



*International Association of Colloid
and Interface Scientists*

NEWSLETTER NO. 19

FEBRUARY 1992

COMPILED BY J. LYKLEMA

INTERNATIONAL ASSOCIATION OF COLLOID AND INTERFACE SCIENTISTS

NEWSLETTER NO. 19

February 1992

1 ABOUT THE NEWSLETTER/FROM YOUR NEWS- LETTER EDITOR

The main purpose of the Newsletter is the same as that of IACIS, namely to promote international cooperation in colloid and interface science. It is hoped that through these letters colloid and interface scientists become better informed about forthcoming events, developments, and personal news from various countries.

So far, I have edited 19 Newsletters. The task is not too heavy and I receive much help from my secretary, Mrs. Wil Kleijne. Many people around the world show from time to time their appreciation for the NL (which is appreciated in turn) by supplying items for the next NL. Please continue to keep me informed about relevant meetings, books and developments so that the NL could become more encompassing, complete and useful.

The conference agenda (item 6 of this NL) is not only meant to fill the travel agenda of IACIS members, but also assists planners to look ahead. Hence, please keep me posted and do so well in advance, even if the plans are only provisional. As a further service to our members we shall also give Telephone, Fax, E-mail and other numbers of contact persons as far as they are known to us.

With best wishes from your Newsletter Editor,

Hans Lyklema

2 STATUS OF THE NEWSLETTER, LIABILITY

The first two Newsletters (henceforth abbreviated as NL 1 and NL 2), dated September 1978 and July 1979 respectively, were written under the auspices of the IUPAC Commission on Surface and Colloid Science (Commission I.6) before IACIS was formally established. Starting with NL-3 in June 1980 the Newsletters appear under IACIS auspices.

Parts of this NL may be copied provided the source is acknowledged. Although everything is verified to the best of our knowledge, errors may occur; IACIS can not accept any responsibility for them.

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3 IACIS NEWS

3.1 President's Message

Let me start my message by congratulating Professor Pierre Gilles de Gennes for being awarded the Nobel Prize for Physics, certainly well deserved. Prof. de Gennes made many outstanding contributions in the field of Physics. In the mean time, his contributions in the field of colloid, polymer and interface science are enormous. Most colloid scientists who work in the field of polymers at interfaces and steric interactions are familiar with De Gennes' scaling theories which, once the range of validity is established, are easy to apply to many problems such as the structure of the polymer layer at the interface and the interaction between particles or macroscopic bodies containing

polymer layers. Indeed most of the force-distance curves between mica sheets containing adsorbed polymer layers are fitted to De Gennes scaling theories. Prof. de Gennes also made significant contributions in the field of microemulsions and influenced research that led to excellent work published by various French schools. More recently, Prof. de Gennes paid attention to the problem of wetting and its dynamics. Excellent work in this field is led by him at the Collège de France. These are only few examples of De Gennes' contributions to the field of colloid and interface science. I am sure that all members of the IACIS will join me in congratulating Prof. de Gennes for this honour, which certainly makes our field of research a very attractive one.

I would like to say a few words about the 7th IACIS meeting at Compiègne. Those of you who have attended would realise how successful this meeting was. We should pay our thanks to Professor Marc Clause for the enormous effort he put into the meeting. The plenary lectures were excellent reviews in various fields of research. The various Symposia covered many topics regarding molecules at interfaces, disperse systems and biosystems. The quality of the papers and posters was certainly high. The high conference attendance (over 1000) was a demonstration of how lively our field of research is.

I have made several appeals at the conference to recruit more members for the IACIS. This produced some positive response at the spot, with a number joining immediately. On my return from Compiègne, I have sent several hundred letters to scientists all over the world persuading them to join our association. The progress is slow but positive. Our membership is steadily increasing and I would ask all members to help me in recruiting more candidates. In the mean time, I am discussing with the council members of ways to enhance our activities, e.g., by organising one or two summer schools.

I would like to thank you again for your support and I hope that we can increase our successes in the future.

Th.F. Tadros

3.2 Venue of the 9th International Conference on Colloid and Interface Science.

For this conference, to be held in 1997, the President would like to receive nominations. Suggestions for suitable locations, specifying facilities, problem (if any) and special features can be sent to Dr. Th.F. Tadros, ICI Agrochemicals, Jealott's Hill Research Station, Bracknell, Berkshire RG12 6EX, U.K.

3.3 Minutes of the IACIS General Assembly, held in Compiègne, France, on July 8, 1991.

1. Opening.
President Tadros welcomes 23 members and expresses his regrets about the small attendance.
2. Future International Conferences.
Prof. Ralston reports about the preparations for the 8th International Conference, which will be held from 11 till 19 February 1994, in Adelaide, South Australia. The venue will be the Adelaide Convention Centre, which has ample facilities to host a meeting of this scope. Moreover, plenty of hotel rooms are available within distances of 300-400 meter. Sponsorship of the Royal Australian Chemical Institute's Division of Colloid and Surface Science has been acknowledged and support from state and local authorities has been assured.
As for support from industry, D.T.Wu expresses his concern with regard to the composition of Council, which is biased towards academia. This prevents many companies having their employees attend these meetings

and might well be hampering their sponsoring of the conference. Including a section on industrial applications might also help in this regard.

Since the high travel expenses might prevent a large attendance, it is suggested investigating the possibilities of charter flights and/or reduced rates for large groups with regular airlines.

For the venue of the 9th Conference, Germany, Montreal and Sofia are suggested. A decision will be made by Council at a later stage.

3. Increase in membership.
Various remarks and suggestions are made in order to increase membership and thus the impact of IACIS. It should always be mentioned very clearly that members are entitled to a, usually substantial, reduction in the fees of conferences which have obtained IACIS sponsorship.
Since the president has not received any favourable reaction to his request for company sponsorship, it is remarked that we should not approach the companies as such, but the research directors of those divisions that, by own experience, are aware of the importance of our disciplines. Interest and active participation from industry could possibly also be increased by letting representatives from these circles contribute to the organization of a number of section sessions. Of course one would have to see to it that increased participation of whatever kind should not decrease the scientific standards of the conferences.
No actual decisions are made, but all members are invited to consider the various aspects, when appropriate, and to come up with additional suggestions.
4. Membership fee.
The total amount of annual fees has been sufficient for the scope of IACIS sponsorship so far. Our concerns are not so much of a financial nature but, rather the fact of

the low impact. In the latter relation the mismatch in global representation is expressed again.

Nevertheless, if the annual income would grow, we could afford to offer more support, such as sponsoring small industrial conferences as well as small scientific meetings.

The general feeling is that no reasons exist for increasing the annual fee. Decisions in this matter can only be made by the Council. In passing, the president mentions the possibility to organize summer schools in order to raise money, a suggestion that will be further elaborated on by Council.

Prof. Ivanov mentions that he would be grateful for suggestions about obtaining financial support for the conference on surfactancy, that will take place in Varna (Bulgaria) in 1992.

5. Closing.

Since no other topics for deliberation are suggested, the president closes the meeting.

Minutes of the IACIS Council Meeting, held in Compiègne on July 8, 1991.

1. Opening.

President Tadros welcomes Council Members Aveyard, Bijsterbosch, Cazabat, Churaev, Lindman, Lyklema, Matijevic (former president as guest), Platikanov (sitting in for Exerowa), Ralston and Vincent. Apologies for absence have been received from Everett, Exerowa, Hunter, Ise and Silberberg. Since this Council meeting immediately follows the General Assembly the discussion can be limited for many topics. For additional information one is referred to the minutes of that General Assembly.

2. Fee for members in underprivileged countries.

In the discussion the following remarks are made: In many cases it is not so much the height of the fee, but

the impossibility of converting local currency into guilders or dollars, which prevents members from paying their annual fee.

Setting up a set of criteria according to which members are either entitled to a reduced fee or to a complete waiver, is not only difficult and time-consuming, but also very difficult to carry out.

Let the members decide themselves whether they can afford to pay and transfer the fee.

It is decided that the fees will not be adapted, but that those who are unable to pay, annually repeat their pledge, in which case it will be to the discretion of the Honorary Secretary and Treasurer to take a decision.

3. Company-sponsoring.

See the minutes of the General Assembly.

4. Summer school.

Tadros explains his ideas, which mainly aim at providing education facilities for people who cannot afford the high fees which are usually charged for these schools. The goal of low costs could possibly be reached if the lecturers (IACIS members) would refrain from a salary.

In the discussion it is remarked that such a school could be run in conjunction with a regular conference; that it should be considered if industrial participants would also be entitled to reductions; that it is crucial to find a local person who is willing to run the whole show; and, last but not least, whether that person and the lecturers would be sufficiently motivated and would have enough time to prepare and participate in such a set-up. All Council Members are explicitly invited to mail their ideas on this rather idealistic approach. The secretary would like to receive these reactions no later than 1 November 1991.

5. Venue of the 9th Conference (1997).
Also referring to the minutes of the General Assembly, all Council Members are invited to inform the secretary about ideas and suggestions, preferably also before 1 November 1991.
It is very relevant that we not only receive suggestions for locations, but in particular receive information on who will be willing to take up the organization and what facilities will be at their disposal.
6. Increase in membership.
No suggestions are brought forward, that have not already been mentioned in the minutes of the General Assembly.
7. Newsletter.
It is emphasized that this is by far the best source of communication and information. Lyklema expresses that he is quite willing to continue as the Newsletter Secretary for a few more years, but that the Association should start thinking about who is going to be his successor. Lyklema also mentions very explicitly that he could not do this job without the extensive assistance of his secretary, Mrs. Wil Kleijne. (Note of the secretary: her help is equally indispensable in doing my share).
8. Closing.
No other subjects being brought up, the President closes the meeting.

Bert Bijsterbosch
Hon. Secretary and Treasurer

4 IACIS-SPONSORED MEETINGS

4.1 International Conference on Surface and Colloid Science (previously IUPAC-sponsored, now under auspices of IACIS)

History: 1st Conference, Budapest, Hungary, 1973
2nd Conference, Puerto Rico, 1976
3rd Conference, Stockholm, Sweden, 1979
4th Conference, Jerusalem, Israel, 1981
5th Conference, Potsdam NY, U.S.A., 1985
6th Conference, Hakone, Japan, 1988
7th Conference, Compiègne, France, 1991, July 7-13

Future: 8th Conference, Adelaide, Australia, 1994, February 11-19.
9th Conference, 1997, see 3.2.

4.2 Other conferences sponsored or co-sponsored by IACIS

In addition to the large international conferences, IACIS has supported and will support smaller meetings, all of this in the framework of its credo. Here follows a list of such smaller conferences:

- 1) September 1983 Paris (France) Physical Chemistry of Colloids and Interfaces: Biotechnology and Drug Research.
- 2) June 1984 Lund (Sweden) 8th Scandinavian Symposium on Surface Chemistry with international participation.
- 3) June 1984 Pittsburgh (U.S.A.) 58th Colloid and Surface Science Symposium ACS.
- 4) May 1986 Zakopane (Poland) IX European Chemistry at Interfaces Conference.
- 5) June - July 1986 Crveni Otok (Yugoslavia) 7th International Summer Conference on the Chemistry of Solid-Liquid Interfaces.
- 6) September 1987 Eindhoven (Netherlands) Polymers in Colloidal Systems: Adsorption, Stability and Flow.

- 7) May 1988 San Benedetto (Italy) X European Chemistry at Interfaces Conference.
- 8) June 1989 Åbo/Turku (Finland) EUCHEM Workshop on Adsorption of Surfactants and Macromolecules from Solution, and 10th Scandinavian Symposium on Surface Chemistry.
- 9) June 1990, Toronto (Canada) International Symposium on Contact Angles and Wetting Phenomena.
- 10) November 1990, Moscow (Russia) International Conference on Surface Forces.
- 11) June 1991, Bergen (Norway) 11th Scandinavian Symposium on Surface Chemistry, with international participation.
- 12) June-July 1992, Lund (Sweden) XII European Chemistry at Interfaces Conference.
- 13) August 1992, Moscow, Russia, 10th International Conference on Surface Forces.

5 IUPAC NEWS

Commission I.6 Colloid and Surface Chemistry Including Catalysis.

Commission Membership 1991-1993 (Lists are provisional and subject to subsequent ratification by Division Committee; * indicates new member.)

Titular Members:

Prof. J. Rouquérol, Chairman	France
Dr. B. Vincent, Secretary	U.K.**)
Prof. B. Delmon	Belgium
Prof. J. Ralston	Australia
Prof. K.K. Unger*	Germany
Dr. A.M. Cazabat*	France
Prof. M. Misono	Japan

***) Department of Physical Chemistry, School of Chemistry, University of Bristol, Cantock's Close, Bristol BS8 1TS, U.K., Phone +44 (272) 303030, ext. 4718, Fax +44 (272) 250612, Telex 444174 BUPHYS G.

Associate Members:

Prof. G.I. Panov	C.I.S. (former U.S.S.R.)
Dr. P. Pendleton	Australia
Prof. D. Platikanov	Bulgaria
Prof. T. Kunitake	Japan
Dr. C.W. Fairbridge	Canada
Prof. J.A. Pajares	Spain
Prof. I. Dekany*	Hungary
Dr. L.K. Koopal*	Netherlands

National Representatives:

Prof. L.A. Petrov	Bulgaria
Prof. S. Ardizzone	Italy
Prof. M.S. Suwandi	Malaysia
Prof. J. Haber	Poland
Prof. H. Chon	Korea
Dr. M.S. Scurrrell	South Africa
Dr. S. Peker	Turkey
Dr. K.R. Kutsenogii	C.I.S. (former U.S.S.R.)
Dr. B. Wichterlová	Czechoslovakia
Prof. E. Barbosa	Portugal
Dr. Ch. Petropoulos	Greece
Dr. S. Milonjic	Yugoslavia
Dr. F. Galembeck	Brazil
Prof. J. Lyklema	Netherlands

Subcommittees:

- Porous Solids (Chairman: Prof. J. Rouquerol)
- Advanced Materials (Chairman: Prof. B. Delmon)
- Environmental Protection (Chairman: Prof. J. Ralston).

The next full meeting of the Commission will be during the General Assembly of IUPAC in Lissabon, Portugal, in August 1993.

Publications since last General Assembly:

- "A Survey of Experimental Techniques in Surface chemical Physics", J.H. Block et al., Pure Appl. Chem. 62 (1990) 2297-2322
- "Recommendations on the Measurements and Interpretation of Interfacial Electrochemical Data of

Disperse Systems", J. Lyklema, Pure Appl. Chem. 63 (1991) 895-906

- "Manual on Catalyst Characterisation", J. Haber et al., Pure Appl. Chem. 63 (1991) 1227-1246.

Physical Chemistry Division. President: Prof. R.A. Alberty. Secretary: Prof. G. Somsen, Faculteit der Scheikunde, Vakgroep Fysische en Theoretische Chemie, Vrije Universiteit, De Boelelaan 1083, 1081 HV Amsterdam, The Netherlands, Phone +31 (20) 5485364, Fax +31 (20) 6461479, Telex 11329 DPVVU NL.

Macromolecular Division. President: Prof. W. Eitz. Secretary: Prof. A.D. Jenkins, School of Chemistry and Molecular Sciences, University of Sussex, Falmer, Brighton BN1 9QJ, U.K., Phone +44 (273) 678321, Fax +44 (273) 677196.

Commission I.1 Physicochemical Symbols, Terminology, and Units. Chairman: Prof. T. Cvitas. Secretary: Prof. M. Quack, Laboratorium für Physikalische Chemie, Eidgenössische Technische Hochschule - Zentrum, CH-8092 Zürich, Switzerland, Phone +41 (1) 256 44 21, Fax +41 (1) 252 34 02, Telex 817379 EHHG CH.

Commission IV.1 Macromolecular Nomenclature. Chairman: Dr. R.F.T. Stepto. Secretary: Dr. W.J. Work, Research Division, Rohm and Haas Co., P.O. Box 219, Bristol, PA 19007, U.S.A., Phone +1 (215) 785 8549, Fax +1 (215) 781 0624, Telex 650 4190136.

Commission on Environmental Analytical Chemistry. Chairman: Dr. J. Buffle. Secretary: Dr. H.P. van Leeuwen, Department of Physical and Colloid Chemistry, Wageningen Agricultural University, P.O. Box 8038, NL-6700 EK Wageningen, The Netherlands, Phone 31-8370-82269, Fax 31-8370-84141, E-mail FYSKO@RCL.WAU.NL. *Environmental Particles Programmes I and II.* The first programme of this Commission started in 1989 and is concerned with the characterization of environmental

particles. Within this programme, 13 reports on various aspects of the sampling and characterization of atmospheric and aquatic particles, as well as on the reactivity and transport properties of particles in aquatic systems, have been completed. The preparation of these reports has included a plenary discussion meeting in Wageningen, The Netherlands, with all the project coordinators. Active support was given by the Analytical Chemistry Division Committee. Publication in the form of a monograph is due for March 1992 (Lewis Publishers, as volume I in the new Environmental Analytical and Physical Chemistry Series).

The Commission endorsed the launching of a second programme on environmental particles, with 12 contributions from international top-level specialists. One category of subjects deals with environmental particle characterization techniques such as field-flow fractionation, size distribution measurements by photon correlation, spectroscopy, NMR and EXAFS for surface analysis. Other chapters highlight certain types of particles, for example manganese particles in freshwaters, carbonaceous particles in freshwaters, carbonaceous particles in the atmosphere, particulate organic carbon in seawater and particulate matter with organic coatings. Particulate formation and aggregation processes are also analysed and the role of particles in the transport of contaminants is explained. Draft reports of the various projects were discussed at a special programme meeting on 11-13 October 1991 in Davos, Switzerland, and revised accordingly.

Other Programmes. The Commission made the decision to start with the preparation of a new main programme under the collective title "Bio-active Chemical Species". This has actually started in the autumn of 1991 with support from the International Council of Scientific Unions (ICSU). It treats the nature of chemical species which are available for (or released by) organisms and which may have an important ecological significance. The analytical methods used and the environmental mechanisms controlling bioavailability will also be covered.

The Commission is also planning to initiate programmes on environmental interphases (structure, analysis and fluxes), and on environmental monitoring. In order to organize the extensive work in an efficient way, the Commission has proposed to create a Subcommittee on Environmental Interphases.

6 CONFERENCES IN THE FIELD OF SURFACE AND COLLOID SCIENCE

NOTE 1. If information is already given in a previous Newsletter, it will be repeated here.

NOTE 2. I have refrained from including commercial courses, realizing that the distinction between them and non-subsidized (either/or not advanced) courses is not always unambiguous.

6.1 19th Australian Polymer Symposium, 3-7 February 1992, Perth, Australia. Contact: G.M. Ferguson, Chemistry Centre WA, 125 Hay Street, East Perth, 6004, W. Australia, Phone 61-9-222 3010, Fax 61-9-325 7767, or W. Fletcher, Lions Eye Institute, 2 Verdun Street, Nedlands, 6009, Western Australia, Phone 61-9-389 3589, Fax 61-9-382 1171.

6.2 Surface and Colloid Science - Achievements, applications and future trends, 4-5 March 1992, Tiberias, Lake of Galilee, Israel. Contact: S. Benita, School of Pharmacy, Faculty of Medicine, The Hebrew University of Jerusalem, The Adolph Weinberger Building, P.O. Box 12065, Jerusalem 91120, Phone 972-2-428620, Fax 972-2-431094.

6.3 PARTEC/POWTECH '92: 5th European Symposium Particle Characterization, 2nd European Symposium Separation of Particles from Gases, 24-26 March 1992, Nürnberg, Germany. Contact: GVC VDI

Verfahrenstechnik, P.O. Box 101139, W-4000 Düsseldorf 1, Germany.

6.4 5th International Conference on Reinforced Composites FRC '92, 24-26 March 1992, Newcastle upon Tyne, U.K. Contact: The Plastics and Rubber Institute, 11 Hobart Place, London SW1WOHL, U.K., Phone 071 245 9555, Fax 071 823 1379.

6.5 Spring National Meeting of the American Institute of Chemical Engineers, 29 March - 2 April 1992, New Orleans LA, U.S.A.

- Alternate Methods for Gas Purification. Contact: D. Leppin and H. Meyer, Gas Research Institute, 8600 Bryn Mawe, Chicago, IL 60631, U.S.A., Phone (312)399-8230.

- History of Separations Technology. Contact: J.R. Fair, Department of Chemical Engineering, University of Texas, Austin, TX 78712-1062, U.S.A., Phone (512)471-3689.

- Contaminant Removal from Gases. Contact: J. Abbasian, Institute of Gas Technology, 3424 S. State Street, Chicago, IL 60616-3896, U.S.A., Phone (312)567-5785.
- Fundamentals of Gas Treating. Contact: R.L. McKee, M.W. Kellogg Co., P.O. Box 4557, Houston, TX 77210-4557, U.S.A., Phone (713)753-3195.

6.6 Symposium on Polymer Colloids, 30 March - 1 April 1992, Bristol, U.K. Organised by the Colloid and Interface Science Group of the Faraday Division of the Royal Society of Chemistry, in honour of Professor R.H. Ottewill. Contact: J.W. Goodwin, School of Chemistry, Bristol University, Cantock's Close, Bristol BS8 ITS, U.K.

6.7 Understanding Catalysts: Catalysis and Surface Characterisation, 30 March - 1 April 1992, Dundee, U.K. Organised by the Surface Reactivity and Catalysis Group of the Faraday Division of the Royal Society of Chemistry. Contact: R. Buscall, ICI Corporate Colloid Science Group,

P.O. Box 11, The Heath, Runcorn, Cheshire WA7 4QE, U.K., Phone 0928-513715.

6.8 Structure and Activity of Enzymes, 1-3 April 1992, Cambridge, U.K. General Discussion 93 of the Faraday Division of the Royal Society of Chemistry. Contact: A.D. Buckingham, Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EW, U.K.

6.9 203rd ACS National Meeting, 5-10 April 1992, San Francisco, U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. Symposia include:

- Contact Angle, Wettability and Adhesion in Honor of Robert J. Good (Division of Colloid and Surface Chemistry). Contact: K.L. Mittal, IBM Corporation, 500 Columbus Avenue, Thornwood, NY 10594, U.S.A., Phone (914) 742-5747.

- Surface Science of Catalysis: Students and Friends of Gabor Somorjai (Division of Colloid and Surface Chemistry). Contact: F. Zaera, Department of Chemistry, University of California, Riverside, CA 92521, U.S.A., Phone (714) 787 5498, Fax (714) 787 4713, Bitnet Zaera@UCRVM.S.

- Surface Chemistry in Biology, Medicine and Dentistry: Surface Phenomena of Biopolymers and Cells (Division of Colloid and Surface Chemistry). Contact: W. Duncan-Hewitt, Faculty of Pharmacy, University of Toronto, Toronto, Ontario M5S 1A1, Canada, Phone (416) 978-6749.

- Colloidal Particles: Colloid-Polymer Interactions (Division of Colloid and Surface Chemistry). Contact: P. Dubin, Department of Chemistry, Purdue University, 1125 E. 38th Street, P.O. Box 647, Indianapolis, IN 46205, U.S.A., Phone (317) 274-6879.

- Photochemical and Electrochemical Surface Science: The Roger Parsons Symposium on the Electrical Double Layer Honoring Roger Parsons (Division of Colloid and

Surface Chemistry). Contact: J. Lipkowski, Department of Chemistry, University of Guelph, Guelph, Ontario N1G 2W1, Canada, Phone (519) 824 4120.

- Tribology: Friction, Wear and Lubrication: New Tools for Tribology: Surface Force Balance to Atomic Force Microscopy (Division of Colloid and Surface Chemistry). Contact: M.R. Philpott, IBM Research Division, Almaden Research Center, 650 Harry Road, San Jose, CA 95120-6099, U.S.A., Phone (408) 927 2410, or V. Novotny, IBM Research Division, Almaden Research Center, 650 Harry Road, San Jose, CA 95120-6099, U.S.A., Phone (408) 927 2080.

- Surfactants and Associated Colloids: Reactions in Organized Media (Division of Colloid and Surface Chemistry). Contact: C.A. Bunton, Department of Chemistry, University of California, Santa Barbara, CA 93106, U.S.A., Phone (805) 961 2931.

- Colloid and Surface Chemistry of Advanced Materials: Novel Structural, Mechanical and Electrical Aspects of Chemical Interfaces (Division of Colloid and Surface Chemistry). Contact: N. Lewis, California Institute of Technology, 1201 East California Boulevard, Pasadena, CA 91125, U.S.A., Phone (818) 356 6335.

- General Papers Division of Colloid and Surface Chemistry. Contact: D.W. Osborne, Calgon Vestal Laboratories, P.O. Box 147, St. Louis, MO 63166-0147, U.S.A., Phone (314) 535-1396.

- Molecular Dynamics (Division of Polymer Chemistry). Contact: M.D. Ediger, Department of Chemistry, University of Wisconsin, Madison, WI 53706, U.S.A., Phone (608) 262-7273, Fax (608) 262-0381.

- Synthesis, Purification and Processing of Polymers in Microgravity (Division of Polymer Chemistry). Contact: S.P. McManus, Materials Science Graduate Program, University of Alabama, Huntsville, AL 35899, U.S.A., Phone (205) 895-6247.

- Polymer Photophysics: Fundamentals and Applications (Division of Polymer Chemistry). Contact: C.W. Frank, Department of Chemical Engineering, Stanford

University, Stanford, CA 94305-5025, U.S.A., Phone (415) 723-4573, Fax (415) 725-9780.

- Macromolecules and the New Microscopy (Division of Polymer Chemistry). Contact: P.S. Russo, Department of Chemistry, Louisiana State University, Baton Rouge, LA 70803-1804, U.S.A., Phone (504) 388-5729, Fax (504) 388-3458, or W.W. Adams, Air Force Materials Laboratory, Dayton, OH 45433, Fax (513) 255-9148.

- Functionalized Polymers and Reactive Oligomers (Division of Polymer Chemistry). Contact: R.P. Quirk, Department of Polymer Science, University of Akron, Akron, OH 44325, U.S.A., Phone (216) 375-7510, Fax (216) 972-5290, or F.W. Harris, Department of Polymer Science, University of Akron, 302 East Buchtel Avenue, Akron, OH 44325, U.S.A., Phone (216) 375-7511, Fax (216) 375-5121, or D.N. Schulz, Exxon Chemical Co., P.O. Box 45, Linden, NJ 07036, U.S.A., Phone (2012) 730-2526, Fax (201) 730-2536.

- Synthesis of Well-Defined Polymers (Division of Polymer Chemistry). Contact: K. Matyjaszewski, Department of Chemistry, Carnegie-Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213, U.S.A., Phone (412) 268-3209.

- 2nd International Symposium on Material Science: Polymeric Matrices in Composite Structures (Division of Polymer Chemistry). Contact: J.E. McGrath, Department of Chemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, U.S.A., Phone (703) 961-5976, Fax (703) 231-8517, or C. Arnold, ICI Fiberite, 2055 East Technology Circle, Tempe, AZ 85284, U.S.A., Phone (602) 730-2190.

- Modelling and Computer Simulation (Division of Polymer Chemistry). Contact: L.M. Monnerie, École Supérieure de Physique et de Chimie Industrielles de la Ville de Paris, E.S.P.C.I., 10 Rue Vauquelin, F-75005 Paris Cedex 05, France, Fax +33 1 4331 4222, or U.W. Suter, Institut für Polymere, ETH-Zürich, ETH-Zentrum CNB E92, CH-8092 Zürich, Switzerland, Fax +41 1 261 0215/4633, E-mail suter@CZHE5A, or D.N. Theodorou, Department

of Chemical Engineering, University of California at Berkeley, 218 Gilman Hall, Berkeley, CA 94720, U.S.A., Fax +1 415 642 4778, E-mail doros@ucbcmsa or doros@mycnae.cchem.berkeley.edu.

- X-Ray and Electron Diffraction from Polymers (Division of Polymer Chemistry). Contact: K.H. Gardner, Du Pont Experimental Station, Wilmington, DE 18990-0356, U.S.A., Phone (302) 695-2408, Fax (302) 695-8207.

- Alteration and Utilization of Lignin (Division of Polymer Chemistry). Contact: J.J. Meister, University of Detroit, Department of Chemistry, 4001 West McNichols Road, Detroit, MI 48221, U.S.A., Phone (313) 927-1049, Fax (313) 927-1011.

- Biomedical Applications of Biotechnology (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 18880-0356, U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-mail ENGLISH@ESVAX.DNET.-DUPONT.COM, or J.S. Riffle, Department of Chemistry, Virginia Polytechnic Institute, Blacksburg, VA 24061, U.S.A., Phone (703) 231-8214/8237, Fax (703) 231-8517.

- Computer-Aided Design of Catalysts (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 18880-0356, U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-mail ENGLISH@ESVAX.DNET.-DUPONT.COM, or J.S. Riffle, Department of Chemistry, Virginia Polytechnic Institute, Blacksburg, VA 24061, U.S.A., Phone (703) 231-8214/8237, Fax (703) 231-8517.

- General Papers Division of Polymer Chemistry. Contact: R.F. Storey, Department of Polymer Science, University of Southern Mississippi, Box 10076, Hattiesburg, MS 39406-0076, U.S.A., Phone (601) 266-4879, Fax (601) 266-5829.

- Surface Precipitation and Solid Solutions at the Mineral/Water Interface (Division Geochemistry). Contact: D.A. Dzombak, Department of Civil Engineering, Carnegie Mellon University, Pittsburgh, PA 15213, U.S.A., Phone 412 268 2946, Fax 412 268 7813, or P.D.

Glynn, U.S. Geological Survey, 432 National Center, Reston, VA 22092, U.S.A., Phone 703 648 5823, Fax 703 648 5274.

- Water Based Coatings (Division of Polymeric Materials: Science and Engineering). Contact: F. Louis Floyd, The Glidden Company, 16651 Sprague Road, Strongsville, OH 44136, Phone 216 826 5448, Fax 216 826 5555, or J.L. Massingill Jr., The Dow Chemical Company, Bldg B-1603, Freeport, TX 77541, U.S.A., Phone 409 238 4399, Fax 409 238 4530.
- Complexing Agents for Environmental Problems. Contact: A.K. Sengupta, Environmental Engineering Program, Lehigh University, Bethlehem, PA 18015, U.S.A., Phone (215) 758-3534.

6.10 9th International Symposium on Preparative and Industrial Chromatography. 6-8 April 1992, Nancy, France. Contact: M. Perruti, 1 Rue Grandville, B.P. 451, F-54001 Nancy Cedex, France.

6.11 Electrochemical Engineering and the Environment. 7-9 April 1992, Loughborough, U.K. Contact: R.J. Mortimer, Department of Chemistry, Loughborough University of Technology, Loughborough, Leicestershire LE11 3TU, U.K., Phone +44 (509) 222 583, Fax +44 (509) 233 163.

6.12 Food Colloids and Polymers: Structure and Dynamics. 8-10 April 1992, Lunteren, The Netherlands. Contact: Y.H.M. Smolders, Department of Food Science, Wageningen Agricultural University, P.O. Box 8129, 6700 EV Wageningen, The Netherlands, Phone (08370) 82520.

6.13 2nd International Conference on Calorimetric Studies of the Chemical Stability of Solids, Liquids and Mixtures. 13-15 April 1992, Kent, Canterbury, U.K. Contact: ThermoMetric Ltd., 10 Dalby Court, Gadbrook Business Park, Northwich, Cheshire CW9 7TN, U.K., Phone 0606 49007, Fax 0606 48924.

6.14 Characterisation of Solids and Surfaces. 13-16 April 1992, Manchester, U.K. Annual Congress of the Faraday Division of the Royal Society of Chemistry. Contact: J.F. Gibson, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K.

6.15 SPE/DOE 8th Symposium on Enhanced Oil Recovery. 21-24 April 1992, Tulsa, Oklahoma, U.S.A. Contact: J.L. Thurber, Society of Petroleum Engineers, P.O. Box 833836, Richardson, TX 75083-3836, U.S.A., Telex 730989.

6.16 Materials Research Society 1992 Spring Meeting. 27 April - 1 May 1992, San Francisco, California, U.S.A. Contact: J.D. Passaretti, Phone (215) 861 3431, Fax (215) 861 3412, or L.E. Rehn, Phone (708) 972 5021, Fax (708) 972 4798, or D.W. Schaefer, Phone (505) 844 7937, Fax (505) 846 5064.

6.17 Rolduc Polymer Meeting 92: Optimizing production, processing and properties of polymers. 10-14 May 1992, Kerkrade, The Netherlands. Contact: L.A. Kleintjens, DSM Research, P.O. Box 18, 6160 MD Geleen, The Netherlands, Phone +31-46-761938, Fax +31-46-767244, Telex 36777, or P.J. Lemstra, T.U. Eindhoven, Centre for Polymers and Composites, P.O. Box 513, 5600 MB Eindhoven, The Netherlands, Tel. +31-40-473650, Fax +31-40-546402.

6.18 Workshop on Ionomers and Ion-Containing Polymers. 10-14 May 1992, Monterey, California, U.S.A. Contact: A. Eisenberg, Department of Chemistry, McGill University, Otto Maass Chemistry Building, 801 Sherbrooke Street West, Montreal, Quebec, Canada H3A 2K6, Phone (514) 398-6934, or R.A. Weiss, Institute of Materials Science, University of Connecticut, Storrs, CN 06268, U.S.A., Phone (203) 486-4698, Fax (203) 486-4745, or W.J. McKnight, Polymer Science and Engineering, University of Massachusetts, Amherst, MA

01003, U.S.A., Phone (413) 545-0433, Fax (413) 545-0082, or J.M. Pochan, Corporate Research Laboratories, Eastman Kodak Company, Building 82, Floor 6, Rochester, NY 14650-2110, U.S.A., Phone (716) 588-6312, Fax (716) 722-2327.

6.19 23èmes Journées de Calorimétrie et d'Analyse Thermique JCAT-92, 11-13 May 1992, Compiègne, France. (Official language French; contributions in English acceptable.) Contact: D. Clause, Division Thermodynamique et Physicochimie de Procédés Industriels (DTPPI), Département de Génie Chimique, Université de Technologie de Compiègne, B.P. 649, 60206 Compiègne Cedex, France.

6.20 Concentrated Dispersions: Advances in Instrumentation, 13 May 1992, London, U.K. Contact: Secretariat Society of Chemical Industry, 14-15 Belgrave Square, London SW1 X 8PS, U.K.

6.21 4th International Conference on Fundamentals of Adsorption, 17-22 May 1992, Kyoto, Japan. Organised by the Japan Society on Adsorption. Contact: M. Suzuki, Institute of Industrial Science, University of Tokyo, 7-22-1 Roppongi, Minato-ku, Tokyo 106, Japan, Phone 81 3 402 6231 ext. 2412.

6.22 181st Electrochemical Society Meeting, 17-22 May 1992, Arizona, U.S.A. Contact: Electrochemical Society Inc., 10 South Main Street, Pennington NJ 08534-2896, U.S.A.

6.23 4th International Symposium on Supercritical Fluid Chromatography and Extraction, 20-22 May 1992, Cincinnati, Ohio, U.S.A. Contact: L.T. Taylor, Department of Chemistry, VPI & SU, Blacksburg, VA 24061-0212, U.S.A.

6.24 4th International Conference on Composite Interfaces ICCI-IV: Engineered Interphases, 26-29 May 1992, Cleveland, Ohio, U.S.A. Contact: H. Ishida,

Department of Macromolecular Science, Case Western Reserve University, Cleveland, OH 44106, U.S.A., Phone 216/368 4285, Fax 216/368 4164, Telex 980 676 CWRU-CLEVE.

6.25 Surface and Colloid Science at Fluid Interfaces, symposium at the **Central Regional Meeting of the American Chemical Society**, 27-29 May 1992, Cincinnati, Ohio, U.S.A. Contact: E. Sprague, Department of Chemistry, University of Cincinnati, Cincinnati, OH 45221-0172, U.S.A., Phone 513/556 9200, Fax 513/556 9239, or R.G. Laughlin, Miami Valley Laboratories, The Procter & Gamble Company, P.O. Box 398707, Cincinnati, OH 45239-8707, U.S.A., Phone 513/245 2248, Telex 6503262506, Fax 513/245 1233.

6.26 3rd CESIO International Surfactants Congress and Exhibition, 1-5 June 1992, London, U.K. Contact: I. Shepherd, Gardiner-Caldwell Communications Ltd., The Old Ribbon Mill, Pitt Street, Macclesfield, Cheshire, SK11 7PT, U.K., Phone 0625 618507, Fax 0625 610260.

6.27 14th Symposium on Applied Surface Analysis, 10-12 June 1992, Ann Arbor, Michigan, U.S.A. Contact: S. Gaarenstroom, General Motors Research Laboratories, 30500 Mound Road, Box 9055, Warren, MI 48090-9055, U.S.A.

6.28 9th International Symposium on Surfactants in Solution, 10-15 June 1992, Varna, Bulgaria. Contact: T. Gurkov, Laboratory of Thermodynamics and Physicochemical Hydrodynamics, Faculty of Chemistry, University of Sofia, 1126 Sofia, Bulgaria, Phone (359-2) 62 90 98, Fax (359-2) 68 10 30.

6.29 66th Colloid and Surface Science Symposium (Division of Colloid and Surface Chemistry of the American Chemical Society), 14-17 June 1992, Morgantown, West Virginia, U.S.A. Contact: D. Kullman, Morgantown Energy

- Technology Center, Morgantown, WV 26507-0880, U.S.A., Phone (304) 291 4108, Fax (304) 291-4469.
- Surfactants: Isotropic Solutions and Liquid Crystals. Contact: A.J. Ward, Department of Chemistry, Clarkson University, Potsdam, NY 13676, U.S.A., Phone (315) 268-3886, Fax (315) 268-6670, or D. Osborne, Calgon Vestal, P.O. Box 147, St. Louis, MO 63166-0147, U.S.A., Phone (800) 243-5799, Fax (314) 535-1074.
- Emulsions and Foams. Contact: K.-H. Lim, Department of Chemical Engineering, West Virginia University, Morgantown, WV 26506-6101, U.S.A., Phone (304) 293-2111 ext. 422, Fax (304) 293-5024, or M.E. Labib, David Sarnoff Research Center, CN 5300, Princeton, NJ 08543-5300, U.S.A., Phone (609) 734-2176, Fax (609) 734-2221.
- Wettability: Surface Forces, Wetting Transitions, Applied Studies. Contact: P. Doe, Shell Development Co., P.O. Box 481, Bellaire Research Center, Houston, TX 77001, U.S.A., Phone (713) 245-7173, Fax (713) 245 7990.
- Flow through Porous and Related Media: Experiments and Modeling. Contact: R.A. Geisbrecht, Morgantown Energy Technology Center, Morgantown, WV 26507-0880, U.S.A., Phone (304) 291-4658, Fax (304) 291-4403, or M. Ferer, Department of Physics, West Virginia University, Morgantown, WV 26506, U.S.A., Phone (304) 293-5769, Fax (304) 293-5732, Bitnet U07d1@WVNVNVM.
- Adsorption and Characterization of Solid/Gas Interactions. Contact: R.A. Sirlwardane, Morgantown Energy Technology Center, Morgantown, WV 26507-0880, U.S.A., Phone (304) 291-4513, Fax (304) 291-4403, or J.P. Wightman, Department of Chemistry, Virginia Technology, Blacksburg, VA 24061, U.S.A., Phone (703) 231-5854, Fax (703) 231-3971.
- Surface Chemistry of Electronic Materials. Contact: C.D. Stinespring, Department of Chemical Engineering, West Virginia University, Morgantown, WV 26506-6101, U.S.A., Phone (304) 293-2111, ext. 425, Fax (304) 293-5024.

- Ferro/Electro Fluids and Magnetic Particle Suspensions. Contact: M.S. Jhon, Department of Chemical Engineering, University of Pittsburgh, PA 15213, U.S.A., Phone (412) 268-2233, Fax (412) 268-7139, or T.E. Karis, K93/801, IBM Almaden Research Center, San Jose, CA 95120, U.S.A., Phone (408) 927-1619, Fax (408) 927-2100.
- Biomedical Applications of Colloid and Surface Science. Contact: P. Malchesky or M. Zborowski, Department of Biomedical Engineering, Cleveland Clinic, Cleveland, OH 44195, U.S.A., Phone (216) 444-1055, or (216) 444-5857, Fax (216) 444-9198.
- Catalysts: Fundamentals and Applications in Fossil Energy. Contact: E.L. Kugler or B.D. Dadyburjor, Department of Chemical Engineering, West Virginia University, Morgantown, WV 26506-6101, U.S.A., Phone (304) 293-2111 ext. 411, Fax (304) 293-5024.
- Colloid and Surface Properties of Coals and Related Materials. Contact: E.L. Fuller, Oak Ridge National Laboratory, MS-6087, P.O. Box 2008, Oak Ridge, TN 37831, U.S.A., Phone (615) 574-4959, Fax (615) 574-7721.
- Aerocolloidal Processes. Contact: M.A. Silarski, 635 Portland Drive, Lexington, KY 40503, U.S.A., Phone (606) 278-4904, or W.F. Lawson Jr., Morgantown Energy Technology Center, Morgantown, WV 26507-0880, U.S.A., Phone (304) 291-4173, Fax (304) 291-4403.
- General Papers in Surface and Colloid Science. Contact: J.A. Shaeiwitz, Department of Chemical Engineering, West Virginia University, Morgantown, WV 26506-6101, U.S.A., Phone (304) 293-2111, ext. 410, Fax (304) 293-5024, Bitnet JAS@WVNVNVM.
- Poster Presentations. Contact: H.A. Finklea, Department of Chemistry, West Virginia University, Morgantown, WV 26506, U.S.A. Phone (304) 293-3068, Fax (304) 293-4904, Bitnet Finklea@WVNVNVM.
- Workshop Nuclear Magnetic Resonance Imaging of Porous Media. Contact: A.J.I. Ward, Department of

Chemistry, Clarkson University, Potsdam, NY 13676, U.S.A., Phone (315) 268-3886, Fax (315) 268-6670.

6.30 3rd European Conference on the Mathematics of Oil Recovery (ECMOR III), 17-19 June 1992, Delft, The Netherlands. Contact: Congress Bureau ASD, P.O. Box 40, 2600 AA Delft, The Netherlands, Phone +31-15-120234, Fax +31-15-120250.

6.31 14th International Liquid Crystal Conference, 21-26 June 1992, Pisa, Italy. Contact: Prof. Chiellini, Dipartimento de Chimica e Chimica Industriale, Università degli Studi di Pisa, Via Risortimento 35, I-56100 Pisa, Italy.

6.32 12th European Chemistry at Interfaces Conference, 28 June - 2 July 1992, Lund, Sweden. Themes:

- Adsorption of surfactants and polymers
- Interaction between surfactants and polymers
- Concentrated dispersions
- Microemulsions.

Sponsored by **IACIS**; members will be allowed a discount on the conference fee. Contact: B. Lindman, Physical Chemistry 1, Chemical Center, P.O. Box 124, S-221 00 Lund, Sweden, or G. Olofsson, Thermochemistry, Chemical Center, University of Lund, P.O. Box 124, S-221 00 Lund, Sweden, Phone +46 46 10 81 75, Fax +46 46 10 45 33, Telex 33533 LUNIVER S.

6.33 6th International Conference on Solid Films and Surfaces ICSFS-6, 29 June - 3 July 1992, Nolsy-le-Grand, France. Contact: J. Lecante, LURE, Bâtiment 209D, Université Paris-Sud, 91405 Orsay Cedex, France.

6.34 2nd International Symposium on Surface Chemistry, Adsorption and Chromatography, 29 June - 3 July 1992, Moscow, Russia. Contact: O. Larionov, Institute of Physical Chemistry, Academy of Sciences, Leninskii Prospekt 31, Moscow 117915, Russia.

6.35 9th International Zeolite Conference, 5-10 July 1992, Montreal, Canada. Contact: D.E.W. Vaughan, Exxon R & E, Route 22 East, Annandale, NJ 08801, U.S.A.

6.36 5th International Symposium on Solubility Phenomena, 8-10 July 1992, Moscow, Russia. Contact: V.M. Valyashko, N.S. Kurkanov Institute of General and Inorganic Chemistry, Leninsky Prospekt 31, Moscow, GSP-1, 117907, Russia.

6.37 International Conference of Ion Exchange Advances, 12-17 July 1992, Cambridge, U.K. Contact: SCI Conference Secretariat, 14-15 Belgrave Square, London SW1X 8PS, U.K., Phone 071-235 3681.

6.38 2nd International Symposium on Electrochemical Impedance Spectroscopy, 12-17 July 1992, Santa Barbara, California, U.S.A. Contact: D.D. MacDonald, Center for Advanced Materials, 517 Delke Building, The Pennsylvania State University, University Park, PA 16802, U.S.A., Fax +1 (814) 863-4718.

6.39 International Symposium on Effects of Surface Heterogeneity in Adsorption and Catalysis, 12-19 July 1992, Kazimierz, Poland. Contact: W. Rudzinski, Department of Theoretical Chemistry, Faculty of Chemistry UMCS, Pl. Marie Curie-Skłodowskiej 3, Lublin 20-031, Poland.

6.40 Gordon Research Conference on Chemistry at Interfaces, 13-17 July 1992, Meriden, New Hampshire, U.S.A. Contact: M.L. Hair, Xerox Research Centre of Canada, 2660 Speakman Drive, Mississauga, Ontario, Canada, Phone (416) 823-7091, Ext. 417, Fax (416) 695-6988. Sections:

- Polymers at Surfaces
- Liquids at Surfaces
- Particles
- Two Dimensional Surfaces
- Electrokinetic Effects.

6.41 23rd Annual Meeting of the Fine Particle Society, 13-17 July 1992, Las Vegas, Nevada, U.S.A. Contact: T. Yoon, Department of Environmental Engineering, Inha University, 253 Yonghyun Dong, Incheon 402-751 Korea, Phone 032-860-7503, Fax 032-865-8625.

6.42 34th International Symposium on Macromolecules, 13-18 July 1992, Prague, Czechoslovakia. Contact: P. Cefelin, Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences, Heyrovského nám. 18882/2, 162 06 Prague 6-Petriny, Czechoslovakia, Phone +42 (2) 360317, Telex 122019 IMCP C.

6.43 6th International Conference on Magnetic Fluids, 20-24 July 1992, Paris, France. Contact: V. Cabuil, Université Pierre et Marie Curie, Boîte 740, 4 Place Jussieu, 75252 Paris Cedex 05, France, Phone (33-1) 44 27 31 74 or 44 27 31 66, Fax (33-1) 44 27 38 41 or 44 27 38 66, Telex UPMC SIX200145F.

6.44 3rd IUPAC International Symposium on Analytical Chemistry in the Exploration, Mining, and Processing of Materials, 2-7 August 1992, Sandton, South Africa. Contact: The Symposium Secretariat Mintek, Private Bag X3015, Randburg 2125, South Africa, Phone (27)(11)793 3511, Fax (27)(11) 793 2413, Telex 424867 SA.

6.45 17th International Symposium on Macrocyclic Chemistry, 9-14 August 1992, Provo, Utah, U.S.A. Contact: Department of Chemistry, ISMC, 226 ESC, Brigham Young University, Provo, UT 84602, U.S.A., Phone +1 (801) 3782315, Fax +1 (801) 3785474.

6.46 12th IUPAC Conference on Chemical Thermodynamics, joint meeting with the **47th Calorimetry Conference**, 16-21 August 1992, Snowbird, Utah, U.S.A. Contact: Department of Chemistry, 226 ESC, Brigham

Young University, Provo, UT 84602, U.S.A., Phone 801-378-6269, Fax 801-378-5474, E-mail WOOLLEYE@VAN.LAB.BYU.EDU, Telex 706448.

6.47 10th International Conference on Surface Forces (at the occasion of Professor Deryagin's 90th birthday), 17-22 August 1992, Moscow, Russia. Sponsored by IACIS; members will be allowed a discount on the conference fee. Contact: L. Bolnovich, Institute of Physical Chemistry, Leninskii Prospekt, 117915 Moscow, Russia.

6.48 International Symposium on Surface Modification - Principles and Applications, 19-21 August 1992, Stockholm, Sweden. Contact: Institute for Surface Chemistry, Kerstin Möller, Box 5607, S-114 86, Stockholm, Sweden, Phone +46 8 790 99 19, Fax +46 8 20 89 98.

6.49 204th ACS National Meeting, 23-28 August 1992, Washington DC, U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. The symposia include:

- Surface Science of Catalysis: Spectroscopic Characterization of Catalysts (Division of Colloid and Surface Chemistry). Contact: H.H. Lamb, Department of Chemical Engineering, North Carolina State University, Raleigh, NC 27695-7905, U.S.A., Phone (917) 737 3572.
- Surface Chemistry in Biology, Medicine and Dentistry: Surface Phenomena of Biopolymers and Cells (Division of Colloid and Surface Chemistry). Contact: W. Duncan-Hewitt, Faculty of Pharmacy, University of Toronto, Toronto, Ontario M5S 1A1, Canada, Phone (416) 978-6749.

- Photochemical and Electrochemical Surface Science: Electroanalysis and Surfaces (Division of Colloid and Surface Chemistry). Contact: M.M. Majda, Department of Chemistry, University of California at Berkeley, Berkeley, CA 94720, U.S.A., Phone (415) 642-8961, or R.M. Crooks, Department of Chemistry, University of

New Mexico, Albuquerque, NM 87131, U.S.A., Phone (505) 277-5992.

- Surfactants and Associated Colloids: Solubilization Phenomena (Division of Colloid and Surface Chemistry). Contact: A.J.I. Ward, Department of Chemistry, Clarkson University, Potsdam, NY 13676, U.S.A., Phone (315) 268 3886, Fax (315) 268 6570.

- Colloid and Surface Chemistry of Advanced Materials: Theoretical Aspects of Materials-Related Surface Chemistry (Division of Colloid and Surface Chemistry). Contact: H. Jonsson, Department of Chemistry, University of Washington, B6-10, Seattle, WA 98195, U.S.A., Phone (206) 685-1804.

- Molecular Processes at Solid Surfaces: Surface Organometallic Chemistry (Division of Colloid and Surface Chemistry). Contact: C. Friend, Department of Chemistry, Harvard University, 12 Oxford Street, Cambridge, MA 02138, U.S.A., Phone (617) 495-4052, or M. Chisholm, Department of Chemistry, Indiana University, Bloomington, IN 47405, U.S.A., Phone (812) 335-6606.

- General Papers Division of Colloid and Surface Chemistry. Contact: D.W. Osborne, Calgon Vestal Laboratories, P.O. Box 147, St. Louis, MO 63166-0147, U.S.A., Phone (314) 535-1396.

- APS/ACS Symposium No. 3. (Division of Polymer Chemistry). Contact: A.J. Lovinger, AT&T Bell Laboratories, MH 1A-319, 600 Mountain Avenue, Murray Hill, NJ 07974-2070, U.S.A., Phone (201) 582-2151, Fax (201) 582-3609.

- Instrumental Methods No. 15 (Division of Polymer Chemistry). Contact: J.F. Haw, Department of Chemistry, Texas A&M University, College Station, TX 77843, U.S.A., Phone (409) 845-1966, Fax (409) 845-4719.

- Blends of Amorphous and Crystalline Polymers (Division of Polymer Chemistry). Contact: R.P. Kambour, Research and Development Center, General Electric Co., P.O. Box 8, Schenectady, NY 12301, U.S.A., Phone (518) 387-7942, Fax (518) 387-5324.

- Polymers for Drug Delivery Systems (Division of Polymer Chemistry). Contact: R.M. Ottenbrite, Department of Chemistry, Virginia Commonwealth University, Richmond, VA 23284, U.S.A., Phone (804) 367-1298.

- Polymers of Biological and Biomedical Significance (Division of Polymer Chemistry). Contact: S.W. Shalaby, Bioengineering Department, Clemson University, 301 Rhodes Research Center, Clemson, SC 29634-0905, U.S.A., Phone (803) 656-2787, Fax (803) 656-4466, or J. Williams, Department of Polymer Chemistry, Becton & Dickinson Co., Research Center, P.O. Box 12016, Research Triangle Park, NC 277809, U.S.A., Phone (919) 549-8641.

- Polymers in Museums (Division of Polymer Chemistry). Contact: M.T. Baker, Conservation Analytical Laboratory, Smithsonian Institute, Washington, DC 20560, U.S.A., Phone (301) 238-3714, Fax (301) 238-3709.

- Intermolecular Interactions in Polymer Mixtures (Division of Polymer Chemistry). Contact: P.A. Mirau, AT&T Bell Laboratories, Murray Hill, NJ 07974, U.S.A., Phone (201) 582-5841, Fax (201) 582-3609.

- Preparation and Physicochemical Characterization of Hydrogels (Division of Polymer Chemistry). Contact: N.A. Peppas, School of Chemical Engineering, Purdue University, West Lafayette, IN 47907, U.S.A., Phone (317) 494-7944, Fax (317) 494-0805.

- Polymer Foams (Division of Polymer Chemistry). Contact: F. Bailey, Union Carbide Technical Center, P.O. Box 8361, South Charleston, WV 25303, U.S.A., Phone (304) 767-4164, Fax (304) 747-5570.

- General Papers Division of Polymer Chemistry. Contact: R.F. Storey, Department of Polymer Science, University of Southern Mississippi, Box 10076, Hattiesburg, MS 39406-0076, U.S.A., Phone (601) 266-4879, Fax (601) 266-5829.

- Electroactive Polymers.

- Plasma Polymerization.

- 6.56 6th Hungarian Conference on Colloid Chemistry**, 16-19 September 1992, Balatonszéplak, Hungary. Includes a seminar programme for students and young researchers. Contact: I. Pászli, Hungarian Chemical Society, Budapest, Fő u. 68, H-1027, Hungary.
- 6.57 Colloids in External Fields**, 17-18 September 1992, Cambridge, U.K. Organised by the Colloid and Interface Science Group of the Faraday Division of the Royal Society of Chemistry. Contact: I.D. Robb, Unilever Research, Port Sunlight Laboratories, Quarry Road East, Bebington, Wirral, Merseyside L63 3JW, U.K.
- 6.58 Recovery of Biological Products VI**, 20-25 September 1992, Interlaken, Switzerland. Contact: Engineering Foundation, 345 East 47th Street, New York, NY 10017, U.S.A., Phone (212)705-7835, Fax (212)705-7441.
- 6.59 43rd Meeting International Society of Electrochemistry**, 20-25 September 1992, Córdoba, Argentina. Contact: V.A. Macagno, Depto. de Físico Química, Facultad de Ciencias Químicas, U.N.C., Suc. 16, C.C. 61, 5016 Córdoba, Argentina, Phone +54 51 60-6373/8778, Fax +54 51 694724, Telex 51822 BUCOR AR.
- 6.60 2nd International Symposium on Evaluation of Reservoir Wettability and its Effect on Oil Recovery**, 21-23 September 1992, Edinburgh, Scotland. Contact: A.J.P. Fletcher, Petroleum Science and Technology Institute, Dunedin House, 25 Ravelston Terrace, Edinburgh, EH4 3EX, U.K., Phone (44) 451 5231, Fax (44) 31 451 5232.
- 6.61 6th European Colloid and Interface Society (ECIS) Conference**, 21-25 September 1992, Graz, Austria. Contact: I. Ames, Institut für Biophysik und Röntgenstrukturforschung, Steyrergasse 17, A-8010 Graz, Austria.

- 6.50 Macromolecules 92: Functional Polymers and Biopolymers**, 31 August - 4 September 1992, Canterbury, U.K. Contact: A.J. Amass, Specialty Materials, Research Group, Alston University, Birmingham, U.K., or B. Anderson, Central Research, Du Pont, Wilmington, DE 19880-0328, U.S.A., Phone (302) 695-3332, Fax (302) 695-9183.
- 6.51 43rd Meeting of the International Society for Electrochemistry**, August or September 1992, Argentina. Contact: A.J. Arvia, INIFTA, Casilla de Correo 16, Sucursal 4, 1900 La Plata, Argentina.
- 6.52 Capillarity and Wetting, Dynamical Phenomena**, 2-6 September 1992, Arnhem, The Netherlands. Contact: A.M. Cazabat or L. Leger, Collège de France, Laboratoire de Physique de la Matière Condensée, 11 place Marcelin-Berthelot, 75231 Paris Cedex 05, France, Phone (1) 4427 1211, Fax (1) 4427 1082
- 6.53 Colloids in the Aquatic Environment**, 7-9 September 1992, London, U.K. Organised by the SCI Surface and Colloid Chemistry Committee. Contact: Secretariat Society of Chemical Industry, 14-15 Belgrave Square, London SW1X 8PS, U.K., Phone 071-235 3681.
- 6.54 The Liquid/Solid Interface at High Resolution**, 7-9 September 1992, Newcastle upon Tyne, U.K. General Discussion 94 of the Faraday Division of the Royal Society of Chemistry. Contact: A. Hamnett, Department of Chemistry, Bedson Building, The University, Newcastle upon Tyne, NE1 7RU, U.K.
- 6.55 Crystallization of Polymers**, 7-9 September 1992, Mons, Belgium. NATO Advanced Research Workshop. Contact: Prof. M. Dislère, Université de Mons-Hainaut, Département des Matériaux et Procédés, Place du Parc 20, 7000 Mons, Belgium.

6.62 **10th European Symposium on Polymer Spectroscopy, ESOPS-10** 29 September - 2 oktober 1992, St. Petersburg, Russia. Contact: A.V. Purkina or I.V. Kovalenko, Institute of Macromolecular Compounds, Academy of Sciences, Bolshoi Prospekt 31, St. Petersburg 199004, Russia, Phone (812)218-40-01, Fax (812)218-68-69.

6.63 **Meeting of the Division of Colloid and Surface Science of the Royal Australian Chemical Institute**, 28 September - 2 October 1992, Melbourne, Australia. Contact: I. McKinnon, Monash University, Clayton, Victoria 3168, Australia.

6.64 **12th International Vacuum Congress and 8th International Conference on Solid Surfaces**, 12-16 October 1992, The Hague, The Netherlands. Contact: Congress Secretariat IVC-12/ICSS-8, Van Namen & Westerlaken, Congress Organization Services, P.O. Box 1558, 6501 BN Nijmegen, The Netherlands.

6.65 **17th Congress International Federation of Societies of Cosmetic Chemists**, 13-16 October 1992, Yokohama, Japan. Contact: Society of Cosmetic Chemists of Japan, c/o Shiseido Co. Ltd., Ginza, Tokyo, Japan.

6.66 **Annual Meeting American Institute of Chemical Engineers**, November 1992, Miami, Florida, U.S.A.

- Fundamentals of Adsorption and Ion Exchange. Contact: A. Myers, Department of Chemical Engineering, University of Pennsylvania, Philadelphia, PA 19104, U.S.A., Phone (215)898-7078.

- Gas Separation by Adsorption. Contact: D.K. Friday, GEO-Centers, Inc., Ft. Washington, MD 20274, U.S.A., Phone (301)671-4822.

- Bioseparations by Adsorption. Contact: L.N.-H. Wang, School of Chemical Engineering, Purdue University, West-Lafayette, IN 47907, U.S.A., Phone (317)494-4081.

- Statistical Mechanics of Adsorption. Contact: P.A. Monson, Department of Chemical Engineering, University of Massachusetts, Amherst, MA 01003, U.S.A., Phone (413)545-0661.

6.67 **4th EC Symposium Oil and Gas Technology in a Wider Europe**, 3-5 November 1992, Berlin, F.R.G. Contact: The Petroleum Science and Technology Institute, Dunedin House, 25 Ravelstone Terrace, Edinburgh EH4 3EX, U.K., Phone + (44) 31 451 5231, Fax + (44) 31 451 5232.

6.68 **Materials Research Society 1992 Fall Meeting**, 30 November - 4 December 1992, Boston, Massachusetts, U.S.A. Contact: C.C. Koch, Phone (919) 737 7340, Fax (919) 737 7724, or S.J. Pennycook, Phone (615) 574 5504, Fax (615) 574 4143, or A.E. White, Phone (908) 582 2506, Fax (908) 582 2783.

6.69 **Aerosols**, 16 December 1992, London, U.K. Organised by the Colloid and Interface Science Group of the Faraday Division of the Royal Society of Chemistry. Contact: I.C. Callaghan, B.P. Research Centre, Chertsey Road, Sunbury-on-Thames, Middlesex TW16 7LN, U.K.

1993

6.70 **4th Aachener Membran Kolloquium**, 9-11 March 1993, Aachen, Germany. Contact: GVC VDI Verfahrns-technik, P.O. Box 101139, W-4000 Düsseldorf 1, Germany, Phone (0211) 6214 257, Telex 8586525, Fax (0211) 6214 575.

6.71 **205th ACS National Meeting**, 28 March - 2 April 1993, Denver, U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. The symposia include:

- Surface Science of Catalysts: Kinetics of Elementary Steps on Surfaces (Division of Colloid and Surface Chemistry). Contact: R.F. Hicks, Department of Chemical Engineering, 5531 Boelter Hall, University of

California, Los Angeles, CA 90024-1592, U.S.A., Phone (213) 206 6865, or F. Zaera, Department of Chemistry, University of California, Riverside, CA 92521, U.S.A., Phone (714) 787 5498, Fax (714) 787 4713, Bitnet Zaera@UCRVMS.

- Surface Chemistry in Biology, Medicine and Dentistry: Surface Phenomena of Biopolymers and Cells (Division of Colloid and Surface Chemistry). Contact: W. Duncan-Hewitt, Faculty of Pharmacy, University of Toronto, Toronto, Ontario M5S 1A1, Canada, Phone (416) 978-6749.
- Photochemical and Electrochemical Surface Science: Immobilization of Biomolecules at Surfaces (Division of Colloid and Surface Chemistry). Contact: W. Heineman, Department of Chemistry, University of Cincinnati, Cincinnati, OH 45221, U.S.A., Phone (513) 556 9208.
- Colloid and Surface Chemistry of Advanced Materials: Surface Science Related to Advanced Materials (Division of Colloid and Surface Chemistry). Contact: S. Williams, Department of Chemistry, University of California, 405 Hilgard Avenue, Los Angeles, CA 90024, U.S.A., Phone (213) 825-8818.
- Tribology: Friction, Wear, and Lubrication: Molecular Basis of Friction (Division of Colloid and Surface Chemistry). Contact: G. McClelland, IBM Research Division, Almaden Research Center, 650 Harry Road, San Jose, CA 95120-6099, U.S.A., Phone (408) 927-2406.
- Plasma Polymerization (Division of Polymer Chemistry). Contact: C.W. Frank, Department of Chemical Engineering, Stanford University, Stanford, CA 94305-5025, U.S.A., Phone (415) 723-4573, Fax (415) 725-9780.
- New Macromolecular Architecture (Division of Polymer Chemistry). Contact: V. Percec, Case Institute of Technology, Case Western Reserve University, Cleveland, OH 44106, U.S.A., Phone (216) 368-4242, Fax (216) 368-4202, or D.A. Tirrell, Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA 01003, U.S.A., Phone (413) 545-0433.

- Transition Metal Chemistry and Polymerization (Division of Polymer Chemistry). Contact: R.P., Quirk, Department of Polymer Science, University of Akron, Akron, OH 44325, U.S.A., Phone (216) 375-7510, Fax (216) 972-5290.
- Polymers in Packaging (Division of Polymer Chemistry). Contact: M.M. Bitritto, Celanese Research Company, 86 Morris Avenue, Summit, NJ 07901, U.S.A., Phone (201) 522-7544.
- Inorganic and Organometallic Polymers (Division of Polymer Chemistry). Contact: K.J. Wynne, Chemistry Division, Code 1113, Office of the Naval Research, 800 North Quincy Street, Arlington, VA 22217, U.S.A., Phone (202) 696-4315, or P. Wisian-Nielson, Department of Chemistry, Southern Methodist University, Dallas, TX 75275, U.S.A., Phone (214) 692-2483, or H.R. Allcock, Pennsylvania State University, Department of Chemistry, Davey Laboratory, University Park, PA 16802, U.S.A., Phone (814) 865-3527, Fax (814) 865-3314.
- Creation of Macroscopic Order in Polymeric Systems (Division of Polymer Chemistry). Contact: H.-W. Schmidt, Department of Materials, University of California, Santa Barbara, CA 93106, U.S.A., Phone (805) 961-8474, Fax (805) 961-8502.
- Fluorine-Containing Polymers (Division of Polymer Chemistry). Contact: P.E. Cassidy, Department of Chemistry, Southwest Texas State University, San Marcos, TX 78666-4616, U.S.A., Phone (512) 245-3632, or T. Davidson, Institute of Materials Science, University of Connecticut, U-136, Storrs, CT 06268, U.S.A., Phone (203) 486-4399.
- Polymer Blends and Alloys (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 19880-0356, U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-mail ENGLISH@ESVAX.DNET.-DUPONT.COM, or J.S. Riffle, Department of Chemistry, Virginia Polytechnic Institute,

Blacksburg, VA 24061, U.S.A., Phone (703) 231-8214/8237, Fax (703) 231-8517.

- Biotechnology Applications to Energy (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 19880-0356, U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-mail ENGLISH@ESVAX.DNET.DUPONT.COM, or J.S. Riffe, Department of Chemistry, Virginia Polytechnic Institute, Blacksburg, VA 24061, U.S.A., Phone (703) 231-8214/8237, Fax (703) 231-8517.

- General Papers Division of Polymer Chemistry. Contact: R.F. Storey, Department of Polymer Science, University of Southern Mississippi, Box 10076, Hattiesburg, MS 39406-0076, U.S.A., Phone (601) 266-4879, Fax (601) 266-5829.

6.72 3rd Conference on the Characterization of Porous Solids COPS 3, 9-12 May 1993, Marseille, France. Contact: J. Rouquerol, Centre de Thermodynamique et de Microcalorimétrie du CNRS, 26 rue du 141e RIA, F-13003, Marseille, France, Phone +33 91282053, Fax +33 91503820.

6.73 6th World Filtration Congress 18 - 21 May 1993, Nagoya, Japan. Contact: Department of Chemical Engineering, Nagoya University, Furo-cho, Chikusa-ku, Nagoya 464-01, Japan, Phone 052-781-5111 ext. 3374 and 3375.

6.74 Cellucon '93 - Physical-Chemical Aspects of Cellulose, Cellulose Derivates and Other Polysaccharides, 14-17 June 1993, Lund, Sweden. Contact: L. Piculell, Physical Chemistry 1, University of Lund, Chemical Center, Box 124, S-221 00 Lund, Sweden.

6.75 9th Summer Conference on the Chemistry of Solid/Liquid Interfaces (provisional!), 23 June - 3 July 1993, Dubrovnik, Croatia. Contact: V. Pravdic, Institute Ruder Boskovic, P.O. Box 1016, 41001 Zagreb, Croatia, Phone 41 435 111, Telex 213 83, Fax 041 425 497.

6.76 2nd International Symposium on Surface Chemistry, Adsorption and Chromatography SCAC 92, 29 June - 3 July 1992, Moscow, Russia. Contact: L. Kolomiets, Institute of Physical Chemistry, Leninski Prospekt 31, 117915 Moscow, Russia.

6.77 6th International Conference on Organized Molecular Films, 4-9 July 1993, Trois-Rivières, Québec, Canada. Contact: Dr. P.-F. Blanchet, Département de Chimie-Biologie, Université du Québec à Trois-Rivières, C.P. 500, Trois-Rivières, Québec, Canada G9A 5H7, Phone 819-376-5146, Fax 819-376-5057.

6.78 33rd Microsymposium on Micromolecules, Optics and Dynamics of Polymers, 12-15 July 1993, Prague, Czechoslovakia. Contact: P. Cefelin, Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences, Heyrovského nám. 18882/2, 162 06 Prague 6-Petriny, Czechoslovakia, Phone +42 (2) 360317, Fax +42 (2) 367981, Telex 122019 IMCPC.

6.79 IUPAC General Assembly, August 1993, Lissabon, Portugal. Contact: IUPAC Secretariat, Bank Court Chambers, 2-3 Pound Way, Templars Square, Cowley, Oxford OX4 3YF, U.K., Phone +44.865.747744, Fax +44.865.747510.

6.80 34th IUPAC Congress, 15-20 August 1993, Beijing, China. Contact: X. Song, Chinese Chemical Society, P.O. Box 2709, Beijing, 100080, China.

6.81 23rd International Conference on Solution Chemistry, 15-21 August 1993, Leicester, U.K. Contact: M.J. Blandamer, Department of Chemistry, Leicester University, University Road, Leicester LE1 7RH, U.K.

6.82 206th ACS National Meeting, 22-27 August 1993, Chicago, U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. The symposia include:

- Lifetime, Degradation, and Stability of Macromolecular Materials (Division of Polymer Chemistry). Contact: R.L. Clough, Sandia National Laboratories, Organization 1811, Albuquerque, NM 87185, U.S.A., Phone (805) 844-3492.
- Advances in Polyethers (Division of Polymer Chemistry). Contact: J. McGrath, Department of Chemistry, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061, U.S.A., Phone (703) 961-5976, Fax (703) 231-8517, or T. Vigo, USDA, Southern Regional Research Center, 1100 Robert E. Lee Boulevard, New Orleans, LA 70124, U.S.A., Phone (504) 286-4487.
- General Papers Division of Polymer Chemistry. Contact: R.F. Storey, Department of Polymer Science, University of Southern Mississippi, Box 10076, Hattiesburg, MS 39406-0076, U.S.A., Phone (601) 266-4879, Fax (601) 266-5829.

6.83 Advanced Polymer Materials Conference, Dresden '93, 30 August - 3 September 1993, Dresden, Germany. Contact: M. Rätzsch, c/o ACS Macromolecular Division, 1155 Sixteenth Street, N.W., Washington, DC 20036, U.S.A.

6.84 Progress in Electrocatalysis: Theory and Practice, 12-15 September 1993, Ferrara, Italy. Contact: S. Trasatti, Department of Physical Chemistry and Electrochemistry, Via Venezian 21, 20133 Milan, Italy, Phone +39-2-26603223, Fax +39-2-70638129, E-mail Trasatti at IMISIAM.MI.CNR.IT.

6.85 Gas-Solid Surface Dynamics, 13-15 September 1993, Cambridge, U.K. General Discussion 96 of the Faraday Division of the Royal Society of Chemistry. Contact: D.A. King, Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EW, U.K.

6.86 44th Meeting of the International Society for Electrochemistry, 20-24 September 1993, Berlin, Germany. Contact: W. Plieth, Free University of Berlin,

Surface Chemistry in Biology, Medicine, and Dentistry: Surface Phenomena of Biopolymers and Cells (Division of Colloid and Surface Chemistry). Contact: W. Duncan-Hewitt, Faculty of Pharmacy, University of Toronto, Toronto, Ontario M5S 1A1, Canada, Phone (416) 978-6749.

Photochemical and Electrochemical Surface Science: Vibrational Spectroscopy at Surfaces (Division of Colloid and Surface Chemistry). Contact: A. Campion, Department of Chemistry, University of Texas, Austin, Austin, TX 78712, U.S.A., Phone (512) 471 3012.

Colloid and Surface Chemistry of Advanced Materials: Chemically Sensitive Interfaces: Molecular Recognition and Signal Transduction (Division of Colloid and Surface Chemistry). Contact: T. Mallouk, Department of Chemistry, University of Texas, Austin, Austin, TX 78712, U.S.A., Phone (512) 471 3949.

Symposium on Recent Advances in the Synthesis and Characterization of Block and Graft Copolymers (Division of Polymer Chemistry). Contact: J.M. De Simone, Department of Chemistry, University of North Carolina, Chapel Hill, NC 27599-3290, U.S.A., Phone (919) 962-2172, Fax (919) 962-2388, or T. Long, Eastman Kodak Co., Corporate Research Laboratory, Building 82/6, Rochester, NY 14650-2110, U.S.A., Phone (716) 588-6051, Fax (716) 722-2327, or A.J. Diaz, Exxon Chemical Company, Baytown Polymer Center, Baytown, TX 77522, U.S.A.

Advances in Polarized Polymers (Division of Polymer Chemistry). Contact: G.A. Lindsay, Polymer Science Branch, Department of Research, Code 3858, Naval Weapons Center, China Lake, CA 93555, U.S.A., Phone (619) 939-1630.

Macromolecular Metal Complexes (Division of Polymer Chemistry). Contact: W.M. Culbertson, Ohio State University, Department of Dentistry, 305 West 12th Avenue, Columbus, OH 43210-1241, U.S.A., Phone (614) 292-0777, Fax (OSU) (614) 292-7619.

Institute of Physical and Theoretical Chemistry, Takustrasse 3, W-1000 Berlin 33, Germany.

6.87 **2nd Gordon Conference on Complex Fluids**, 27-September - 1 October 1993 (not in 1992, as previously announced), Irsee, Germany. Contact: D. Andelman, School of Physics, Tel-Aviv University, Ramat-Aviv, 69978 Israel, Phone (972)3-6419-529, Fax (972)3-6422-979, E-mail ANDELMAN@TAUNIVM, or S. Sinha, Exxon Research and Engineering Co., Clinton Twp., Rte. 22 E, Annandale, NJ 08801, U.S.A., Phone (908)730-2875, Fax (908)730-3031, E-mail SKSINHA@ERENJ.

6.88 **International Conference on Emulsions, emphasizing butiminous emulsions**, 20-22 October 1993, Paris, France. Contact: A. le Coroller, COLAS, 7 Place René Clair, 92653, Boulogne-Billancourt Cedex, France.

Preview 1994 and later

6.89 **8th International IACIS Conference on Colloid and Interface Science, 11-19 February 1994, Adelaide, Australia**. IACIS members will be allowed a discount on the conference fee. Topics include:

- Mineral science
- Self-assembly
- Dispersion stability
- Membrane technology
- Swelling amphiphiles.

Contact: J. Ralston, Department of Applied Chemistry, University of South Australia, Adelaide, S.A. 5095, Australia.

6.90 **207th ACS National Meeting**, 13-18 March 1994, San Diego, U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. The symposia include:

- Photochemical and Electrochemical Surface Science: Spectroscopy of Electrode Surfaces (Division of Colloid

and Surface Chemistry). Contact: M.P. Soriaga, Department of Chemistry, Texas A&M University, College Station, TX 77843, U.S.A., Phone (409) 723 4643.

- Surfactants and Associated Colloids: Microemulsions and Micellar Systems (Division of Colloid and Surface Chemistry). Contact: J. Puig, Universidad de Guadalajara, Boulevard Tlaquepaque 1451, Guadalajara, Jalisco 44430, Mexico.

- Polymer Dynamics and Thermodynamics in Solutions (Division of Polymer Chemistry). Contact: H. Yu, Department of Chemistry, University of Wisconsin, Madison, WI 53706, U.S.A., Phone (608) 262-3082, Fax (608) 262-0381, or M. Fixman, Department of Chemistry, Colorado State University, Fort Collins, CO 80523, U.S.A., Phone (303) 491-6037, Fax (303) 491-1801.

- Dielectric Properties of Polymers (Division of Polymer Chemistry). Contact: J.P. Runt, Department of Materials Science and Engineering, Pennsylvania State University, 117 Steidle Building, University Park, PA 16802, U.S.A., Phone (814) 865-1288, Fax (814) 865-2917, or J.J. Fitzgerald, Eastman Kodak Company, 5/82/rl Rochester, NY 14650-2135, U.S.A., Phone (716) 477-9301, Fax (716) 722-2327.

- NMR Spectroscopic Characterization of Polymers (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 19880-0356, U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-mail ENGLISH@ESVAX.DNET-DUPONT.COM, or H.W. Spiess, Max Planck Institut für Polymerforschung, Postfach 3148, W-6500 Mainz, Germany, Phone 06131-379120, Fax 96131-379100, or J.F. Haw, Department of Chemistry, Texas A&M University, College Station, TX 77843, U.S.A., Phone (409) 845-1966, Fax (409) 845-4719.

- Industrial Applications in Biotechnology (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 19880-0356,

U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-mail ENGLISH@ESVAX.DNET-DUPONT.COM, or J.S. Riffle, Department of Chemistry, Virginia Polytechnic Institute, Blacksburg, VA 24061, U.S.A., Phone (703) 231-8214/8237, Fax (703) 231-8517.

- General Papers Division of Polymer Chemistry. Contact: R.F. Storey, Department of Polymer Science, University of Southern Mississippi, Box 10076, Hattiesburg, MS 39406-0076, U.S.A., Phone (601) 266-4879, Fax (601) 266-5829.

6.91 13th European Chemistry at Interface Conference, provisionally May 1994, Kiev, Ukraine.

6.92 35th IUPAC International Symposium on Macromolecules, Macro 94, 11-15 July 1994, Acron, Ohio, U.S.A. Contact Dr. Kennedy, c/o ACS Macromolecular Division, 1155 Sixteenth Street, N.W., Washington, DC 20036, U.S.A.

6.93 35th Microsymposium on Polymer Networks, 25-28 July 1994, Prague, Czechoslovakia. Contact: P. Cefelin, Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences, Heyrovského nám. 18882/2, 162 06 Prague 6-Petriny, Czechoslovakia, Phone +42 (2) 360317, Telex 122019 IMCPC.

6.94 208th ACS National Meeting, 21-26 August 1994, Washington D.C., U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. The symposia include:

- Photochemical and Electrochemical Surface Science (Division of Colloid and Surface Chemistry). Contact: J. Stickney, Department of Chemistry, University of Georgia, Athens, GA 30602, U.S.A., Phone (404) 542 1967.

- Polymer Recycling and Disposal (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 19880-0356, U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-

mail ENGLISH@ESVAX.DNET-DUPONT.COM, or J.S. Riffle, Department of Chemistry, Virginia Polytechnic Institute, Blacksburg, VA 24061, U.S.A., Phone (703) 231-8214/8237, Fax (703) 231-8517.

- General Papers Division of Polymer Chemistry. Contact: R.F. Storey, Department of Polymer Science, University of Southern Mississippi, Box 10076, Hattiesburg, MS 39406-0076, U.S.A., Phone (601) 266-4879, Fax (601) 266-5829.

6.95 209th ACS National Meeting, 2-7 April 1995, Anaheim, U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. The symposia include:

- Photochemical and Electrochemical Surface Science: Monomers and Polymers at Electrode Surfaces (Division of Colloid and Surface Chemistry). Contact: H. Zimmer, Department of Chemistry, University of Cincinnati, Cincinnati, OH 45221, U.S.A., Phone (513) 556 9273.

- Surfactants and Associated Colloids: Symposium Honoring Stig E. Friberg (Division of Colloid and Surface Chemistry). Contact: D.W. Osborne, Calgon Vestal Laboratories, P.O. Box 147, St. Louis, MO 63166-0147, U.S.A., Phone (314) 535-1396.

- New Polymeric Reactions and Reaction Mechanism (Division of Polymer Chemistry). Contact: V. Percec, Case Institute of Technology, Case Western Reserve University, Cleveland, OH 44106, U.S.A., Phone (216) 368-4242, Fax (216) 368-4202, or D.A. Tirrell, Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA 01003, U.S.A., Phone (413) 545-0433.

- Agricultural Applications of Biotechnology (Division of Polymer Chemistry). Contact: A.D. English, Du Pont Experimental Station, Wilmington, DE 19880-0356, U.S.A., Phone (302) 695-4851, Fax (302) 695-8207, E-mail ENGLISH@ESVAX.DNET-DUPONT.COM, or J.S. Riffle, Department of Chemistry, Virginia Polytechnic

6 REGIONAL AND PERSONAL NEWS

6.1 Personal News

IACIS regrets to report the death of **Marjorie J. Vold**, November 4, 1991. In the next Newsletter we hope to publish an obituary.

Professor Pierre Gilles de Gennes, Collège de France, Paris, has been awarded the Nobel Prize for Physics. See the President's Message (item 3.1) of this Newsletter.

The Electrochemical Division of the Italian Chemical Society has awarded the 1991 "Luigi Galvani Medal" to **Professor Brian E. Conway**, University of Ottawa, Canada, for his contributions to the development of electrochemistry.

6.2 International and Regional News

The American Chemical Society (ACS) Department of Government Relations and Science Policy has released the third edition of **Acid Rain**, an information pamphlet developed by the ACS Committee on Environmental Improvement. Single copies are available free of charge (up to ten for non-profit groups) from the ACS Department of Government Relations and Science Policy, 1155 Sixteenth Street NW, Washington, DC 20036, U.S.A. Please include a self-addressed mailing label.

India

In October 28 to 30, 1991, the 5th National Conference on "Surfactants, Emulsions and Biocolloids" was held in M S University, Baroda situated in the Western part of India. The Conference was sponsored jointly by the Indian Society of Surface Science and Technology and the M S University. Nearly 150 scientists, research students and technologists from different parts of India participated in this meeting and exchanged their views. Altogether sixty

Institute, Blacksburg, VA 24061, U.S.A., Phone (703) 231-8214/8237, Fax (703) 231-8517.

- General Papers Division of Polymer Chemistry. Contact: R.F. Storey, Department of Polymer Science, University of Southern Mississippi, Box 10076, Hattiesburg, MS 39406-0076, U.S.A., Phone (601) 266-4879, Fax (601) 266-5829.

6.96 **210th ACS National Meeting**, 20-25 August 1995, Chicago, U.S.A. Contact: Th.A. Horbett, Chemical Engineering Department, University of Washington, Seattle, WA 98195, U.S.A. The symposia include:
- Photochemical and Electrochemical Surface Science: Microstructure of Electrode Surfaces (Division of Colloid and Surface Chemistry). Contact: D.G. Frank, Phone (513) 559-1099.

6.97 **36th IUPAC International Symposium on Macromolecules, Macro 96**, August - September 1996, Seoul, South Korea. Contact: Dr. Ahn, c/o ACS Macromolecular Division, 1155 Sixteenth Street, N.W., Washington, DC 20036, U.S.A.

6.98 **ACS National Meetings**

211th March 24-29, 1996, Salt Lake City, U.S.A.

212th August 25-30, 1996, Boston, U.S.A.

214th September 7-12, 1997, Las Vegas, U.S.A.

papers were presented in this Conference on different topics of surface science and technology.

Israel

In the framework of a reorganization of the Chemistry Faculty of the **Weizmann Institute of Science** a **Department of Materials and Interface Research** was formed. The first head is Professor Meir Lahav.

Japan

The Division of Colloid and Surface Chemistry of the Chemical Society of Japan was founded in 1976 and now has 1043 members including 48 corporation members. For the period March 1991-February 1992 Prof. M. Seno is Chairman (School of High-Technology for Human Welfare, Tokai University); Vice-Chairman is Prof. T. Seimiya.

U.K.

As from January 1992 Dr. I.D. Robb (Unilever Research, Port Sunlight Laboratories, Quarry Road East, Bebington, Wirral, Merseyside L63 3JW, U.K.) will be Honorary Secretary of the **Colloid and Interface Science Group of the Faraday Division of the Royal Society of Chemistry**.

U.S.A.

In November 1991 the sixth Newsletter of the **International Adsorption Society, Inc.** was published. Those who are interested can contact K.S. Knaebel, Department of Chemical Engineering, Ohio State University, 140 West 19th Avenue, Columbus, OH 43210, U.S.A., Phone (614)292-6618, Fax (614)292-9021, E-mail knaebel@kegll.ohio-state.edu.

7 NEW JOURNALS AND BOOKS

The main purpose of the following list is to inform IACIS members on new titles in the field of colloid and surface science. Mention of a given title is not a guarantee of its quality. Details can only be given if this information has been made available. Suitable titles for forthcoming Newsletters can be sent to the author of this Newsletter. We cannot accept any responsibility for omissions or errors, although of course the information is checked to the best of our knowledge.

7.1 New Journals

GAIA - Ecological Perspectives in Science, Humanities and Economics, Spektrum Akademischer Verlag, Heidelberg, Germany, Vol. 1 (1992) six issues, DM 63.00 (Germany DM 57.00), incl. postage charges.

Journal of Materials Chemistry, A.R. West, Ed., Royal Society of Chemistry, Cambridge, U.K., Vol. 1 (1991), six issues, EC £175.00, Overseas £195.00, U.S.A. US\$395.00.

Optical Materials, R.C. Powell, Ed., North-Holland (Elsevier Science Publishers), Amsterdam-New York, Vol. 1 (1991) four issues, Dfl. 330.00/US\$178.50 incl. postage and handling charges.

Processing of Advanced Materials, J.A. McGeough, FRSE, Ed., Chapman and Hall, New York-London, Vol. 1 (1991) £35.00 (U.S.A. and Canada US\$60.00).

7.2 Books 1989

Bothorel, P., and Dufoure, E.J., **Trends in Colloid and Interface Science III** (Progress in Colloid and Polymer Science 79), Steinkopff Verlag, Darmstadt, F.R.G.

Munk, P., **Introduction to Macromolecular Science**, Wiley, New York NY, U.S.A., £36.00.

Parris, N., and Barford, R., **Interactions of Food Proteins** (ACS Symposium Series 454), American Chemical Society, Washington DC, U.S.A., US\$59.95.

Pietralla, M., and Pechhold, W., **Relaxation in Polymers** (Progress in Colloid and Polymer Science 80), Steinkopff Verlag, Darmstadt, F.R.G.

Rätzsch, H., and Jacobasch, H.J., Eds., **Symposium on Electrokinetic Phenomena 89** - Theory, Methods, and Applications, November 6-8, 1989, two volumes, Inst. Technol. Polym., Dresden, F.R.G.

Thrower, P.A., Ed., **Chemistry and Physics of Carbon Vol. 22**, Marcel Dekker, New York-Basel, US\$155.25 (U.S.A. and Canada US\$135.00).

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8 NEWSLETTER IDEAS AND INFORMATION

All members are invited to send their suggestions on the scope and other aspects of these Newsletters. Contributions to fostering international contacts are specifically solicited but information on meetings is also very welcome!

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