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9th International Symposium on Cationic Polymerization and Related Ionic Processes

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Conference Reports

9th International Symposium on Cationic Polymerization and Related Ionic Processes

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The 9th International Symposium on Cationic Polymerizations and Related Processes was held from June 5 to 9, 1989 in Strasbourg, France.

It was held under the auspices of the International Union of Pure and Applied Chemistry (IUPAC) and the Groupe Francais d'Etudes et d'Applications des Polymeres (GFP). It was sponsored by the Centre National de la Recherche Scientifique (CNRS), the University Louis Pasteur of Strasbourg (ULP) and the Direction de la Recherche et des Etudes Techniques (DRET).

This symposium was jointly organized by the Institut Charles Sadron (CNRS) in Strasbourg and the Centre for Molecular and Macromolecular Studies of the Polish Academy of Sciences (PAN) in Lodz.

The meeting was organized by the International Committee led by Pierre Sigwalt (Paris), Stanislaw Penczek (Lodz) and Paul Rempp (Strasbourg). The local organizing committee was headed by Emile Franta.

The Symposium had 20 Invited Speakers, 43 Contributed Papers and 27 papers that were presented in poster form. It also included a panel discussion which was led by Otto Vogl (New York). The Symposium had 215 participants from 23 countries.

The "9th International Symposium on Cationic Polymerization and Other Ionic Processes" embraced a broader scope than the preceding Symposia on Cationic Polymerization, Cationic as well as Anionic Polymerizations and various types of dipole-dipole insertion processes were discussed. Ring-opening as well as vinylic polymerization was considered in spite of many differences that exist. It was recognized that many common features among these polymerizations are primarily of the living polymer type.

The Scientific Committee had in mind that many specialists of various types of polymerizations came together, shared their experience, compared their results and discussed further developments. It was hoped that much stimulation would result from the contacts and discussions between the specialists of fundamental Polymer

Science and those that were more involved in the study of Polymeric Materials.

It was intended that the meeting contribute to a better understanding of Polymerization Mechanisms and further developments of Polymer Synthesis which involve not only structural but also stereochemical control which could contribute to the still expanding field of Macromolecular Engineering and Macromolecular Design and Architecture.

On Monday, June 5 the meeting was opened by the representative of the Mayor of the city of Strasbourg, of the IUPAC and the CNRS and the Institute of Charles Sadron and also by the President of the GFP.

The opening lecture was given by T. Saegusa (Kyoto), who discussed "Ring-Opening Polymerization of 2-Oxazoline Monomers". He presented his work on 2-substituted oxazolines, either unsubstituted or substituted with aliphatic, aromatic or perfluoroalkyl substituents. Because of the difference of reactivity of these three categories of oxazolines toward p-toluenesulfonic acid or triflic acid as initiators it was possible to prepare block copolymers by a "one-pot—one-shot" process.

This lecture was followed by a lecture by E. Goethals, D. Van Meirvenne, R. De Clercq, and G. Trossaert (Ghent) entitled "Polymer Networks by Cationic Ring-Opening Polymerization". A number of cationic ring-opening polymerizations are known to occur by living or "pseudo living" mechanisms. The pseudo living systems are those where the concentration of active species remains constant during and after the polymerization but in which the active species may be continuously transferred from one polymer chain to another. In such systems bifunctionally growing polymers keep their bifunctionality and therefore the polymers can be regarded as living, although the molecular weight distributions were found to be broader than in the "real" living systems.

These invited lectures were followed by a contribution

