



IUPAC-Macro is Once Again Held in Rio de Janeiro After 32 Years

In 1974 the IUPAC MACRO SYMPOSIUM was held in Rio de Janeiro, Brazil, on July 26-31, when Prof. Eloisa B. Mano was the chairwoman of the Organizing Committee. It was one of the most important international meetings held in Brazil on polymer chemistry since then. Over 700 people were registered coming from 25 different countries. Prof. Mano, herself, describes in some details how was held the first IUPAC-MACRO in Brazil. Several outstanding polymer scientists were present in that meeting. Prof. Charles G. Overberger, from University of Michigan, gave a strong support to the IUPAC MACRO SYMPOSIUM to be held in Brazil. Professor Sir Harry Melville (University of London), presented the opening plenary lecture of the conference. Professor Herman F. Mark (Polytechnic Institute of New York), was responsible for the ending conference with the last plenary lecture. Professor Carl S. Marvel (University of Arizona, USA) received special honors for his contribution in the field of Polymer Chemistry in the opening session. Some biographic information about the distinguished polymer scientists is shown.

The Brazilian polymer community is very happy to receive colleagues from all over the world to participate of the IUPAC MACRO SYMPOSIUM, which is held in Rio de Janeiro in 2006 by the second time. As I was the Chairman of the Organizing Committee of the previous meeting, it may be opportune to present some information on it.

The International Symposium on Macromolecules (Simpósio Internacional de Macromoléculas, SIM) was held in Rio de Janeiro, Brazil, on July 26-31, 1974, under the sponsorship of the International Union of Pure and Applied Chemistry (IUPAC), the Brazilian Academy of Sciences, the Brazilian National Research Council and the Secretariat of Science and Technology of the State of Guanabara.

The aims of the Symposium were to contribute to the transfer of the newest macromolecular research results and to provide a forum for informal discussion. This was the first IUPAC macromolecular Symposium held in Latin America and in South Hemisphere. In keeping with the high standards of the previous symposia on macromolecules, many of the speakers were of international reputation. The registration was over 700 people, from 25 countries. This included about 550 active participants with about 50% coming from Brazil. A large number of Brazilian students from all parts of the country were attracted by the Symposium, holding promise for the future of macromolecular research in Brazil.

The Symposium was divided into four parallel sections: Section A – Polymer Chemistry; Section B – Polymer Physical Chemistry; Section C – Polymer Technology; and Section D – Biopolymers. The seven sessions of each section were composed of one main lecture (45 minutes in length) and an average of six contributed papers (20 minutes in length, each). The main lectures were scheduled to have a minimum of

overlap between sessions). The Proceedings of the IUPAC Macromolecular Symposium in Rio containing the main lectures were published by Elsevier Scientific Publishing Company in a separate volume; by October, 1974, the books were already available for sale on the bookstores.

All abstracts of the contributed papers were published in a paperback volume, “Contributed Papers – Abstracts”. During the sessions, a discussion period was held for each of these contributed works. An effort was made to record these discussions and put them into print in the form of questions and answers which were written and answered on Discussion Cards. On the closing day of the Symposium, the booklet “Contributed Papers – Discussion” was available to all participants.

During the Opening Session of the Symposium, Professor Carl S. Marvel was honored by his outstanding contributions to the development of polymer research in the world. Sir Harry Melville, of the University of London, presented the Opening Plenary Lecture, “Trends in Polymer Science”. The Closing Plenary Lecture, “Polymers Worldwide: Review and Preview”, was given by Professor Herman Mark, of the Polytechnic Institute of New York.

The IUPAC International Symposium on Macromolecules in Rio in 1974 was made possible mainly by funds given by the Brazilian Government through the following agencies: Academia Brasileira de Ciências, Conselho Nacional de Pesquisas, Secretaria de Ciência e Tecnologia do Estado da Guanabara, Coordenação de Aperfeiçoamento do Pessoal de Nível Superior, Centro para a Aplicação da Ciência e da Tecnologia ao Desenvolvimento da América Latina, Conselho Federal de Química, Divisão de Ciência e Tecnologia do Ministério das Relações Exteriores and Organization of American States.

“Special moments of the IUPAC MACRO Symposium held in 1974 can be enjoyed through the following photos, where some of the outstanding polymer scientist are shown.”



Opening session of the International Symposium on Macromolecules, IUPAC-MACRO, July 26th, 1974. Prof. Mano can be seen as first from the left. The other members were authorities who were present in the opening session.



Invited members for the opening session of the MACRO/IUPAC 1974. Opening session of the International Symposium on Macromolecules, IUPAC-MACRO, July 26th, 1974. Among the invited members for the opening ceremony we find from the right Prof. Charles G. Overberger, Prof. Carl S. Marvel, some Brazilian authorities, and Prof. Mano far at left. All conference was held in the just-inaugurated Hotel Nacional, São Conrado, Rio de Janeiro.



Professor Sir Harry Melville (University of London, Great Britain), presented the opening conference during the IUPAC-MACRO 1974. He worked as a Colloid Chemist at Cambridge in the 1930s. He later became Professor of Polymer Science at Birmingham University, then Provost of Queen Mary College, London.



Prof. Charles G. Overberger (Universidade de Michigan, USA), US representative in the CNPq-National Academy of Science (NAS) cooperative program for Chemistry Development in Brazil, Polymer section. Prof. Overberger helped very much for the establishment of the first Polymer Group on polymer chemistry in Brazil. He also made possible the IUPAC-MACRO to be held in Brazil, by convincing the IUPAC executive committee in previous meeting in Helsinki, Finland two years before. Among his many honors were the presidency of the American Chemical Society and the International Union of Pure and Applied Chemistry. He was also former editor of the Journal of Polymer Science.



Professor Carl S. Marvel (University of Arizona, USA), who received special honors for his contribution in the field of Polymer Chemistry in the opening session of the IUPAC-MACRO 1974. Professor Marvel was a founder of the High Polymer Forum that became the Division of Polymer Chemistry of the American Chemical Society, of which he was chairman in 1950-51. He made major fundamental contributions to the polymer field with innovative methodology in synthesis, analysis, and characterization. His ideas and his research led to substantial practical results; for example, the production in the United States of synthetic rubber, amide solvents for polyacrylonitrile, and polymers with exceptional resistance to fire and retention of strength at high temperature for aerospace applications. He was highly successful in teaching and in research guidance and training. He was the mainstay of organic chemistry first at the University of Illinois and then at the University of Arizona.



Professor Herman F. Mark (Polytechnic Institute of New York, USA), was responsible for the ending conference of the 1974 IUPAC MACRO SYMPOSIUM. He is known as the **father of polymer science** and the contribution he made to his chosen field was crucial in many ways. His research and inspiring teaching and lecturing were only part of his activities. Being completely devoid of academic snobbery, Mark was equally at home at universities and industrial laboratories and was most influential in the phenomenal growth of the polymer industry. Deeply concerned with establishing the study of polymers as a discrete branch of chemistry, he designed the first graduate curricula in that discipline, founded a polymer journal and monograph series, and was one of the chief architects of the Polymer Section of the International Union of Pure and Applied Chemistry.