AMERICAN CHEMICAL SOCIETY
MEETING AGENDA
NOVEMBER 17-22, 1990

SATURDAY, NOVEMBER 17, 1990

3:00 - 9:00pm	Registration
7:30 - 9:30pm	Welcome Reception (Poolside)

SUNDAY, NOVEMBER 18, 1990

7:00 - 8:00am	Breakfast - Cafe 66 Restaurant
8:30 - 12:15pm	Meeting - Panorama AB
10:00 - 10:15am	Refreshment Break - Panorama Foyer
5:15 - 7:30pm	Resume General Session - Panorama AB

MONDAY, NOVEMBER 19, 1990

7:00 - 8:00am	Breakfast - Crystal II Ballroom
8:30 - 12:15pm	Meeting - Panorama AB
10:00 - 10:15am	Refreshment Break - Panorama Foyer
10:00 - 10:45am	Poster Session Open - Panorama CD
2:00 - 4:00pm	Boat Cruise - Anticipation II
5:15 - 7:30pm	General Session - Panorama CD

TUESDAY, NOVEMBER 20, 1990

7:00 - 8:00am	Breakfast - Crystal II Ballroom
8:30 - 12:15pm	Meeting - Panorama AB
10:00 - 10:15am	Refreshment Break - Panorama Foyer
10:00 - 10:45am	Poster Session Open - Panorama CD
5:15 - 7:30pm	General Session - Panorama CD
8:00 - 10:30pm	Dinner Banquet - Crystal I & II

WEDNESDAY, NOVEMBER 21, 1990

7:00 - 8:00am	Breakfast - Crystal II Ballroom
8:30 - 12:15pm	Meeting - Panorama AB
10:00 - 10:15am	Refreshment Break - Panorama Foyer
10:00 - 10:45am	Poster Session Open - Panorama CD

ADVANCES IN NEW MATERIALS

15th Biennial Polymer Symposium

PROGRAM

November 17-21, 1990

J. C. Salamone, Chairman
K. J. Wynne, J. L. Benham, Co-Chairmen

SATURDAY

7:30 - 9:30 pm **Welcome Reception**

SUNDAY

8:20 - Introductory Remarks, J. C. Salamone

High Performance Polymers
S.C. Israel and B.C. Anderson, Presiding

8:30 - 1. Recent Advances in High Performance Composite Matrices, P.M. Hergenrother

9:15 - 2. High Performance Segmented Copolymers, J.E. McGrath

10:00 - 3.- 26a. Posters

11:00 - 27. The Chemistry of Macrocyclic Oligomers, J.W. Verbicky

11:20 - 28. Mechanism for the Amine-Catalyzed Formation of Polycarbonate Cyclics, E.P. Boden and D.J. Brunelle

11:45 - 29. Poly(enaminonitriles), J.A. Moore

High Performance Polymers
K.J. Wynne, Presiding

5:00 - 30. High Performance Polymer Blends, M. Jaffe

5:45 - 31. New Routes to Polyarylether Engineering Thermoplastics, G.T. Kwiatkowski

6:30 - 32. Organo-soluble, Rigid-Rod and Segmented, Rigid-Rod Polyimides, F.W. Harris

---

MONDAY

Polymers for Electronic Applications
M.J. Bowden and A.B. Salamone, Presiding

8:30 - 33. Chemical Amplification in the Design of Resist Materials, C.G. Willson

9:15 - 34. Ultrathin Polymer Films for Nanolithography, C.W. Frank

10:00 - 35. - 56c. Posters

11:00 - 57. Characterization of Epoxies and Polyimides for Microelectronics Packaging, D.S. Soane

11:45 - 58. Polymers, Surfaces and Microstructures, G.N. Taylor

Electrically Conducting Polymers
T.W. Smith, Presiding

5:00 - 59. Polyaniline: New Chemistry, Oriented Films and Fibers, A.G. MacDiarmid

5:45 - 60. Emerging Structure-Property Relationships in Conductive Polymers, R.L. Elsenbaumer

6:30 - 61. The Preparation of Processable Conjugated Polymers for the Improvement of Electrical and Nonlinear Optical Properties, F. Wudl

---

TUESDAY

Nonlinear Optics
R.A. Gaudiana and H. Goldberg, Presiding

8:30 - 62. New Materials and Processing Techniques for Nonlinear Optics, M.F. Rubner

9:15 - 63. Polymeric Materials for Nonlinear Optics, S.K. Tripathy

10:00 - 64. - 85c. Posters

11:00 - 86. Molecular Engineering of Liquid Crystalline Polymers, V. Percec

11:45 - 87. Prototype Nonlinear Optical Devices from Conjugated Polymers, G.L. Baker

Silicon-Containing Polymers
D.R. Weyenberg, Presiding

5:00 - 88. Conjugated Polysilylenes and Related Materials - Structure, Chemistry, Electronic Properties, and Applications, J.M. Zeigler

Polymer Division Award
J.L. Benham, Presiding

5:45 - 89. How I Became a Polymer Chemist and Developed Living Polymers, M. Szwarc

---

WEDNESDAY

Polymers from Biological Sources
E. M. Pearce, Presiding

8:30 - 90. Biodegradable Polyesters Produced by Bacteria, R.W. Lenz

9:15 - 91. New Polymers from Artificial Genes, D.A. Tirrell

Silicon- and Zirconium-Containing Polymers
B. Arkles, Presiding

10:00 - 92. Status of New Hybrid Inorganic/Organic Network (Ceramer) Materials - Synthesis/Structure/Property Behavior, G.L. Wilkes

10:45 - 93. Measurement of the Growth and Structure of Zirconia Polymers, K. Keefer

56b. Achieving Conducting Polymeric Materials Through Solution Blending Conducting Polymers with Commercial Polymers, D. MacInnes.

56c. Preparation of Substituted Polyphenylenes and Catalyzed Aromatization of Polycyclohexadienyldiol Derivatives D.R. Wilson, H. Jathavedam and N.W. Thomas

---

TUESDAY

---

64. Polyrotaxanes: Novel Polymeric Materials Based on Supramolecular Organization, H. W. Gibson

65. Delocalized Carbanion Initiators: Controlled Routes Towards Catenated Polymers, B. Gordon, III

66. Polyboranes, Synthesis and Its Applications in Functional Polyolefins, T.C. Chung

67. Copolymerization of Trisubstituted Ethylenes with Some Vinyloxy Monomers, G.B. Kharas

68. Materials from Isocyanate Functionalized Siloxanes, J. Smid

69. Synthesis and Properties of Star-Branched Nylon-6, J.M. Warakomski

70. New Materials by Group Transfer Polymerization, O.W. Webster

71. Synthesis and Properties of Novel Silicones, G.E. Wnek

72. Cationic Polymerization of Various Esters of p-Hydroxystyrene: Probing the Internal Electron Donor Effect, R.F. Storey and D.C. Hoffman

73. Synthesis and Solution Properties of Linear and Star Branched Poly (c-Stearyl-L-glutamates), W. H. Daly

74. Enzymatic Degradation of Graft Copolymers of Vinyl Acetate and Hydroxyethyl Cellulose, R. D. Gilbert

75. Evaluation of Poly(phosphoesters) or Degradable Biomaterials, K.W. Leong

76. High Purity Chitosan: A New Cationic Biomaterial for Bio Applications, P.A. Sandford

77. Advanced Materials Based Upon Polypeptide/Synthetic Polymer Hybrids, D.Y. Sogah

78. Fibrous Polymer Supports and Modules for Blood Therapy, L.F. Pelosi, J.J. Hogan, A. Kopatsis, P.T. Shannon

79. Anionic Polyelectrolytes: Their Biologic Role, W. Regelson, R.M. Ottenbrite

80. Synthesis and Characterizaiton of a New Conjugated Polymer: Poly(2,5-(4'-Methoxy) Stilbenylene Vinylene) Prepared from a Cycloalkylene Sulfonium Salt Precursor Polymer, J.D. Stenger-Smith and G.A. Lindsay

81. Derivatives of Poly(alkyl/arylphosphazenes), P. Wisian-Neilson

82. PMDA: Correlation of its Solid State NMR Spectra, Thermal Analysis Behavior and Crystal Structure, R.A. Wolfe, W.T. Schwart, and F.J. Dinan

83. Cyanoazocarbons Derived from Imidazoles, P.G. Apen and P.G. Rasmussen

84. Radical Cation Salts of Simple Aromatics - π Family of Organic Metals, V. Enkelmann and C. Krohnke

85. Synthesis and Characterization of Macro-Cyclic Poly[2-vinyl pyridine], J. Sundararajan and T.E. Hogen Esch

85a. Synthetic Investigations of Aromatic Amine Functional Polydimethylsiloxane Oligomers, R.B. Jayaraman, G. Sinai-Zingde, J. Rancourt, L.T. Taylor, and J.S. Riffle

85b. Oriented Fluorescent Streptavidin-Phycoerythrin Conjugated Protein Monolayer on Biotin Lipid L-B Monolayer Films, L. Samuelson, D. Kaplan, P. Miller, D. Galotti, K.A. Marx, J. Kumar and S. Tripathy

85c. Characterization and Production of C60 and other Buckminsterfullerenes, Robert D. Johnson, D.S. Bethune, G. Meijer, C.S. Yannoni, J. Salem, I.L. Rosen, W.C. Tank, and M. De Vries. (also presenting #14)

POSTER SESSION

SUNDAY

3. Rigid Rod Molecules as Liquid Crystal Thermosets, B. Benicewicz

4. Solid State Structure/Properties Correlation for a Homologues Series of Mesogenic Aromatic-Aliphatic Azomethine Ether Polymers, A. Biswas and K-C.H. Gardner

5. Crosslinkable Poly(ether ketones) which Incorporate Hexafluoro-isopropylidene Groups, P. E. Cassidy

6. Recent Predictions of Static and Dynamic Properties of Polymers, Including First Super-Strong Polymers, F. Dowell

7. Backbone Modified Poly(Ethylene Ether Carbonate) Polyols and Their Use in Polyurethane Elastomers, R.F. Harris

8. Rigid Rod Liquid Crystalline Thermosets, S.J. Huang

9. Inorganic Network Polymers, P.A. Biaconi

10. Performance Properties of Polimides Based on 3,5-Diamino Benzotrifluoride, R.A. Buchanan and H.C. Lyn

11. Cellulose Based Composites with Improved Properties, P. Gatenholm and J. Felix

12. Crosslinked Liquid Crystal Monomers and Polymers, M. Litt and X.J. Quian

13. Preparation and Properties of New High Performance Liquid Crystal Polyester Plastics, J. C. Morris

14. Molecular Motion and Orientation Dynamics of Main-ChainLiquid Crystalline Polymers, J. R. Lyerla and Robert D. Johnson

15. The Preparation of High Performance Poly(amidoimides), R.M. Ottenbrite

16. The Origins of Strain Rate Effects in Ultra Strong PE Fibers, D.C. Prevorsek

17. The Cure and Properties of High T_g Thermosetting Liquid Dicyanate/Polycyanurate System, J.K. Gillham

18. The Glass Transition Temperature, T_g, as a Parameter for Monitoring the Cure of Thermosetting Systems During Both Chemical and Diffusion Control, J.K. Gillham

19. Polyamic Acid Derivatives: Precursors for Polyimide Blends and Copolymers, W. Volksen

20. Spectroscopic Characterization of Aromatic Imine Intrinsically Conductive Polymers, T. DiBerardino and B. Howell

21. New NLO Polymers based on Ferrocene Subunits, M.E. Wright and S.A. Svajda

22. Recent Developments in Main Chain Chromophoric Second Order Non-Linear Optical Polymers, J.D. Stenger-Smith, J.W. Fischer, L.M. Hayden, R.A. Henry, J.M. Hoover, and H.A. Lindsay

23. Mixed (Electronic and Ionic) Conductive Block Copolymers, I.M. Khan

24. Conformation and Miscibility in Aromatic Polymers, M. Drzewinski

25. Design of New Types of Liquid Crystalline Polymers through Hydrogen Bonding, T. Kato, H. Adachi, U. Kumar, N. Hirota, A. Fujishima, and J.M. Frechet

26. Polymidazoleamides - A New Class of Heteroaromatic Polyamide, P.G. Rasmussen, R.P. Subrayan and E.L. Thurber

26a. Hydrogen Atom Bombardment of Monomers and Polymers, I. Brown and T. Sandreczki

35. Electrical Conductivity, NMR and Thermal Analysis Studies of Ion-Containing Polymers, J. J. Fontanella, M.C. Wintersgill and S.G. Greenbaum, C.S. Coughlin (presenter)

36. Approaches to Orthogonally Fused Conducting Polymers for Molecular Electronics, J. Tour, R. Wu and J.S. Schunn

37. Physical and Electrical Characterization of Polyiodide-Containing Polymers, Bruce J. Heyen, D.F. Shriver

38. Electrically Conductive and Electroactive Polyheterocycle/ Polyelectrolyte Molecular Composites, J.R. Reynolds

39. Synthesis of Conducting Composite Polymer Beads, G.Y. Kim, R. Salovey, and J.J. Aklonis

40. Novel Designs for Piezoelectric Polymers Containing Multiorgano-Substituted Small Rings, A. P. Padias and H.K. Hall

41. Annealing and Doping Effects on the Remanent Polarization and Piezoelectric Properties of Poly(vinylidene Fluoride) and Old Nylons, J.I. Scheinbeim

42. Third Order Nonlinearities of Transition Metal Poly-ynes, S. Guha, P. Porter, K. Kang, C. C. Frazier

43. Second Harmonic Generation in Benzophenone and Chalcone Derivative Crystals, P. Cockerham, S. Guha, C. C. Frazier

44. Synthesis and Characterization of Functionalized Polyethylene Interfaces, D. Bergbreiter

45. Viscosity and Shear Behavior of Polymer Association Complexes in Fresh Water and Saline Media, J.K. Borchardt

46. Adsorption Properties and Applications of Polyquaternary Ammonium Salts, J.K. Borchardt

47. Designed Monolayer and Multilayer Forming Phthalocyanine Oligomers as Gas Sensors, J. B. Lando, M. Kenney, W. Ko, H. Wang and T. Clark

48. Monte Carlo Simulation of Polymer/Additive Interactions, J.P. Puglia

49. From Glasses to Liquid Crystals to Crystals through Molecular Engineering of Polymers, S. I. Stupp

50. Crosslinking of PMMA of Elastomers Block Copolymers with the Participation of PMMA Stereocomplexes, T.E. Hogen-Esch, J.A. Mason and B. J. Ladd

51. Reactivity and Anionic Polymerization of Sterically Hindered Isopropenyl t-Butyl Ketone, H. Ito

52. A New Look at Ionomer Morphology - Consequences for Control of Physical Properties, A. Eisenberg

53. The Dynamic Helix Reversals in Polyisocyanates Offer New Experimental Opportunities for Cholesteric Studies, M.M. Green, B. Christiani, J. Kelly, T. Sato, Y. Sato, A. Teramoto, J. Wagner, Y. Nagamura, Y. Okamoto, and K. Hatada

54. Transparent Conductive Composites by In-Situ Crystallization of a Radical-Cation-Salt in a Polymer Matrix, J.P. Ansermet, J. Finter, B. Hilti, C. Krohnke, C.W. Mayer, E. Minder and D. Neuschafer

55. Conducting Polypyrroles with Controlled Fibrillar Morphology, R.P. Burford, R.P. Chaplin and T. Tongtam

56. A Theoretical Treatment of the Structural Aspects of the Topochemial Polymerization of Diacetylenes, M. Jalali-Heravi, S.E. Zutaut, and S.P. McManus

56a. Conductive Textiles, H.H. Kuhn, W.C. Kimbrell, and R.V. Gregory