ 65.00, £ 39.00;
Softcover: ISBN 0-907-567-06-1, US$ 45.50, £ 22.50

Volume 3. Assessing Tropical Forest Lands: their suitability for sustainable uses. R. A. Carpenter, editor. Published for the East-West Centre, 1981, 351 p.

The first part contains the literature presented as background to the Conference on Forest Land Assessment and Management for Sustainable Uses, held in Honolulu in June 1979. It consists of a practical approach to land capability classification and suitability assessment. Part 2 consists of papers presented at the conference on concepts and methods of land capability classification and assessment of given landscape units for various uses. This volume concludes with a collection of descriptions of current practices in various countries.

Hardback: ISBN 0-907-567-02-9, US$ 55.00, £ 33.00;
Softcover: ISBN 0-907-567-07-X, US$ 38.75, £ 20.00

Volume 4. Fuelwood and Rural Energy Production and Supply in the Humid Tropics. W. B. Morgan and R. P. Moss. Published for the United Nations University, 1981, 234 p.

After an introductory chapter which describes the energy supply situation in the Third World and the Humid Tropics, seen in the broader context of the global energy problem, the authors discuss the specific position of fuelwood both in rural energy economy and in commercial industry. The following two chapters explore respectively the ecological constraints for fuelwood production and the relationship between fuelwood production and other forms of agriculture. Chapter five proposes alternative strategies for the development of and research into rural energy, and the particular role of the United Nations University in such research and development.

The work includes a comprehensive 20 page bibliography.

Hardback: ISBN 0-907-567-03-7, US$ 33.50, £ 21.50;
Softcover: ISBN 0-907-567-08-8, US$ 26.50, £ 15.75

All orders to: Tycooly International Publishing Limited, 6 Crofton Terrace, Dun Laoghaire, Co. Dublin, Ireland. Individuals and institutions in developing countries have concessional rates for all publications.

Benchmark Soils of India. R. S. Murthy, L. R. Hirekerur, S. B. Deshpande, B.V. Venkata Rao. National Bureau of Soil Survey and Land Use Planning, Nagpur, 1982, 374 p.

This is the first effort in India to present the morphological descriptions, micromorphological interpretations and analytical data of 64 carefully selected benchmark soils from all over the country, along with their classification according Soil Taxonomy and crop yield data. Climadiagrammes give monthly information on precipitation, temperature, potential evaporation and the soil water balance.

This important publication on Indian soils has also chapters on physiography, climate, vegetation and land use, soils in relation to factors of soil formation, micromorphology, use of soil survey information and soil maps for land use planning and thus providing the necessary background to understand the soils of the country.

An attempt has also been made to express soil productivity by yields of major crops under defined levels of management, and highlight constraints, if any, in their use for rainfed and irrigated agriculture or other uses. It serves as useful reference material for scientists engaged in soil research, education and training.

Twenty four of the benchmark soils were on display at the 12th International Congress of Soil Science in the form of soil monoliths.

Price: US$ 30.00 plus postage.

Orders to: D. K. Agencies, International Boosellers, H-12 Bali Nagar, New Delhi – 110 015, India.

The Mineralogy, Chemistry, and Physics of Tropical Soils with Variable Charge Clays. G. Uehara and G. Gillman. Westview Press, Boulder, 1981, 170 p. ISBN 0-89158-484-6.

In this book, the authors explain the basic differences between the variable and permanent charge systems, first examining the ideal variable system and then searching for similar behaviour in soil colloids.

Their theoretical analysis of variable charge colloids is followed by practical examples of soil behaviour in the field. The authors use the surface charge characteristics of variable charge colloids to explain nutrient retention and buffering capacities of soils, which in turn are the basis for recommendations on fertilizer and lime applications.

Further chapters deal with the physics of variable charge soils and the extent and distribution of these soils. In the final chapter, the analytical methods for characterizing soils with variable charge colloids are presented. The book has many figures and tables.

Price: £ 16.00; or $ 36.00.

Orders to: Bowker Publishing Company, Erasmus House, Epping, Essex CM16 4Bu, England; or: Westview Press, 5500 Central Avenue, Boulder, CO 80301, U.S.A.

A Provisional Methodology for Soil Degradation Assessment – Méthode provisoire pour l'évaluation de la dégradation des sols – Metodologia provisional para la evaluacion de la degradacion de las suelos. Compiled and published by FAO, Rome, 1979/1980.

The three-year joint project of FAO, UNEP/GEMS (Global Environmental Monitoring System) and Unesco: 'A World Assessment of Soil Degradation – Phase I' drew up soil degradation maps of Africa north of the equator and the Middle East at a scale of 1 to 5 million, showing present soil degradation and the risks on soil degradation. The present publication contains 6 maps and a bulletin outlining the framework of the methodology used for the maps and a part on the use of this methodology at different scales. The bulletins are available in English (ISBN 92-5-100869-8), French (ISBN 92-5-200869-1), Spanish (ISBN 92-5-300869-5) and Arabic (ISBN 92-6-600869-6). The legends of the maps are also given in these four languages. This collection will be of interest to anyone concerned with the present rate of soil degradation and the present state of the soil as well as with the soil degradation risks. The price of the collection, which comes in a cover, is low.

Price: $ 20.00

Orders to: Offical country FAO sales representatives or, in case of difficulties, through Sales and Distribution Section, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy.

Proceedings of a National Workshop on Tillage Systems for Crop Production. Roseworthy Agricultural College, South Australia, 1981, 288 p.

These proceedings are most likely to appeal to people who have direct involvement or interest in research, development and application of innovative technology in Australia's cropping industry (especially broadacre cereal production). The publication contains the following sections: overview of present and potential tillage systems (7 papers); soil physical properties (16 papers); fertilizers (4 papers); weed control (14 papers); rotations, pests and diseases (12 papers); and machinery, fuel and energy (12 papers). It also carries the summaries of the discussion groups, recommendations for tillage research in the 1980's, and a summary of the workshop.

Although the workshop only dealt with tillage systems in Australia, these proceedings will also be of interest to persons involved in the technology of crop production – mainly wheat – in other countries.

Price: Austr. $ 5.00 plus postage.

Orders to: Dr. R. G. Fawcett, South Australia Dept. of Agriculture, G.P.O. Box 1671, Adelaide S.A. 5001, Australia.

Soil Degradation. D. Boels, D. B. Davies and A. E. Johnston, editors. A. A. Balkema Publishers, Rotterdam, the Netherlands, 1982, 280 p.

This book grew out of a seminar on problems which have been selected for funding by the Working party on Land Use and Rural Resources, an advisory body to the European Economic Community. The seminar took place in Wageningen, the Netherlands, from 13–15 October 1980. Problems of physical soil degradation and the concomitant decrease in production potential of soils basically revolve around the use of modern, highly mechanized agricultural systems using farm equipment with typically high wheel and axel loads. Problems of organic soil degradation can often be traced to the preference for monocultures in modern farming systems. These two topics are covered in depth by experts from throughout the European Community. Altogether, 18 papers are included, followed by the gist of the discussions held.

A third section outlines the conclusions and recommendations growing out of the seminar. In its entirety, the present volume offers a complete overview of European research into techniques for coping with problems of soil degradation. This book is published for the Commission of the European Communities.

Price: Dfl. 75.00, $ 30,00 or £ 16.30.

Orders to: A. A. Balkema, P. O. Box 1675, 3000 BR Rotterdam, the Netherlands; or: MBS, 99 Main Street, Salem, NH 03079, U.S.A.

Aridic Soils and Geomorphic Processes. Dan. H. Yaalon, editor, Catena Supplement No. 1, 1982. Catena Verlag, 1982, ISBN 3-923381-00-X.

This supplement of the journal Catena contains 13 papers presented at the International Conference on Aridic Soils, held in Jerusalem, Israel, 29 March to 4 April 1981. They form a part of the proceedings; being in addition to the book Aridic Soils of Israel. Properties, Genesis and Management, the Volcani Centre, Bet Dagan, 1981 (see Bulletin 59, p. 58) and a forthcoming issue of the journal Geoderma.

Price: DM 95.00 or US$ 55.00 including postage.

Orders to: Catena Verlag, Ms. M. Rohdenburg, Brockenblick 8, 3302 Cremlingen 4, Fed. Rep. of Germany.

Fourth Symposium on Soil Biology. Cluj-Napoca, 1977. Edited and published by the Romanian National Society of Soil Science, 1981, 400 p.

This publication contains the papers presented at the Fourth Symposium on Soil Biology of the RNSS, all of them being published in English.

The main topics discussed were: nitrogen fixation by soil symbiotic or free-living microorganisms, soil fertility, soil pollution and soil dwelling organisms, soil enzymes, qualitative tests and other techniques, soil microflora and fauna, the influence of waste products and compositing of sludge.

Most papers have extensive lists of references.

Price: US$ 25.

Orders to: Romanian National Society of Soil Science, Bd. Marasti 61, 71 331 Bucharest I, Romania.

D. Teaci, Bucharest.

International Symposium on Salt Affected Soils. Karnal, India, 18–21 February 1980. **Proceedings.** 176 p.

The symposium papers appeared in a separate volume (see Bulletin 59, p. 49). The present publication includes some additional research papers, the texts of the special lectures by Drs. Dudal and Bhumbla, the discussions on the papers as well as the recommendations.

Orders to: Central Soil Salinity Research Institute, Karnal 132001, Haryana, India.

Bodenkunde. Zweite, völlig neubearbeitete Auflage. H. Kuntze, J. Niemann, G. Roeschmann und G. Schwerdtfeger. UTB 1106 (Uni-Taschenbücher). Eugen Ulmer, Stuttgart, 1981, 407 p. ISBN 3-8001-2481-5.

This German-language paperback pocket-book, replaces an earlier hardcover edition from 1969.

The book was mainly written as a supplement to lectures at Polytechnical schools for Agriculture, Horticulture, Forestry and Hydro-engineering, but also for people using pedology in practical work, in extension service or executing plans. There are four chapters: Earth-scientific principles (97 pp.), Soil Properties (150 pp.), Soil Genesis, Systematics and Geography (85 pp.) and Applied Soil Science (29 pp.). The first chapter gives basic information about mineralogy, weathering of rocks and important geological processes typical for northwestern Europe and deals shortly with the stratigraphy of mainly the Quaternary deposits. The second chapter discusses the soil properties in an evenly balanced review. The chapter about soil taxonomy treats middle-European soils and deals shortly with soils from other regions. The last section of this chapter gives an holistic approach of soil geography by means of block diagrams and cross sections. In the last, rather short chapter, quite rightly the eleven pages in the first edition about the pre-war system of *Bodenschätzung* (soil evaluation) are reduced to two pages in this section. However, one misses with some regret an updated table 'translating' soils and soil properties into soil suitability classes.

Price: DM 29.80.

Orders to: Verlag Eugen Ulmer, Postfach 700561, 700 Stuttgart 70, Federal Republic of Germany.

H. de Bakker, Wageningen

Proceedings of Symposium on Paddy Soils. Edited by Institute of Soil Science, Academia Sinica, Science Press, Beijing/Springer Verlag, Berlin, Heidelberg, New York, 1981, 864 p. ISBN 3-540-10900-5 (Fed. Rep. of Germany); 0-387-10900-5 (U.S.A.).

Paddy land is one of the most important land resources in the world. Owing to the peculiar water regime, paddy soils possess quite different properties physically, chemically and biologically as compared with those of upland soils. Such properties have a conspicuous effect on fertility and management practices of paddy fields. In recent years, an extensive study of paddy soils has been carried out in different parts of the world, especially in Asia. It is estimated that in China rice constitutes about half of the total food production, covering an area of about 30% of 1000 million hectares of cultivated land of the whole country.

For the purpose of summing up the past work and opening up new prospects, a 'Symposium on Paddy Soils' was organized under the auspices of Academica Sinica in Nanjing, October 1980 (see ISSS Bulletin 58, page 27). It was attended by 120 Chinese and 59 foreign experts. A total of 110 papers were presented and are contained in the present proceedings under the following sections: contributions at plenary sessions (15 papers); properties of paddy soils (23 papers); genesis and classification (20 papers); management (23 papers); and 29 poster sessions. The proceedings have 317 figures and 445 tables.

Price: DM 98.00.

Orders to: Springer Verlag, Heidelberg Platz 3, D-1000 Berlin 33, Fed. Rep. of Germany; or: 175 Fifth Avenue, New York, NY 10010, U.S.A.

Tropical Agriculture. Special Issue on the Management of Clay Soils. Vol. 59, nr. 2, April 1982. N. Ahmad, F. A. Gumbs, J. Lindsay, S. M. Griffith and G. Holder, editors. Butterworth, Guildford.

This issue contains the 16 papers and the workshop discussion presented at the Symposium on the Management of Clay Soils held at the University of the West Indies, St. Augustine, Trinidad, 15-19 September 1980. The background papers discuss a number of topics relevant to the management of clay soils, reviewing the state of knowledge and management requirements for good crop production on these soils.

The workshop dealt with the following topics with relevance to crop production in Trinidad and Guyana: management of structure on clay soils; water management on clay soils; tillage management of clay soils; hillside management of clay soils on small farms for erosion control; crop and fertility management of clay soils; priority problems for management on clay soils in the Caribbean.

Price: single copies £ 11.75 including surface mail postage.

Orders to: IPC Business Press, Oakfield Road, Perrymount Road, Haywards Heath, Sussex RH16 3DH, England.

Progress in Experimental Petrology, 5th Progress Report. C. E. Ford, editor. The Natural Environment Research Council Publications Series D, No. 18. N.E.R.C., 1981, 319 p. ISSN 0309-6882.

This is the fifth report of progress in experimental petrology and mineralogy at UK universities. The work reported is supported by research grant awards made by the Natural Environment Research Council.

This report encompasses the wider interpretation of experimental petrology and mineralogy established by the fourth report, reflecting the increasing scope for application of experimental techniques in the earth sciences. The need for fundamental, quantitative physical and chemical data can in many circumstances best be met by well designed experiments. This series of reports provides the opportunity to publish, inter alia, details of techniques and interim data, of wide interest and often in more detail than can be published in scientific journals. Nine different university institutions present results here.

There are obvious advantages in close collaboration in equipment-intensive projects and it is encouraging to note the working links reported here. At least as important is the dissemination of experimental results to the wide 'user' public. This publication is designed to aid this.

Altogether, 30 reports are included. The publication is free of charge.

Requests to: National Environment Research Council, Polaris House, North Star Avenue, Swindon, Wilts SN2 1EU, U.K.

Soil water assessment by the neutron method. E. L. Greacen, editor. CSIRO Australia, 1981, 140 p. ISBN *0-643-00414-9*.

The neutron moisture meter responds to the volumetric water content of the soil in a way which statisfies almost ideally the requirements of agronomists and hydrologists for measurement of soil water. As a consequence it has found wide application in research and is increasingly becoming adopted as a management tool in systems dealing with water. Until now there has been a lack of appreciation of the finer details of installation and calibration techniques, and a failure to come to grips with the problem of experimental design. This publication clarifies some of the more contentious aspects of methodology and spells out in some detail what can be achieved with the neutron method. Experienced workers have prepared the individual chapters dealing with applications in agriculture, forestry and environmental science, neutron moisture meter theory, instrument design, accuracy, calibration, field installation and maintenance, site selection and representivity, field practice, data acquisition and processing and safety.

Price: $A 12.00.

Orders to: CSIRO Editorial and Publications Service, 314 Albert Street, East Melbourne, Vic. 3002, Australia.

Soils and Landforms – An Integration of Geomorphology and Pedology. J. Gerrard. Allen & Unwin, London, 1981, 238 p., ISBN 0-04-551048-2, hardback; 0-04-551049-0, paperback.

This book provides a vital integration of geomorphology and pedology, two major divisions of the Earth Sciences which hitherto have been treated separately. An accurate assessment of the geomorphological evolution of landscapes and of the patterns of soil formation is possible only if the inherent interdependence of soils and landform is recognised, and the aim of this book is to leave the reader in no doubt that such an integrated treatment is long overdue and important to the development of both the contributing disciplines.

In the first part of the book the principles underlying the interrelationships are examined. Many distinctive soil patterns are the result of selective erosion and deposition of soil by geomorphological processes – surface and subsurface water flow, mass movements, wind erosion – which are treated in some detail. Distinctive landform assemblages are often matched, on to one, by soil patterns, The general theme of the book is illustrated by the analysis of such patterns on glacial and fluvioglacial landforms, river floodplains and terraces, and coastal plains, amongst others.

The value of soils as stratigraphic indicators and as guides to and understanding of landform evolution is being increasingly recognised; this book provides much of the background to these themes. The applied aspects of geomorphology and pedology are stressed throughout with examples taken from land management studies.

Students and research scientists should find this book to be highly relevant to their interests in geomorphology and pedology, whether they work in departments of geography, soil science, geology or environmental science. The book has been written with them in mind, and such features as the 400-entry bibliography should enhance its usefulness for their purposes.

With the continuing rise in the prices of books, the publishers are to be congratulated with also presenting a paperback edition, bringing this pedogeomorphic synthesis within the reach of individual students and scientists.

Price: hardback edition £ 15.00 or $ 35.00; paperback £ 7.75 or $ 16.95.

Orders to: George Allen & Unwin, P.O. Box 18, Park Lane, Hemel Hempstead, Herts. HP2 4TE, England; 9 Winchester Terrace, Winchester, MA 01890, U.S.A.; or: P.O. Box 764, 8 Napier Street, North Sydney 2060, Australia.

Physico-chemical Methods of Soil Investigations. N. G. Zorin and D. S. Orlov, editors. Moscow University Press, Moscow, 1980, 382 p.

This monograph by ten authors incorporates the most recent infomation on methods of soil physico-chemical analyses originated or evaluated by the Soviet scientists. The nine chapters and appendix include potentiometric determinations of the activities of hydrogen and nutrient ions, redox potential, polarography, spectrophotometry, infrared spectrophotometry, analyses by emission, atomic absorption, X-ray and thermal procedures, electron microscopy, and statistical treatment of analytical data.

A large part of the book is concerned with the organic soil constituents, components which seldom receive adequate attention in treatises on soil analyses. A good share of the information incorporated in this volume has not yet reached English-speaking soil scientists. Preparation of this monograph involved a larger staff than is usually the case in scientific literature. In addition to the two principal editors, the publication required participation of three other editors, an artist, an art editor, and two proof readers.

Price: 1 rouble.

J. G. Iyer and S. A. Wilde
Univ. of Wisconsin, Madison

The Economics of Irrigation. I. Carruthers and C. Clark. Liverpool University Press, Liverpool, 1981, 320 p. ISBN 0-85323-254-7.

This book represents an extensive revision and updating of Colin Clark's The Economics of Irrigation, the second edition of which was issued by Pergamon Press in 1970 and has been out of print since 1973. It emphasizes the principles relevant in planning and operating irrigation including physical, biological, economic, financial and social aspects.

Among the principal topics covered in detail are: the character and extent of irrigated agriculture; the water requirements of plants in different environments; crop response to irrigation; water resources, including quality considerations; groundwater economics; cost and returns to irrigation; charging for irrigation water; and planning procedures for irrigation development.

The final chapter contains a summary of the findings of the review and recommendations regarding technical and socio-economic aspects of irrigation. This well-produced book contains an extensive list of notes and references and a helpful bibliography for further reading. It will be of value to agriculturists, engineers, medical specialists, administrators and politicians in this increasingly important area of technology.

Price: £ 20.00.

Orders to: Pudoc, P.O. Box 4, 7600 AA Wageningen, the Netherlands.

Manual of Soil Laboratory Testing. Volume 1, soil classification and compaction tests. K. H. Head. A Halsted Press Book, John Wiley and Sons, New York, Toronto, 1980, 339 p. ISBN 0-470-26973-1.

There have been many developments in soil laboratory testing procedures during the last 20 years, and this volume is the first of a new series which is designed to present current accepted laboratory practice in geotechnology. The series will provide step-by-step details of procedures for carrying out tests on soils, including those covered by British Standards as well as those that are based on accepted practice or on U.S. (ASTM) Standards. Background knowledge, and reference to testing experience, which are necessary for the full appreciation of the engineering context of the tests, will be a feature of the series. The basic theory underlying the tests will also be presented.

The volumes are intended to act as a working manual for all those involved in geotechnical laboratory testing, whether they be technicians with little or no previous experiences; senior technicians, engineers; or students, who should also find it useful as a reference for details of laboratory procedures.

The first volume covers the basic tests for soil classification and compaction, as given in British Standard 1377: 1975, which it augments. Each test is broken down into simple stages and is described in step-by-step form. Some of the more complex procedures are illustrated by flow diagrams. Many numerical examples are given, to illustrate the methods of calculation. Typical graphical results are shown, and the reporting of data is explained. Procedures are based on British Standards where applicable, or on other recognised authorities, or on the author's own experience. Also included are notes on general laboratory equipment, good technique and safety in the laboratory.

Further volumes will cover strength, consolidation and permeability tests and effective stress tests.

Price: $ 49.50. Orders with payment are sent postage-free.

Orders to: Soil Test Inc., 2205 Lee Street, Evanston, Illinois 60202, U.S.A.

Dictionary of Soils. French-English. G. Plaisance and A. Cailleux. Amerind Publishing Company, New Delhi, 1981, 1109 p.

This is a translation of the French 'Dictionnaire des Sols', published in 1958. It provides more than 10.000 scientific and popular terms of soil science and allied sciences used in France, followed by their synonyms and description in English. It also gives information on symbols of measures, British and American units and common abbreviations in French, Latin, Greek, English, and German that are used in textbooks.

This dictionary is meant for all those interested in soils. Because the original publication is nearly 24 years old, new terms are not incorporated.

Price: US$ 30.00

Orders to: D. K. Agencies, International Booksellers, H-12 Bali Nagar, New Delhi – 110 015, India.

Soils and Agriculture. P. B. Tinker, editor. Critical Reports on Applied Chemistry, Volume 2. Blackwell Scientific Publications, Oxford, 1980, 151 p. ISBN 0-632-00722-2.

Critical Reports on Applied Chemistry is a new series of publications sponsored by the UK Society of Chemical Industry. It replaces the Annual Reports on the Progress of Applied Chemistry and each issue is designed to review one of the main subjects within the Society's considerable range of interest. The emphasis is on critical assessment rather than comprehensiveness but as the series develops, it is expected to provide a unique overview of scientific and technological developments affecting the chemical industry.

Soils and Agriculture is volume 3 of this series and the subjects of the report have been selected on the basis of their current interest, and each chapter has been written by experts who are themselves closely involved in the developments they discuss. Recent work in the subject is reviewed and new and future applications which may lead to improved crop yields are described. The volume therefore presents a concise account of significant areas of agricultural research in which the technology is related to the economics of food production. It contains the following four chapters: Root-soil interactions in crop plants; Soil nitrogen and nitrate leaching; Retention and release of phosphate by soil and soil constituents; and Physical methods for the study of the chemical composition of soils and plants.

Price: £ 8,00; $ 27.95, paperback.

Orders to: Blackwell, Osney Mead, Oxford, OX2 OEL, England; or: Halsted Press, 605 Third Avenue, New York, NY 10158, U.S.A.

Dränanleitung. R. Eggelsmann. Paul Parey, Hamburg, 1981, 268 p. ISBN 3-490-15216-6.

In the second edition of this German-language compendium on drainage, new material has been added, e.g. on the ecological aspects of drainage. The main chapters of the subject matter are: an introduction on general items; water and soils; field investigations; methods of drainage; effects of drainage; hydraulic calculations; drain design; drain material; drain construction; drain maintenance.

The manual contains a large number of diagrams, tables and photographs. There is an extensive subject index.

Price: DM 78.00

Orders to: Paul Parey, Spitalerstrasse 12, D-2000 Hamburg, Fed. Rep. of Germany.

Nitrogen Cycling in West African Ecosystems. T. Rosswall, Editor. SCOPE/UNEP International Nitrogen Unit, Stockholm, 1980, 450 p. ISBN 91-7190-007-1.

This volume reports on the first regional meeting arranged by the SCOPE/UNEP International Nitrogen Unit, held at IITA, Ibadan in December 1980. The volume contains invited key-note papers as well as papers contributed by other participants in the workshop. A major part of the meeting was devoted to discussions of present knowledge of nitrogen cycling in three major ecosystem types in West Africa, viz., savannas, forests and agro-ecosystems. The reports from these work group discussions are included together with a report on the final discussion on research priorities and future cooperation.

Bibliographies on published articles dealing with nitrogen cycling in West African ecosystems are also included.

Price: US$ 15.00, incl. airmail postage.

Orders to: Information Department, Royal Swedish Academy of Sciences, P.O. Box 50005, S-104 05 Stockholm, Sweden.

Copper in Soils and Plants. J. F. Loneregan, A. D. Robson and R. D. Graham, editors, Academic Press, Sydney, 1981, 380 p. ISBN 0-12-455520-9.

This volume critically reviews information pertinent to understanding the importance of copper in soil-plant systems. It contains the proceedings of the Golden Jubilee International Symposium on 'Copper in Soils and Plants' held at Murdoch University, Perth, Western Australia on May 7–9, 1981 under the sponsorship of the Australian Academy of Technological Sciences.

The book begins with a chapter that discusses the chemistry of copper relevant to the systems studied. The following five chapters cover various aspects of the distribution of copper in, and the behavior of copper with, soils and soil materials. In the next five chapters the behavior of copper in plants in examined, and these topics are treated: absorption, distribution, forms, function, and the physiological bases of response to deficiency and tolerance to toxicity.

From the assessment of the basic processes involved in the behavior of copper in soils and plants, the book moves into a final section that deals with soil-plant systems. It covers the relationship of soil copper to plant copper, the diagnosis of copper deficiency and toxicity in plants, and the distribution and correction of copper deficiencies in crops and pastures. The volume concludes with a chapter that indicates gaps in our knowledge of the processes that govern the behaviour of copper in soils and plants. The chapter also emphasizes the need to integrate process-oriented research into an overall quantitave model.

This book will be of interest to agronomists, soil scientists, plant physiologists, foresters, botanists, environmental scientists, and researchers and advanced students in these fields.

Price: $ 28.50

Orders to: Academic Press, 111 Fith Avenue, New York, NY 10003, U.S.A.; or: 24/28 Oval Road, London NW1 7DX, England.

Mapa de Solos do Brasil, 1:5,000,000. EMBRAPA-Serviço Nacional de Levantamento e Conservação de Solos, 1981.

This map illustrates clearly the great advancement made in recent years in the knowledge on soil geography in Brazil. For the northern part of the country, where radar-imagery has been a very helpful tool, the soils pattern now appearing is rather drastically different from earlier small-scale maps like the FAO-Unesco Soil Map of the World sheet IV-1. The map has been prepared under the guidance of M. N. Camargo by a large group of soil scientists.

The legend mentions altogether 248 units, mostly consisting of soil associations of which the constituing soils are given. Use has been made of the Brazilian soil classification system. The map is well-produced. No explanatory text has appeared.

Orders to: EMBRAPA-SNLCS, Rua Jardim Botanico 1024, 22460 Rio de Janeiro, RJ Brazil.

Soil Conservation, second editon. N. Hudson. Cornell University Press, Ithaca, 1981, 324 p. ISBN 0-8014-1436-9.

This is second edition of Professor Hudson's standard work and records the changes and developments since it was first published in 1971. The main framework has been retained but each chapter has been brought up-to-date, incorporating significant advances made in the last decade.

Concentrating on improved land use and crop management, the author discusses recent findings on population pressures and food production, rainfall erosion, developments in simulation and mathematical modeling and problems of soil conservation for subsistence farmers in the tropics. The author has a wide experience in African soil conservation programmes and suitable and acceptable management practices in the tropics are frequently mentioned.

This clearly written text contains many diagrams, tables and photographs and will be of interest to people working in all the applied sciences which have a bearing on soil erosion.

Price: $ 17.50

Orders to: Cornell University Press, 124 Roberts Place, Ithaca, NY 14850, U.S.A.

Soil Resource Inventories and Development Planning. Technical Monograph No. 1. Soil Management Support Services, USDA, 1981, 407 p.

A knowledge of soil resources is important for planning agricultural development. Many developing countries do not have a comprehensive soil resource inventory. Others have information on land which only partially answers questions critical for the evaluation of the environment. In other cases, complete surveys are available but ignored because of lack of communications, differences in technical language, or in disciplinary approaches. As a results planners have difficulties selecting suitable locations for agricultural development, or deciding on the best uses of land being brought into cultivation.

It is hoped that this book will be useful to soil scientists and planners in improving communications between disciplines. The text is a selection of papers presented at two workshops held at Cornell University in 1977 and 1978. The workshops concentrated on the characterization of soil surveys and on ways to make them more effective for agricultural planning.

The book contains papers in the following sections: kinds and intensities of soil surveys (5 papers), soil survey methodology: techniques (4 papers), nature of soil resource information needed by planners (4 papers), soil properties important for given land uses (5 papers), kinds of soil survey interpretations (4 papers), criteria for appraising soil surveys (3 papers), methods to determine adequacy of surveys (3 papers), ground-truth checking and map unit composition (3 papers), and the presentation of soil resource inventory information to planners (2 papers).

The Soil Management Support Services Project (SMSS) of the Soil Conservation Service in the U.S. Department of Agriculture is now continuing the study of new methodologies in soil surveys. The materials published in this book may serve as starting points for further research on inventory techniques particularly suited for developing nations. It is hoped this publication will be a source book for direct application in SMSS's technical assistance programs.

Orders to: Program Leader, Soil Management Support Services, Soil Conservation Service, USDA, P. O. Box 2890, Washington, D.C. 20013, U.S.A.

Advances in Microbial Ecology, volume 5. M. Alexander, editor. Plenum Press, New York and London, 1981, 250 p. ISBN 0-306-40767-1.

The series Advances in Microbial Ecology presents the latest research on the roles of microorganisms in natural ecosystems, emphasizing microbial processes and interactions, the effects of environmental factors on microbial populations and the economic impact of these organisms. Volume 5 covers a broad range of topics, with particular focus on the ecology of several microbial groups and the role that environmental factors play in the behavior of microorganisms in natural habitats. Contributors examine the biochemistry and ecological significance of lignin decomposition, consider the responses of fungi to nutrient limitations, discuss the possible basis for oligotrophy (the ability of certain microorganisms to grow at very low nutrient concentrations), analyze the stresses imposed on microorganisms by water limitations in natural habitats, and review the beneficial contributions to plant growth of the mycorrhizal fungi.

This volume offers important reading for microbial ecologists, microbial physiologists, soil scientists, and others.

Price: $ 35.00 in U.S.A. and Canada, elsewhere $ 42.00

Orders to: Plenum Publishing Corporation, 233 Spring Street, New York, NY 10013, U.S.A.

Principles and Applications of Soil Geography. E. M. Bridges and D. A. Davidson, editors. Longman, London and New York, 1982, 297 p. ISBN 0-582-30014-2.

This important new text is an integrated introduction for students to the principles and applications of soil geography. It begins with an historical review of man's relationship with the soil from earliest times to the end of the nineteenth century. Further chapters look at the development of scientific soil survey techniques; the principles of soil classification; the handling of soil survey data including recent advances in the uses of computer based techniques; and the use of conceptual models as an aid to the study of spatial patterns of soils.

Two chapters then look at the applications of soil survey data. The first focuses on the vital role soil survey data play in agriculture, and shows how soil distribution studies can be used to increase agricultural productivity. The second considers the benefits derived from soil survey data in non-agricultural applications in forestry and land use planning including road construction, urban extension, sewage disposal and recreational use. The concluding chapter gives a global assessment of the value of present-day soil studies in making the optimum use of soil resources in the face of increasing demands for food supplies.

All the chapters have been specially written for the book by experts in the subject with the aim of giving students and comprehensive, up-to-date and authoritative overview of modern soil geography. The editors have compiled an extensive bibliography to encourage students to explore the literature of the subject.

This book will be essential reading for the increasing number of students taking soil geography as part of a degree course in geography or environmental science. The price is very reasonable.

Price: In U.K. £ 6.95.

Orders to: Longman, Longman House, Burnt Mill, Harlow, Essex CM20 2JE, England.

Advanced Techniques for Clay Mineral Analysis. J. J. Fripiat, editor. Elsevier Scientific Publishing Company, Amsterdam, Oxford and New York, 1982, 235 p. ISBN 0-444-42002-9.

One of the important aims of an international congress devoted to natural or synthetic materials is to inform the researcher about the potential use of new physical techniques employed for characterizing these materials. This specific task is becoming more and more urgent because the number of physical techniques and their new applications are increasing very rapidly.

The organizing committee of the 7th International Clay Conference held in Bologna and Pavia in September 1981 has thought that a special symposium on Advanced Methods in Clay Minerals Research should be of great interest for many participants. Dr. J. J. Fripiat was asked to take the responsibility for its organization.

For a variety of reasons, nine techniques were selected to be reviewed; they form the nine chapters of this monograph, volume 34 in Elsevier series Development in Sedimentology. For theoretical discussions on the methods reference is made to the publication Advanced Chemical Research (D. Reidel Publishing Company, Dordrecht, 1980, see Bulletin 59, p. 62). The present book concentrates on experimental results and their physical meaning on the following methods: thermal analysis, electron microscopy, Mössbauer spectroscopy, nuclear magnetic resonance, electron spin resonance, electron spectroscopy, UV and visible spectroscopy and far infrared spectroscopy. Each paper is accompanied by an up-to-date bibliography.

Price: Dfl. 100.00 (about $ 46.50).

Orders to: Elsevier Scientific Publishing Company, P. O. Box 211, 1000 AE Amsterdam, the Netherlands; or: Elsevier/North Holland, 52 Vanderbilt Avenue, New York, NY 10017, U.S.A.

International Research on Saline Irrigation Waters. An Annotated Bibliography 1950–1980. I. C. Gupta and K. N. Pahwa. Agricole Publishing Academy, New Delhi, 1981, 394 p.

The pressing need for increased agricultural production in the times ahead can only be met by more efficient use of whatever land and water resources are available to mankind. With irrigation, crop production can be largely increased and hence in arid and semi-arid areas of the world, irrigation development is taking place at a faster rate now than ever before. The fresh water resources are meagre in arid zones and ground waters are commonly saline. However, the possibility of utilizing large areas of inland desert soils for agricultural purpose through the use of saline ground waters and of the soils in coastal strips through sea water, is enormous.

During the last three decades, a large body of information from researches and scientific investigations conducted in different countries of the world on the use of saline and sea water in agriculture is available. The findings of these investigations lie scattered in many journals and in papers in different languages of the world. These research findings have been summarized in the present publication in the form of an annotated bibliography. It contains 884 entries, and indices on author, subject, source and geographical region. It should be of interest to many scientists and research workers and agricultural libraries should have a copy.

A foreword has been written by Prof. I. Szabolcs, Chairman of the Subcommission on Salt-Affected Soils of the ISSS.

Price: Rs. 170 in India, $ 34.00 elsewhere

Orders to: Agricole Publishing Academy, D-76 Panchsheel Enclave, New Delhi 1110017, India.

Terrain Analysis and Remote Sensing. J. Townshend, editor. Allen & Unwin, London, 1981, 240 p., ISBN 0-04-551036-9, hardback; 0-04-551037-7, paperback.

This purpose of this book is to present an authoritative view of the role of remote sensing techniques in the analysis of terrain and land resources. A distinctive viewpoint has been adopted in order to integrate terrain analysis with remote sensing, fields which have previously been dealt with separately. The treatment of remote sensing in this book indicates that these techniques are adding significantly to the systematic monitoring and intelligent forecasting of land resources and thereby to a better understanding of the terrestrial environment.

Price: In U.K. £ 18.00 hardback; £ 9.95 paperback.

Orders to: see below.

Geomorphological Techniques. A. S. Goudie, editor. Allen & Unwin, London, 1981, 416 p., ISBN 0-04-551042-3, hardback; 0-04-551043-7, paperback.

As geomorphology has established its status as a major division of the Earth sciences over the past twenty years, it has acquired a burgeoning range of techniques with which to arm the scientific study of the Earth's surface. The aim of this book is to provide all geomorphologists, earth scientists and engineers with a manual which will introduce a authoritative and useful manner, and guide the reader to sources of further information. It offers the comprehensive and up-to-date treatment that only a well integrated volume of specialist contributions can achieve.

Price: In U.K. £ 25.00 hardback; £ 12.95 paperback.

Orders to: George Allen & Unwin, P.O. Box 18, Park Lane, Hemel Hempstead, Herts, HP2 TE, England; or: 9 Winchester Terrace, Winchester, MA 01890, U.S.A.

New Journals/Nouveaux Journaux/Neue Zeitschrifte

Geochemistry – a new journal. Science Press, Beijing/Springer Verlag Berlin, Heidelberg, New York. Springer Verlag title no. 342.

This new journal contains original Chinese papers in an English translation. It is distributed worldwide (with the exception of the People's Republic of China) on behalf of Science Press, Beijing.

Subscription: (1982) DM 124.00 plus postage and handling; in North America US$ 80.00 including postage and handling.

Orders to: Springer Verlag, Journal Division, P.O. Box 105280, D-6900 Heidelberg, Fed. Rep. of Germany; or: Springer Verlag, 175 Fifth Avenue, New York, NY 10010, U.S.A.

Alternative/Appropriate Technologies in Agriculture. Intertrade Publications, Kalyani, West Bengal, India. ISSN 0002-1733.

This new quarterly grass-roots research journal is exclusively concerned with appropriate and applicable existing and future research in the field of agriculture. The journal seeks to make its diverse coverage to the advantage of all concerned, highlighting many emerging opportunities. In the fields of soils, the subjects mentioned are; agricultural chemistry and physics, fertilizers and manures, soil and land use surveys, and general soil science.

Subscription orders to: K. K. Roy (Private) Ltd., P.O. Box 10210, Calcutta, 700 019, India.

Agroforestry Systems – an international journal. Martinus Nijhoff/Dr. W. Junk, Publishers, The Hague. ISSN 0167-4366.

This is an international, multidisciplinary journal which will provide a rapid publication outlet for all types of research concerned with the various aspects of agroforesty systems, and for critical reviews on all sustainable and management systems which combine agriculture, animal husbandry, and trees on the same unit of land. It is published in cooperation with the International Council for Research in Agroforestry (ICRAF), Nairobi.

This new journal has the following objectives: to identify techniques, methods, policies, education and training suitable for rural development in the various ecological regions of the world, predominantly in the tropics; to supply the decision maker at all levels on progress, contraints and advantages of multidisciplinary land use planning; and to contribute in solving dominant problems of rural development by stimulating demand oriented applied science.

Special emphasis will be given to fundamental and applied research and to practical experiences on: contributions of agroforestry to solving problems of rural development; agro-sylvo-pastoral systems and ecosystems; the role of trees in agriculture, range and livestock management, horticultural and multiple land use; compatibility of agricultural, postoral, horticultural and multiple land use practices with forest management; shifting cultivations and related practices; tree-based farming and multi-purpose tree products; economics of agroforestry, monitoring and evaluation; and acceptability of new policies and techniques to rural societies.

It is hoped this publication will encourage cooperation and mutual exchange of knowledge between the different disciplines involved in land use. A forum is offered for open discussion. Alle contributions will be in the English language. Agroforestry Systems will appear quarterly, commencing in 1982.

Subscription price: In 1982 Dfl. 125 plus Dfl. 23 for postage and handling.

Private subscribers: Dfl. 86 including postage and handling.

Orders to: Kluwer Academic Publishers Group, Distribution Centre, P.O. Box 322, 3300 AH Dordrecht, The Netherlands.

Trends in Analytical Chemistry (TRAC). A new monthly magazine from Elsevier, Amsterdam.

This new monthly magazine publishes short, critical reviews and news on trends and developments in analytical chemistry. This branch of chemistry has grown so rapidly and is applied to so many diverse problems that it is impossible for analytical chemists to have specialist knowledge of every available technique. However, it is important for them to be aware of techniques outside their own area and of what these techniques can achieve. They must also be in a position to select appropriate methods for solving the broad spectrum of problems encountered in practice.

TRAC will provide this information – its purpose is to promote communication about methodology amongst all scientists involved in chemical analysis.

It will publish short, critical reviews that are written in such a way as to be intelligible to an interdisciplinary audience; publish regular feature articles; publish insights into norms, procedures and standards related to the function, organization and operation of industrial, government or research laboratories; serve as teaching aid; publish articles on historical aspects of analytical chemistry; and report on meetings.

There will also be a news section open for voluntary contributions, a book review section and a calendar of forthcoming events.

Subscription: (1982) Personal edition Dfl. 91.50 or $ 42.50, prepaid. Library edition Dfl. 260.00 or $ 104.00. Prices include air delivery worldwide.

Orders to: Elsevier Scientific Publishing Company, P.O. Box 330, 1000 AH Amsterdam, The Netherlands; or: Elsevier/North Holland, 52 Vanderbilt Avenue, New York, NY 10017, U.S.A.

Soil Taxonomy News. A newsletter

Soil Taxonomy News (STN), is published for the Soil Management Support Services (SMSS) by the Agronomy Department of Cornell University. SMSS is a program of international technical assistance executed by the Soil Conservation Service of the U.S.D.A. The first issue appeared in October 1981. Dr. Hari Eswaran, Program Leader of SMSS, notes in the editorial that the 1980's promises to be an exciting decade for soil science and the hopes that STN will become a forum for exchange of ideas between scientists. Although the emphasis is on propagation of the US 'Soil Taxonomy' system of classification, STN will also publish on developments of other systems or on other aspects of soil science. It contains i.a. news on the international committees on improvement of the system (ICOMLAC, ICOMOX, ICOMMORT, ICOMAND, ICOMID and ICOMMERT); list of international activities, meetings, workshops; developments in soil science, new analytical techniques; and mentions recent relevant publications.
For issues of Soil Taxonomy News, write to Dr. A. van Wambeke, 1014 Bradfield Hall, Cornell University, Ithaca, NY 14853-0144, U.S.A.

Environmental Monitoring and Assessment. An International Journal. D. Reidel Publishing Company, Dordrecht. ISSN 0167–6369.

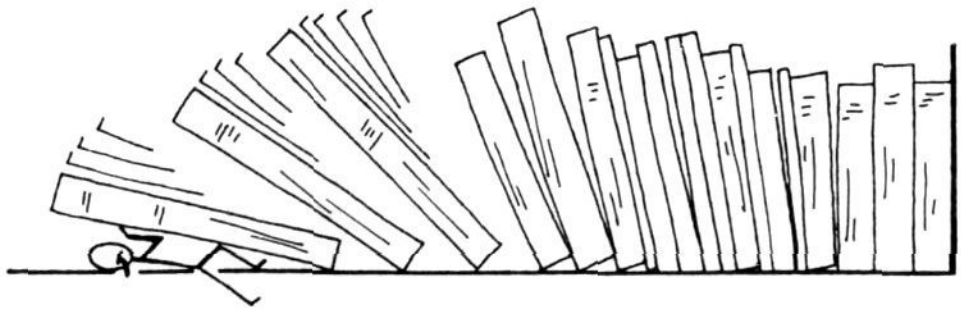
This new international journal is intended to bring together and present advances in the monitoring of the environment and the assessment of environmental data. The journal emphasizes the use of scientific principles in the design, development and implementation of monitoring systems at the local, regional and global scale. The scope of the journal includes the use of monitoring in the estimation and evaluation of pollution risks to man and the environment. Particular attention is devoted to methods and procedures for the synthesis of monitoring with ecological, toxicological, epidemiological and health data and with pre-market screening.
Examples of specific areas of interest to the journal are:
- the design and development of single medium and multimedia monitoring systems, sampling techniques, optimization of monitoring networks, data handling, quality and assurance procedures, operational costs.
- the scientific basis for monitoring, the use of biological indicators, dynamic and commitment models, pollution indices, etc.
- exposure assessment: the development of monitoring systems which allow direct or indirect estimates of pollutant exposure to critical receptors.
- ecological monitoring of populations and ecosystems for example in biosphere reserves, use of microcosms, etc.
- methods and procedures of risk estimation, including assessment of pollution sources, pathways, exposures, trends in time and space, anticipatory systems, evaluation of environmental quality and of management practice, and methods of assessing pollution impact on the natural environment.

Subscription price: (1982, four issues) Private: Dfl. 55.00; Institutions: Dfl. 143.00, including postage and handling.
Orders to: D. Reidel Publishing Company, P.O. Box 17, 3300 AA Dordrecht, The Netherlands; or: 190 Old Derby Street, Hingham, MA 02043, U.S.A.

Geoökodynamik. Geoöko-Verlag, Bensheim. ISSN 0720-454-X.

Geoökodynamik, herausgeber Prof. Dr. O. Seuffert in verbindung met dem Verein für Erdkunde zu Darmstadt, is eine Zeitschrift für Wissenschaftler, Lehrer, Studenten und Schüler und für alle anderen umwelt interessierten und umwelt bewussten Bürgern. Er wird berichtet über aktuelle geoökologische Probleme, über das natürliche Potential unseres Planetes und seine Nutzung durch den Menschen, über Ursachengefüge, Abläufe und Ergebnisse im naturbedingten und/oder anthropogen induzierten Prozessgeschehen unserer Umwelt, sowie über Möglichkeiten und Formen der Beeinflüssung solcher geoökodynamischer Prozesse durch den Menschen.

Die Zeitschrift erscheint in unregelmässigen Abstände in einem Gesamtumfang von 200–300 Seiten jährlich (2–3 Hefte).
Subskriptionspreis: DM 54; für Privatpersonen DM 44,00.
Bestellung: Geoöko-Verlag W. Seuffert, Lessingstrasse 19, D-614 Bensheim 3, BRD.



NEWS FROM THE ISSS SECRETARIAT AND TREASURY
NOUVELLES DU SECRETARIAT ET DE LA TRESORERIE DE L'AISS
MITTEILUNGEN DES IBG-SEKRETARIATS UND DER KASSENVERWALTUNG

Life Membership Facility

Following a decision of the ISSS Council of February 1982 the Society has established a life membership facility. The minimum rate is US$ 200.– or equivalent and all those that have been regular member for four years or more are eligible.

The ISSS Treasurer will open a special savings account for the purpose. Only the interest proceeds of this account will be used for the day-to-day running of the Society, part of it as equivalent of the annual fee (US$ 8.– as from January 1983) of the member concerned. Another part of the interest will be used to promote introductory membership – for a maximum of four years – for those young soil scientists in smaller developing countries where no associated national society (yet) exists, and/or who have temporary problems in transferring their annual fee.

The life members will be identified in the ISSS membership lists with a special annotation. They will also receive a printed and signed certificate and an official receipt *(for tax deduction purposes). Each Bulletin will contain a list of the new life members.*

The first life members are: *Dr. E. Pushparajah:* RRI, Kuala Lumpur), *Dr. R. Dudal* (FAO, Rome), *Dr. A. Osman* (ACSAD, Damascus), and *Mr. J. H. V. van Baren* (ISM, Wageningen). The ISSS Executive hopes that many more members will follow their example, thereby promoting a sound financial footing of the Society, stimulating membership from developing countries, ensuring uninterrupted receipt of the biannual Bulletin, and relieving the Treasurer of a significant part of the time-consuming and costly reminding for annual fees transfer.

ATTENTION, PLEASE!

New, computerised membership list

The ISSS Office is compiling the new Membership List (1982) which will henceforward the published every four years – after each official international Congress – in a computerised form. The relevant information will be fed in the computer of the Printers of the Bulletin (Messrs. Veenman in Wageningen), to be used also for automatic addressing.

Each member will receive an identification number, to stay with him/her wherever he/she happens to work, and to appear on the addressing slip. The membership list will also contain a coding for the ISSS Commission(s) and Sub-Commission(s) that have their special interest. The first computerised list will have these codes only for those members that have taken the effort, in the past few years, to inform the ISSS-Office on their subject(s) of interest, through completion of the relevant forms at registration or change-of-address.

The new Membership List will be dispatched together with Bulletin no. 62, at the end of 1982. The present Bulletin is however already being forwarded using the new computerised system. Members who find their name or address incorrect on the envelopes of this Bulletin are therefore requested to send corrections – and the (sub)Commission(s) of their interest – forthwith and by airmail to the Secretary-General's office in Wageningen, allowing him to feed the changes into the computer before printing of the new List.

Membre a vie

Suivant une décision du Conseil de l'AISS de février 1982, la Société a créé le titre de 'membre à vie'. La contribution minimum est de 200 $ EU ou l'équivalent. Peuvent être élus 'membre à vie' tous ceux qui sont 'membre régulier' depuis quatre ans ou plus.

Le trésorier de l'AISS ouvrira un compte d'épargne spécial à cet effet. Seulement les intérêts produits par ce compte seront utilisés pour les opérations courantes de la Société à concurrence de la cotisation annuelle (8 $EU à partir de janvier 1983) des membres concernés. Une autre part des intérêts sera utilisée pour promouvoir l'affiliation de membres nouveaux – pendant un maximum de quatre ans – pour des jeunes pédologues de ces pays en développement où il n'existe pas (encore) d'association nationale, et/ou pour ceux qui ont temporairement des problèmes pour transferer leur cotisation annuelle.

Les membres à vie seront distingués dans les listes de membres de l'AISS par une annotation spéciale. Ils recevront aussi un certificat imprimé et signé et un reçu officiel (en vue de déduction d'impôt). Chaque bulletin contiendra une liste des nouveaux membres à vie.

Les premiers membres à vie sont *Dr. E. Pushparajah* (RRI, Kuala Lumpur), *Dr. R. Dudal* (FAO, Rome), *Dr. A. Osman* (ACSAD, Damascus), and *Mr. J. H. V. Van Baren* (ISM, Wageningen). Le bureau de l'AISS espère que beaucoup d'autre membres suivront leur exemple, de façon à créer une base financière solide pour la Société, encourageant ainsi l'affiliation des scientifiques des pays en développement, assurant la réception ininterrompue du bulletin semestriel et déchargeant le trésorier d'une part importante du temps et des frais consacrés au rappel et au transfert des cotisations annuelles.

ATTENTION, S.V.P.!

Nouvelle liste de membres sous forme informatisée

Le Bureau de l'AISS est en train d'établir la nouvelle liste de membres (1982), qui sera publiée dorénavant tous les quatre ans – après chaque congrès international officiel – sous forme informatisée. L'information sera stockée dans le système de Veenman, imprimeur du Bulletin, qui l'utilisera aussi pour l'adressage automatique. Chaque membre aura un numéro personnel d'identification, qui ne changera pas en cas de changement d'adresse.

En plus, la liste de membres contiendra des codes indiquant les intérêts particuliers des membres dans les Commissions et Sous-commissions de l'AISS. La première liste à paraître donnera telles codes uniquement pour ces membres qui se sont donnés la peine d'informer le Bureau de l'AISS de leur champ d'intérêt en remplissant les fiches concernées pour l'enrégistrement ou changement d'adresse.

La nouvelle liste de membres sera envoyée conjointement avec le Bulletin no. 62 à la fin de 1982. Cependant, le présent Bulletin est déjà expédié à l'aide du nouveau système informatisé. Si vous constatez des erreurs dans l'adresse sur l'envelop de ce Bulletin, veuillez le retourner toute de suite par poste aérienne au Secrétaire général aprés avoir marqué les corrections afin de permettre la mise au jour avant l'impression de la nouvelle liste. On pourrait également communiquer au Secrétaire-général les (Sous)commissions où on s' intéresse.

Lebenslange Mitgliedschaft

Gemäss eines Beschlusses des IBG-Beirates vom Februar 1982 hat die Gesellschaft die Möglichkeit lebenslanger Mitgliedschaft geschaffen. Der dafür erforderliche Mindestbeitrag beträgt US$ 200.– oder ein Äquivalent davon, und jeder, der mindestens vier Jahre gewöhnliches Mitglied gewesen ist, kann Mitglied auf Lebenszeit werden.

Der Schatzmeister der IBG wird zu diesem Zwecke ein eigenes Sparbuch eröffenen. Von diesem Sparbuch sollen ausschliesslich die Zinserträge für die tägliche Geschäftsführung der Gesellschaft verwendet werden und zwar zum Teil als Gegenwert des jährlichen Beitrages des entsprechenden Mitgliedes (US$ 8.– vom Januar 1983 an). Ein weiterer Teil der Zinsen wird dazu verwendet werden, einführende Mitgliedschaften (für höchstens vier Jahre) für diejenigen jungen Bodenkundler zu begründen, die aus kleineren Entwicklungsländern stammen, die (noch) keine eingegliederte nationalen Gesellschaften haben und/oder die vorübergehende Schwierigkeiten bei der Überweisung des jährlichen Mitgliedsbeitrages haben.

Mitglieder auf Lebenszeit werden in den IBG-Mitgliederlisten besonders gekennzeichnet werden. Sie erhalten ausserdem eine gedruckte, signierte Urkunde, sowie (für Steuerabzugszwecke) eine offizielle Rechnung. In jedem Heft der 'Mitteilungen' wird eine Liste der neuen Mitglieder auf Lebenszeit abgedruckt werden.

Die ersten Mitglieder auf Lebenszeit sind: *Dr. E. Pushparaja* (RRI, Kuala Lumpur), *Dr. R. Dudal* (FAO, Rom), *DR. A. Osman* (ACSAD, Damaskus) und *Mr. J. H. V. van Baren* (ISM, Wageningen). Die IBG-Verwaltung hofft, dass noch viele andere Mitglieder ihrem Beispiel folgen werden, wodurch die Gesellschaft auf eine solide finanzielle Grundlage gestellt wird und Mitgliedschaften aus Entwicklungsländern gefördert werden, wodurch aber auch gleichzeitig der ununterbrochene Erhalt der zweimal Jährlich erscheinenden Mitteilungen sichergestellt und ausserdem der Schatzmeister von einem beträchtlichen Teil seiner zeitraubenden und kostspieligen Aufgabe, an die Zahlung der jährlichen Mitgliedsbeitrage zu erinnern, entlastet wird.

ACHTUNG BITTE!

Neue Mitgliederliste mittels Computer

Der IBG-Vorstand stellt zur Zeil eine neue Mitgliederliste (1982) zusammen, welche von nun an alle vier Jahre – nach jedem offiziellen internationalen Kongress veröffentlicht werden wird, und zwar in computergerechter Form. Alle relevanten Informationen werden in den Computer der Firma, die diese Mitteilungen druckt (Fa. Veenman in Wageningen) eingegeben und können dann auch zur automatischen Adressierung verwendet werden.

Jedes Mitglied erhielt eine Identifizierungsnummer zugeschrieben, die sich nich ändert, wo immer er/sie gerade arbeitet und die auch am Adressierumschlag erscheint. Die Mitgliederliste wird auch einen Kode für die IBG-Kommission(en) und -Subkommissionen(en) von besonderem jeweiligem Interesse enthalten. Die erste Computerliste enthielt diese Kodes nur für diejenigen Miglieder, die in den letzten Jahren von sich aus den IBG-Vorstand über ihre Interessengebiete informiert haben, indem sie die entsprechenden Aufnahme oder Adressenänderungsformulare ausgefüllt haben.

Die neue Mitgliederliste wird gemeinsam mit dem Mitteilungsblatt Nr. 62 Ende 1982 versandt werden. Die vorliegende Mitteilungen sind jedoch bereits mit Hilfe dieses neuen Datensystems verschickt worden. Mitglieder, die ihren Namen oder ihre Adresse auf den Umschlägen dieser Mitteilungen fehlerhaft gedruckt vorfinden, werden daher gebeten, die Richtigstellungen – und die (Sub-)kommission(en) ihres Interesses – unverzüglich mit Lüftpost an das Generalsekretariat in Wageningen zu senden, damit dieses die Änderungen noch vor dem Abdruck der neuen Liste in den Computer einbringen kann.

Receipts and Payments Account for the period 1 January 1981 – 20 January 1982

(Treasurer and Secretary-General)

Receipts	US dollars	Payments	US dollars
Balance on 1 January 1981		Secretarial assistance	1,132.71
– Secretary-General Wageningen	363.69	Travel and representation	3,273.32
– Treasurer Ghent	19,684.84	Equipment and supplies	2,273.64
– deposit with savings account	8,000.00	Printing	28,223.46
Interest savings account (1)	978.00	Bank charges	231.79
Membership fees	25,277.69	Postal and telephone charges	6,711.85
Subscriptions	699.29		
Advertisements	708.67		41,846.77
Sale of books/publications	232.22		
Interests	188.67	balance carried forward:	
Grants (2)	6,000.00	cash in bank: (3)	18,286.30
Return of advance for micromorphological research 12th Congress	6,000.00	deposit with savings account	8,000.00
	68,133.07		68,133.07

(1) Interest accrued on the ISSS savings account during December 1979, Jan/Dec 1980, transferred on 14 February 1981
(2) Contribution by Dutch Soil Survey Institute 'Stiboka' for 1981
(3) US dollars, Belgian francs, Dutch guilders and other currencies

Receipts and Payments Account for the period 1 January 1979 – 20 January 1982

(Treasurer and Secretary-General)

Receipts	US dollar	Payments	US dollar
Advanced operational expenses (1)	8,240.38	Secretarial assistance	2,996.06
Balance brought forward on 1 January 1979		Travel and representation	8,161.91
– cash in bank	12,327.70	Equipment and supplies	11.994.65
Interest savings account	1,859.98	Printing	56,583.74
Services publication 11th Congress	10,079,32	Bank charges	717.96
Membership fees	75,739.46	Postal and telephone charges	31,398.55
Subscriptions	1,567.02	Purchase of books/publications	2,429.71
Advertisements	2,395.71	Subsidy Subcommission A	198.00
Sale of books/publications	531.85	Advance to micromorphological	
Bank interests	522.88	research 12th Congress	7.500.00
Grants (2)	28,500.00		
Sale of equipment	502.31		121,980.31
Return of advance of micromorphological research 12th Congress	6,000.00	Balance carried forward	
		– cash in bank (3)	18,286.30
		– deposit with savings account	8,000.00
	148,266.61		148,266.61

(1) Amount transferred by R. Dudal, former ISSS Treasurer (see account 1978)
(2) Contribution by Dutch Soil Survey Institute 'Stiboka'
(3) US dollars, Belgian francs, Dutch guilders and other currencies.

Relevé de recettes et dépenses pour la période du 1 janvier 1981 au 20 janvier 1982

(Trésorier et Secrétaire général)

Recettes	dollars EU	**Dépenses**	dollars EU
Bilan au 1 janvier 1981			
– Secrétaire général Wageningen	363.69	Aide au Secrétariat	1,132.71
– Trésorier Gand	19,684.84	Représentation et déplacements	3,273.32
– dépôt au compte d'épargne	8,000.00	Equipement et fournitures	2,273.64
Intérêt du compte d'épargne (1)	978.00	Impression	28,223.46
Cotisations des membres	25,277.69	Frais banquaires	231.79
Souscriptions	699.29	Frais postaux et téléphoniques	6,711.85
Réclames	708.67		
Vente de livres/publications	232.22		41,846.77
Intérêts banquaires	188.67		
Allocations (2)	6,000.00	Solde	
Retour de l'avance pour la recherche micromorph. 12ème Congrès	6,000.00	Avoir en banque (3)	18,286.30
		Dépôt au compte d'épargne	8,000.00
	68,133.07		68,133.07

(1) Intérêt cumulé du compte d'épargne de l'AISS durant déc 1979, déc-janv 1980, transferé le 14 février 1981
(2) Contribution de l'Institut néerlandais de cartographie des sols 'Stiboka' pour 1981
(3) Dollars, francs, florins, marks etc...

Relevé de recettes et dépenses pour la période du 1 janvier 1979 au 20 janvier 1982

(Trésorier et Secrétaire général)

Recettes	Dollars EU	**Dépenses**	Dollars EU
Avances au Trésorier (1)	8,240.38	Aide au Secrétariat	2,996.06
Bilan au 1er janvier 1979		Réprésentation et déplacements	8,161.91
Avoir en banque	12,327.70	Equipement et fournitures	11,994.65
Intérêts du compte d'épargne	1,859.98	Impression	56,583.47
Services publication Congrès Edmonton	10,079.32	Frais banquaires	717.96
Cotisations des membres	75,739.46	Frais postaux et téléphoniques	31,398.55
Souscriptions	1,567.02	Achat de livres/publications	2,429.71
Réclames	2,395.71	Subvention Sous-commission A	198.00
Vente de livres/publications	531.85	Avance pour la recherche micromorph. 12ème Congrès	7,500.00
Intérêts banquaires	522.88		
Allocations (2)	28,500.00		121,980.31
Vente d'équipement	502.31		
Retour de l'avance pour la recherche micromorph. 12ème Congrès	6,000.00	Solde	
		Avoir en banque (3)	18,286.30
		Dépôt au compte d'épargne	8,000.00
	148,266.61		148,266.61

(1) Montant transferé par R. Dudal, ancien Trésorier de l'AISS (voir bilan 1978)
(2) Contribution de l'Institut néerlandais de Cartographie des Sols 'Stiboka'
(3) Dollars, francs, florins, marks, etc.

Einnahmen-Ausgaben Rechnung für den Zeitraum 1. Januar 1981–20. Januar 1982

(Schatzmeister und Generalsekretär)

Einnahmen	US Dollars	**Ausgaben**	US Dollars
Saldo am 1. Januar 1981			
– Generalsekretär Wageningen	363.69	Aushilfe Sekretariat	1,132.71
– Schatzmeister Gent	19,684.84	Reisen und Representation	3,273.32
– Anlage bei Spareinlage	8,000.00	Ausrüstung und Versorgungsgüter	2,273.64
Zinsen von Spareinlage (1)	978.00	Druckkosten	28,223.46
Mitgliedsbeiträge	25,277.69	Bankgebühren	231.79
Subskription	699.29	Post und Telephongebühren	6,711.85
Anzeigen	708.67		41,846.77
Verkauf von Bücher/Publikationen	232.22		
Bankzinsen	188.67		
Spenden (2)	6,000.00	Saldo	
Rückerstattung Vorschusz für Mikromorf. Nachforschung 12. Kongres	6,000.00	Bankguthaben (3)	18,286.30
		Anlage bei Spareinlage	8,000.00
	68,133.07		68,133.07

(1) Aufgelaufene Zinsen der IBG Spareinlage während Dez 1979, Jan/Dez 1980 übertragen am 14. Februar 1981
(2) Beitrage niederländische Institut für Bodenkartographie 'Stiboka' für 1981.
(3) Dollars, Franken, Gulden, Marken, etc.

Einnahmen – Ausgaben Rechnung für den Zeitraum 1. Januar 1979 – 20. Januar 1982

(Schatzmeister und Generalsekretär)

Einnahmen	US Dollars	**Ausgaben**	US Dollars
Vorschusz zum Schatzmeister (1)	8,240.38	Aushilfe Sekretariat	2,996.06
Saldo am 1. Januar 1979		Reisen und Representation	8,161.91
Bankguthaben	12,327.70	Ausrüstung und Versorgungsgüter	11,994.65
Zinsen von Spareinlage	1,859.98	Druckkosten	56,583.47
Dienst Publikation Edmonton Kongress	10,079.32	Bankgebühren	717.96
Mitgliedsbeiträge	75,739.46	Post und Telephongebüren	31,398.55
Subskription	1,567.02	Erwerb von Publikationen	2,429.71
Anzeigen	2,395.71	Beihilfe Subkommission A	198.00
Verkauf von Publikationen	531.85	Vorschusz für Mikromorf. Nachforschung 12. Kongress	7,500.00
Bankzinsen	522.88		121,980.31
Spenden (2)	28.500.00		
Verkauf von Ausrüstung	502.31	Saldo	
Rückerstattung Vorschusz für Mikromorf. Nachforschung 12. Kongress	6,000.00	Bankguthaben (3)	18,286.30
		Anlage bei Spareinlage	8,000.00
	148,266.61		148,266.61

(1) Dieser Beitrag wurde bei R. Dudal, ehemahliger IBG Schatzmeister, übertragen (Rechnung 1978)
(2) Beitrage niederländische Institut für Bodenkartographie 'Stiboka'
(3) Dollars, Franken, Gulden, Marken, etc.

International Society of Soil Science (ISSS)
Association Internationale de la Science du Sol (AISS)
Internationale Bodenkundliche Gesellschaft (IBG)

☐ REGISTRATION FOR MEMBERSHIP/DEMANDE D'AFFILIATION/AUFNAHMEANTRAG

☐ CHANGE OR CORRECTION OF ADDRESS/CHANGEMENT OU CORRECTION D'ADRESSE/ANSCHRIFTENÄNDERUNG

☐ STATEMENT ON SPECIAL INTERESTS/DECLARATION D'INTERÊTS SPECIAUX/ANZEIGUNG VON SPEZIALINTERESSEN

☐ APPLICATION FOR LIFE MEMBERSHIP/DEMANDE D'AFFILION POUR LA VIE/ANTRAG AUF MITGLIEDSCHAFT AUF LEBENSZEIT

- Please return this form, completed at both sides, to the Secretariat ISSS: P.O. Box 353, 6700 AJ Wageningen, the Netherlands.
- *Veuillez bien renvoyer ce formulaire, complété de deux côtés, au Secrétariat AISS: B.P. 353, 6700 AJ Wageningen, Pays-Bas.*
- Bitte senden Sie diesen Formular, ausgefüllt an beiden Seiten, zum Sekretariat IBG: P.B. 353, 6700 AJ Wageningen, Niederlande.

Membership number (if applicable)
Numéro d'affiliation (si applicable) .....
Mitgliedernummer (wenn anwendbar)

* **Surname** (Apellido/Sobrenome)
* **Non de famille** .....
* **Familienname**

First name (s) (Nombre/Nome) or initials, **and title(s)**
Prénom(s) ou initiales, **et titre(s)** .....
Vorname(n) oder Initialen, **und Titel(s)**

Address (Institution & Dept., Street and no. P.O. Box, Town & Zipcode, Country)
Adresse (Institution et Département, Rue et no., Boîte Postale, Ville et Code Postale, Pays)
Anschrift (Institut & Abteilung Strasse & No., Postfach, Stadt & Postleitzahl, Land)

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Previous country of residence
Ancien pays de domicile .....
Voriger Landesort

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* For composite names, please indicate first the part of the name to be used for listing it in alphabetical order.
* *Pour les noms composés, prière de marquer en premier lieu l'élément du nom à utiliser dans une liste alphabétique.*
* Bei zusammengesetzte Namen wird gebeten, zuerst den Teil des Namens anzugeben, der in einer alphabetische Folge erscheinen soll.

please turn over!/*voir au verso!*/bitte wenden!

Specially interested in the activities of/particulièrement interessé au activités de/besonders am folgenden Bereichen interessiert:

(C) *Commission(s)/Commission(s)/Kommission(en)*

- [1] I Soil Physics/Physique du sol/Bodenphysik
- [2] II Soil Chemistry/Chimie du sol/Bodenchemie
- [3] III Soil Biology/Biologie du sol/Bodenbiologie
- [4] IV Soil Fertility and Plant Nutrition/Fertilité du sol et nutrition des plantes/Bodenfruchtbarkeit und Pflanzenernährung
- [5] V Soil Genesis, Classification and Cartography/Genèse du sol, classification et cartographie/Bodengenetik Klassifikation und Kartographie
- [6] VI Soil Technology/Technologie du sol/Bodentechnologie
- [7] VII Soil Mineralogy/Minéralogie du sol/Bodenmineralogie

Subcommissions/Sous-commissions/Subcommissionen

- [1] A Salt Affected Soils/Sols salins/Salzböden
- [2] B Micromorphology/Micromorphologie/Mikromorphologie
- [8] C Soil Conservation and Environment/Conservation du sol et environment/Bodenerhaltung und Umwelt

Working Groups/Groupes de Travail/Arbeitsgruppen

- FT Soil Fertility Trials/Essais de fertilité des sols/Bodenfruchtbarkeitsproben (Comm. IV)
- DP Soil Information Systems/Informatique en pédologie/Informationssysteme i.d. Bodenkunde (Comm. V)
- DC Desertification/Désertification/Verwüstung (Subcomm. C)
- FS Forest Soils/Sols forestiers/Waldböden (Comm. V)
- RB International Reference Base for Soil Classification/Base internationale de référence pour la classification des sols/Internationale Referenzbasis für Bodenklassifikation (Comm. V)
- PP Paleopedology/Paléopédologie/Paläopedologie (Comm. V, with/avec/mit INQUA)
- RS Remote Sensing for Soil Surveys/Pédologie et Télédétection/Fernerkundung für Bodenkartographie (Comm. V)
- LE Land Evaluation/Evaluation des terres/Landbewertung (Comm. VI)
- CO Soil Colloid Surfaces/Surfaces des colloïdes de sol/Kolloidale Oberflächen in Böden (Comm. II)
- EP Engineering Properties of Soils/Propriétés constructuelles des sols/Ziviltechnische Eigenschaften von Böden (Comm. VI)
- AS Acid Sulphate Soils/Sols sulfatés acides/Saure Sulfatböden (Comm. V)
- HP History, Philosophy and Sociology of Soil Science/Histoire, philosophie et sociologie de la science du sol/Geschichte, Philosophie und Soziologie der Bodenkunde (Comm. V)
- MV Moisture Variability of Field Soils/Variabilité en humidité des sols sur le terrain/Veränderlichkeit von Bodenfeuchtgehalt im Gelände (Comm. I)

(T) **Preferred language/Langue préférée/gewünschte Sprache**

- [1] English
- [2] Français
- [4] Deutsch

Payment/Cotisation/Jahresbeitrag

Payment of the yearly due of US$ 8 or equivalent will be made:
La cotisation annuelle de 8 dollars E.U. ou leur équivalent sera versée:
(P) Der Jahresbeitrag von US$ 8 oder Gegenwert wird bezahlt:

- ☐ through the national society of/par l'intermédiaire de l'association nationale de/durch die Nationalgesellschaft von (country/pays/Land) .....
- ☐ by cheque/par chèque/durch Scheck
- ☐ as Unesco coupons/sous forme de bons de l'Unesco/mit Unesco-Kupons
- ☐ **life membership/affiliation pour la vie/Mitgliedschaft auf Lebenszeit** (US$ 200 or equivalent, after four years of regular membership/US$ 200 ou leur équivalent, après quatre ans d'affiliation régulière/US$ 200 oder Gegenwert, nach vier Jahren Normalmitgliedschaft)

Account/Compte/Konto: D. Gabriels, Treasurer ISSS, 390.0440957.50, Bank Brussels Lambert, Martelaarslaan, B 9000 Gent, Belgium (no direct transfer of small amounts, please/pas de transfers directs de petites sommes, svp/keine direkte Remittierung von kleinen Beiträge, bitte!)

Subcommissions/Sous-Commissions/Subkommissionen – Chairmen/Présidents/Vorsitzende

A. Salt affected soils/Sols salins/Salzböden
Dr. I. P. Abrol, Central Soil Salinity Research Institute, Karnal 132001, Haryana, India

B. Soil Micromorphology/Micromorphologie du sol/Bodenmikromorphologie
Prof. Dr. G. Stoops, Geologisch Instituut, Universiteit van Gent, Krijgslaan 271, 9000 Gent, Belgium

C. Soil Conservation and Environment/Conservation du sol et environnement/Bodenerhaltung und Umwelt
Dr. K. W. Flach, Soil Conservation Service, U.S. Dept. of Agriculture, P.O. Box 2890, Washington, D.C. 20013, USA

Working Groups of the Commissions/Groupes de Travail des Commissions/Arbeitsgruppen der Kommissionen – Chairmen/Présidents/Vorsitzende

FT Soil Fertility Trials/Essais de fertilité des sols/Bodenfruchtbarkeitsproben (Comm. IV)
Prof. Dr. E. von Boguslawski, Versuchsstation Rauisch-Holzhausen, Justus-Liebig-Universität Giessen, 3557 Ebsdorfergrund 4, BRD

DP Soil Information Systems/Informatique en pédologie/Informationssysteme i.d. Bodenkunde (Comm. V)
Dr. A. W. Moore, CSIRO Div. of Plants and Industries, P.O. Box 109, Canberra City, Act 2601, Australia

DC Desertification/Désertification/Verwüstung (Subcomm. C)
Prof. Dr. H. E. Dregne, Texas Technical Univ., P.O. Box 4169, Lubbock, TX 79409, USA

FS Forest Soils/Sols forestiers/Waldböden (Comm. V)
Dr. R. Saly, Dept. of Soil Science and Geology, Sturova 2, 96001 Zvolen, Czechoslovakia

RB International Reference Base for soil classification/Base internationale de référence pour la classification des sols/Internationale Referenzbasis für Bodenklassifikation (Comm. V)
Prof. Dr. E. Schlichting, Institut für Bodenkunde und Standortlehre, Universität Hohenheim, P.O. Box 106, D-7000 Stuttgart-70, BRD

PP Paleopedology/Paléopédologie/Paläopedologie (Comm. V; with/avec/mit INQUA)
Prof. Dr. D. H. Yaalon, Department of Geology, Hebrew University, Jerusalem 91000, Israel

RS Remote Sensing for Soil Surveys/Pédologie et Télédétection/Fernerkundung für Bodenkartographie (Comm. V)
Dr. S. Bialousz, Ul. Belska, 24M24, 02.638, Varsovie, Poland

LE Land Evaluation/Evaluation des terres/Landbewertung (Comm. VI)
Prof. Dr. K. J. Beek, I.T.C., P.O. Box 6, 7500 AA Enschede, Netherlands

CO Soil Colloid Surfaces/Surfaces des colloïdes de sol/Kolloidale Oberflächen in Böden (Comm. II)
Prof. Dr. G. H. Bolt, Dept. of Soil Science and Plant Nutrition, Agricultural University, P.O. Box 8005, 6700 EC Wageningen, Netherlands

EP Engineering Properties of Soils/Propriétés constructuelles des sols/Ziviltechnische Eigenschaften von Böden (Comm. VI)
Dr. G. Wilson, Land Resource Inst. C.E.F., K. W. Neatby Bldg., Ottawa, Ont. K1A OC6, Canada

AS Acid Sulphate Soils/Sols sulfatés acides/Saure Sulfatböden (Comm. V)
Prof. Dr. L. J. Pons, Dept. of Soil Science and Geology, Agric. University, P.O. Box 37, 6700 AA Wageningen, Netherlands

HP History, Philosophy and Sociology of Soil Science/Histoire, philosophie et sociologie de la science du sol/Geschichte, Philosophie und Soziologie der Bodenkunde (Comm. V)
Prof. Dr. D. H. Yaalon, Department of Geology, Hebrew University, Jerusalem 91000, Israel

MV Moisture Variability of Field Soils/Variabilité en humidité des sols sur le terrain/Veränderlichkeit von Bodenfeuchtgehalt im Gelände (Comm. I)
Dr. D. R. Nielsen, Dept. of Water Science and Engin., Univ. of California, Davis, CA 95616, USA

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