

GUY C. BERRY

Addresses

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Pittsburgh, PA 15221
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Personal

United States citizen, born May 11, 1935. Married, with three children.

Education

1960 University of Michigan, Ph.D., Chemical Engineering.
1958 University of Michigan, M.S., Polymer Science.
1975 University of Michigan, B.S., Chemical Engineering.

Research Interests

Physical chemistry and rheology of polymers and their solutions. Now Emeritus, when research-active, studies involved mesogenic polymers, branched chains, filled polymeric fluids, and water soluble macromolecules. Methods included integrated and photon correlation light scattering, exclusion chromatography, and a variety of rheological experiments. Custom equipment was used in many cases to extend the range and precision of experiments. Typically, studies included dilute solution properties to characterize the chain conformation and intermolecular interactions, investigation of the rheological properties of concentrated solutions, and dispersions of particles in polymeric fluids. Solutions studied included isotropic solutions of flexible and rodlike chains, and nematic solutions of rodlike chains.

Experience

2004 - 20xx **Facilitator**, University Professor Committee, *Carnegie Mellon Univ.*
2004 - 20xx **Chair**, Dickson Prize Committee, *Carnegie Mellon Univ.*
2004 - 20xx **Chair**, Honorary Degree Nomination Committee, *Carnegie Mellon Univ.*
2004 - 20xx **University Professor of Polymer Science & Chemistry Emeritus**, *Carnegie Mellon Univ*
2002 - 2004 **University Professor of Polymer Science & Chemistry**, *Depart. Chem., Carnegie Mellon Univ*
2001 - 20xx **Editor-in-Chief**, *Progress in Polymer Science*
1973 - 2002 **Professor of Polymer Science & Chemistry**, *Depart. Chem., Carnegie Mellon Univ.*
1990 - 1995 **Head**, *Department of Chemistry, Carnegie Mellon University.*
1983 - 1984 **Acting Head**, *Department of Chemistry, Carnegie Mellon University.*
1981 - 1982 **Acting Dean**, *Mellon College of Science, Carnegie Mellon University.*
1967 - 1973 **Associate Professor**, *Carnegie Mellon University.*
1965 - 1973 **Senior Fellow**, *Mellon Institute.*
1960 - 1965 **Fellow**, *Mellon Institute.*
1957 - 1960 **Research Assistant**, *University of Michigan*

Honors

2003 Fellow, American Chemical Society, Division of Polymeric Materials: Science and Engineering.
1996 Fellow, American Physical Society.
1994 Pittsburgh Prize, American Chemical Society.
1990 Bingham Medal Award, Society of Rheology
1977 Adjunct Professor, University of Pittsburgh, Department of Metallurgical and Materials Engineering, 1977-2004t.
1983 Visiting Professor, Kyoto University, May-June 1983.
1979 Visiting Professor, Department of Chemistry, Colorado State University, August 1979.
1973 Visiting Professor, University of Tokyo, Japan Society for the Promotion of Science.
1979 Member, U.S. Delegation to U.S.-China Bilateral Symposium on Polymer Chemistry and Physics (12 delegates), October.

Professional Society and Association Memberships

- Polymer Division, (National and Local), American Chemical Society (1960 to present)
- Organic Coatings and Plastics Chemistry, American Chemical Society (1965 to present)
- American Association for the Advancement of Science (1965 to present)
- Japan Society of Rheology (1973 to 2004)
- Society of Rheology (USA) (1960 to present)
- American Physical Society (1973 to present)
- Materials Research Society (1986 to 2000)

Selected Professional Activities

- Delegate (1 of 12), US-China Bilateral Symposium on Polymer Science, 1979
- Contribution in report "Polymer Science and Engineering: Challenges, Needs and Opportunities", published by National Research Council, 1981.
- National Academy of Science Ad Hoc Committee on Polymer Science, 1979-80.
- ACS Membership, Regional Co-Chairman, 1978-1982.
- Advisory Board, Macromolecules, (ACS publication), 1978-81.
- Advisory Board, J. Polymer Science, 1986-88.
- Permanent Scientific Committee, Int'l. Symp. on Polymer Analysis and Characterization, 1987-
- IUPAC Working Committee on Polymer Liquid Crystals, 1987-1990.
- Editor, J. Polymer Science, Physics Edition, 1988-1993.
- Editorial Board, J. Rheology, 1990-2004?
- Editor, Progress in Polymer Science, 2001-present.
- Alternate Councilor, ACS Pittsburgh Section, 1990-95, 1996-99.
- Chair/Chair Elect, ACS Pittsburgh Section, 1996-97.
- Chair, Selection Committee PolyEd Grad Student Award, 1995-2010
- Director, ACS Pittsburgh Section, 2000- present.
- Chair, Int'l. Symp. on Polymer Analysis and Characterization, 2004- present.
- Consultant: Office of the President, Carnegie Mellon University, 2004- present.

Ph.D. Research Supervised

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| Vernon G. Ammons | - Determination of Synthesis Parameters and Molecular Characterization of Polybisbenzi-midazobenzophen-anthrolin-dione (1970). |
| Bruce L. Hager | - Intermolecular Interactions in Moderately Concentrated Polymer Solutions: A study of Polystyrene in Several Solvents by Viscometry and Light Scattering (1977). |
| David B. Cotts | - Polymerization Kinetics of the Rodlike Polymer Poly[benzo(1,2-D:5,4;D')Bisoxazole-2,6-diy]-1,4- henylen PBO (1979). |
| Patricia C. Metzger | - Effects of Aggregation and Electrostatic Repulsions on Solution Properties of Flexible and Rodlike Polymers (1980). |
| Subramanian Venkatraman | - Studies on the Thermodynamic, Rheological and Rheo-Optical Properties of a Rigid Polymer in Solution (1981). |
| Hsin-Hsing Tsai | - Phase Equilibrium and Rheological Studies of Solutions of Rodlike, Articulated Polymers and Their Mixtures (1983). |
| David W. Meitz | - Complicated Rheological Properties of a Suspension of Crosslinked Polystyrene Particles in a Polystyrene Fluid and a Rheological Investigation of the Mechanical Response of a Binary Immiscible Polymer Blend (1985). |
| Ruth Furukawa | - Dilute Solution Characterization of Rodlike Poly[1,4-Phenylene Benzobisthiazole] (PBT) and Articulated Copolymers of PBT and Poly[1,4-Phenylene Benzobisoxazole] (PBO) (1985). |
| Caroline C-H. Wei | - Study of Dilute Solution Properties of Rod and Rodlike Polymers (1986). |

- Jung Ok Park** - Viscoelastic Behavior of Polystyrene Solutions in a Good Solvent and in a Theta Solvent (1986).
- Cynthia P. Spencer** - Anisotropic Phase Polymerization Kinetics of Rodlike Polymer Poly[(benzo(1,2-d:4,5-d')bisthiazole-2,6-diyl)-1,4-phenylene] (1987).
- Churl S. Kim** - Rheological Behavior of Blends of Rodlike and Flexible Chain Polymers in Isotropic Solutions (1988).
- Shean-J. Chen** - Physical Chemical Studies on Moderately Concentrated Solutions of Polystyrene in Cyclohexane and in Carbon Disulfide (1989)
- Vincent J. Sullivan** - Rheology and Phase Behavior and Dilute Solution Properties of Blends of the Rodlike Poly (p-phenylenebenzobisoxazole) and Flexible Chain Poly(2,5-benzoxazole) in Sulfonic Acid Solvents (1990).
- Liu, Chih-Chau** - Rheological Studies on Dispersions of Magnetic Particles (1990).
- Mohan Srinivasarao** - Rheo-optical Studies on a Polymer Liquid Crystal Under the Influence of Flow or Magnetic Fields (1990).
- Bei-Bei Diao** - Rheological and Optical Studies on Solutions of Rodlike Poly(1,4-phenylene-2,6-benzobisthiazole) (1994).
- Shunqiong Yue** - Light Scattering Studies on Dilute Solutions of Associating Polymers and Moderately Concentrated Solutions of Polystyrene (1994).
- Vijaykumar, Sudha** - Rheological and Rheo-optical Studies on Nematic Solutions of a Rodlike Polymer: Poly(1,4-phenylene-2,6-benzobisthiazole) (PBZT) (1996).
- Hy Si Bui** - Viscoelastic Study of Reversible Gels and Block Copolymer Melts (2004)

M.S. Research Supervised

- Margaret A. Leech** - Dilute Solution Properties of Cellulose Triacetate (1978).
- Richard S. King** - Solution Processing of Rigid-chain Polymers, M.S. Thesis, Chemical Engineering (1980).
- Alan Kass** - Creep Behavior of an Interpenetrating Polymer Network, M.S. Thesis, Chemistry (1980).
- Anne F. Charlet** - Fabrication of Ribbons of a Rodlike Polymer, M.S. Thesis, Chemistry (1981).
- Paula Solinsky** - Rheological Properties of Concentrated Solutions of Branched Polystyrene (1981).
- Robert L. Frye** - Electrophoretic Light Scattering of Polymer Emulsions, M.S. Thesis, Chemistry (1982).
- Mark Featherstone** - Studies on Blends of Rodlike and Flexible Polyquinolines (1989).
- Cheng-F. Tu** - Studies on Dispersions of Spheres in a Polymer Solution (1990).

Postdoctoral Associates

Shiao-Ping Yen	1967-69	Koichi Tsutsui	1979-80
Jens Borch	1970-71	C. C. Lee	1979-81
Donald W. Tanner	1970-72	L. Marwaha	1979-81
Kenneth D. Goebel	1972-74	Fu-Mei Lin	1985
Chiu-Ping Wong	1973-79	G. B. Sohoni	1985
Yeong C. Lin	1974-75	Nicole N. Desvignes	1985
Michael Dror	1976-77	Kattera A. Suresh	1985-86
James J. Beeson	1977-78	L. Du	1986
Sung Gun Chu	1977-79	Hedi Mattoussi	1991-93
T. P. Sham	1978	Zhangie Tan	1996-98
Maher Elsabee	1978-79	Ying Wang	2002-03

Visiting Scientists

Hiroshi Nomura	1965-66	Kunio Nakamura	1980-81
Kenneth G. Mayhan	1966-67	Meyer. H. Birnboim	1981
R. D. Patel	1975-76	Yoshiyuki Einaga	1981-82
James L. Work	1976	Kazunori Se	1985-86
Thadius E. Helminiak	1977	Jeff Odell	1986
Hiroshi Ohnuma	1977-78	Takakatsu Kojima	1986-87
Toshiro Masuda	1979	Kiyofumi Matsuoka	1990-92