

Biographical Sketch

Dale Teeters

Department of Chemistry and Biochemistry

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(i) Professional Preparation

Southwestern State Oklahoma State Univ., Chemistry, B.S. Magna Cum Laude, 1975.

University of Oklahoma, Physical Chemistry, Ph.D., 1981.

(ii) Appointments:

Camille and Henry Dreyfus Fellow, 2000

Chairman, Department of Chemistry, The University of Tulsa, 1996-present

Professor of Chemistry, The University of Tulsa, 1996-present

Associate Professor of Chemistry, The University of Tulsa, 1987-96

Assistant Professor of Chemistry, The University of Tulsa, 1983-87

Senior Research Chemist, Dow Chemical, Freeport, Texas, 1981-82.

(iii) Publications (over 40 publications)

Most Closely Related to Nanotechnology

D. W. Iacoe, W. T. Potter, D. Teeters, "Simple Generation of C₆₀ (Buckminsterfullerene) in Undergraduate Research Laboratories," *J. Chem. Ed.*, **69**(8), 663 (1992)

D. Teeters, R. G. Neuman, and B. D. Tate, "The Concentration Behavior of Lithium Triflate at the Surface of Polymer Electrolyte Materials," *Solid State Ionics*, **85**, 239 (1996).

R. N. Mason, M. Smith, T. Andrews, and D. Teeters, "Using Self-Assembled Monolayers to Inhibit Passivation at the Lithium Electrode/Polymer Electrolyte Interface," *Solid State Ionics*, **118**, 129 (1999).

Y. Chen, W. T. Ford, N. F. Materer, D. Teeters, "Facile One-Step Conversion of Polymer Colloidal Crystals to Ordered Porous Polymer Nets," *Journal of the American Chemical Society*, **122**, 10472 (2000).

M. Le Granvelet-Mancini, L. Honeycutt, and D. Teeters, "Characterization of Self-Assembled Molecular Layers at the Polymer Electrolyte/Lithium Electrode Interface," *Electorchimica Acta*, **45**, 1491 (2000).

V. D. Land, T. M. Harris, and D. C. Teeters, "Processing of Low-density Silica Gel by Critical Point Drying or Ambient Pressure Drying," *J. Non-Cryst. Solids*, **283**, 11(2001).

M. Le Granvelet-Mancini, L. Honeycutt, and D. Teeters, "Characterization of Self-Assembled Molecular Layers at the Polymer Electrolyte/Lithium Electrode Interface," *Electorchimica Acta*, **45**, 1491 (2000).

M. Le Granvalet-Mancini, T. Hanrath, and D. Teeters, "Characterization of the Passivation Layer at the Polymer Electrolyte/Lithium Electrode Interface," *Solid State Ionics*, **135/1-4**, 283 (2000).

V. D. Land, T. M. Harris, and D. C. Teeters, "Processing of Low-density Silica Gel by Critical Point Drying or Ambient Pressure Drying," *J. Non-Cryst. Solids*, **283**, 11(2001).

M. Le Granvalet-Mancinia and D. Teeters, "The Effects of Chemical Composition of Adsorbed Molecular Layers on Lithium Electrode/Polymer Electrolyte Interface Stabilization," *J. Power Sources*, **97-98**, 624 (2001).

Y. Chem, W. T. Ford, N. F. Materer, D. Teeters, "Conversion of Colloid Crystals to Polymer Nets: Turning Latex Particles Inside Out, *Chemistry of Materials*, **13**, 2697 (2001).
Anthony Layson, Shailesh Gadad, Dale Teeters, "Resistance Measurements at the Nanoscale: Scanning Probe AC Impedance Spectroscopy," *Electrochimica Acta*, in press.

Seshumani Vorrey and Dale Teeters, "Study of the Ion Conduction of Polymer Electrolytes Confined in Micro and Nanopores," *Electrochimica Acta*, in press.

Christina Dewan and Dale Teeters, "Vanadia Xerogel Nanocathodes Used in Lithium Microbatteries," *Journal of Power Sources*, in press.

(iv) Current Funding

Office of Naval Research, "Development and Characterizations of NanoBattery Systems"
NASA, "Development of Technology Addressing Power Generation and Storage Challenges Faced by NASA."

NSF, "Oklahoma NanoNet Center"

(v) Synergistic Activities

Principal Investigator, Funded NASA EPSCoR grant, "Development of Technology Addressing Power Generation and Storage Challenges Faced by NASA." 2001. Responsible for coordination of efforts of co-principal investigators from The University of Tulsa, The University of Oklahoma, and Oklahoma State University.

Member of Steering Committee for NSF EPSCoR Oklahoma Center for Photonic and Electronic Materials and Devices, 1995-present. Committee facilitate infrastructure development in the area of Potonic and electronic materials at The University of Oklahoma, Oklahoma State University, and The University of Oklahoma through equipment procurement, funding of graduate students, and funding of Postdoctoral Fellows.

Member of Steering Committee for NSF EPSCoR Oklahoma NanoNet Center, 2002-present. Committee facilitate infrastructure development in the area of Nanotechnology at The University of Oklahoma, Oklahoma State University, and The University of Oklahoma through equipment procurement, funding of graduate students, and funding of Postdoctoral Fellows.

General Program Chair 53rd Southwest Regional Meeting of the American Chemical Society, 1997.

Co-Organizer Symposium on "Solid State Ionic Materials," 53rd Southwest Regional Meeting of the American Chemical Society, 1997

(vi) Collaborators and Other Affiliations

(a) Collaborators

M. A. Andersen, BP Amoco Petroleum Co.

W. Ford, Oklahoma State

F. Growcock, BP Amoco Petroleum Co.

B. Howard, Tulsa

Fred Ridell, Kimberly-Clark Co.

Maccor Inc, Tulsa OK

R. Doezema, Oklahoma

R. Frech, Oklahoma

Thomas Harris, Tulsa

W. T. Potter, Tulsa

J. F. Scamehorn, Oklahoma

Eagle-Picher, Joplin

(b)Current research group: 5 Master's students, 1 Ph.D. Student, 1 Postgraduate-Scholar, 1 Research Associate.