



*International Association of Colloid
and Interface Scientists*

NEWSLETTER NO. 20

DECEMBER 1992

COMPILED BY J. LYKLEMA

**INTERNATIONAL ASSOCIATION OF COLLOID
AND INTERFACE SCIENTISTS**

NEWSLETTER NO. 20

December 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 20 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 5 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 Composition of Council 1992-1994

President:

Prof.dr. Robert J. Hunter (Australia)

President-elect:

Prof.dr. Anne-Marie Cazabat (France)

Immediate Past President:

Dr. Tharwat F. Tadros (U.K.)

expiration on 1 Sept.
of the year:

Ordinary Council Members:

Dr. R. Aveyard (U.K.) 1994

Dr. T. Cosgrove (U.K.) 1996

Prof.dr. D. Exerowa (Bulgaria) 1994

Prof. S.E. Friberg (U.S.A.) 1994

Prof.dr. K. Holmberg (Sweden) 1996

Prof.dr. N. Ise (Japan) 1994

Dr. R.G. Laughlin (U.S.A.) 1994

Prof. A.W. Neumann (Canada) 1996

Prof.dr. A. Prins (The Netherlands) 1996

Prof.dr. A.I. Rusanov (Russia) 1996

Dr. R. Sharma (U.S.A.) 1996

Prof.dr. J.E.G. Sjöblom (Norway) 1994

Co-opted Council Members:

Prof.dr. B.H. Bijsterbosch
(Honorary Secretary and Treasurer)

Prof. D.K. Chatteraj (India)

Prof. N.V. Churaev (Russia)

Prof. M. Clausse (France)

Dr. F. Csmpesz (Hungary)

Prof.dr. H. Hoffmann (Germany)

Prof.dr. J. Lyklema
(Newsletter Editor)

Prof. J. Ralston (Australia)

Prof. F. Rodriguez-Reinoso (Spain).

3.2 President's Message

May I thank you, first of all, for your support in electing me to the Presidency. The fact that it is feasible for someone from the nether reaches of the planet to take on the position is an indication of how much the modern methods of communication have widened the possibilities for scientific interaction.

I'm sure to speak for the outgoing executive when I offer my thanks to Dr. Tharwat Tadros for his services to the IACIS over the years, and especially for his work as President over these past two years. I look forward to working with him during my own term of office.

Since taking up the position of President I have been looking at the distribution of our membership. Not surprisingly, the biggest group comes from the U.S.A., with over 100 members. Then there are the middle ranking countries, France, Hungary, Japan, the Netherlands and the U.K. with 30 to 40 members each. The next group, with 15 to 30 members: Australia, Belgium, Canada, Germany and Sweden, also presents few surprises although one might have expected a few more members from Germany. The rest of the world's countries have fewer than 12 members each and here there are some real surprises.

Why do we have only 3 members each from India and China, and only 10 from the former Soviet Union? And why only 5 in Switzerland, the home of so many large chemical companies? We certainly know that those numbers do not reflect the interest in colloid science in those countries. What determines the level of support for the international organization? Is it a matter of historical accident, stemming from past conference activities? Certainly that must have some effect but it is a chicken

and egg situation. We could find it difficult to run a successful meeting in a country with too few members.

The strong showing of the Netherlands reflects not only their commitment to colloid science but also the enthusiasm of a few long-standing supporters. That is no doubt what we need in those other countries which so far are under-represented. The large number of members from Hungary suggests that even the difficulties of limited currency conversion can be overcome if there is a will to do so.

Having a numerically strong and vigorous international organization may well prove crucial in the years ahead, as we find our research programs being ever more critically scrutinised for relevance and cost effectiveness. We are fortunate that colloid and surface science gives ample evidence of its importance in the 'real' world, but as scientists we know that, without a continuing growth in our knowledge of the fundamentals of our subject, to the extent that they can be separated, one from the other.

IACIS is not, and would not want to be, a political organization in the narrow sense of the word, but to the extent that all our communal activities are influenced by 'the body politic' in which they occur, we cannot entirely escape the influence of politics. Our international conferences are the show cases for transnational cooperative science. They will be successful to the extent that we can influence both government and private organizations to finance the free flow of information. They can best do that by supporting the attendance of our members at our international meetings. I certainly hope they can be prevailed upon to help us with the next such meeting in Adelaide, South Australia in February 1994.

Robert J. Hunter
President

3.3 From the Honorary Secretary and Treasurer

Below you will find the financial report over the period September 1991 - September 1992, and the one of the preceding year. The latter has been included since it gives a better insight into our financial status, particularly since, with the approval of the President, I have decided to change the currency from American dollars into Dutch guilders. The reason for this change is that some years ago, when the value of the American dollar kept going down, the President and I decided to exchange almost all our balance from dollars into guilders. Since, the dollar has gone down quite a bit further from that moment on, IACIS has indeed profited from this decision. But since our balance is now mainly in guilders (probably the strongest currency in the world at the moment), expressing them in terms of dollar rates on September 1 of the respective years creates unreal fluctuations. For instance, in September 1991 one dollar was worth 2.00 guilders, but in September 1992 only 1.60 guilders. At the moment the rate has increased again and ranges somewhere around 1.80 guilders.

By comparing the periods September 1990 - September 1991 and September 1991 - September 1992, it is obvious that last year we have run at quite a loss. However, the situation is less serious than it might look at first sight. First of all, the low amount of membership fees received during last year as compared to the preceding year is due to the fact that along the road the financial year was changed from January till January into September till September. Consequently, many members who had already paid for the whole of 1991, decided not to pay the difference until September 1992, but included, or intend to include it in their payment for 1992-1993. Actually, in the past three months we have received so many membership fees that the amount of cash today is roughly 17500

guilders, despite the fact that in the mean time we also paid some 7000 guilders in sponsorship money.

In the second place it has to be realized that last year we sponsored more conferences than in the preceding year. Actually, for the running year sponsorship has been granted in the order of some ten thousand guilders again, but, as mentioned in the preceding paragraph, about seven thousand of them have already been paid.

In the third place you will notice that the post computers has appeared. This is due to the fact, that two years ago it turned out to be impossible to continue to perform the IACIS administration on the PC's of the department any longer. Therefore, both the secretary and the administrator needed a PC at home, for which the President granted permission. The total cost will run up to 6000 guilders, of which half has already been paid and the rest will follow in the next two years. This delayed payment is due to the cooperation of our department which has granted us an interest-free credit. The first installment was due before September 1, 1991, but was paid slightly later, which also contributes to the mismatch between the two years. Some other posts can also show annual fluctuations because the dates of expenditure and invoice were out of balance.

Any comments and/or suggestions regarding this financial report will be welcome.

Bert Bijsterbosch
Honorary Secretary and Treasurer

3.3.1 Financial Report September 1990 - September 1991

Balance per September 1, 1990 Dfl. 23,938

Receipts

Membership fees Dfl. (credit cards)	Dfl. 8,196
Membership fees Dfl. (cheques)	- 2,326
Membership fees Dfl./US\$ (bank)	- 824
Membership fees US\$ (cheques)	- 916
Membership fees (cash Dfl., SFr., etc.)	- 950
Interest	- 1,322
BASF	- 886

Dfl. 15,420
Dfl. 39,358

Payments

Newsletters	Dfl. 1,608
Mailing, paper, printing	- 6,134
Costs cheques	- 800
Costs creditcards	- 396
Salary secretary	- 3,610
Norway conference	- 4,016

Balance per September 1, 1991
- 22,794
Dfl. 39,358

Amounts are rounded.

Number of members May 31, 1988 324
September 1, 1991 424.

3.3.2 Financial Report September 1991 - September 1992

Balance per September 1, 1991 Dfl. 22,794

Receipts

Membership fees (credit cards)	Dfl. 4,618
Membership fees (cheques)	- 746
Membership fees (bank and cash)	- 943
Interest	- 1,496

Dfl. 7,803
Dfl. 30,597

Payments

Newsletters	Dfl. 1,322
Sponsoring (Lund, Moscow, Arnhem)	8,345
Application forms, List of members	- 1,406
Mailing, paper	- 506
Costs (cheques, creditcards a.o.)	- 637
Salary secretary	- 2,100
Computers	- 3,000

Balance per September 1, 1992
- 13,281
Dfl. 30,597

Hungarian Funds M Forint 65,486 = Dfl. 1,768
(M Forint 100 = Dfl. 2.70)

Amounts are rounded.

Number of members September 1, 1991 424
September 1, 1992 486.

Bert Bijsterbosch
Hon. Secretary and Treasurer

4 IACIS-SPONSORED MEETINGS

4.1 International Conferences 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, under discussion.

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.
- 14) September 1992, London (U.K.), Aquatic Environment Conference.
- 15) May 1993, Louvain-la-Neuve, (Belgium) BIoAdhesion II - International Conference on the Fundamental Aspects of Bioadhesion and Flocculation and their Implications in Technological, Ecological and Medical Fields.
- 16) September 1993, Bristol (U.K.) Polymers at Interfaces.
- 17) September 1993, Granada (Spain) Electrokinetic Phenomena '93.

5 IUPAC NEWS

Commission I.6 on Surface and Colloid Chemistry including Catalysis

Chairman of the Commission is Dr. J. Rouquerol, Centre de Thermodynamique et de Microcalorimétrie du CNRS, 26 rue du 141e RIA, F-13003 Marseille, France, Phone 9128-

2053, Fax 9150-3829; Secretary is Prof. B. Vincent, Department of Physical Chemistry, School of Chemistry, University of Bristol, Cantock's Close, Bristol BS8 1TS, U.K., Phone (272) 303030, ext. 4718, Fax (272) 250-612, Telex 444174 BUPHYS G.

The next full meeting of the Commission will be during the 37th General Assembly in Lisbon, Portugal. See 6.47.

The Projects of the Commission have made progress. A fine result is the comprehensive document (95 pages) produced on "Thin Films, Including Layers. Terminology in Relation to their Preparation and Characterization" by the **Sub-Committee on Thin Films**, under the chairmanship of Dr. Lisbeth Ter-Minassian-Saraga. This document is still to be approved by IUPAC after external refereeing but has certainly been quite carefully prepared and ought to be successful.

The Sub-Committee on the Characterization of Porous Solids is to submit a "final" version of its Recommendations at the occasion of the IUPAC Symposium on the Characterization of Porous Solids (COPS-III) which is to be held in Marseille from 9 to 12 May 1993. See also 6.22.

The recently published monograph *Environmental Particles* (Volume 1) is part of a project of the **IUPAC Limited Life Commission on Environmental Analytical Chemistry**. It is the first volume in the new IUPAC *Environmental Analytical and Physical Chemistry Series*. Publication of the second volume is expected next year sometime before the IUPAC General Assembly in Lisbon. The editors of these volumes are Jaques Buffle and Herman P. van Leeuwen. See also item 8.5.

Macromolecular Division

The Division will convene at the 37th IUPAC General Assembly, 5-12 August 1993, Lisbon, Portugal. See also 6.47.

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.

1993

6.1 International Conference Thermodynamics of Solutions and Biological Systems, 3-6 January 1993, New Delhi, India. Contact: J.C. Ahluwalia, Department of Chemistry, Indian Institute of Technology, Hauz Khas, New Delhi 110016, India, Tel. (11) 653-474/653-576/664-519, Fax (11) 6862037, Telex 3173087/3161460-IITD-IN.

6.2 1st International Conference on Spectroscopic Ellipsometry (ICSE '93), 11-14 January 1993, Paris, France. Contact: Secrétariat de la Conférence ICSE '93, B.P. 82, Université Pierre et Marie Curie, 75252 Paris Cedex 05, France, Fax (1) 4427-3982.

6.3 International Symposium on the Interphase, 21-26 February 1993, Colonial Williamsburg, Virginia, U.S.A. Held during the 16th Annual Meeting of The Adhesion Society. Contact: L.H. Sharpe, 28 Red Maple Road, Hilton Head Island, SC29928, U.S.A., Phone/Fax (803) 671-4810, or F.J. Boerio, Department of Materials Science and Engineering (ML 12), University of Cincinnati, Cincinnati, OH 45221, U.S.A., Phone (513) 556-3111, Fax (513) 556-2569.

6.4 SDLS II - Static and Dynamic Light Scattering: Techniques and Applications to Dense Colloids, 1-4 March 1993, near Kiel, Germany. Contact: K. Schätzel, Institut für Angewandte Physik, Uni Kiel, Leibnizstrasse

11, D-2300 Kiel, Germany, Phone (431) 880-3942/3943, E-mail PANO1@RZ.UNI-KIEL.DBP.DE, Fax (431)880-4608.

6.5 Jahrestagung der Deutschen Rheologische Gesellschaft, 8-10 March 1993, Karlsruhe, Germany. Contact: Deutsche Rheologische Gesellschaft, Unter den Eichen 87, D-1000 Berlin 45, Germany, Phone (30) 8104-5209.

6.6 4th Aachener Membran Kolloquium, 9-11 March 1993, Aachen, Germany. Contact: GVC VDI Verfahrenstechnik, P.O. Box 101139, W-4000 Düsseldorf 1, Germany, Phone (211) 621-4257, Fax (211) 621-4575, Telex 8586 525.

6.7 European Water Filtration Congress, 15-17 March 1993, Oostende, Belgium. Contact: Koninklijke Vlaamse Ingenieursvereniging v.z.w., Belgium, Phone (03) 216-0996, Fax (03) 216-0689.

6.8 Cellular Polymers III, 23-25 March 1993, Edinburgh, U.K. Contact: K. Royle, Rapra Technology Ltd., Shawbury, Shrewsbury, Shropshire SY4 4NR, U.K.

6.9 13th Experimental Thermodynamics Conference, 24-26 March 1993, Bristol, U.K. Contact: C.J. Wormald, School of Chemistry, Bristol University, Cantock's Close, Bristol BS8 1TS, U.K., Phone (272) 303-686, Fax (272) 250-612.

6.10 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., Phone (206) 543-2250. The symposia include:

- Sorption Separations for Environmental Restoration.
- Ion Exchange for Environmental Restoration.

Division of Colloid and Surface Chemistry:

- Surface Science of Catalysis: Kinetics of Elementary Steps on Surfaces.

- Photochemical and Electrochemical Surface Science: Immobilization of Biomolecules at Surfaces.
- Colloid and Surface Chemistry of Advanced Materials: Surface Science Related to Advanced Materials.
- Tribology: Friction, Wear, and Lubrication: The Molecular Basis of Friction.
- Colloid and Surface Chemistry of Fluorocarbons and Highly Fluorinated Amphiphiles.
- Langmuir-Blodgett and Self-Assembled Films.
- Molecular Processes at Solid Surfaces.
- Environmental Catalysts.
- Polyelectrolytes.
- General Papers.

Division of Polymer Chemistry:

- Plasma Polymerization.
- New Macromolecular Architecture.
- Transition Metal Chemistry and Polymerization.
- Polymers in Packaging.
- Inorganic and Organometallic Polymers.
- Creation of Macroscopic Order in Polymeric Systems.
- Fluorine-Containing Polymers.
- Polymer Blends and Alloys.
- Biotechnology Applications to Energy.
- General Papers.

Division of Petroleum Chemistry:

- Enhanced Oil Recovery.

6.11 Polymer Spectroscopy, 29 March - 1 April 1993, Grasmere, Cumbria, U.K. Organised by the Macro Group of the Royal Society of Chemistry. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.12 Colloids and Interfaces, 1-2 April 1993, Berne, Switzerland, opening conference of the Swiss Group of Colloid and Interface Science, Grabenstrasse 3, CH-8952 Schlieren, Switzerland, Fax (41) 1731-0783.

6.13 Aspects of Contemporary Polymer Chemistry. 6-8 April 1993, Lancaster, U.K. Contact: D.J. Hourston, The Polymer Centre, University of Lancaster, Bailrigg, Lancaster, LA1 4YA, U.K.

6.14 Peptide Synthesis: Speciality Amino Acids to Pharmaceutical Peptides, 13-16 April 1993, Bangor, North Wales, U.K. Contact: M.S. Baird, University of Wales, Bangor, North Wales, U.K.

6.15 Crystal Growth, Equilibrium Structure, Interface Kinetics, Lattice Defects and their Interrelationships, General Discussion 95 of the Faraday Division of the Royal Society of Chemistry, 14-16 April 1993, Glasgow, U.K. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227, or J.N. Sherwood, Department of Pure and Applied Chemistry, University of Strathclyde, Thomas Graham Building, 295 Cathedral Street, Glasgow G1 1XL, U.K.

6.16 Pure and Applied Aspects of Surfactant Behaviour, 14-17 April 1993, Strasbourg, France. Contact: I.D. Robb, Unilever Research Laboratories, Port Sunlight, Merseyside L63 3JW, U.K., Phone (51) 471-3039, Fax (51) 471-1800, or B.H. Robinson, School of Chemical Sciences, University of East Anglia, Norwich NR4 7TJ, U.K., Phone (603) 592-007, Fax (603) 259-396.

6.17 2nd U.K. Colloid and Surface Science Student Meeting, 18-21 April 1993, Nottingham, U.K. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.18 Polymer Science and Technology, 21-23 April 1993, Leeds, U.K. Organised by the Polymers Physics Groups of the Faraday Division of The Royal Society of Chemistry. Contact: M.J. Richardson, Division of Materials Metrology, National Physical Laboratory,

Teddington, Middlesex TW11 0LW, U.K., (81) 943-6785, Fax (81) 943-6755, or Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.19 9th International Meeting on Small-Angle Scattering, 27-30 April 1993, Saclay, France. Contact: J.-P. Cotton and J. Teixeira, Laboratoire Léon Brillouin, CEN-Saclay, F-91191 Gif-sur-Yvette Cedex, France, Fax (1) 6908-8261.

6.20 Rolduc Polymer Meeting: Rise and Decline of High performance Polymers in Europe, 3-6 May 1993, Rolduc Abbey, Kerkrade, The Netherlands. Contact: L.A. Kleintjens, DSM Research, P.O. Box 18, 6160 MD Geleen, The Netherlands, Phone (46) 761-938, Fax (46) 767-605.

6.21 Annual Meeting American Filtration Society: System Approach to Separation and Filtration Process Equipments, 4-6 May 1993, Chicago, U.S.A. Contact: W.W.F. Leung, Bird Machine Company, 100 Neponset Street, S. Walpole, MA 02071, U.S.A., Phone (508) 668-0400, ext. 226, Fax (508) 668-6855.

6.22 3rd International Symposium on the Characterization of Porous Solids COPS III, 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 9128-2053, Fax 9150-3829.

6.23 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 (52) 781-5111 ext. 3374 and 3375.

6.24 Bioadhesion II - International Conference on the Fundamental Aspects of Bioadhesion and Flocculation and their Implications in Technological, Ecological and Medical Fields, 23-27 May 1993, Louvain-la-Neuve,

Belgium. **Sponsored by IACIS.** Contact: Bioadhesion, Chimie des Interfaces, Place Croix du Sud 2/18, B-1348 Louvain-la-Neuve, Belgium.

6.25 4th International Symposium on Polymer Blends, 24-26 May 1993, Capri, Italy. Contact: R. Greco, Institute of Research on Polymer Technology, Via Tolano 6, 80072, Arco Felice (Napoli), Italy, Phone (81) 853-4224, Fax (81) 866-3378.

6.26 1st Symposium on Surfactants, Pula, Croatia, 24-28 May 1993. Contact: R. Despotovic, Ruder Boskovic Institute, Bijenicka 54, P.O. Box 1016, 41001 Zagreb, Croatia, Phone (41) 434-462/425-458, Fax (41) 425-497.

6.27 15th Mendeleev Session on General and Applied Chemistry. Chemical-ecological problems, 24-29 May 1993, Minsk, Belorussia. Contact: V.S. Soldatov, Institute of Physical-Organic Chemistry, Surganov Street 13, Minsk, 220072 Belorussia, Phone (0172) 395-338, Fax (0172) 394-679.

6.28 2nd International Symposium on the Metalization of Polymers, 30 May - 3 June 1993, Montréal, Canada. Contact: E. Sacher, Department of Engineering Physics, École Polytechnique, P.O. Box 6079, Station A, Montréal, Québec H3C 3A7, Canada, Phone (514) 340-4858, Fax (514) 340-3218.

6.29 Journées d'Electrochimie 1993, 7-10 June 1993, Grenoble, France. Contact Secrétaire, CREMGP/ENSEEG, Domaine Universitaire, B.P. 75, 38402 St. Martin d'Hères, France.

6.30 PREP'93 - 10th International Symposium on Preparative Chromatography, 14-16 June 1993, Oak Ridge, U.S.A. Contact: J. Cunningham, Barr Enterprises, P.O. Box 279, Walkersville, MD 21793, U.S.A., Phone (301) 898-3772.

6.31 67th Colloid and Surface Science Symposium, 20-23 June 1993, Toronto, Ontario, Canada. Contact: M.L. Hair, Xerox Research Centre of Canada, 2660 Speakman Drive, Mississauga, Ontario, Canada L5K 2L1, Phone (416) 823-7091 ext. 417, Fax (416) 822-7022, or A.W. Neumann, University of Toronto, Department of Mechanical Engineering, 5 Kings College Road, Toronto, Ontario, Canada M5S 1A4, Phone (416) 978-3601, Fax (416) 978-7753. Includes symposia on

- Colloidal Dispersions
- Fundamentals of Adhesion (Nonbiological Systems)
- Wetting and Interfacial Phenomena
- Hydration Energetics in Molecular Conformation and Assembly
- Structure and Dynamics of Complex Liquids and Liquid Interfaces
- Proteins and Cells at Interfaces
- Atomic Force Microscopy and Surface Spectroscopy
- Tribology
- Block Copolymer Micelles
- Applied Surfactant Science
- Colloidal Aspects of Pulp and Paper
- General Papers.

6.32 Zeolite '93 - 4th International Conference on the Occurrence, Properties, and Utilization of Natural Zeolites, 20-27 June 1993, Boise, Idaho, U.S.A. Contact: F.A. Mumpton, Department of Earth Sciences, SUNY-College at Brockport, Brockport, NY 14420, U.S.A., Phone (716) 395-2334, Fax (716) 395-2416.

6.33 Cellucon '93 - Cellulose and Cellulose Derivates: Physio-Chemical Aspects and Industrial Applications, 21-24 June 1993, Lund, Sweden. Contact: Cellucon '93, P.O. Box 124, S-221 00 Lund, Sweden, Phone (46) 109-518, Fax (46) 104-413.

6.34 4th International Conference on Polymers in Offshore Engineering, 24-25 June 1993, Glasgow, U.K. Contact: J. Upton, The Institute of Materials, I Carlton

House Terrace, London SW IV 5DB, U.K., Phone (71) 839-4071, Fax (71) 839-3576.

6.35 2nd International Symposium on Surface Chemistry, Adsorption and Chromatography SCAC 92, 29 June - 3 July 1992, Moscow, Russia. Contact: L. Kolomlets, Institute of Physical Chemistry, Leninskiy Prospekt 31, 117915 Moscow, Russia.

6.36 11th IUPAC International Symposium on Cationic Polymerization and Related Ionic Processes, 4-7 July 1993, Borovets, Bulgaria. Contact: I.V. Berlinova, Institute of Polymers, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria, Phone (2) 700-138, Fax (2) 707-523.

6.37 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.

6.38 11th International Symposium on Cationic Polymerization and Related Ionic Processes, 5-8 July 1993, Borovets, Bulgaria. Contact: I.M. Panayotov, Institute of Polymers, Bulgarian Academy of Sciences, BG-1113 Sofia, Bulgaria.

6.39 Silicon-Containing Polymers, 7-9 July 1993, Canterbury, U.K. Contact: R.G. Jones, University Chemical Laboratory, University of Kent, Canterbury, Kent CT2 7NH, U.K., Phone (227) 764-000, Fax (227) 475-475.

6.40 Catalysis and Surface Science, 7-9 July 1993, Cardiff, U.K. Annual conference of the Surface Reactivity and Catalysis Group of the Faraday Division of the Royal Society of Chemistry. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.41 Recent Developments in Polymer Characterization, 8 July 1993, Runcorn, Cheshire, U.K. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.42 33rd Microsymposium on Macromolecules, 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 (2) 360-317, Fax (2) 367-981, Telex 122 019 IMCP C.

6.43 10th International Clay Conference: Clays Control the Environment, 18-23 July 1993, Adelaide, Australia. Contact: Elliservice Convention Management, P.O. Box 753, Norwood, SA 5067, Australia, Phone (8) 332-4068, Fax (8) 364-1968.

6.44 34th Microsymposium on Macromolecules, Fluorinated Monomers and Polymers, 19-22 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 (2) 360-317, Fax (2) 367-981, Telex 122 019 IMCP C.

6.45 Workshop on The Liquid State of Matter: Opportunities from New Radiation Sources, 19-30 July 1993, Trieste, Italy. Contact: Condensed Matter Section ICTP, P.O. Box 586, I-34100 Trieste, Italy, Phone (40) 22-401, Fax (40) 224 163, Telex 460392 ICTP I, E-mail Centralom.

6.46 The Polymer Conference: Modelling-Synthesis-Characterization-Materials, 20-22 July 1993, Cambridge, U.K. Contact: J. Herriot, Straight Mile House, Tilford Road, Rushmoor, Farnham, Surrey GU10 2EP, U.K., Phone (25) 125-5414, Fax (25) 125-2101.

6.47 37th IUPAC General Assembly, 5-12 August 1993, Lisbon, Portugal. The Macromolecular Division and the Commission on Surface and Colloid Chemistry including Catalysis also convene at this occasion. Contact: IUPAC Secretariat, Bank Court Chambers, 2-3 Pound Way, Temple Square, Cowley, Oxford OX4 3YF, U.K., Phone (865) 747-744, Fax (865) 747-510, Telex 83147 VIA OR G, attn. IUPAC, Telegrams: IUPAC OXFORD.

6.48 34th IUPAC Congress, 15-20 August 1993, Beijing, China. Organized by the Chinese Chemical Society. Contact: X. Song, Chinese Chemical Society, P.O. Box 2709, Beijing, 100080, China, Phone (1) 256-8157/256-4020, Fax (1) 256-8157, Telex 20035 CAST CN c/o CAST.

6.49 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.

6.50 International Symposium on Zeolites and Microporous Crystals, 22-25 August 1993, Nagoya, Japan. Contact: Y. Izumi, Department of Applied Chemistry, School of Engineering, Nagoya University, Furo-cho, Chikusa-ku, Nagoya 464-01, Japan, Phone (52) 781-5111 ext. 4495.

6.51 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., Phone (206) 543-2250. The symposia include:

- *Division of Colloid and Surface Chemistry*:
- Photochemical and Electrochemical Surface Science: Vibrational Spectroscopy at Surfaces.
- Catalysis: Especially on Strong Solid Acids.
- Colloid and Surface Chemistry of Advanced Materials: Chemically Sensitive Interfaces: Molecular Recognition and Signal Transduction.

- Diffusion and Mass Transfer in Surfactant and Colloidal Systems.
- Surfactants and Associated Colloids: Rheology of Surfactant Solutions.
- General Papers.

Division of Polymer Chemistry:

- Symposium on Recent Advances in the Synthesis and Characterization of Block and Graft Copolymers.
- Advances in Polarized Polymers.
- Macromolecular Metal Complexes.
- Lifetime, Degradation, and Stability of Macromolecular Materials.
- Advances in Polyethers.
- General Papers.

6.52 International Conference on Environmental Protection Problems: Siberian Ecology SibEco'93, 24-27 August 1993, Lake Baikal, near Irkutsk, Russia. Organized by the Institute of Polytechnics, Irkutsk (Russia), the University of Miskolc (Hungary), the SIBECO Innovation Company Ltd., in collaboration with the Russian Academy of Sciences and the Institute of Colloid and Water Chemistry of the Ukrainian Academy of Sciences. Contact: S. Bárány, Miskolc University, Institute of Chemistry, 3515 Miskolc-Egyetemváros, Hungary, Phone (46) 365-111, ext. 1193, Fax (46) 365-174 or (46) 369-554, Telex 62223 miegy, or G. Rusetskaya, Irkutsk Institute of Polytechnics, Lermontov Str. 83, 664074 Irkutsk, Russia, Phone (395) 243-0542, telex 133 153 INST SU.

6.53 5th International Symposium on Macromolecule-Metal Complexes (MMC V), 30 August - 3 September 1993, Bremen, Germany. Contact: D. Wöhrle, Institute of Organic and Macromolecule Chemistry, P.O. Box 330 440, W-2800 Bremen 33, Germany, Phone (421) 218-2805/2809, Fax (421) 218-4042.

6.54 44th Meeting of the International Society of Electrochemistry, together with the Annual Meeting of the Fachgruppe Angewandte Elektrochemie of the German

Chemical Society, 5-10 September 1993, Berlin, Germany. The symposia include: Surface Processing - Fundamentals and Applications. Contact: Dechema e.V., Exhibitions and Congresses, TheodorHeussAllee 25, D-6000 Frankfurt am Main 15, Germany, Phone (69) 756-4241, Fax (69) 756-4201.

6.55 **Adhesion '93**, 6-8 September 1993, York, U.K. Contact: The Plastics and Rubber Institute, 11 Hobart Place, London SW1W 0HL, U.K.

6.56 **International Conference on Advanced Polymer Materials**, 6-10 September 1993, Dresden, Germany. Contact: C. Kummerlöwe, TU Dresden, Institute of Macromolecular and Textile Chemistry, Mommsenstrasse 13, O-8027 Dresden, Germany, Phone (51) 463-3802, Fax (51) 463-7122, or K. Wustrack, Institute of Polymer Research Dresden, P.O. Box 411, I-8012 Dresden, Germany, Phone (51) 465-8282, Fax (51) 465-8214.

6.57 **Polymers at Interfaces**, 8-10 September 1993, Bristol, U.K. **IACIS sponsored**. Contact: T. Cosgrove, University of Bristol, School of Chemistry, Cantock's Close, Bristol BS8 1TS, U.K., Phone (272) 303-686, Fax (272) 250-612, E-mail COSGROVE@UK.AC. BRISTOL.SIVA.

6.58 **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 (2) 2660-3223, Fax (2) 7063-8129, E-mail Trasatti at IMISIAM.MI.CNR.IT.

6.59 **7th European Colloid and Interface Society (ECIS) Conference**, 12-16 September 1993, Bristol, U.K. Contact: R.H. Ottewill, School of Chemistry, University of Bristol, Cantock's Close, Bristol BS8 1TS, U.K., Phone (272) 303-680, Fax (272) 251-295.

6.60 **1st European Congress on Catalysis**, 12-17 September 1993, Montpellier, France. Organised by the

Surface Reactivity and Catalysis Group of the Faraday Division of the Royal Society of Chemistry. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.61 **Dynamics at the Gas-Solid Interface**, 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.

6.62 **Electrokinetic Phenomena '93**, 13-16 September 1993, Granada, Spain. **IACIS sponsored**. Contact: F. González Caballero, Universidad de Granada, Departamento de Física Aplicada, 18071 Granada, Spain, Phone (58) 243 209, Fax (58) 243 214, E-mail FGONZALEZ@UGR.ES.

6.63 **Polymer Adsorption and Polymers in Colloidal Systems**, 15-17 September 1993, Bristol, U.K. Contact: R.H. Ottewill, University of Bristol, School of Chemistry, Cantock's Close, Bristol BS8 1TS, U.K., Phone (272) 303-680, Fax (272) 250-612.

6.64 **Physical Aspects of Polymer Science**, 15-17 September 1993, Reading, U.K. 16th Biennial Meeting of the Polymer Physics Group of The Royal Society of Chemistry. Contact: D.C. Bassett, J.J. Thomson Physical Laboratory, University of Reading, P.O. Box 220, Whiteknights, Reading RG6 2AF, U.K., Phone (734) 318-540/1, Fax (734) 750-203.

6.65 **2nd Liquid Matter Conference**, 18-22 September 1993, Firenze, Italy. Contact M. Zoppi, Istituto di Elettronica Quantistica, Consiglio Nazionale delle Ricerche, Via Panciatichi, 56/30, I-50 127 Firenze, Italy, Phone (55) 416-128/434-403, Fax (55) 414-612, E-mail ZOPPI at IFIIDG.FI.CNR.IT. Planned symposia include:

- Polymers and polyelectrolytes

- Structure and dynamics of colloids
- Interfaces and low dimensionality.

6.66 Kinetics of Phase Growth, 20-21 September 1993, Hull, U.K. Contact: P. Fletcher, Department of Chemistry, University of Hull, Hull HU6 7RX, U.K., Phone (482) 465 450, Fax (482) 466 410.

6.67 44th Meeting of the International Society for Electrochemistry, 20-24 September 1993, Berlin, Germany. Contact: W. Plöth, Free University of Berlin, Institute of Physical and Theoretical Chemistry, Takustrasse 3, W-1000 Berlin 33, Germany.

6.68 2nd Gordon Conference on Complex Fluids, 27-September - 1 October 1993, Irsee, Germany. Contact: D. Andelman, School of Physics, Tel-Aviv University, Ramat-Aviv, 69978 Israel, Phone (3) 641-9529, Fax (3) 642-2979, 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.

6.69 Tenside und Kolloide in der Umwelt, 36. Hauptversammlung der Kolloid-Gesellschaft, 27 September - 1 Oktober 1993, Jülich, Germany. Contact: M.J. Schwuger, Institut Angewandte Physikalische Chemie, Forschungszentrum Jülich GmbH, Postfach 1913, D-5170 Jülich, Germany, Phone 02461-61-3178, Fax 02461-61-2493.

6.70 Europhysics Conference on Macromolecular Physics 1993: Transitions in Oligomer and Polymer Systems, 27 September - 1 October 1993, Ulm, Germany. Contact: H.G. Kilian, Universität Ulm, Experimentelle Physik, Albert-Einstein-Allee 11, D-7900 Ulm, Germany, Phone (731) 502-3010, Fax (731) 502-3036.

6.71 International Symposium on Theoretical Models and Their Experimental Verification, 27 September - 2 October 1993, Yalta, Ukraine. Contact: A. Yaroshchuk, c/o E. Staude, Universität-GH Essen, Institut für Technische

Chemie II, Universitätsstrasse 5, 4300 Essen 1, Germany, Phone (201) 183-3506, Fax (201) 183-3228, Telex 8579 091 unie d.

6.72 Neutron Scattering from Colloidal Materials, October 1993, U.K. Contact: A. Rennie, Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EW, U.K.

6.73 6th Chinese Colloid and Surface Symposium, October 1993, Beijing, P.R. China. Contact: S. Yan, Tianjin Institute of Light Industrial Chemistry, Liu Lin, Hexi District, Tianjin 300222, P.R. China.

6.74 45th Annual Meeting of Colloid and Interfacial Chemistry (Domestic), 9-11 October 1993, Tokyo, Japan. Contact: T. Kondo, Tokyo Science University, Kagurazaka, Tokyo, Japan.

6.75 3rd International Conference on Filtration, 19-21 October 1993, Karlsruhe, Germany. Contact: M. Duck, Pressalds Ltd., Bridge House, 181 Queen Victoria Street, London EC4AV 4DN, U.K., Phone (71) 236-0911, Fax (71) 329-0347.

6.76 1st World Congress on Emulsion: Science and Technology, 20-22 October 1993, Paris, France. Contact: A. Le Coroller or Ch. Grandemange, Société CME, 50 place Marcel Pagnol, 92000 Boulogne-Billancourt, France, Phone (1) 4761-7689, Fax (1) 4761-7465.

6.77 Annual Meeting American Institute of Chemical Engineers, 7-12 November 1993, St. Louis, Missouri, U.S.A. Symposia include:

- Adsorption Based Hybrid Separation Systems. Contact: A. Kapoor, The BOC Group, Inc., 100 Mountain Avenue, Murray Hill, NJ 07974, U.S.A., Phone (908) 771-6449, Fax (908) 771-6113, or J.S. Dranoff, Department of Chemical Engineering, Northwestern University, Evanston, IL 60208, U.S.A., Phone (708) 491-5252, Fax (708) 491-3728.

- Fundamentals of Adsorption and Ion Exchange. Contact: M. Douglas Le Van, Department of chemical Engineering, University of Virginia, Charlottesville, VA 22903-2442, U.S.A., Phone (804) 924-6279, Fax (804) 982-2658, or D.K. Friday, Geocenters, Inc., Funpowder Branch, P.O. Box 68, APG, MD 21010-0068, U.S.A., Phone (410) 671-4377, Fax (410) 671-2081.
- Molecular Theory of Adsorption Equilibria and Dynamics (Oral Presentations and Poster Presentations). Contact: P.A. Monson, Department of Chemical Engineering, University of Massachusetts, Amherst, MA 01003, U.S.A., Phone (413) 545-0661, Fax (413) 545-1647, or J.A. O'Brien, Department of Chemical Engineering, Yale University, New Haven, CT 06520-2159, U.S.A., Phone (203) 432-4382, Fax (203) 432-7232.
- Pressure Swing Adsorption: Theory and Practice (Oral Presentations and Poster Presentations). Contact: K.S. Knäbel, Adsorption Research, Inc., 6185 Shamrock Court, Dublin, OH 43017, U.S.A., Phone (614) 798-9090, Fax (614) 798-9091, or J.A. Ritter, Building 704-1T, Westinghouse Savannah River Co., Aiken, SC 29808, U.S.A., Phone (803) 725-6295, Fax (803) 725-6271.

6.78 6th International Symposium on Agglomeration, 15-17 November 1993, Nagoya, Japan. Contact: Y. Kawashima, Department of Pharmaceutical Engineering, Gifu Pharmaceutical University, Mitahora Higashi, Gifu 502, Japan, Phone (58) 237-3931, ext. 244/245, Fax (58) 237-5979.

6.79 3rd Pacific Polymer Conference, 13-17 December 1993, Queensland Gold Coast, Australia. Contact: PPC-3 Secretariat, The University of Queensland, Queensland 4072, Australia, Phone (7) 365-4180, Fax (7) 365-3628.

6.80 Dynamics of Surfactant Monolayers, 17 December 1993, London, U.K. Contact: P. Fletcher, Department of Chemistry, University of Hull, Hull HU6 7RX, U.K., Phone (482) 465 450, Fax (482) 466 410.

Preview 1994 and later

6.81 8th International IACIS Conference on Colloid and Interface Science, 11-19 February 1994, Adelaide, Australia. Professor John Ralston (Department of Applied Chemistry, University of South Australia, Adelaide) is Chairman, Dr. Neil Furlong (CSIRO Division of Chemicals and Polymers, Melbourne) is Secretary. IACIS members will be allowed a discount on the conference fee. Topics include:

- **Advanced Mineral Processing**
 - * Flotation
 - * Hydrometallurgy
- **Biosystems**
 - * Biomembranes
 - * Living systems
 - * Bioelectrostatics
- **Disperse Systems**
 - * Food colloids
 - * Transport properties
 - * Nucleation precipitation
 - * Characterization techniques
 - * Concentrated dispersions
 - * Rheology
- **Polymers at Interfaces**
 - * Adsorption
 - * Interfacial polymerisation
 - * Steric stabilization
- **Self Assembly**
 - * Curvature/Structure
 - * Swelling amphiphiles
- **Surface Forces**
 - * Theory
 - * Measurement
- **Surface Structure and Reactions**
 - * Photochemistry/Colloids
 - * Surface characterization
 - * Surface reaction

- **Thin Films**

- * Monolayers/Multilayers
- * Film thinning
- * Membrane technology

- **Wetting and Adhesion**

- * Static/Dynamic
- * Surface modification.

Contact: Karen English, The Secretariat, Techsearch Incorporated, GPO BOX 2471, Adelaide, South Australia 5001, Phone (8) 267-1755/5466, Fax (8) 267 4031, Telex AA 82565.

Immediately prior to the 8th ICSCS the following symposia will be held:

6.82 Structure of Monolayers at the Air/Water Interface, contact: G. Barnes, University of Queensland, Fax (7) 365-4299,

6.83 Biosensors 94, contact: N. Furlong, CSIRO Division of Chemicals and Polymers, Fax (3) 542-2515,

6.84 Solid Surfaces, contact: P. Pendleton, University of South Australia, Fax (8) 349-5805.

6.85 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., Phone (206) 543-2250. The symposia include:

Division of Colloid and Surface Chemistry:

- Surface Science of Catalysis.
- Photochemical and Electrochemical Surface Science: Spectroscopy of Electrode Surfaces.
- Surfactants and Associated Colloids: Microemulsions and Micellar Systems.
- Surface Chemistry in Biology, Medicine, and Dentistry: Proteins at Interfaces 1994.
- Catalysts: Especially Fischer Tropsch and Alcohol Synthesis.
- Surface and Colloid Chemistry of Advanced Materials.

- Surfactants and Associated Colloids: Emulsions and Microemulsions.
- Surfactants and Associated Colloids: Surfactant Adsorption and Surface Solubilization.
- Molecular Processes at Solid Surfaces.
- General Papers.

Division of Polymer Chemistry:

- Polymer Dynamics and Thermodynamics in Solutions.
- Dielectric Properties of Polymers.
- NMR Spectroscopic Characterization of Polymers.
- Industrial Applications in Biotechnology.
- General Papers.

6.86 The Reactive Interface, 12-15 April 1994, Liverpool, U.K. Annual Congress of the Faraday Division of the Royal Society of Chemistry. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.87 35th IUPAC International Symposium on Macromolecules, Macro 94, 11-15 July 1994, Akron, Ohio, U.S.A. Contact: C. Manus-Gray, The University of Akron, Institute of Polymer Science, Akron, OH 44325-3909, U.S.A., Fax (216) 972-5463.

6.88 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 (2) 360-317, Fax (2) 367-981, Telex 122 019 IMCP C.

6.89 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., Phone (206) 543-2250. The symposia include:

Division of Colloid and Surface Chemistry:

- Photochemical and Electrochemical Surface Science: Surface Electrochemistry.
- General Papers.

Division of Polymer Chemistry:

- Polymer Recycling and Disposal.
- General Papers.

6.90 13th European Chemistry at Interfaces Conference, 11-16 September 1994, neighbourhood of Kiev, Ukraine. Contact: A.A. Chuiko, Academy of Sciences of the Ukrainian SSR, Institute of Surface Chemistry, Prospect Nauki 31, 252028 Kiev, Ukraine. Phone (044) 265-4160, Fax (044) 264-0446.

6.91 Polymer Surfaces and Interfaces, General Discussion 98 of the Faraday Division of the Royal Society of Chemistry, 12-14 September 1994, Bristol, U.K. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227.

6.92 8th European Colloid and Interface Society (ECIS) Conference, 26-29 September 1994. Contact: H. Hoffmann, Universität Bayreuth, Lehrstuhl für Physikalische Chemie, Postfach 3008, 8580 Bayreuth, Germany.

6.93 Vibrational Optical Activity: from Fundamentals to Biological Applications, General Discussion 99 of the Faraday Division of the Royal Society of Chemistry, 19-21 December 1994, Glasgow, U.K. Contact: Y.A. Fish, The Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN, U.K., Phone (71) 437-8656, Fax (71) 734-1227

6.94 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., Phone (206) 543-2250. The symposia include:

Division of Colloid and Surface Chemistry:

- Photochemical and Electrochemical Surface Science: Monomers and Polymers at Electrode Surfaces.
- Surfactants and Associated Colloids: Symposium Honoring Stig E. Friberg.

Division of Polymer Chemistry:

- New Polymeric Reactions and Reaction Mechanism.
- Agricultural Applications of Biotechnology.
- General Papers.

6.95 IUPAC General Assembly, 7-15 August 1995, Surrey, U.K. Contact: IUPAC Secretariat, Bank Court Chambers, 2-3 Pound Way, Templars Square, Cowley, Oxford OX4 3YF, U.K., Phone (865) 747-744, Fax (865) 747-510, Telex 83147 VIA OR G, attn. IUPAC, Telegrams: IUPAC OXFORD.

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., Phone (206) 543-2250. The symposia include:

- Photochemical and Electrochemical Surface Science: Microstructure of Electrode Surfaces (Division of Colloid and Surface Chemistry).

6.97 14th European Chemistry at Interfaces Conference, 1996, Switzerland. Contact: H.-F. Eicke, Universität Basel, Physikalisch-Chemisches Institut, Klingelbergstrasse 80, 4056 Basel, Switzerland.

6.98 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.

6.99 ACS National Meetings

- 211th 24-29 March 1996, Salt Lake City, U.S.A.
- 212th 25-30 August 1996, Boston, U.S.A.
- 213th 6-11 April 1997, San Antonio, U.S.A.
- 214th 7-12 September 1997, Las Vegas, U.S.A.
- 215th 29 March - 3 April 1998, St. Louis, U.S.A.
- 216th 23-28 August 1998, Orlando FL, U.S.A.
- 217th 21-26 March 1999, Anaheim CA, U.S.A.
- 218th 22-27 August 1999, New Orleans, U.S.A.
- 219th 26-31 March 2000, Las Vegas, U.S.A.
- 220th 20-25 August 2000, Washington DC, U.S.A.
- 221st 1-6 April 2001, San Francisco, U.S.A.
- 222nd 19-24 August 2001, Chicago, U.S.A.

7 REGIONAL AND PERSONAL NEWS

7.1 Personal News

Obituary

Marjorie J. Vold, remarkable both as a person and as a scientist, died on November 4, 1991. Born on October 25, 1913 in Ottawa, Canada she grew up on Mt. Hamilton, California, where her grandfather was director of the Lick Observatory. At the age of twenty she received the Bachelor's degree with the Valedictory Medal from the University of California at Berkely. Two years later she also earned the Ph.D. degree there and soon married fellow student Robert D. Vold.

The Volds spent four years working with J.W. McBain at Stanford University. Robert was then appointed to the faculty of the University of Southern California. Due to the mores of the times, this limited greatly Marjorie's academic opportunities. Nevertheless she taught enthusiastically and did effective research under various titles at USC except for three year in industry.

Her research was first concerned with unraveling the phase behavior of surfactant/water system to obtain the now classical phase diagrams. One of the new techniques used was differential calorimetry for which she developed the first theory. A Guggenheim fellowship spent with J.Th.G. Overbeek in Utrecht deepened her interest in dispersion forces and resulted in the first calculations of Hamaker's constant for spheres with adsorbed layers and for prisms and ellipsoids.

At about that time, 35 years ago, Marjorie was diagnosed as having multiple sclerosis. This incurable disease with its progressive paralysis interrupted by occasional remissions, kept her from laboratory work but not from teaching and research though mostly confined to a wheel chair. She added the budding computer and Monte Carlo methods to her arsenal and published the first simulations of sedimentation volumes and of floc formation.

She received in 1967 the Garvan Award of the American Chemical Society for distinguished service to chemistry by a woman, and was Los Angeles Times' "Woman of the year" in 1966.

The Volds retired early and moved to San Diego where their son was Professor of Chemistry at the University of California. After Robert's death in 1978 she lived alone in their house, wrote the book that they had planned together: "Colloid and Interfacial Chemistry" and continued her computer studies.

When her worsening condition forced to a move to a convalescent hospital she had her bed surrounded by computer gear (with the help and advice of Willis E. Lamb, the physicist, a friend from the Berkeley days). She wrote a family history for her three children and seven grand children and worked on modeling hydrophobic behavior. Her last paper was submitted a couple of weeks before the end.

Those who had the privilege of knowing her were always impressed by her intellectual sharpness, tenacity, and cheerfulness under the most difficult conditions.

Karol J. Mysels
University of California San Diego

Obituary

With deep regret we announce the death of **Jan Scheutjens**, who died on August 2, 1992, as a result of a traffic accident during his vacation in Norway. Jan was senior lecturer in the Department of Physical and Colloid Chemistry of the Wageningen Agricultural University. He was only 45 years of age.

Jan Scheutjens was a special person and a brilliant scientist. During his much too brief scientific career he earned a world-wide reputation, being in frequent contact with leading polymer physicists. As a person he remained very modest, but with a subtle sense of humour which reflected his remarkable intelligence.

In 1970, after several detours in his early career, he began the study of Molecular Sciences in Wageningen, where he graduated with honour in 1977.

Although he was clearly interested in biology (one of his examination subjects was plant physiology), he devoted himself to the study of the molecular thermodynamics of polymers at interfaces. Scheutjens' dissertation elaborated on the theme of his Masters' thesis and led to his Ph.D.-degree in 1985, once again with honours. His dissertation laid the basis for the Scheutjens-Fleer (SF) theory, and made him one of the great scientists in the area. Under Jan's leadership the theory was extended to cover many new applications (heterodispersity, polyelectrolytes, block and random copolymers, melts, branching, multi-component systems, ring polymers), as well as refinements (trans-gauche, rotational isomeric state, parallel orienting at high densities, etc.).

Many students found him to be a gifted and inspiring teacher. Many PhD candidates and post-docs (mostly non-Dutch) were inspired by his help and leadership. He contributed intensively to the writing of a book 'Polymers at Interfaces', a co-production of the universities of Wageningen and Bristol. Unfortunately, he did not live to see the completion of this book, the manuscript of which will be ready at the end of 1992. Similarly, he acted as a highly appreciated sparring partner for Hans Lyklema in the preparation of the book "Fundamentals of Interface and Colloid Science", the first volume of which appeared in 1992.

He received the Research Prize of Wageningen University in 1980, and the prestigious Gold Medal of the Royal Dutch Chemical Society in 1986. In 1986 he was appointed as a senior lecturer on the basis of his scientific achievements, and in 1988 he became a Senior Research Fellow of the Dutch Academy of Sciences. He was an often asked speaker in national and international conferences and author or co-author of more than sixty papers, many of them milestones.

Although Jan Scheutjens was mainly active in theoretical work, he also had a warm interest in experiments. His casual remarks often turned out to have great importance later and this even influenced Ph-D students which he did not supervise. His intuition was formidable indeed.

We have lost in Jan Scheutjens not only a co-worker of the highest qualifications, but also an outstanding person who secured a prominent place in our hearts and thoughts through his intuition, talent and humorous insights. We shall miss him, but we hope to continue working with the rich heritage he has left behind.

Gerard Fleer, Hans Lyklema
Department of Physical and Colloid Chemistry
Wageningen Agricultural University, The Netherlands

The 1992 Luigi Galvani Medal, established in 1986 by the Italian Chemical Society in recognition of outstanding contributions to the progress of Electrochemistry, has been awarded to **Professor Allen J. Bard**, University of Texas at Austin, U.S.A.

Dr. Dinesh Shah, Director of the Center for Surface Science and Engineering and Professor of Anesthesiology, Biophysics, and Chemical Engineering at the University of Florida, recently received the International award for outstanding achievement from Vishwa Gurjarl in 1992. The Vishwa Gurjarl is an international organization of Gujarati people residing in India as well as overseas.

Professor P. Somasundaran, Columbia University's La Von Duddleson Krumb Professor on Mineral Engineering, is the recipient of the 1992 Frank F. Aplan Award.

7.2 International and Regional News

The **American Chemical Society** has created two new awards in the surface colloid areas: The Arthur W. Adamson Award for Distinguished Service in the Advancement of Surface Chemistry sponsored by Occidental Petroleum Corporation and the Ralph K. Iler Award in the Chemistry of Colloidal Materials sponsored by E.I. du Pont de Nemours & Company. Neither carries any restriction as to nationality.

Europe

Prof.dr. Per Stenius (Helsinki University of Technology, Department of Forest Products Technology, Vuorimiehentie 1A, SF 02150 Espoo, Finland) is now President-elect of the **European Colloid and Interface Society (ECIS)**.

Hungary

The 6th Conference on Colloid Chemistry (Balatonszéplak) has been successful; the Proceedings of the conference will be published early in 1993.

U.K.

The Officers of the **Colloid and Interface Science Group of the Royal Society of Chemistry** for 1992 are: Dr. W.D. Cooper Chairman, Dr. I.D. Robb (Unilever Research, Port Sunlight Laboratory, Quarry Road East, Bebington, Wirral L63 3JW, U.K.) Honorary Secretary, Dr. R.A. Harrop Honorary Treasurer, Dr. J.W. Goodwin Newsletter Editor.

This year a large Government-Industry Project on Colloid Technology was set up, sponsored by Unilever, ICI and Schlumberger with Cambridge, Bristol and Imperial College. A conference on **Concentrated Dispersions** (main topic of the project) is planned, to discuss progress, in Easter 1995.

U.S.A.

For 1992 David W. Osborne is Chairman of the **Colloid and Surface Chemistry Division of the American Chemical Society**. Chairman-elect is Charles T. Campbell; Raymond A. Mackay is Vice-Chairman, and Lisa B. Quencer (The Dow Chemical Company, Larkin Laboratory, Midland, MI 48674) is Secretary. Newsletter editor is Noel H. Turner (Naval Research Laboratory, Code 6170, Washington, DC 20375). Macromolecular Secretariat Representatives are T.F. Yen (Department of Chemistry, University of Southern California, Los Angeles, CA) and Barbara J. Kinzig (Surface Research and Applications, P.O. Box 14706, Lenexa, KS 66215).

Professor Alan L. Myers is now president of the **International Adsorption Society**, Vice-President is Professor M. Suzuki.

8 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.

8.1 New Journals

Colloid and Surfaces B: Biointerfaces, J.L. Brash, H.J. Busscher and D.W. Osborne, Eds., Elsevier, Amsterdam - New York, Vol. 1 (1993) six issues, Dfl.392.00/US\$214.00, including postage.

Composite Interfaces, H. Ishida, Ed., VSP, Zeist, The Netherlands, Vol. 1 (1992), six issues, DM525.00, including postage and handling.

Diamond and Related Materials, R. Messier, Ed., Elsevier, Amsterdam - New York-Lausanne, Vol. 1 (1992) 12 issues, Dfl.1,101.00.

Polymer Recovery, E.J. Beckman, Ed., Kluwer, Dordrecht, The Netherlands, Vol. 1 (1993) four issues, Dfl. 325.00.

Solid State - Nuclear Magnetic Resonance, J. Klinowski, Ed., Elsevier, Vol. 1 (1992) 6 issues, Dfl.381.00 (total).

Supramolecular Chemistry, J.L. Atwood and G.W. Gokel, Eds., Gordon and Breach, Reading, U.K.

Surface Science Spectra, C.E. Bryson and G.E. McGuire, Eds., American Vacuum Society, Vol. 1 (1992) four issues, US\$1,007.00.

Ukrainian Polymer Journal, Yu. S. Lipatov, Ed., "I. Fedorov" Ukrainian Printing Institute and Lviv Polytechnic Institute, 19 Pidgolosko St., 290020 Lviv, Ukraine, Vol. 1 (1992) four issues, US\$80.00 (individuals)/US\$120.00 (institutions).

Renewed Chemical Society Reviews, K.J. Wilkinson and J.A. Rhodes, Eds., Royal Society of Chemistry, Letchworth, U.K., 1992, four issues, £81.00 (EC £72.00, U.S.A. US\$158.00, Canada £85.00 plus GST).

8.2 Books 1989

Segal, D., **Chemistry of Solid State Materials No. 1: Chemical Synthesis of Advanced Ceramic Materials**, Cambridge University Press, Cambridge, U.K., £15.00.

8.3 Books 1990

Barton, A.F.M., **Handbook of Polymer-Liquid Interaction Parameters and Solubility Parameters**, ISBN 0-8493-3544-2, £231.00.

Beckett, R., Ed., **Surface and Colloid Chemistry in Natural Waters and Water Treatment**, Plenum, New York NY, U.S.A., US\$71.40 (U.S.A. and Canada US\$59.50).

De Boedt, M.F., Hayes, M.H.B., and Herbillion, A., Eds., **Soil Colloids and Their Associations in Aggregates**, Plenum, New York NY, U.S.A., US\$162.00 (U.S.A. and Canada US\$135.00).

Glass, J.E., and Swift, G., Eds., **Agricultural and Synthetic Polymers: Biodegradability and Utilization**,

(ACS Symposium Series 433), American Chemical Society, Washington DC, U.S.A., US\$69.95.

Leyden, D.E., and Collins, W.T., Eds., **Chemically Modified Oxide Surfaces** (Proceedings Symposium Midland, Michigan, U.S.A., June 28-30, 1989), Gordon and Breach, New York NY, U.S.A.

Mittal, K.L., and Susko, J.R., **Metallized Plastics 1: Fundamental and Applied Aspects**, Plenum, New York NY, U.S.A., US\$78.00 (U.S.A. and Canada US\$78.00).

Perera, I.K., Salehpour, M., Kjellberg, J., Hedin, A., Haakansson, P., and Sundqvist, B.U.R., **Laser Induced Desorption of Positive and Negative Ions of Large Proteins**, Wiley, Chichester, U.K.

8.4 Books 1991

Baker, R.W., et al., **Membrane Separation Systems: Recent Developments and Future Directions**, Noyes Publications, Park Ridge NJ, U.S.A., US\$64.00.

Barth, H.G., and Mays, J.W., **Methods of Polymer Characterization**, Wiley, Chichester, U.K.

Bartholomew, C.H., and Butt, J.B., Eds., **Catalyst Deactivation 1991**, Elsevier, Amsterdam, The Netherlands, US\$254.50.

Bear, J., and Corapcioglu, M.Y., Eds., **Transport Processes in Porous Media** (NATO ASI Series E: Applied Sciences 202), Kluwer, Dordrecht, The Netherlands, Dfl.380.00/US\$199.00.

Berezkin, V.G., **Gas-Liquid-Solid Chromatography**, Marcel Dekker, New York NY, U.S.A., US\$114.50 (U.S.A. and Canada US\$99.75).

- Bitter, J.G.A., **Transport Mechanisms in Membrane Separation Processes**, Plenum, New York-London.
- Bredas, J.L., and Silbey, R.J., Eds., **Conjugated Polymers. The Novel Science and Technology of Highly Conducting and Nonlinear Optically Active Materials**, Kluwer, Dordrecht, The Netherlands.
- Broszeit, E., Hieber, K., Oechsner, H., Rie, K.-T., and Wolf, G.K., **Plasma Surface Engineering**, North-Holland (Elsevier), Amsterdam - New York, US\$254.00/Dfl.495.00.
- Charrier, J.M., **Polymeric Materials and Processing: Plastics, Elastomers and Composites**, Oxford University Press, New York NY, U.S.A., US\$60.00.
- Chum, H.L., Ed., **Polymers from Biobased Materials**, Noyes Publications, Park Ridge NJ, U.S.A., US\$45.00.
- Clegg, D.W., and Collyer, A.A., Eds., **Irradiation Effects on Polymers**, Elsevier Amsterdam - New York, £80.00/US\$160.00.
- Coleman, M.M., Graf, J.F., and Painter, P.C., **Specific Interactions and the Miscibility of Polymer Blends**, Technomic Publishing, Lancaster PA, U.S.A., US\$85.00.
- Corti, M., and Mallamace, F., Eds., **Trends in Colloid and Interface Science V**, Steinkopff, Darmstadt, F.R.G.
- Czanderna, A.W., and Hercules, D.M., Eds., **Methods of Surface Characterization Vol. 2: Ion Spectroscopies for Surface Analysis**, Plenum, New York NY, U.S.A., US\$110.00.
- Dumesic, J.A., Rudd, D.F., Aparicio, L.M., Rekoske, J.E., and Treviño, A.A., **The Microkinetics of Heterogeneous Catalysis**, American Chemical Society, Washington DC, U.S.A., US\$64.95.

- Flick, E.W., **Prepaint Specialties and Surface Tolerant Coatings**, Noyes Publications, Park Ridge NJ, U.S.A., US\$76.00.
- Forssberg, K.S.E., Ed., **Flotation of Sulphide Minerals 1990**, Elsevier Amsterdam - New York, US\$146.00/Dfl.285.00.
- Givargizov, E.I., and Grinberg, S.A., Eds., **Growth of Crystals Vol. 17**, Plenum Press, New York NY, U.S.A., US\$95.00.
- Glöckner, G., **Gradient HPLC of Copolymers and Chromatographic Cross-Fractionation**, Springer, Berlin etc., DM148.00.
- Huang, R.Y.M., Ed., **Pervaporation Membrane Separation Processes** (Membrane Science and Technology Series 1), Elsevier, Amsterdam, The Netherlands, Dfl.295.00.
- Krivoshel, I.V., and Skorobogatov, V.M., **Polyacetylene and Polyarylenes: Synthesis and Conductive Properties** (Polymer Monographs 10), Gordon and Breach, Philadelphia, U.S.A., £50.00.
- Lee, L.-H., Ed., **Adhesive Bonding**, Plenum, New York NY, U.S.A., US\$95.00.
- Mattsson, E., **Electrochemical Corrosion** (in Russian), Metallurgiya Moscow, Russia.
- Mersmann, A.B., and Scholl, S.E., Eds., **Fundamentals of Adsorption** (Third International Conference, Sonthofen, Germany, 5-9 May 1989), AIChE, New York NY, U.S.A.
- Migliarese, C., Ed., **Polymers in Medicine**, Elsevier Amsterdam - New York, £85.00/US\$170.00.
- Mittal, K.L., and Shah, D.O., **Surfactants in Solution Vol. 11**, Plenum, New York NY, U.S.A., US\$162.00 (U.S.A. and Canada US\$135.00).

Mulder, M., **Basic Principles of Membrane Technology**, Kluwer, Dordrecht, The Netherlands, £69.00.

Nicholson, J.W., **The Chemistry of Polymers**, Royal Society of Chemistry, Cambridge, U.K., £14.50.

Notwoitny, J., Ed., **Science of Ceramic Interfaces** (Materials Science Monographs 75), Elsevier Amsterdam - New York, US\$177.00/Dfl.345.00.

Ogenko, V.M., Rozenbaum, V.M., and Chuiko, A.A., **Theory of Vibrations and Reorientations of Surface Groups of Atoms** (in Russian), Naukova Dumka, Kiev, Ukraine.

Ohe, S., **Vapor-Liquid Equilibrium Data - Salt Effect** (Physical Sciences Data 43), Elsevier, Amsterdam - New York, US\$218.00/Dfl.425.00.

Pethrick, R.A., **Polymer Yearbook 7**, Gordon & Breach, New York-Reading, US\$250.00/£140.00 (SAS members US\$95.00/ £54.00).

Pethrick, R.A., **Polymer Yearbook 8**, Gordon & Breach, New York-Reading, US\$250.00/£140.00 (SAS members US\$95.00/ £54.00).

Quinn, T.F.J., **Physical Analysis for Tribology**, Cambridge University Press, Cambridge, U.K., £75.00.

Salaneck, W.R., Clark, D.T., and Samuelsen, E.J., Eds., **Science and Applications of Conducting Polymers** (Papers 6th European Physical Society Industrial Workshop, Lofthus, Norway, 28-31 May 1990), Hilger, Bristol, U.K.

Sharma, M.K., Ed., **Surface Phenomena and Additives in Water-Based Coatings and Printing Technology**, Plenum, New York NY, U.S.A., US\$85.00.

Shustorovich, E., Ed., **Metal-Surface Reaction Energetics: Theory and Applications to Heterogeneous**

Catalysis, Chemisorption, and Surface Diffusion, VCH, New York NY, U.S.A.

Taktarov, N.G., **Introduction to the Hydrodynamics of Surface Phenomena** (in Russian), Izd. Mordovskogo Univ. Saransk, Russia.

Tosi, M.P., and Kornyshev, A.A., Eds., **Condensed Matter Physics Aspects of Electrochemistry** (27 August - 9 September 1990, Trieste, Italy), World Scientific, Singapore, Singapore.

Van Bekkum, H., Flanigen, E.M., and Jansen, J.C., Eds., **Introduction to Zeolite Science and Practice** (Studies in Surface Science and Coatings 58), Elsevier, New York NY, U.S.A., US\$225.50.

Williams, M.M.R., and Loyalka, S.K., **Aerosol Science: Theory and Practice**, Pergamon Press, Oxford etc.

Williams, R.A., and De Jaeger, N.C., **Advances in Measurement and Control of Colloidal Processes**, Butterworth-Heinemann, Oxford, U.K., £40.00.

Wünsche, P., Ed., **Polymeric Layers** (Progress in Colloid and Polymer Science 85), Steinkopff, Darmstadt, F.R.G.

Zecchina, A., and Morterra, C., Eds., **Workshop on Clusters and Surfaces, Held in Turin (I), January 9-11, 1991**, Elsevier Sequoia, Lausanne, Switzerland.

8.5 Books 1992

Abramets, A.M., Lishtran, I.I., and Churaev, N.V., **Mass Transport in Natural Disperse Systems** (in Russian), Nabuka i Tekhnika, Minsk, Belorussia.

Afanasyev, A.E., and Churaev, N.V., **Optimization of the Drying Processes and Structure Formation in the**

Technology of Peat Production (in Russian), Nedva, Moscow, Russia.

Ahuja, S., Ed., **Chiral Separations by Liquid Chromatography** (ACS Symposium Series 471), American Chemical Society, Washington DC, U.S.A., US\$59.95.

Bachrach, R.Z., Ed., **Synchrotron Radiation Research, Advances in Surface and Interface Science, Vol. 1: Techniques**, Plenum, New York NY, U.S.A.

Beamson, G., and Briggs, D., **High Resolution XPS of Organic Polymers - The Scienta ESCA300 Database**, Wiley, Chichester, U.K., £65.00/US\$138.30.

Bein, Th., Ed., **Supramolecular Architecture: Synthetic Control in Thin Films and Solids** (ACS Symposium Series 499), American Chemical Society, Washington DC, U.S.A., US\$97.95.

Benningshoven, A., Janssen, K.T.F., Tümpner, J., and Werner, H.W., Eds., **Secondary Ion Mass Spectrometry SIMS VIII**, Wiley, Chichester, U.K., £115.00/US\$245.00.

Bevensee, R.M., **Maximum Entropy Solutions to Scientific Problems**, Simon & Schuster, Hempstead, U.K., £53.50/US\$69.00.

Bockris, John O'M., Ed., **Modern Aspects of Electrochemistry Vol. 22**, Plenum, New York NY, U.S.A., US\$114.00 (U.S.A. and Canada US\$95.00).

Botto, R.E., and Sanada, Y., Eds., **Magnetic Resonance of Carbonaceous Solids** (Advances in Chemistry Series 229), American Chemical Society, Washington DC, U.S.A., US\$149.95.

Boyd, I.W., Ed., **Laser Surface Processing and Characterization** (Proceedings Symposium E of the 1991 E-MRS Spring Conference, Strasbourg, France, May 28-31, 1991), North-Holland, Amsterdam, The Netherlands.

Briggs, D., Ed., **ECASIA 91: Proceedings of the European Conference on Applications of Surface and Interface Analysis**, Wiley, Chichester, U.K., £130.00/US\$277.00.

Buffle, J., and Van Leeuwen, H.P., **Environmental Particles Vol. 1** (IUPAC Environmental Analytical and Physical Chemistry Series), Lewis Publishers, Boca Raton FL, U.S.A., US\$79.95.

Cagniant, D., Ed., **Complexation Chromatography** (Chromatographic Science Series 57), Marcel Dekker, New York NY, U.S.A.

Catlow, C.R.A., Ed., **Modeling of Structure and Reactivity in Zeolites**, Academic Press, London, U.K., £45.00.

Chen, S.H., Huang, J.S., and Tartaglia, P., Eds., **Structure and Dynamics of Strongly Interacting Colloids and Supramolecular Aggregates in Solution** (NATO ASI Series C: Mathematical and Physical Sciences 369), Kluwer, Dordrecht, The Netherlands, Dfl.420.00/US\$244.00.

Cheremisinoff, N.P., **An Introduction to Polymer Rheology and Processing**, CRC Press, London, U.K., approx. £69.00.

Chung, Y., Homola, A.M., and Street, G.B., Eds., **Surface Science Investigations in Tribology: Experimental Approaches** (ACS Symposium Series 485), American Chemical Society, Washington DC, U.S.A., US\$59.95.

Czyzewski, J.J., Kiejna, A., and Ciszewski, A., Eds., **Proceedings Fifteenth International Seminar on Surface Physics, Prziesieka, Poland, May 20-25, 1991, Part II**, Polish Academy of Sciences, Institute of Physics, Warsaw, Poland.

Daniels, E.S., Sudol, E.D., and El-Aasser, M.S., Eds., **Polymer Latexes: Preparation, Characterization, and**

Applications, (ACS Symposium Series 492), American Chemical Society, Washington DC, U.S.A., US\$99.95.

Davenport, A., and Gordon, J.G., Eds., **Proceedings Symposium of X-Ray Methods in Corrosion and Interfacial Electrochemistry**, Electrochemistry Society, Pennington NJ, U.S.A.

De Certaines, J.D., Bovee, W.M.M.J., and Podo, F., Eds., **Magnetic Resonance Spectroscopy in Biology and Medicine**, Pergamon Press, Oxford etc.

Di Benedetto, A.T., Nicolais, L., and Watanabe, R., Eds., **Composite Materials**, North-Holland (Elsevier), Amsterdam - New York, US\$137.00/Dfl.240.00.

Dwyer, D.J., and Hoffmann, F.M., Eds., **Surface Science of Catalysis In Situ Probes and Reaction Kinetics** (ACS Symposium Series 482), American Chemical Society, Washington DC, U.S.A.

Edelman, P.G., and Wang, J., Eds., **Biosensors and Chemical Sensors: Optimizing Performance Through Polymeric Materials** (ACS Symposium Series 487), American Chemical Society, Washington DC, U.S.A., US\$79.95.

Elgh European Conference on Chemical Vapour Deposition, Glasgow, Scotland, 9-13 September 1991, Les Éditions de Physique, Les Ulis, France, FF690.00.

Espinat, D., **Application des Techniques de Diffusion de la Lumière, des Rayons X et des Neutrons à l'Étude des Systèmes Colloïdaux**, Éditions Technip, Paris, France, FF220.00.

Feast, W.J., Munro, H.S., and Richards, R.W., Eds., **Polymer Surfaces and Interfaces II**, Wiley, Chichester, U.K., £45.00/US\$74.50.

Free Radical Copolymerization/Dispersions/Glassy State Relaxation (Advances in Polymer Science 103), Springer, Berlin etc., DM168.00.

Gabar, B.P., and Easwaran, R.R.K., Eds., **Biomembrane Structure and Function: The State of the Art**, Adenine, Guilderland NY, U.S.A., US\$95.00.

Gardner, J.W., and Bartlett, P.N., **Sensors and Sensory Systems for an Electronic Nose** (NATO ASI Series E: Applied Sciences 212), Kluwer, Dordrecht, The Netherlands, Dfl.195.00/US\$115.00.

George, J., **Preparation of Thin Films**, Marcel Dekker, New York NY, U.S.A.

Glasser, W.G., and Hatakeyama, H., Eds., **Viscoelasticity of Biomaterials**, (ACS Symposium Series 489), American Chemical Society, Washington DC, U.S.A., US\$84.95.

Glohuber, Chr., and Künstler, K., Eds., **Anionic Surfactants - Second Edition, Revised and Expanded** (Surfactant Science Series 43), Marcel Dekker, New York-Basel, US\$160.00.

Godovski, Yu.K., **Thermophysical Properties of Polymers**, Springer, Berlin etc., DM198.00.

Guenet, J., **Thermoreversible Gelation of Polymers and Biopolymers**, Academic Press, London, U.K., £40.00.

Guidelli, R., Ed., **Electrified Interfaces in Physics, Chemistry and Biology** (NATO-ASI Series C: Mathematical and Physical Sciences 355), Kluwer, Dordrecht, The Netherlands.

Güntherodt, H.-J., and Wiesendanger, R., **Scanning Tunneling Microscopy I: General Principles and Applications to Clean and Adsorbate-Covered Surfaces** (Springer Series in Surface Sciences 20), Springer, Berlin etc., DM95.00. Vols. II and III in preparation.

Haeder, D.P., **Analysis of Two-Dimensional Electrophoresis Gels**, CRC, Boca Raton FL, U.S.A.

Hamid, S.H., Amin, M.B. and Maadhah, A.G., **Handbook of Polymer Degradation** (Environmental Science and Pollution Control Series 2), Marcel Dekker, New York-Basel, US\$175.00.

Helm, C., Losche, M., and Möhwald, H., Eds., **Trends in Colloid and Interface Science VI** (Progress in Colloid and Polymer Science 89), Springer, Berlin-New York, U.S.A., DM 108.00.

Henderson, D., Ed., **Fundamentals of Inhomogeneous Fluids**, Marcel Dekker, New York-Basel, US\$185.00.

Holland, P.M., and Rubingh, D.N., Eds., **Mixed Surfactant Systems** (ACS Symposium Series 501), American Chemical Society, Washington DC, U.S.A., US\$99.95.

Holloway, S., and Nørskov, J., **Surface Science Lecture Notes Vol. 1: Bonding at Surfaces**, Liverpool University Press, Liverpool, U.K., £9.50.

Issaq, H.J., Ed., **Proceedings Second Annual Frederick Conference on Capillary Electrophoresis, October 15-16, 1991, Frederick, Maryland**, Marcel Dekker, New York NY, U.S.A.

Jena, P., Khanna, S.N., and Rao, B.K., Eds., **The Physics and Chemistry of Finite Systems: From Clusters to Crystals Vols. 1 and 2**, (NATO ASI Series C: Mathematical and Physical Sciences 374), Kluwer, Dordrecht, The Netherlands, Dfl.575.00/US\$335.00.

Jennings, B.R., and Stoylov, S.P., Eds., **Colloids and Molecular Electro-optics 1991**, Institute of Physics, Bristol, U.K., £52.00.

Kärger, J., and Ruthven, D.M., **Diffusion Zeolites and Other Microporous Solids**, John Wiley, New York NY, U.S.A., £117.00.

Kiefer, W., Schaack, G., Schneider, F.W., Cardona, M., and Schritter, H.W., Eds., **XIII International Conference on Raman Spectroscopy**, Wiley, Chichester, U.K., £135.00/US\$287.25.

Kliss, H., Ed., **Conjugated Conducting Polymers**, Springer, Berlin, F.R.G.

Koenig, J.L., **Spectroscopy of Polymers**, American Chemical Society, Washington DC, U.S.A., US\$89.95 (clothbound)/ US\$49.95 (paperback).

Laskowski, J.S., Ed., **Colloid Chemistry in Mineral Processing**, Elsevier, Amsterdam - New York, US\$133.50/Dfl.260.00.

Li, S.F.Y., **Capillary Electrophoresis: Principles, Practice and Applications** (Journal of Chromatography Library 52), Elsevier Amsterdam - New York, US\$225.50/Dfl.395.00.

Macromolecules: Synthesis, Order and Advanced Properties (Advances in Polymer Science 100), Springer, Berlin etc., DM298.00.

Marciniec, B., Ed., **Comprehensive Handbook on Hydro-silylation**, Pergamon Press, Oxford etc.

Marton, A., Ed., **Selected Papers Presented at the 6th Symposium on Ion Exchange, Balatonfüred, Hungary, September 3-7, 1990**, Elsevier, Amsterdam, The Netherlands.

Miles, I.S., and Rostami, S., **Multicomponent Polymer Systems**, Longman, Harlow, U.K., £60.00.

Mittal, K.L., Ed., **Particles on Surfaces 3 - Detection, Adhesion, and Removal**, Plenum, New York NY, U.S.A., US\$107.40 (U.S.A. and Canada US\$89.50).

- Mittal, K.L., Ed., **Silanes and Other Coupling Agents, Festschrift in Honor of Dr. Edwin P. Plueddemann**, VSP, Zelst, The Netherlands, DM169.00/US\$105.00.
- Mittal, K.L., and Susko, J.R., **Metallized Plastics 2: Fundamental and Applied Aspects**, Plenum, New York NY, U.S.A., US\$138.00 (U.S.A. and Canada US\$115.00).
- Montenegro, M.I., Quelros, M.A., and Daschbach, J.L., Eds., **Microelectrodes: Theory and Applications** (NATO ASI Series E: Applied Sciences 197), Kluwer, Dordrecht, The Netherlands.
- Moroi, Y., **Micelles - Theoretical and Applied Aspects**, Plenum, New York NY, U.S.A., US\$71.40 (U.S.A. and Canada US\$59.50).
- Mottola, H.A., and Steinmetz, J.R., **Chemically Modified Surfaces** (Proceedings Symposium, Chadds Ford PA, U.S.A., July 31-August 2, 1991), Elsevier, Amsterdam - New York, US\$197.00/Dfl.345.00.
- O'Connor, D.J., Sexton, B.A., and Smart, R.C., Eds., **Surface Analysis Methods in Materials Science** (Springer Series in Surface Sciences 23), Springer Berlin etc., DM114.00.
- Osada, Y., and Nakagawa, T., Eds., **Membrane Science and Technology**, Marcel Dekker, New York-Basel, US\$165.00.
- Packham, D.E., Ed., **Handbook of Adhesion**, Longman, Harlow, U.K., £60.00.
- Perfetti, P., Campisano, S.U., Margaritondo, G., and Bisl, O., Eds., **ICFSI-3: Proceedings Third International Conference on the Formation of Semiconductor Interfaces, Rome, Italy, May 6-10, 1991**, North-Holland, Amsterdam, The Netherlands.

- Pirra, I., **Polymeric Surfactants** (Surfactant Science Series 42), Marcel Dekker, New York NY, U.S.A., US\$143.75 (U.S.A. and Canada US\$125.00).
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9 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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