

James E. Smay
Curriculum Vitae

Oklahoma State University
School of Chemical Engineering
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(i) Professional Preparation

Oklahoma State University, Stillwater, OK	Mechanical Engineering	B.S., 1996
University of Illinois, Urbana, IL	Materials Science and Engineering	Ph.D., 2002

(ii) Appointments

2002 - present	Assistant Professor School of Chemical Engineering Oklahoma State University, Stillwater, OK
1999 - 2002	Fulltime Graduate Student Intern Advanced Materials Lab Sandia National Laboratories, Albuquerque, NM
1996 – 1999	Research Assistant University of Illinois, Urbana, IL Department of Materials Science and Engineering
1995 – 1996	Undergraduate Research Assistant Department of Mechanical and Aerospace Engineering Oklahoma State University
1993 – 1996	Cooperative Educational Intern Puralator Products Inc., Tulsa, OK

(iii) Publications

Tohver, V., Smay, J.E., Braem, A., Braun, P.V., Lewis, J.A., “Nanoparticle Halos: A New Colloidal Stabilization Mechanism”, *Proceedings of the National Academy of Sciences*, 98 (16), 8950-8954, 2001 (featured cover article)

Tuttle, B.A., Smay, J.E., Cesarano III, J., Lewis, J.A., “Robocast Pb(Zr_{0.95}Ti_{0.05})O₃ Ceramic Monoliths and Composites”, *Journal of the American Ceramic Society*, 84 (4), 872-874, 2001

Smay, J.E., Lewis, J.A., “Structure and Property Evolution of Aqueous Lead Zirconate Titanate Thick Films”, *Journal of the American Ceramic Society*, 84 (11), 2495-2500, 2001

Smay, J.E., Cesarano III, J., Lin, S.Y., Stuecker, J.N., Lewis, J.A., "Robocasting of photonic band gap structures," *Solid Freeform Fabrication Symposium Proceedings*, 175-178, 2001

Smay, J.E., Cesarano III, J., Lewis, J.A., "Colloidal Inks for Directed Assembly of 3-D Periodic Structures", *Langmuir*, 18(14), 5429-37, 2002 (featured cover article)

Smay, J.E., Tuttle, B.A., Cesarano III, J., Lewis, J. A., "Piezoelectric Properties of Periodic 3-X Type PZT-Polymer Composites", *Journal of Applied Physics*, 92(10), 6119-6127, 2002

Smay, J.E., Gratson, G.M., Shepherd, R.F., Lewis, J.A., "Directed Colloidal Assembly of Mesoscale Periodic Structures", *Advanced Materials*, 14(18), 1279-1283, 2002

(iv) Synergistic Activities

Peer Reviews - NSF – MRI/IMR review panel, NASA, Journal of the American Ceramic Society, Journal of Materials Research, Materials Research Society.

Teaching – ENSC 3313 Materials Science, CHE 4002 & 4112 Unit Operations Laboratory

Undergraduate Research –supported two undergraduate research assistants

(v) Collaborators and Other Affiliations

P.V. Braun, U. of Illinois
J. Cesarano III, Sandia National Labs
K.M. Gasem, Oklahoma State
G.M. Gratson, U. of Illinois
N. Kotov, Oklahoma State
J.A. Lewis, U. of Illinois
S.Y. Lin, Sandia National Labs
S. Madhally, Oklahoma State

D.A. Payne, U. of Illinois
T.W. Scofield, Sandia National Labs
R.F. Shephers, U. of Illinois
J.N. Stuecker, Sandia National Labs
B.A. Tuttle, Sandia National Labs
J.A. Voigt, Sandia National Labs
C.F. Zukoski, U. of Illinois

Graduate Advisor – Jennifer A. Lewis, University of Illinois

Ph.D. Students:

Jian Xu (Fall 2002 – present)
Sarosh Nadkarni (Fall 2002 – present)
Kevin Barber (Summer 2002 – present)

Ph.D. Committee

S.S. Godavarthy