

IHSS COMMUNICATIONS

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THE INTERNATIONAL HUMIC SUBSTANCES SOCIETY

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It is already 1988; time has been fleeting by so quickly. It has been far too long since our last IHSS Communication, but the Society has been very active in the interim. 1987 has been a busy and difficult year healthwise for many of us. We trust that everyone has had an enjoyable holiday period, that 1987 was a productive research period, and that 1988 holds the promise of an even better year than 1987. We hope this Communication will be encouraging and stimulating to all and that you will start making plans early to attend our 4th IHSS Meeting to be in Spain during October 1988.

1988 MEETING IN SPAIN

The Board of Directors has accepted the Spanish invitation to host the 1988 IHSS Meeting in Spain during October 3-7, 1988. The meeting will be held in the Mediterranean resort city of Matalascanas Beach, which is approximately 100 km. south of Sevilla. The meeting will be conducted in the Flamerio Hotel. Dr. Cesareo Saiz Jimenez is the chairman of the local organizing committee. Other members of the organizing committee are Dr. A. Valerga, Dr. F.J. Gonzalez-Vila, Dr. A. Polo, and Dr. R.A. Rosell. Prof. Joan Albaiges is Chairman of the Scientific Program Committee.

Major topics for the meeting include (1) Humic Substances and Soil Fertility, (2) Humic Substances and Human Health, (3) Aquatic and Sedimentary Humic Substances, (4) New Methods in Humic Acid Chemistry, and (5) General Topics.

As customary, the meeting will have both oral and poster sessions. Contrary to custom, the invited papers will not be published as a special book of the Society. All of the oral and poster papers will be published as a special issue of a professional journal or independently as a Meeting Proceedings.

The local organizing committee has worked extensively to provide the maximum desirable accommodation at the lowest cost. Some of the facilities and tentative costs are registration at 30.00 pesetas for members and 35.00 pesetas for non-members, beachfront rooms with kitchen and refrigerator, with breakfast and lunch included, for 5.00 pesetas per day, and freshwater and oceanwater pools for swimming with daytime temperatures about 28°C. The meeting and the accommodations should be very enjoyable and are available at a low cost. The exact costs will be provided in the first meeting circular which will be distributed in the near future.

1986 OSLO MEETING

General Aspects.

As most of you already know, our third IHSS Meeting in Oslo, Norway, during July 22-28, 1986, was a huge success. The meeting was hosted by Dr. Egil Gjessing. Other members of the local organizing committee were Dr. George Becher, Mrs. Oddny Falck, Dr. Stoier Johnsen, Dr. Britt Salbu, and Dr. Hallvard Odegaard.

The meeting was held in the spectacular mountain setting of the Soria Moria Hotel and Conference Center above Oslo and near the Holmenkollen Ski Jumps. The meeting was attended by approximately 170 members and guests from over 25 countries. There were 40 oral papers and 80 poster papers presented during the five day meeting. The meeting was highlighted by a half-day cruise on the Oslo Fjord, a visit to the Oslo sewage treatment facility which is carved into the mountain south of Oslo, and a special outing and dinner overlooking the Oslo Fjord. Many of the meeting attendees toured the beautiful Norwegian mountains and fjords after the meeting.

As usual, the poster area was the center of attention and discussion throughout the meeting. The two poster sessions were concluded by lengthy semiformal question periods and lively discussion. Three of the many informative oral presentations were from Dr. R.F.C. Mantoura, Dr. Yona Chen, and Dr. Simon Visser. Dr. Visser presented autoradiographic evidence for the incorporation of humic substances into living cells. Dr. Yona Chen presented very convincing evidence for the beneficial effects of low concentrations of humic substance on plant growth. Dr. Mantoura discussed the state-of-the-art knowledge of humic substances in seawater and their importance in the global CO₂ balance.

Dr. George Becher, Dr. G.E. Carlberg, Dr. R.F.C. Mantoura, and Dr. S. Ramamoorthy are to be especially commended for the rapid publication of the volunteered oral and poster papers. The special issue of the Science of the Total Environment, April 1987, volume 62, entitled "Advances in Humic Substances Research", should have been received by all meeting participants. Additional copies can be obtained directly from the IHSS. This publication should be of interest to all members because it is well-prepared and very informative about recent advances in humic studies.

The 42 invited papers will be published by Wiley as Volumes 2 and 3 in the series of IHSS books. These books are in the final stages of editing.

The Business Meeting

Honorary Membership:

Dr. Morris Schnitzer was announced as an Honorary Member of IHSS. He is the second member honored with Honorary Membership; Dr. W. Flaig was elected as an Honorary Member at the Birmingham meeting in 1984. Everyone in humic acid research is indebted to the leadership of Dr. Schnitzer during his career at Agriculture Canada in Ottawa. Morris has been an outspoken advocate of humic acid science throughout the world, has conducted outstanding original research in soil humic substances, has been a teacher and mentor to so very many young scientists, and has encouraged all of us to do our best in our own research efforts. Dr. Schnitzer is one of the founders of IHSS and contributed to the Standard Reference Collection by extracting the leonardite standard humic acid. We all welcome Morris as an Honorary Member of IHSS and wish him many more years of productive research.

Standard and Reference Collection of Humic Substances:

The Standard and Reference Collection of humic and fulvic acids as proposed in 1981 has now been completed. This represents a major achievement in a short time. The seven standard samples and the ten reference samples and the cost of each are listed on the enclosed price list. These are all available upon order. The characterization of all these samples is not complete, but is in progress. The Standard and Reference Collection effort has been labor intensive on the part of a number of members to whom the Society is indebted. Some of these individuals are Roger Swift for the soil humic and fulvic acids; Mike Hayes for the peat humic and fulvic acids; Morris Schnitzer for the leonardite humic acid; Ron Malcolm, George Aiken, Carol Bowles, Dianne McKnight, Kevin Thorn, Wes Campbell, and Bob Averett for the Suwannee River humic and fulvic acids; and Egil Gjessing, Ron Malcolm, Carol Bowles, George Becher, Stoler Johnsen, Irma Makinen, John Peuravuori, and Hans Boren for the Nordic humic and fulvic acids.

Special thanks are due to Dr. Bob Averett, an administrator of the U.S. Geological Survey, for his encouragement, scientific support, and monetary support in the form of a U.S. Geological Survey Grant which provided the funds necessary for the isolation and extraction of the standard and reference fulvic and humic acids.

Treasurer's Report:

Dr. MacCarthy reported on the financial status of the Society. As of August 6, 1986, the Society had a balance of \$1,587. The major expenditures of the Society for the 1985-86 period were \$10,000 in travel support for the Oslo Meeting, \$4,000 in travel support to the Board of Directors Meeting, and \$3,000 in support of the Oslo Meeting. The \$10,000 for travel support to the Oslo Meeting was given to 16 members from 9 countries.

The major sources of Society revenue are membership fees (10%) and the sale of samples from the standard and reference collection (90%). The Society has also received \$800 in royalties from the sale of Book I. An increase in

Society membership fees was discussed, because present fees do not even pay for the mailing fees. The Society is essentially subsidized by the sale of standard and reference samples as well as grants for hosting international meetings. The Board of Directors has initiated a policy after the Oslo Meeting that only 15-20% of the funds from the sale of the reference collection can be used for travel support funds to international meetings. These funds must be reserved for the perpetuation of the reference collection, especially the preparation of additional reference samples when the present ones are completely sold.

The Society now has corporate members. The two corporate members are The American Colloid Company (Skokie, Illinois) and Agrosave (Fresno, California). The Society appreciates the support of these two organizations. Dr. MacCarthy also reported that the society has 409 members from 35 countries.

APPROVAL OF REVISIONS IN IHSS BYLAWS

The revisions in the IHSS bylaws which were recommended by the Board of Directors were overwhelmingly approved by written ballot during 1986. The major changes in the bylaws included the division of the office of Secretary-Treasurer into two offices, changes in the duration of all offices which were reduced to two years, the reduction of Board positions from the membership from four to two, and changes in the eligibility for holding office. These changes were necessary due to increased Society membership, the cost of travel to Board meetings, and to remedy previous omissions.

The approval and timely response of the membership on these issues were greatly appreciated by the Board of Directors.

ELECTION OF OFFICERS

Upon the approval of the new Bylaws, elections were held according to the new provisions. The election of officers for 1988-1990 has just recently been completed with a large percentage of the membership voting for their candidates of choice. The results of the election will be announced informally in the near future. A formal announcement will be made with installation to the respective offices at the meeting in Spain during October 1988.

IHSS - INTERNATIONAL SOCIETY OF SOIL SCIENCE
JOINT SYMPOSIUM IN HAMBERG ON AUGUST 15, 1986

A joint IHSS-ISSS symposium entitled, "Dynamics of Organic Matter in Soils," was organized by Dr. Roger Swift of New Zealand and Dr. D.S. Jenkinson of the United Kingdom. Both the organizers are members of IHSS and ISSS. The symposium was cosponsored by Commissions II, III, and IV of the ISSS. Five excellent papers from five countries were presented in the afternoon symposium as listed below.

1. "Techniques for Following the Turnover of Organic Matter in Soil," by J.N. Ladd of Australia.
2. "Organic Matter and Soil Fertility in the Tropics," by P.A. Sanchez and R.H. Miller of the U.S.A.
3. "The Use of Simulation Models of the Turnover of Soil Organic Matter," by J.A. Von Veen of the Netherlands.
4. "Cycling of Carbon, Nitrogen, Sulfur, and Phosphorus in Soil Ecosystems," by C.V. Cole, J.W.B. Stewart, and W.J. Parton of the U.S.A. and Canada.
5. "The Synthesis and Degradation of Humic Substances in Soil," by K. Haider of the Federal Republic of Germany.

The papers were well attended by approximately 200 attendees and were followed by a lively discussion.

IHSS-ACS SYMPOSIUM REPORT

A five day symposium entitled "Influence of Aquatic Humic Substances on Fate and Treatment of Pollutants" was held in Denver, Colorado, April 6-10, 1987. The symposium was cosponsored by the IHSS and the Environmental Chemistry Division of the American Chemical Society, and was held as part of the national ACS meeting. Patrick MacCarthy and Mel Suffet served as cochairmen of the symposium, representing the IHSS and the ACS, respectively. The symposium was well attended, with over 200 participants. The topics discussed included the characterization of humic substances, the effects of humic substances on drinking water and on the fate of hazardous chemicals, and the influence of humic substances on metal speciation and hydrolysis of organic compounds. The proceedings of the meeting will be published in a book in the ACS Advances in Chemistry Series scheduled for release in 1988.

REPORT ON NATO-ISSS SPONSORED WORKSHOP

A workshop entitled "Interactions of the Soil Colloid-Soil Solution Interface" was held in Ghent, Belgium, August 24-29, 1986. This was the second international workshop organized through the International Society of Soil Science (ISSS Working Group for Studies on the Nature and Properties of the Soil Colloid Surfaces). The NATO-sponsored workshop was organized by Dr. G.H. Bolt (The Netherlands, Chairman), Dr. M.H.B. Hayes (England, Secretary), Dr. M. DeBoodt (Belgium), and Dr. A. Herbillon (France). About 90 scientists from 17 countries participated in the workshop. Thirteen formal presentations were given, followed by extensive debate. Topics included the electrified interface of the soil solid phase, surface complexation, redox phenomena, reactions of phosphate with oxides, reactions of metals with clays and organic matter, and sorption of inorganic and organic materials by soil. The workshop concluded with the development of "Some Conclusions and Proposals for the Future" which stated that "Little attention has been focused on the properties and interactions of humin. Humin is closely associated with the mineral colloids and may play very important roles in the binding of metals and of organic compounds and in stabilizing soil aggregates." This may be a priority area for future research. A book based on the workshop is in preparation and publication is planned for 1988.

PUBLICATIONS OF THE SOCIETY

The following is a list of IHSS publications, their availability, and their cost to members:

1. Aiken, G.R., D.M. McKnight, R.L. Wershaw, and P. MacCarthy (editors), 1985, Humic Substances in Soil, Sediment, and Water; Book 1 -- Geochemistry, Isolation, and Characterization, Wiley-Interscience, New York, 659 pages. (Price \$60 plus postage, available from IHSS).
2. Proceedings of the 1st Meeting of the International Humic Substances Society, Estes Park, Colorado, August 1983. Special Issue of Organic Geochemistry, volume 8, no. 1, 1985, 146 pages. (Available only from Organic Geochemistry, Pergamon Press, Headington Hill Hall, Oxford, England OX3 0BW).
3. Hayes, M.H.B. and R.S. Swift (editors), Volunteered Papers of the 2nd International Conference of the International Humic Substances Society (1984), University of Birmingham Press, 1985, 249 pages. (Available from IHSS for \$15.00 plus postage).
4. Becher, G. (editor), A Collection of Volunteered Papers from the Third International Meeting of the International Humic Substances Society, Oslo, Norway, August 4-8, 1986. Special Issue of The Science of the Total Environment, volume 62, April 1987, 505 pages. (Available from IHSS for \$45.00 plus postage).

