

THE CHEMICAL SOCIETY

MACROMOLECULAR GROUP

BULLETIN

No. 4.

July 1975

This Bulletin is being issued earlier than was originally intended so that it might be included with the notices of forthcoming meetings. The spectacular rise in the cost of postage - the mailing costs have now increased to nearly £100 per circulation - has forced the Committee to maximise the amount of information being sent out at any one time to its members. However, a number of developments have occurred since the last Bulletin was issued which we hope will interest members.

Annual General Meeting

The AGM & Polymer Topics Forum will be held on 19 November 1975 at Imperial College, London. Details are given in the notices accompanying this Bulletin and the Committee hopes that, in contrast to last year, the meeting will be well attended by members. It is proposed that the morning will be devoted to a formal lecture, while during the afternoon members will be free to present short informal contributions on any topic in polymer science in which they are active. We hope that the informality of the occasion will encourage the discussion of work still at the speculative stage, and that supervisors might take this opportunity to 'blood' their research students in participating in scientific meetings. The day will be rounded off by the AGM proper. (Interested members should note that the date has been arranged to follow an evening lecture by Nobel Laureate, Professor P.J. Flory, so that both meetings could be covered by one trip to London. - please see p.3). If this type of programme proves to be popular, it could become an annual feature of the Group's activities.

With reference to the AGM : Members are reminded that nominations are required for the Macromolecular Group Committee, and should be forwarded to the Secretary (address given at the end of this Bulletin) no later than a week before the meeting.

Programme 1975 -

3 April 'Useful Inorganic Polymers' - University of Surrey

The Secretary wishes to apologise to those members who, because of unavoidable delays in the issuing of the last Bulletin, were not made aware of this meeting in sufficient time to make the necessary application. Nevertheless the meeting was well attended, and the lectures were of a high standard.

8 April 'Social and Technical Perspectives in Polymers' - University of York

This was a one-day symposium organised by the Group as a contribution to the Chemical Society Annual Congress. Attendance was somewhat disappointing, an average of about 55 people being present at three lectures which were given by senior staff members of ICI. All three talks were well constructed and interesting reviews of aspects of the role of polymers in society, and the survey on 'polymers in surgery' was widely reported in the local and national papers by representatives who were present.

2 July 'Diffusion in Polymers' - UWIST, Cardiff

About sixty members attended this very successful one-day meeting at Cardiff. Professor P. Meares (Aberdeen University) and Dr. G.S. Park (UWIST) admirably set the scene with review lectures on the behaviour of ion exchange membranes, and on the factors controlling the sorption and diffusion of vapour in polymeric systems.

Shorter contributions covered a wide variety of topics ranging from radiotracer studies of diffusion of solids in polymers to the topical subject of diffusion of vinyl chloride monomer out of P V C.

10-12 September 'Polymers at Interfaces' University of Loughborough
19 November 'Annual Forum on Polymer Topics' (AGM) Imperial College

Programme 1976 -

6-7 January 'Polymers in Aqueous Solution' - Cranfield Institute of Technology

(The three programmes listed above are fully described in the application forms which accompany this Bulletin)

29 March-1 April Deformation, Yield and Fracture of Polymers - Churchill College, Cambridge

This is the third international conference to be held at Churchill College on this subject. The programme will consist of 24 papers on original research, arranged in six sessions allowing 20-25 minutes for presentation and 10-15 minutes for discussion of each paper. Three of the sessions will be opened by a review paper of 40-45 minutes with discussions of 15-20 minutes. More details of this meeting will be furnished with the next Bulletin, but members wishing to make a contribution should write to the Secretary, The Plastics & Rubber Institute, 11 Hobart Place, London. SW1W 0HL, indicating very briefly the nature of the work they wish to present.

May 'Polymer Supported Reagents, Catalysts and Synthesis' - UMIST

This one-day meeting is being organised in conjunction with the Perkin Division and the North West Region of the Industrial Division. Details are yet to be finalised, but it is planned to obtain three main papers by overseas speakers and a further seven short contributions. The meeting will cover the scope and limitations of polymeric supports, and discuss the types of reagents which can be used to provide materials of use in catalysis or biochemical synthesis.

7-9 July 'Chromatographic Fractionation of Macromolecules' - University of Birmingham

This will be a 2½-day symposium covering the application of chromatography to biopolymers and to synthetic polymers. The programme is currently being arranged and no details are as yet available; it is intended that the subject matter should be compartmentalised so that members interested in one mode of application need only attend part of the symposium if they so wish. An exhibition of chromatographic equipment is also being organised.

3 September 'Polymers Today and Tomorrow' - University of Lancaster

Part of the British Association Meeting 2-8 September

The Chairman of the Macromolecular Group will be President of the Chemistry Section of the British Association for 1975-76 and suggested that the Group should present a mini-symposium at the BA meeting in the University of Lancaster in September 1976. A one-day symposium has been organised consisting of six lectures which will deal with the use of polymers in an era of diminishing resources and expensive energy, the degradation of polymers by biological, thermal and radiative methods, and the flammability of synthetic materials. It is planned that three of the lectures will be surveys of general interest whilst the remainder will consider certain aspects in depth and will thus be aimed at the specialist.

21-22 October 'Computer Applications in Macromolecular Science' -
University of Bradford

A 1½-day meeting is being prepared with the objectives of bringing together the many computer users working in the broad field of macromolecular science, and of indicating the potential of such applications to those who do not have a specialised knowledge of computer applications. It is intended that an exhibition of hardware, software, text books etc., and a tour of computer installations with demonstrations will be made available to participants.

Additional Programme Information

The following meetings have been arranged by the Plastics & Polymer Group of the S.C.I. and Macromolecular Group members may attend these at preferential rates.

28 October 1975 'Toxicity of Polymer Raw Materials'

A 1-day meeting at 14 Belgrave Square, London

18 November 1975 Professor P.J. Flory

Evening lecture at 14 Belgrave Square, London by this year's Nobel Laureate in chemistry. Subject so far unspecified.

5-6 January 1976 'Flame Resistance and Thermal Stability'

A 2-day meeting at the University of Loughborough.
Organiser, Professor N. Haward (University of Birmingham)

13 April 1976 'Morphology of Orientation Processes'

A one-day meeting at the University of Bradford
Organiser, Professor I. Goodman (University of Bradford)

Finally, the meeting being held at the University of Manchester on 24-25 March 1976 must be given special prominence as it marks the retirement of Professor G. Gee from academic life. Professor Gee has graced the world of polymer science for many years, and the quality of his researches in a variety of disparate areas has made him an internationally acclaimed figure. His retirement marks the end of an era but, typically, the subject chosen for the symposium is the forward looking 'Outlook for Polymer Science'. All the contributors are men of world stature and the meeting promises to be a memorable one.

Programme Sub-committee -

A programme sub-committee has been formed under the chairmanship of Dr. W. Wilson. Although a full programme of meetings has now been planned through till 1977, any members who have suggestions for topics for further symposia should write to the Secretary (address given at the end of this Bulletin) who will transmit these proposals to the sub-committee for consideration.

Macromolecular Science for Undergraduates in Chemistry -

An article based on an analysis of the data received from Universities and Polytechnics on this subject has now been submitted for publication in 'Chemistry in Britain'. The article was accompanied by a comment from the Chairman on the implications of these results on the adequacy of the training in this area being given to chemistry students. It is hoped that these contributions will excite comment and some action when they appear.

Dr. H. Mark's 80th Birthday -

Dr. Mark's 80th birthday was celebrated in New York by a symposium at Brooklyn Polytechnic and a banquet at the New York Hilton.

The Committee sent a telegram of congratulations on behalf of the Group to Dr. Mark at the hotel, timing it so that it could be read out at the celebration banquet.

Non-Chemist Membership of the Macromolecular Group

Macromolecular science is a subject wide enough to attract graduates in disciplines other than chemistry. The Committee felt that such graduates should, in suitable circumstances, be permitted to join the Group although they are not members of the Chemical Society. The annual subscription for this class of membership has been fixed at £3.00. Any member knowing of a colleague who might be interested in joining in this way is asked to invite him to write or telephone the Secretary at the following address:

Dr. D. H. Richards

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