# THE CHEMICAL SOCIETY

# MACROMOLECULAR GROUP

#### BULLETIN

#### No. 2.

October 1974

## Introduction

The Macromolecular Group has now been in operation for nearly two years and members may like to know what has been done so far and what has been arranged or is being planned for the future.

#### Membership

The membership of the Group, as at the end of August was approx. 1200 and the composition of the Committee is currently as follows:

Chairman: Professor C. H. Bamford, FRS - (University of Liverpool)

Hon. Treasurer: Dr. A. F. Johnson

Members: Professor G. Allen+

Dr. E. M. Bradbury Dr. C. W. Bunn, FRS

Dr. B. M. Grieveson

Mr. C.E. Hollis

Professor K. J. Ivin

Dr. J.D. Littlehailes

Dr. A. R. Payne

Dr. D. H. Richards

Dr. A.H. Willbourn

Dr. G. T. Young ++

Secretary: Mr. H.L. Bennister

- (University of Bradford)

- (University of Manchester)

- (Portsmouth Polytechnic)

- (formerly ICI)

- (Shell Research Limited)

- (formerly BP)

- (Queens University, Belfast)

- (ICI, Agricultural Division)

- (Shoe & Allied Trades

Research Association)

- (Explosives Research &

Development Establishment)

- (ICI Plastics Division)

- (Oxford University)

- (Chemical Society, Industrial

Division)

+ Represents also Faraday Division

++ Represents also Perkin Division

Programme to date - The following symposia have been held since the inception of the Group:

- "X-ray studies of natural and synthetic macromolecules" the inaugural meeting at the Scientific Societies Lecture Theatre, London, on 24/25 May 1973;
- "Catalysis by macromolecules" a 1-day symposium at Liverpool University on 21 November 1973 (preceded by Group AGM at which the 'ad hoc' Committee was elected as the first official Committee);
- "Investigation of the structure of macromolecules by spectroscopic methods" - a 2-day residential symposium at Cranfield Institute of Technology, 18 and 19 July 1974; and

"Regulated copolymerisation" - a 1-day symposium, held at the University of Leicester on 25 September 1974, as a part of the Chemical Society Autumn Meeting.

## Future Programme - The following meetings have been arranged:

- "Anionic polymerisation" a 1-day discussion, preceded by the Macromolecular Group AGM, to be held in association with the Ionic Polymerisation Discussion Group and SCI Plastics & Polymer Group, at Imperial College on 27 November 1974;
- "Social and technical perspectives in polymers" a half-day symposium to be held at the University of York as part of the Industrial Division symposium 'Challenge and Opportunity' during the Annual Congress of the Chemical Society at York, 7 11 April 1975; and
- "Diffusion in polymers" a 1-day symposium, to be held in association with SCI Plastics & Polymer Group at UWIST on 2 July 1975.

<u>Projected meetings</u> - Among a number of longer-term plans, the Committee is actively considering arrangements, in conjunction with the Plastics Institute, for a 3-day residential symposium on "Structure and deformation in polymers", to be held at Churchill College, Cambridge during March 1976.

Additional programme arrangements - Apart from those already indicated, the following meetings are being held in association with SCI Plastics & Polymer Group, who have arranged them:

- "Electrical and optical methods of polymer characterisation" a 1-day symposium to be held at 14 Belgrave Square, London on 22 October 1974;
- "New developments in speciality polymers" a 2-day symposium, to be held at Birmingham University on 8 & 9 January 1975; and
- "Rapid polymerisation" a 1-day symposium, to be held at 14 Belgrave Square, London, on 25 February 1975.

As mentioned later, members of the Macromolecular Group can attend any of the meetings held in association with SCI Plastics & Polymer Group, at preferential 'members' rates.

Other activities - The Committee has, from its inception, been concerned over the possible absence of the teaching of macromolecular science at undergraduate level in Universities and Polytechnics and earlier this year embarked on a survey designed to ascertain the extent of any such deficiency. The response to the questionnaire, which went out to about 120 establishments, has been very good and from the replies it is hoped to formulate, if appropriate, suggestions as to possible remedial action which the Group might undertake.

Relationships with other bodies - As mentioned in Bulletin No. 1, the Group Committee has always been conscious of the need to co-operate in a practical manner with other bodies interested in macromolecular science and this is under continuous study. Specific arrangements have already been made with the SCI Plastics & Polymer Group by setting up a joint Working Party on programmes, with a remit to eliminate overlapping and, as appropriate, to recommend to the respective Group Committees the meetings to be held in association with them, and vice versa, at which members of both groups

would enjoy the same preferential 'members' rates and receive all relevant literature, etc. in connection with the meetings. As can been seen, these arrangements have already had the effect of considerably increasing the coverage of the topics of potential interest to members of the Macromolecular Group over the next 12 months and it is expected that this will continue.

Apart from the SCI Plastics & Polymer Group, contact has been established by the Committee with the British Biophysical Society and it is expected that before the end of the year some similar co-operative effort in the direction of programme rationalisation and extension will be made. In this connection, members may like to note that a meeting to review the current status of 'Muscle Research' will be held at Queen Elizabeth College, London, 17 - 19 December 1974, when the main aspects under review will be Energetics and and Structure, Crossbridge Cycle and Comparative Studies. Further information is available from Dr. G. Offer, Dept. of Biophysics, Kings College, London, W.C.2.

Later it is hoped to extend contacts with other organisations dealing with macromolecular science. Links already exist with IUPAC Macromolecular Division, which recently held a successful meeting in Madrid, with some members of the Group Committee participating, and the possibility of organising a 'micro-symposium' on IUPAC lines will be given careful consideration in future planning of Group meetings.

Discussion Groups - A proposal has been made in Committee that more effective contact with the group membership might be achieved if a number of discussion groups were to be set up - each covering a particular specialist facet of macromolecular science. While accepting that there might be considerable merit in this proposal, the Committee had some reservations over the possibility of 'fragmentation' or dissipation of effort which might result, as well as the practical difficulties of establishing proper representation and control. They would, however, be guided by membership reaction and if this was found to be strongly in favour of the formation of specialist discussion groups, further detailed consideration would be given to the problems involved in fitting them into the framework of the Chemical Society Group system.

In the meantime, an experimental joint meeting with the Ionic Polymerisation Group has been arranged for 27 November 1974.

Annual General Meeting, 1974 - As indicated in the accompanying notice, the second Annual General Meeting of the Macromolecular Group will be held at 10.45 a.m. on 27 November at Imperial College, South Kensington, London, S. W. 7, immediately prior to the Ionic Polymerisation Discussion Group meeting mentioned above.

Final word - As implied in the first bulletin, the Group Committee does not wish to work in a vacuum, or to rely on the attendances at meetings for an indication of the acceptability or otherwise of programme and other arrangements made on behalf of the membership. Comments are, therefore welcome at all times and it is hoped that members will let us have the benefit of their own experience and views, particularly on matters such as the possible organisation of discussion groups and future programmes.

C.H. Bamford.

15 October 1974

(Chairman, Macromolecular Group)