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Birth Date: November 18, 1952
Birth Place: Boston, MA

Education

Ph. D., Polymer Science and Engineering, 1979, University of Massachusetts at Amherst
M. S., Polymer Science and Engineering, 1976, University of Massachusetts at Amherst
B. S., Chemistry, 1976, Boston State College

Employment

Universitaet Mainz, Institut fuer Physikalische Chemie, Research Fellow, Mainz, Germany,
1979-1981
International Business Machines Corporation, Research Division, Research Staff Member,
1981-1996
University of Massachusetts at Amherst,
Research Assistant, Polymer Science and Engineering, 1974-1979
Professor, Polymer Science and Engineering, 1996-present
Distinguished University Professor, Polymer Science and Engineering, 2004-present

Honors and Distinctions

Arthur K. Doolittle Award, American Chemical Society, Division of Polymeric Materials: Science and Engineering (with J. T. Koberstein), 1984
Invention Achievement Award, IBM, 1989
Fellow, American Physical Society, 1990
Advisory Board, *Macromolecules*, 1992-1995
Advisory Board, *Acta Polymerica*, 1991-present
Advisory Board, *Advances in Chemical Physics*, 1992-present
Consulting Professor, Stanford University, Stanford Synchrotron Radiation Laboratory,
1992-1995
Elected Chairman, Division of High Polymer Physics, American Physical Society, 1993
Elected Vice President, Neutron Scattering Society of America, 1993-1996
Chairman, Steering Committee for the Spallation Neutron Source, 1996-98
Director, Materials Research Science and Engineering Center, University of Massachusetts,
1997-present
Chairman, Solid State Science Committee, National Research Council, 1998-99
Advisory Board, *Journal of Polymer Science, Physics Edition*, 1999-present
Scientific Advisory Committee, Spallation Neutron Source, 1998-present
Scientific Advisory Board, Symyx Technologies, 1999-present
Dorn Lecture, Northwestern University June 2000
Associate Editor, *Macromolecules*, 2001-present
Silvio P. Conti Faculty Fellowship Award, University of Massachusetts Amherst, 2001
Fellow, American Association for the Advancement of Science, 2002
2003 American Chemical Society Cooperative Research Award in Polymer Science and Engineering (with C.J.Hawker)
Rhodia Professorship, Rhodia Corporation, 2003
Advisory Board, *Advanced Materials*, 2004-present.
Dutch Polymer Award, 2004
Distinguished Professor of Polymer Science, University of Massachusetts, 2004
Polymer Physics Prize, Division of Polymer Physics, American Physical Society, 2004

Editorial Board, Polymer Journal, 2005
International Editorial Advisory Board Member, Soft Matter, 2005
Board of Directors, Materials Research Society, 2006
Elected Member, Executive Advisory Board, Macromolecular Journals, 2006
Elected member, Editorial Board, Journal of Chemical Physics, 2007
Elected Fellow, Society of Neutron Scattering, 2007
Elected Member, International Advisory Board, Macromolecular Research, 2008
Elected Member, National Academy of Engineering, 2008

Selected Invited Lectures

American Physical Society, March 1987
Gordon Conference on Thermoset Polymers, July 1987
Gordon Conference on Polymers, January 1988
Gordon Conference on Polymer Physics, July 1988
Gordon Conference on Polymer Physics, July 1990
John Dorn Memorial Lecture, Northwestern University, May 1993
Bar-Ilan Conference, Frontiers in Condensed Matter Physics 1993
Gordon Conference on Organic Thin Films, January 1994
Gordon Conference on Polymer Physics, July 1994
Gordon Conference on Chemistry at Interfaces, August 1994
Faraday Discussion on Polymer Surfaces and Interfaces , Bristol, England, September 1994
International Conference on Neutron Scattering, Sendai, Japan; Plenary Lecture, October 1994
Gordon Conference on Polymer Physics, July 1996
Harvard University, Physics Colloquium, October 1996
Materials Research Society, Boston, MA, December 1996
Max Planck Institut fuer Polymerforschung, Mainz, Germany, March 1997
Adhesion Society, Savannah, GA, April 1997
University of Akron, Polymer Science Colloquium, May 1997
Spallation Neutron Source Meeting, Washington, DC, June 1997
Wetting and Interfacial Behavior of Polymers, University of Munich, Germany, June 1997
American Physical Society Meeting, Los Angeles, CA, August 1997
Princeton University, Chemical Engineering & Materials Research Institute Colloquium, November 1997
Canadian School of Neutron Science, Chalk River, Canada, June 1998
IUPAC World Polymer Conference, Gold Coast, Australia, July 1998
Australian National University Research School of Chemistry Colloquium, Canberra, AU, July 1998
BHP Steel Institute Lecture, University of Wollongong, Wollongong, Australia, July 1998
Tenth International XAFS Conference, Chicago, IL, September 1998
Columbia University, Chemical Engineering Colloquium, New York, November 1998
Materials Research Society Conference, Boston, December 1998
Spallation Neutron Source Workshop, Knoxville, TN, November 1998
3M Corporation, Science Colloquium, Minneapolis, MN, November 1998
Gordon Research Conference on Polymers, Ventura, CA, January 1999
National Academy of Sciences, Board on Physics and Astronomy, Irvine, CA, January 1999
Midwest ACS Seminar Series, Minneapolis, MN, February 1999
American Physical Society Meeting, Atlanta, GA, March 1999
Kansas State University, Physics Colloquium, Manhattan, KS, April 1999
Small Angle Scattering, International Union of Crystallography, Newark, DL, May 1999
Advanced Light Source Workshop, Berkeley, CA, May 1999
Opportunities for Polymers Using Synchrotrons, ChemMat CARS, Argonne. IL, July 1999
Gordon Research Conference on Polymer Physics, Newport, RI, August 1999
Telluride Physics Workshop, Telluride, CO, August 1999
American Chemical Society, New Orleans, LA, August 1999
Neutron Scattering Short Course, Argonne, IL, August 1999
Complex Fluid Coloquia, UC Santa Barbara, CA, August 1999
Plenary lecture, Los Alamos Neutron Science Center, Los Alamos, NM, January 2000
Massachusetts Institute of Technology, PPST Colloquim, Boston, MA February 2000

Michigan State University, CMRF Colloquium, E. Lansing, MI, February 2000
American Physical Society Meeting, Minneapolis, MN, March 2000
American Chemical Society Meeting, San Francisco, CA, March 2000
MLO-SLI, Weingaten Germany, June 2000
Gordon Research Conference, Polymers West, Ventura, CA, January 2001
American Physical Society, Seattle, WA, March 2001
ICNS 2001, Munich, Germany June 2001
Euro-Conference, Italy, September 2001
PolyNano, Brookhaven, NY, March 2002
Argonne Photon Source Colloquium, Argonne, IL, July 2002
Gordon Research Conference on Adhesion, Tilton, NH, August 2002
Rhodia Conference, Bristol, England, September 2002
Hyperstructured Organic Materials Research Center, Seoul National University, Korea, October 2002
AIChE Meeting, Indianapolis, IN, November 2002
Gordon Research Conference, Polymers West, Vice-Chair, Ventura, CA January 2003
American Physical Society, Austin, TX, March 2003
American Chemical Society, New Orleans, LA, March 2003

Committee Memberships

Chairman, National Spallation Neutron Source Steering Committee, 1998
Chairman, Basic Energy Science Advisory Committee Subpanel on the Next Generation Pulsed Spallation Neutron Source, 1996
Member, Basic Energy Sciences Advisory Committee of the U. S. Department of Energy, 1995-1999
Member, Solid State Sciences Committee, National Research Council, 1994-present
Member, Industrial Users Subcommittee, Neutron Scattering Society of America, 1994-1998
Member, Program Advisory Committee, Cold Neutron Reactor Facility, National Institute of Standards and Technology, 1994-1997
Member, Basic Energy Sciences Advisory Committee, "Kohn Panel", on Neutron Sources for America's Future, 1992-1993
Chairman, Executive Committee, Cold Neutron Reactor Facility Research Group, National Institute of Standards and Technology, 1991-1994
Member, Proposal Review Committee for the Los Alamos Neutron Science Center and Argonne Intense Pulsed Neutron Source, 1989-1996
Member, Program Advisory Committee, Los Alamos Neutron Science Center, 1989-1995
Vice President, Neutron Scattering Society of America, 1993-1996
Member, Executive Committee, Division of High Polymer Physics, 1991-1994
Member, Program Committee, Division of High Polymer Physics, American Physical Society, 1987-1990
Member, Board of Directors, Stanford Synchrotron Radiation Laboratory User's Organization, 1985-1987
Member, Board of Directors, National Center for Small Angle Scattering Research User Group, Oak Ridge National Laboratory, 1984-1987
Chairman, Special Interest Group on Small Angle Scattering, American Crystallographic Association, 1983-1988

Meetings Organized

Polymer Research at Synchrotron Radiation Sources with A. Goland, Brookhaven National Laboratory, L. I., N. Y., October, 1984
Small Angle Scattering with C. Glinka, American Crystallographic Association, Stanford, CA, August, 1985
Scattering, Deformation and Fracture with G. D. Wignall, B. Crist and E. L. Thomas, Materials Research Society, Boston, MA, December, 1986
Division of High Polymer Physics, American Physical Society, Program Chairman, Anaheim, CA, March, 1990
Neutron Reflectivity, with G. P. Felcher, Interdisciplinary Workshop, Argonne National Laboratory, Argonne, IL, August, 1990
Scattering and Reflectivity of Light, X-rays and Neutrons, with P. M. Cotts, American Chemical Society, Washington, DC, August, 1990
Polymeric Alloys, Materials Research Society, Anaheim, CA, April, 1991
Polymer Surfaces and Interfaces, American Chemical Society, Polymer Division Workshop, Danvers, MA, October, 1992

Neutron Scattering in Materials Science, with D. Neuman and B. Wuensch, Materials Research Society, Boston, MA, December, 1994
Long Pulsed Spallation Sources, University of California at Berkeley Workshop, with L. E. Schroeder and R. Pynn, Berkeley, CA, April, 1995
Multicomponent Polymer Systems, with D. Lohse and L. Sperling, American Chemical Society, Polymer and PMSE Divisions, Orlando, FL, August, 1996
Surface and Interfaces, with J. Ankner and H. Kaiser, American Crystallographic Association, St. Louis, MO, April, 1997
Nanostructures in Polymers, Materials Research Society Meeting, San Francisco, Ca, April, 2000

Professional Organization Memberships

American Physical Society: Division of High Polymer Physics, Division of Condensed Matter Physics, Division of Biological Physics, Division of Chemical Physics
American Chemical Society: Polymer Division, Polymer Materials Science and Engineering Division
American Crystallographic Association
Materials Research Society
Neutron Scattering Society of America
American Association for the Advancement of Science
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Books Edited

Multicomponent Polymer Systems, with D. Lohse and L. Sperling, Plenum Publishers, NY, 1997
Neutron Scattering in Materials Science, with D. Neuman and B. Wuensch, Materials Research Society Press, Pittsburgh, PA. 1995
Scattering, Deformation and Fracture, with G. D. Wignall, B. Crist and E. L. Thomas, Materials Research Society Press, Pittsburgh, PA, 1986

Patents

Hedrick, J.L., Hofer, D.C., Labadie, J.W., Prime, P.B., and Russell, T.P., "Foamed Polymers for Use as a Dielectric Material," 1998, IBM: US.05776990
Mayes, A.M., Ruzette, A.-V., T.P. Russell and Banerjee, P., "Baroplastic Materials, Patent No. US 6,632,883, Oct. 14, 2003.
Schaffer, E., Mlynek, J., Steiner, U., Thurn-Albrecht, T. and Russell, T. P., "Methods and Apparatus for Forming Submicron Patterns on Films" US 6,391,217, May 21, 2002.
Tuominen, M. Schotter, J., Thurn-Albrecht, T. and Russell, T. P., "Nanocylinder Arrays," Patent No. US 7,190,049 B2 March 13, 2007
Tuominen, M., Russell, T.P., Bal, M., Ursache, A., "Nanofabrication," Patent No. US 7,189,435 B2, March 13, 2007

Publications

1. S. D. Hong, M. Shen, R. S. Stein and T. P. Russell, "Rheo-Optical Studies of Blends of Poly(Styrene-B-Butadiene-B-Styrene)," *Polymer Alloys*, **72** (1972).
2. W. C. Copenhafer, M. W. Kendig, T. P. Russell and P. H. Rieger, "Spectrophotometric Investigation of Vanadyl Phosphate Equilibria in Acid Media," *Inorg. Chim. Acta* **17**(2), 167-173 (1976).
3. F. B. Khambatta, F. P. Warner, R. S. Stein and T. P. Russell, "Small Angle Light Scattering Studies of the Morphology of Blends of Poly(ϵ -Caprolactone) with Poly(Vinyl Chloride)," *J. Poly. Sci., Phys. E* **14**, 1391 (1976).
4. J. F. Reardon and T. P. Russell, "Standard Potential of the Mercury-Mercurous Benzoate Electrode at 20C," *Chem. Eng. Data* **22**, 370 (1977).
5. T. P. Russell, J. Koberstein, R. Prudhomme, A. Misra, R. S. Stein, J. W. Parsons and R. L. Rowell, "A Calibration Procedure for a Low-Angle Light-Scattering Apparatus," *J. Poly. Sci., Pt. B-Poly. Phys.* **16**(10), 1879-1882 (1978).
6. R. S. Stein, F. B. Khambatta, F. P. Warner, A. Escala, E. Balizer and T. P. Russell, "X-Ray and Optical Studies of the Morphology of Polymer Blends," *J. Polym. Sci., Polym. Symp.* **63**, 313 (1978).
7. J. Koberstein, T. P. Russell and R. S. Stein, "Total Integrated Light-Scattering Intensity from Polymeric Solids," *J. Poly. Sci., Pt. B-Poly. Phys.* **17**(10), 1719-1730 (1979).
8. R. S. Stein, M. K. Kopp, R. E. Zedler, R. W. Hendricks, J. S. Lin and T. P. Russell, "The Use of a One-Dimensional Position Sensitive Detector with a Kratky Small Angle X-Ray Apparatus," *Oak Ridge National Laboratory Technical Manuscript* **6678** (1979).
9. E. J. Roche, R. S. Stein, T. P. Russell and W. J. Macknight, "Small-Angle X-Ray Scattering Study of Ionomer Deformation," *J. Poly. Sci., Phys. Ed.* **18**(7), 1497-1512 (1980).
10. T. P. Russell and R. S. Stein, "Scattering Studies from Polymer Blends," *J. Macro. Sci.-Phys.* **B17**(4), 617-624 (1980).
11. T. P. Russell and R. S. Stein, "Small-Angle X-Ray and Neutron Scattering Studies of Amorphous Polymer Blends," *J. Poly. Sci., Pt. B-Poly. Phys.* **20**(9), 1593-1607 (1982).
12. T. P. Russell, "An Absolute Intensity Standard for Small-Angle X-Ray-Scattering Measured with Position-Sensitive Detectors," *J. Appl. Crystal.* **16**(OCT), 473-478 (1983).
13. T. P. Russell, H. Guggler and J. D. Swalen, "In-Plane Orientation of Polyimide," *J. Poly. Sci., Pt. B-Poly. Phys.* **21**(9), 1745-1756 (1983).
14. T. P. Russell and R. S. Stein, "An Investigation of the Compatibility and Morphology of Semicrystalline Poly(Epsilon-Caprolactone)-Poly(Vinyl Chloride) Blends," *J. Poly. Sci., Pt. B-Poly. Phys.* **21**(7), 999-1010 (1983).
15. J. F. Rabolt, T. P. Russell and R. J. Twieg, "Structural Studies of Semifluorinated Normal-Alkanes .1. Synthesis and Characterization of F(CF₂)N(CH₂)MH in the Solid-State," *Macromolecules* **17**(12), 2786-2794 (1984).
16. T. P. Russell, "Concerning Voids in Polyimide," *Polym. Engr. Sci.* **24**, 345 (1984).
17. T. P. Russell, "A Small-Angle X-Ray-Scattering Study of an Aromatic Polyimide," *J. Poly. Sci., Pt. B-Poly. Phys.* **22**(6), 1105-1117 (1984).
18. T. P. Russell, D. P. Anderson, R. S. Stein, J. J. Beres, N. S. Schneider and C. R. Desper, "Rheo-Optical Investigation of the Transition Behavior of Polyphosphazenes," *Macromolecules* **17**(9), 1795-1799 (1984).

19. A. N. Goland and T. P. Russell, "Polymer Research at Synchrotron Radiation Sources," *Brookhaven National Laboratory Technical Report 51847 UC-25* (1985).
20. S. J. Mumby, P. M. Cotts and T. P. Russell, "Preparative Fractionation of Fluorescent-Dye-Labeled Poly(Ethylene Oxide) by Aqueous Size-Exclusion Chromatography," *J. Chrom.* **319**(2), 241-245 (1985).
21. G. Ronca and T. P. Russell, "Thermodynamics of Phase-Separation in Polymer Mixtures," *Macromolecules* **18**(4), 665-670 (1985).
22. T. P. Russell, "Investigation of Polymer Mixtures Using Synchrotron Radiation," *Polymer News* **11**, 70 (1985).
23. T. P. Russell, G. Hadziioannou and W. K. Warburton, "Phase-Separation in Low-Molecular Weight Polymer Mixtures," *Macromolecules* **18**(1), 78-83 (1985).
24. T. P. Russell and J. T. Koberstein, "Simultaneous Differential Scanning Calorimetry and Small-Angle X-Ray Scattering," *J. Poly. Sci., Pt. B-Poly. Phys.* **23**(6), 1109-1115 (1985).
25. R. J. Twieg, R. Siemens, J. F. Rabolt and T. P. Russell, "Observation of a "Gel" Phase in Binary Mixtures of Semifluorinated N-Alkanes with Hydrocarbon Liquids," *Macromolecules* **18**, 1361 (1985).
26. G. Alfonso and T. P. Russell, "Crystallization and Melting Studies on Poly(Ethyleneoxide)/Poly(Methylemethacrylate) Mixtures," *Integration of Fundamental Polymer Science and Technology*. L. A. Kleintjens and P. J. Lemstra, London, Elsevier, 132-137 (1986).
27. G. C. Alfonso and T. P. Russell, "Kinetics of Crystallization in Semicrystalline Amorphous Polymer Mixtures," *Macromolecules* **19**(4), 1143-1152 (1986).
28. J. T. Koberstein and T. P. Russell, "Simultaneous SAXS-DSC Study of Multiple Endothermic Behavior in Polyether-Based Polyurethane Block Copolymers," *Macromolecules* **19**(3), 714-720 (1986).
29. E. J. Kramer, W. Volfsen and T. P. Russell, "Interdiffusion in Polyimide Thin Films," *MRS Symp.* **72**, 195 (1986).
30. T. G. Oh, W. E. Fischer, G. P. Hellmann, T. P. Russell and C. H. Wang, "The Effect of Structural Relaxation on the Rayleigh-Brillouin Spectra of Liquids Consisting of Chain Molecules," *Polymer* **27**, 261-264 (1986).
31. J. F. Romanelli, J. W. Mayer, E. J. Kramer and T. P. Russell, "Rutherford Backscattering Spectrometry Studies of Iodine Diffusion in Polyimide," *J. Poly. Sci., Poly. Phys. E* **24**, 263 (1986).
32. T. P. Russell, J. F. Rabolt, R. J. Twieg, R. L. Siemens and B. L. Farmer, "Structural Characterization of Semifluorinated Normal-Alkanes.2. Solid-Solid Transition Behavior," *Macromolecules* **19**(4), 1135-1143 (1986).
33. C. E. Williams, T. P. Russell, R. Jerome and J. Horion, "Morphological-Studies of Model Ionic Polymers," *ACS Symp. Ser.* **302**, 22-34 (1986).
34. C. E. Williams, T. P. Russell, R. Jerome and J. Horion, "Ionic Aggregation in Model Ionomers," *Macromolecules* **19**(11), 2877-2884 (1986).
35. A. F. Galambos, W. B. Stockton, J. T. Koberstein, A. Sen, R. A. Weiss and T. P. Russell, "Observation of Cluster Formation in an Ionomer," *Macromolecules* **20**(12), 3091-3094 (1987).
36. G. C. Gobbi, R. Silvestri, T. P. Russell, J. R. Lyerla and W. W. Fleming, "Intermolecular Polarization Transfer Study of Polymer Blend Compatibility," *J. Poly. Sci., Pt. C-Poly. Let.* **25**(2), 61-65 (1987).
37. H. Ito, T. P. Russell and G. D. Wignall, "Interactions in Mixtures of Poly(Ethylene Oxide) and Poly(Methyl Methacrylate)," *Macromolecules* **20**(9), 2213-2220 (1987).

38. G. Ronca and T. P. Russell, "Concentration Fluctuations of Polystyrene-Polybutadiene Blends," *Phys. Rev. B* **35**(16), 8566-8571 (1987).
39. T. P. Russell, "Highlights in Small Angle Scattering During 1987," *Physics Today*(January) (1987).
40. T. P. Russell and H. R. Brown, "X-Ray Studies on the Deformation of an Aromatic Polyimide," *J. Poly. Sci., Pt. B-Poly. Phys.* **25**(5), 1129-1148 (1987).
41. T. P. Russell, H. Ito and G. D. Wignall, "Scattering Studies on Mixtures of Poly(Ethyleneoxide) with Poly(Methylmethacrylate)," *Mats. Res. Soc. Symp.* **79**, 87 (1987).
42. M. A. Winnik, B. Williamson and T. P. Russell, "Small-Angle X-Ray-Scattering Studies of Polymer Colloids: Nonaqueous Dispersions of Poly(Isobutylene)-Stabilized Poly(Methyl Methacrylate) Particles," *Macromolecules* **20**(4), 899-901 (1987).
43. H. R. Brown, A. C. M. Yang, W. Volksen, E. J. Kramer and T. P. Russell, "Diffusion and Self-Adhesion of the Polyimide PMDA-ODA," *Polymer* **29**, 1807 (1988).
44. P. F. Green, T. P. Russell, R. Jerome and M. Granville, "Diffusion of Homopolymers into Nonequilibrium Block Copolymer Structures. 1. Molecular-Weight Dependence," *Macromolecules* **21**(11), 3266-3273 (1988).
45. J. L. Hedrick, B. Haidar, T. P. Russell and D. C. Hofer, "Synthesis and Properties of Segmented and Block Poly(Hydroxy Ether Siloxane) Copolymers," *Macromolecules* **21**(7), 1967-1977 (1988).
46. J. L. Hedrick, D. C. Hofer, T. P. Russell and B. Haidar, "Structural Modifications of Segmented Poly(Hydroxyether-Siloxane) Copolymers," *Polym. Bull.* **19**(6), 573-578 (1988).
47. T. P. Russell, H. Ito and G. D. Wignall, "Neutron and X-Ray-Scattering Studies on Semicrystalline Polymer Blends," *Macromolecules* **21**(6), 1703-1709 (1988).
48. T. P. Russell, R. Jerome, P. Charlier and M. Foucart, "The Microstructure of Block Copolymers Formed Via Ionic Interactions," *Macromolecules* **21**(6), 1709-1717 (1988).
49. T. P. Russell, A. Karim, A. Mansour and G. P. Felcher, "Specular Reflectivity of Neutrons by Thin Polymer Films," *Macromolecules* **21**(6), 1890-1893 (1988).
50. T. P. Russell, J. S. Lin, S. Spooner and G. D. Wignall, "Intercalibration of Small-Angle X-Ray and Neutron-Scattering Data," *J. Appl. Crystal.* **21**, 629-638 (1988).
51. S. H. Anastasiadis, T. P. Russell, S. K. Satija and C. F. Majkrzak, "Neutron Reflectivity Studies of the Surface-Induced Ordering of Diblock Copolymer Films," *Phys. Rev. Lett.* **62**(16), 1852-1855 (1989).
52. F. S. Bates, J. H. Rosedale, H. E. Bair and T. P. Russell, "Synthesis and Characterization of a Model Saturated-Hydrocarbon Diblock Copolymer," *Macromolecules* **22**(6), 2557-2564 (1989).
53. G. Coulon, T. P. Russell, V. R. Deline and P. F. Green, "Surface-Induced Orientation of Symmetric, Diblock Copolymers: A Secondary Ion Mass Spectrometry Study," *Macromolecules* **22**(6), 2581-2589 (1989).
54. E. Gattiglia and T. P. Russell, "Swelling Behavior of an Aromatic Polyimide," *J. Poly. Sci., Pt. B-Poly. Phys.* **27**, 2131-2144 (1989).
55. P. F. Green, T. M. Christensen, T. P. Russell and R. Jerome, "Surface Interaction in Solvent-Cast Polystyrene Poly(Methyl Methacrylate) Diblock Copolymers," *Macromolecules* **22**(5), 2189-2194 (1989).
56. P. F. Green, T. P. Russell, R. Jerome and M. Granville, "Temperature-Dependence of Tracer Diffusion of Homopolymers into Nonequilibrium Diblock Copolymer Structures," *Macromolecules* **22**(2), 908-913 (1989).

57. J. L. Hedrick, B. Haidar, T. P. Russell and D. C. Hofer, "Synthesis and Properties of Segmented Poly(Hydroxyethersiloxane)," *Makromol. Chem. Macromol. Symp.* **25**, 155-166 (1989).
58. J. L. Hedrick, J. W. Labadie, T. D. Palmer and T. P. Russell, "Synthesis of Imide-Aryl Ether Phenylquinoxaline Random Copolymers," *Polyimides: Materials, Chemical Characteristics*. C. Feger, M. M. Khojasteh and J. M. McGrath, Amsterdam, Elsevier Publishers, 61 (1989).
59. J. L. Hedrick, T. P. Russell, B. Haidar and A. C. M. Yang, "Structural Modifications in Hydroxy Ether Dimethyldiphenylsiloxane Copolymers," *Macromolecules* **22**(12), 4470-4477 (1989).
60. W. Jark, G. Comelli, T. P. Russell and J. Stohr, "Structural Studies of Langmuir-Blodgett Multilayers by Means of Soft X-Ray Diffraction," *Thin Solid Films* **170**(2), 309-319 (1989).
61. A. Karim, A. Mansour, G. P. Felcher and T. P. Russell, "A Neutron Reflection Test of the Reptation Time," *Physica B* **156**, 430-433 (1989).
62. H. D. Keith, F. J. Padden and T. P. Russell, "Morphological-Changes in Polyesters and Polyamides Induced by Blending with Small Concentrations of Polymer Diluents," *Macromolecules* **22**(2), 666-675 (1989).
63. J. N. Owens, I. S. Gancarz, J. T. Koberstein and T. P. Russell, "Investigation of the Microphase Separation Transition in Low-Molecular Weight Diblock Copolymers," *Macromolecules* **22**(8), 3380-3387 (1989).
64. J. N. Owens, I. S. Gancarz, J. T. Koberstein and T. P. Russell, "Order-Disorder Transitions in Mixtures of Homopolymers with Diblock Copolymers," *Macromolecules* **22**(8), 3388-3394 (1989).
65. T. P. Russell, W. Jark, G. Comelli and J. Stohr, "Reflectivity of Soft X-Rays by Polymer Mixtures," *Mats. Res. Soc. Symp. Proc.* **143**, 265 (1989).
66. T. P. Russell, "Using Synchrotron Radiation to Study Polymers," *Yearbook of Science and Technology*, 330 (1989).
67. T. P. Russell, G. Coulon, V. R. Deline and D. C. Miller, "Characteristics of the Surface-Induced Orientation for Symmetric Diblock PS/PMMA Copolymers," *Macromolecules* **22**(12), 4600-4606 (1989).
68. S. Tead, E. J. Kramer, T. P. Russell and W. Volksen, "Solvent and Curing Effects on Diffusion at Polyimide Interfaces," *Mats. Res. Soc. Symp. Ser.* **154**, 283 (1989).
69. C. Viney, T. P. Russell, L. E. Depero and R. J. Twieg, "Transitions to Liquid-Crystalline Phases in a Semifluorinated Alkane," *Mol. Cryst. Liq. Cryst.* **168**, 83-92 (1989).
70. C. Viney, R. J. Twieg, T. P. Russell and L. E. Depero, "The Structural Basis of Transitions between Highly Ordered Smectic Phases in Semifluorinated Alkanes," *Liquid Crystals* **5**(6), 1783-1788 (1989).
71. V. S. Wakharkar, G. Coulon, V. R. Deline and T. P. Russell, "The Behavior of Thin Films of Diblock Copolymers," *MRS Bull.* **14**, 33 (1989).
72. S. H. Anastasiadis, T. P. Russell, S. K. Satija and C. F. Majkrzak, "The Morphology of Symmetric Diblock Copolymers as Revealed by Neutron Reflectivity," *J. Chem. Phys.* **92**(9), 5677-5691 (1990).
73. S. H. Anastasiadis, S. K. Satija, C. F. Majkrzak and T. P. Russell, "Temperature Dependence of the Morphology of Thin Diblock Copolymer Films as Revealed by Neutron Reflectivity," *MRS Symp.* **166**, 145 (1990).
74. G. Coulon, D. Ausserre and T. P. Russell, "Interference Microscopy on Thin Diblock Copolymer Films," *J. Phys.* **51**(8), 777-786 (1990).
75. G. Coulon, B. Collin, D. Ausserre, D. Chatenay and T. P. Russell, "Islands and Holes on the Free-Surface

- of Thin Diblock Copolymer Films. 1. Characteristics of Formation and Growth," *J. Phys.* **51**(24), 2801-2811 (1990).
76. V. R. Deline, G. Coulon, D. C. Miller and T. P. Russell, "SIMS and Copolymer Ordering," *SIMS VII*, 359 (1990).
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