

## **CURRICULUM VITAE**

Diandra L. Leslie-Pelecky  
Nebraska Center for Materials and Nanoscience  
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### **EDUCATION**

- 1991 Ph.D., Michigan State University  
*Thesis Topic:* Electron Spin Resonance in Multilayered CuMn/Cu Spin Glasses *Advisor:*  
Jerry A. Cowen
- 1986 B. S. in Physics, Magna Cum Laude  
B. A. in Philosophy, University of North Texas

### **PROFESSIONAL EXPERIENCE**

- 5/2008-present Professor, Department of Physics, The University of Texas at Dallas
- 8/2002-5/2008 Associate Professor, Department of Physics & Astronomy and Nebraska Center for Materials and Nanoscience, University of Nebraska
- 8/96- 7/2002 Assistant Professor, Department of Physics & Astronomy and Center for Materials Research & Analysis, University of Nebraska  
Graduate Faculty Member (1997-present)  
Graduate Faculty Fellow (1997-present)
- 6/01 – present Project Director, Project Fulcrum GK-12 Program, University of Nebraska
- 9/95 – 12/99 Director, ScienceWorks outreach project, University of Nebraska
- 1/94 - 1/95 Visiting Assistant Professor. Center for Materials Research and Analysis and Department of Physics and Astronomy, University of Nebraska
- 1/95- 7/96 Research Assistant Professor. Center for Materials Research and Analysis and Department of Physics and Astronomy, University of Nebraska
- 9/94 – 9/01 Director, Research Experiences for Undergraduates in Nanostructured Materials, University of Nebraska
- 9/91 - 12/93 Postdoctoral Researcher, Department of Physics and Astronomy, Michigan State University (Norman O. Birge, Postdoctoral Supervisor)
- 9/92 - 9/93 College of Natural Sciences Postdoctoral Fellow, MSU
- 9/91 – 12/91 Instructor, Department of Physics and Astronomy, Michigan State University
- 9/93 – 12/93

### **AWARDS AND HONORS**

- 2005 Trophy Award (Best paper in session), MRS Session PP Fall 2005 Meeting
- 2005 Blue Ribbon Award (Outstanding paper), MRS Session PP Fall 2005 Meeting
- 1998 Best Poster Award, Fourth International Conference on Nanostructured Materials, NANO98, Stockholm, Sweden
- 1995 Chancellor's Speaker's Bureau, University of Nebraska
- 1992 College of Natural Science Fellowship, Michigan State University
- 1992 Meggers Foundation Award (for Science Theatre Activities)
- 1992 Michigan State University Department of Physics and Astronomy Outreach Award (with Science Theatre)
- 1990-91 Rockwell International Graduate Fellowship
- 1986-87 Texas Instruments Graduate Fellowship
- 1986 Outstanding Senior Physics Major, University of North Texas

## **RECENT PROFESSIONAL ACTIVITIES**

|                |   |
|----------------|---|
| 2007           | Member of Planning Committee for National Science Foundation Workshop on Materials Science and Engineering Education  |
| 2007           | Chair, Conference on Communicating Science, Math and Engineering to Broader Audiences   |
| 2007-present   | Member, UNL Office of the Vice Chancellor for Research's Research Advisory Board  |
| 2006-present   | Editorial Board, Journal of Biomedical Nanotechnology   |
| 2005-2007      | National Research Council, Board of Physics & Astronomy Panel on Assessment of the Impact of the NSF's Materials Research Science & Engineering Centers Program |
| 2005           | Program Committee, InterMag   |
| 2005           | Program Committee, MMM Conference   |
| 2005           | Organizer, NSF Broader Impacts Toolbox Workshop   |
| 2005           | New Faculty Workshop Alumni Workshop organizer for March APS Meeting  |
| 2004 - present | Editorial Board, IEEE Transactions in Magnetism   |
| 2004           | APS/GMAG (Topical Group on Magnetism) Nominating Committee  |
| 2004           | Program Chair, Mini-symposium on Biomedical Applications of Nanomagnetic Materials  |
| 2004           | Secretary, Steering Committee for 2004 Magnetism and Magnetic Materials Conference  |
| 2003           | Editor, International Conference on Magnetism (Boston, MA)  |
| 2002           | Secretary, Steering Committee for 2002 Magnetism and Magnetic Materials Conference  |
| 1999 – 2002    | APS Representative to the AIP Advisory Committee on Career Services   |
| 2001           | Secretary, Steering Committee for 2001 Magnetism and Magnetic Materials Conference  |
| 2000           | Co-Chair, Conference on "The Role of Physics Departments in Preparing K-12 Teachers",   |
| 1997 - 2000    | Committee on Careers and Professional Development, American Physical Society (Chair 2000)   |
| 1998           | Co-Chair of the Local Organizing Committee, 61st Annual Summer Meeting of the American Association of Physics Teachers (UNL)                                    |
| 1998           | Member, Steering Committee for "Building Undergraduate Physics Programs for the 21st Century" NSF/AAPT/APS/PKAL   |
| 1997           | Local Organizing Chair, Project Kaleidoscope Workshop: "Undergraduate Physics Curriculum: What Works and What Needs to be Done" (UNL)                           |
| 1997           | Chair, American Physical Society Task Force on Career and Professional Development  |
| 1995-1997      | Committee on Professional Concerns, American Association of Physics Teachers (Chair, 1996)  |
| 1994-1997      | Co-Editor, Forum on Education Newsletter, American Physical Society   |
| 1991-1992      | Founder and Director, Science Theatre: NSF-funded physics outreach program  |

## **BOOKS**

*The Physics of NASCAR*<sup>®</sup>, Diandra Leslie-Pelecky (Dutton, 2008)

*Biomedical Applications of Nanotechnology*, edited by V.D. Labhasetwar and D.L. Leslie-Pelecky (Wiley, New York, 2007)

## **BOOK CHAPTERS**

*Nanotoxicology* by D.L. Leslie-Pelecky in *Biomedical Applications of Nanotechnology* edited by V.D. Labhasetwar and D.L. Leslie-Pelecky (Wiley, New York, 2007)

*Nanobiomagnetism* by D.L. Leslie-Pelecky, V.D. Labhasetwar and R.H. Kraus, Jr. in *Advanced Magnetic Nanostructures*, edited by D.J. Sellmyer and R.S. Skomski, Kluwer, New York (2007)

<http://digitalcommons.unl.edu/mrsecfacpubs/31>

## **REFEREED PUBLICATIONS**

### ***About to be Submitted***

*Correlating Magnetism and Disorder in Melt-Spun Gd:Gd<sub>100-x</sub>Fe<sub>x</sub>*, D. Schmitter, G. Shelburne, P.M. Shand, J.G. Bohnet, J. Goertzen, Daniel Haskel and D.L. Leslie-Pelecky, to be submitted to Physical Review B.

### ***Submitted***

56) *Magnetic Behavior of Melt-Spun Gadolinium*, P.M. Shand, J.G. Bohnet, J. Goertzen, D. Schmitter, G. Shelburne, and D.L. Leslie-Pelecky, submitted to Physical Review B.

55) *SQUID-Based Bioassay with Magnetic Particles in Flow*, M.A. Espy, C. Carr, J.H. Sandin, S.G. Daniels, A.N. Matlachov, S.W. Graves, M.D. Ward, R. H. Kraus, Jr., S. Fritz and Diandra L. Leslie-Pelecky, Journal of Physics: Conference Series from the European Conference on Applied Superconductivity.

### ***Accepted***

54) *Biodistribution, Clearance, and Biocompatibility of Iron-Oxide Magnetic Nanoparticles in Rats*, Tapan K. Jain, Maram K. Reddy, M.A. Morales, D. L. Leslie-Pelecky and Vinod Labhasetwar, accepted to Molecular Pharmaceutics.

53) *Examining the Cognitive Processes Used by Adolescent Girls and Women Scientists in Identifying Science Role Models: A Feminist Approach*, Gayle A. Buck, Vicki L. Plano Clark, Diandra L. Leslie-Pelecky, Patricia Cerda and Yun Lu, accepted to Science Education (2007).

### ***Published***

52) *Analysis of the Ferromagnetic Transition in Melt-Spun Gadolinium Nanocrystals*, J.G. Bohnet, P.M. Shand, J. Goertzen, J.E. Shield, D. Schmitter, G. Shelburne, and D.L. Leslie-Pelecky, American Journal of Undergraduate Research **6**(2) 19-26 (2007)

51) *Learning How to Make Inquiry into Electricity and Magnetism Discernible to Middle Level Teachers*, Gayle Buck, Margaret Macintyre Latta, and Diandra Leslie-Pelecky, Journal of Science Teacher Education **18** (3), 377 (2007) [doi 10.1007/s10972-007-9053-8] [digitalcommons.unl.edu/teachlearnfacpub/25/](http://digitalcommons.unl.edu/teachlearnfacpub/25/)

50) *Surface Anisotropy and Magnetic Freezing of MnO Nanoparticles*, M.A. Morales, R. Skomski, S. Fritz, G. Shelburne, J.E. Shield, Ming Yin, Stephen O'Brien, and D.L. Leslie-Pelecky, Phys. Rev. B **75**, 134423 (2007) [doi: 10.1103/PhysRevB.75.134423] [digitalcommons.unl.edu/physicslesliepelecky/19/](http://digitalcommons.unl.edu/physicslesliepelecky/19/)

49) *Terms of Inquiry*, Margaret Macintyre Latta, Gayle Buck, Diandra Leslie-Pelecky, and Lora Carpenter, Teachers and Teaching: Theory and Practice **13**(1), 21-41 (2007) [digitalcommons.unl.edu/teachlearnfacpub/35/](http://digitalcommons.unl.edu/teachlearnfacpub/35/)

48) *Self-Definition of Women Experiencing a Non-Traditional Graduate Fellowship Program*, Gayle A. Buck, Diandra L. Leslie-Pelecky, Yun Lu, Vicki L. Plano Clark, John W. Creswell, Journal of Research in Science Teaching, **43**, 852-873 (2006) [digitalcommons.unl.edu/physicslesliepelecky/1/](http://digitalcommons.unl.edu/physicslesliepelecky/1/)

47) *Research Experiences for Teachers in Materials Science: A Case Study*, Michelle A. Strand, Steve Wignall, and Diandra L. Leslie-Pelecky, Journal of Materials Education **27** (3-6) 222-226 (2005)

46) *Broadening Middle-School Students' Images of Science and Scientists*, Diandra L. Leslie-Pelecky, Gayle A. Buck, and Angela Zabawa, Journal of Materials Education **27** (3-6) 173-178 (2005)

45) *The Stability and Oxidation Resistance of Iron- and Cobalt-Based Magnetic Nanoparticle Fluids Fabricated by Inert-Gas Condensation*, Nguyen H. Hai, Raymond Lemoine, Shaina Remboldt, Michelle A. Strand, Steve Wignall, Jeffrey E. Shield, and Diandra Leslie-Pelecky, in *Nanoscale Materials Science in Biology and*

- Medicine*, edited by C. T. Laurencin and E. A. Botchwey (Mater. Res. Soc. Symp. Proc. 845 Warrendale, PA, 2005) p. AA5.44. [digitalcommons.unl.edu/physicslesliepelecky/18/](http://digitalcommons.unl.edu/physicslesliepelecky/18/)
- 44) *Magnetic Studies of Iron-Oxide Nanoparticles Coated with Oleic Acid and Pluronic<sup>®</sup> Block Copolymer*, M.A. Morales, Tapan Kumar Jain, V. Labhasetwar, D. L. Leslie-Pelecky, *J. Appl. Phys.* **97**, 10Q905 (2005). **Selected for the Virtual Journal of Biological Physics Research** [digitalcommons.unl.edu/physicslesliepelecky/4/](http://digitalcommons.unl.edu/physicslesliepelecky/4/)
  - 43) *Research Experiences for Teachers in Materials Science: A Case Study*, M. A. Strand, S. Wignall, and D. L. Leslie-Pelecky, in *Communicating Materials Science-Education for the 21st Century*, edited by S. Baker, F. Goodchild, W. Crone and S. Rosevear (Mater. Res. Soc. Symp. Proc. 861E, Warrendale, PA, 2005) p. PP3.4. (electronic publication) – **a MRS Trophy Award paper.**
  - 42) *Broadening Middle-School Students' Images of Science and Scientists*, D. L. Leslie-Pelecky, G. A. Buck, and A. Zabawa, in *Communicating Materials Science-Education for the 21st Century*, edited by S. Baker, F. Goodchild, W. Crone and S. Rosevear (Mater. Res. Soc. Symp. Proc. 861E, Warrendale, PA, 2005) p. PP5.5. (electronic publication) – **a MRS Blue-Ribbon paper.**
  - 41) *Iron Oxide Nanoparticles for Sustained Delivery of Anticancer Agents*, Tapan K. Jain, M.A. Morales, Sanjeeb K. Sahoo, D. L. Leslie-Pelecky, and Vinod Labhasetwar, *Molecular Pharmaceutics* **2**, 194-205 (2005); doi: 10.1021/mp0500014 – **featured on the National Cancer Institute's Nanotech News website.** [digitalcommons.unl.edu/physicslesliepelecky/2/](http://digitalcommons.unl.edu/physicslesliepelecky/2/)
  - 40) *Iron- and Cobalt-Based Magnetic Fluids Produced By Inert-Gas Condensation*, Nguyen H. Hai, Raymond Lemoine, Shaina Rembolt, Michelle Strand, Jeffrey E. Shield, David Schmitter, Robert H. Kraus, Jr., Michelle Espy, Diandra L. Leslie-Pelecky, *J. Magn. Magn. Mater.* **293**, 75-79 (2005); doi:10.1016/j.jmmm.2005.01.046
  - 39) *Spin Glass or Random Anisotropy?: The Origin of Magnetically Glassy Behavior in Nanostructured GdAl<sub>2</sub>*, P. M. Shand, C. C. Stark, D. Williams, M. A. Morales, T. M. Pekarek, and D. L. Leslie-Pelecky, *J. Appl. Phys.* **97**, 10J505 (2005); doi:10.1063/1.1853003
  - 38) *Proton Beam Irradiation Effects on Magnetic Nanocomposites*, M. Chipara, M.J. Zaleski, D. Hui, D.L. Pelecky, S. Balascuta, in *Radiation Effects and Ion-Beam Processing of Materials*, edited by Lu-Min Wang, Rainer Fromknecht, Lance L. Snead, Daniel F. Downey, Heishichiro Takahashi (Mater. Res. Soc. Symp. Proc. 792, Warrendale, PA, 2004) p R3.25.
  - 37) *Disorder-Induced Depression of the Curie Temperature in Mechanically Milled GdAl<sub>2</sub>*, M.A. Morales, D.S. Williams, P.M. Shand, C. Stark, T.M. Pekarek, L.P. Yue, V. Petkov, and D.L. Leslie-Pelecky, *Phys. Rev. B* **70**, 184407 (2004) <http://digitalcommons.unl.edu/mrsecfacpubs/11>
  - 36) *On styrene-butadiene-styrene-barium ferrite nanocomposites*, M. Chipara, D. Hui, J. Sankar, D. Leslie-Pelecky, A. Bender, L. Yue, R. Skomski, D.J. Sellmyer, *Composites: Part B*, **35**(3), 235-243 (2004)
  - 35) *Solid-state solubility influences encapsulation and release of hydrophobic drugs from PLGA/PLA nanoparticles*, Jayanth Panyam, Deborah Williams, Alekha Dash, Diandra Leslie-Pelecky, Vinod Labhasetwar, *J. Pharm. Sci.* **93**(7), 1804-1814 (2004)
  - 34) *Magnetic transitions in disordered GdAl<sub>2</sub>*, D.S. Williams, P.M. Shand, T.M. Pekarek, R. Skomski, V. Petkov and D.L. Leslie-Pelecky, *Phys. Rev. B*, **68**, 214404 (2003) <http://digitalcommons.unl.edu/mrsecfacpubs/14>
  - 33) *Curie-Weiss Analysis of Ferromagnetic and Glassy Transitions in Nanostructured GdAl<sub>2</sub>*, D. Williams, P. M. Shand, C. Stark, T. Pekarek, R. Brown, Lanping Yue, D. L. Leslie-Pelecky, *J. Appl. Phys.* **93**, 6525-6527 (2003)
  - 32) *Coercivity of Disordered Nanostructures*, R. Skomski, D. Leslie-Pelecky, R.D. Kirby, A. Kashyap, D.J. Sellmyer; *Scripta Mater.* **48**, 857-862 (2003)
  - 31) *Bringing Female Scientists into the Elementary Classroom: Confronting the Strength of Elementary Students' Stereotypical Images of Scientists*, G.A. Buck, D.L. Leslie-Pelecky and S. Kirby; *Journal of Elementary Science Education*, **14**(2), 1-10 (2002). (<http://digitalcommons.unl.edu/teachlearnfacpub/15>)
  - 30) *High-Temperature Magnetic Properties of SmCo<sub>6.7-x</sub>Cu<sub>0.6</sub>Ti<sub>x</sub> magnets*, I.A. Al-Omari, J. Shobaki, R. Skomski, D.L. Leslie-Pelecky, J. Zhou, D.J. Sellmyer; *Physica B*, **321** (1-4), 107-111 (2002)
  - 29) *The Role of Disorder in the Magnetic Properties of Mechanically Milled Nanostructured Alloys*, Diandra L. Leslie-Pelecky, Elaine M. Kirkpatrick, Tom Pekarek, Richard L. Schalek, Paul Shand, Deborah S. Williams, and Lanping Yue; in *Applications of Ferromagnetic and Optical Materials, Storage and Magneto-electronics*, edited by H. J. Borg, K. Bussmann, W. F. Egelhoff, L. Hesselink, S. A. Majetich, E. S. Murdock, B. J. H. Stadler, M. Vazquez, M. Wuttig and J. Q. Xiao, (Mater. Res. Soc. Symp. Proc. 674, Warrendale, PA, 2002) p U5.1

- 28) *Coexistence of Ferromagnetic and Glassy States in Mechanically Milled GdAl<sub>2</sub>*, C. Stark, P.M. Shand, T.M. Pekarek, D. Williams, R. Brown, L. Yue, D.L. Leslie-Pelecky, American Journal of Undergraduate Research, **1**, 27 (2002)
- 27) *High-Temperature Properties of Mechanically Alloyed SmCo<sub>5</sub> and YCo<sub>5</sub>*, I.A. Al-Omari, R. Skomski, R. A. Thomas, D.L. Leslie-Pelecky and D.J. Sellmyer, IEEE Trans. Magn. **37**, 2534-2536 (2001)
- 26) *Cooperative Freezing in Spin Glasses and Magnetic Nanostructures*, Ralph Skomski and D. Leslie-Pelecky, J. Appl. Phys. **89**, 7036-7038 (2001)
- 25) *Grain Size Effects on the Magnetic Properties of Chemically Synthesized Ni:Ni<sub>3</sub>C Nanocomposites*, M. J. Bonder, E.M. Kirkpatrick, T. Martin, S.-J. Kim, R.D. Rieke and Diandra L. Leslie-Pelecky; J. Magn. Mater. **222**, 70-78 (2001)
- 24) *Magnetic Properties of Disordered Ni<sub>3</sub>C*, Lanping Yue, R. Sabirianov, E.M. Kirkpatrick, Diandra L. Leslie-Pelecky; Phys. Rev. B **62**, 8969-8975 (2000).
- 23) *Interactive Worksheets in Large Introductory Physics Courses*, Diandra L. Leslie-Pelecky; Phys. Teach. **38**, 165-167 (2000).
- 22) *Structural and Magnetic Properties of Mechanically Milled SmCo<sub>5</sub>:C*, E.M. Kirkpatrick and Diandra L. Leslie-Pelecky; J. Appl. Phys. **87**, 6734-6736 (2000).
- 21) *ScienceWorks: A University-Based Science Outreach Group*, Rochelle Payne Ondracek and Diandra Leslie-Pelecky; Proceedings of the American Society for Engineering Education National Conference, Charlotte NC (1999). <http://www.asee.org/acPapers/99conf452.PDF>; <http://digitalcommons.unl.edu/physicslesliepelecky/15>
- 20) *Magnetic and Structural Properties of Chemically Synthesized Mg-Co Alloys*, E.M. Kirkpatrick, Diandra L. Leslie-Pelecky, S.-H. Kim and Reuben D. Rieke; J. Appl. Phys. **85**, 5375-5377 (1999).
- 19) *Room-Temperature Ageing Effects on the Magnetic Properties of Mechanically Milled SmCo*, Diandra L. Leslie-Pelecky, E.M. Kirkpatrick and R.L. Schalek; Nanostruct. Mater. **12**, 887-890 (1999).
- 18) *Effect of Disorder on the Magnetic Properties of SmCo<sub>5</sub>*, Diandra L. Leslie-Pelecky and Richard L. Schalek; Phys. Rev. B **59**, 457-462 (1999).
- 17) *Using High-Temperature Chemical Synthesis to Produce Metastable Nanostructured Cobalt*, Diandra L. Leslie-Pelecky, M. Bonder, T. Martin, E.M. Kirkpatrick, Yi Liu, X.Q. Zhang, S.-H. Kim and Reuben D. Rieke; Chem. Mater. **10**, 3732-3736 (1998).
- 16) *Chemical Synthesis of Nanostructured Cobalt at Elevated Temperatures*, Diandra L. Leslie-Pelecky, M. Bonder, T. Martin, E.M. Kirkpatrick, X.Q. Zhang, S.-H. Kim and Reuben D. Rieke; IEEE Trans. Magn. **34**, 1018-1020 (1998).
- 15) *Structural Properties of Chemically Synthesized Nanostructured Nickel and Ni<sub>3</sub>C:Ni Nanocomposites*, Diandra L. Leslie-Pelecky, X.Q. Zhang, S.H. Kim, M. Bonder and Reuben D. Rieke; Chem. Mater. **13**(1) 164-171 (1998).
- 14) *Magnetic Properties of Nanostructured Materials*, Diandra L. Leslie-Pelecky and Reuben D. Rieke (review paper); Chemistry of Materials **8**(8), 1770-1783 (1996).
- 13) *Self-Stabilized Magnetic Colloids: Ultrafine Co Particles in Polymers*, Diandra L. Leslie-Pelecky, X.Q. Zhang and R.D. Rieke; J. Appl. Phys. **79**, 5312-5314 (1996).
- 12) *Tailoring of the Magnetic Properties of SmCo<sub>5</sub>:NbCr<sub>2</sub> Nanocomposites Using Mechanical Alloying*, Richard L. Schalek, Diandra L. Leslie-Pelecky, John Knight, D.J. Sellmyer and Steven C. Axtell; IEEE Trans. Mag. **31**, 3772-3774 (1995).
- 11) *Dielectric Measurement of the Model Glass Transition in Orientationally Disordered Cyclo-Octanol*, Diandra L. Leslie-Pelecky and Norman O. Birge, Phys. Rev. B **50**, 13250-13258, (1994).
- 10) *Comparison of the Electron Spin Resonance Linewidth in Multilayered CuMn Spin Glasses with Insulating vs. Conducting Interlayers*, Diandra L. Leslie-Pelecky, F. VanWijland, C.N. Hoff, J.A. Cowen, A. Gavrin and C.-L. Chien; J. Appl. Phys. **75**, 6489-6491, (1994).
- 9) *Universal Scaling of the Relaxation Near a Model Glass Transition*, Diandra L. Leslie-Pelecky and Norman O. Birge; Phys. Rev. Lett. **72**, 1232-1235 (1994).
- 8) *The Electron Spin Resonance Linewidth of Multilayered CuMn/Cu Spin Glasses: Residual Width and Thermal Broadening Coefficient*, D.L. Leslie-Pelecky and J.A. Cowen, Phys. Rev. B **48**, 7158-7166 (1993).
- 7) *Critical Behavior of the Electron Spin Resonance Linewidth in Multilayered CuMn Spin Glasses*, D.L. Leslie-Pelecky and J.A. Cowen; Phys. Rev. B **46**, 9254-9257 (1992).

- 6) *The Transition 'Back' from Two to Three Dimensions*, R. Stubi, D. L. Leslie-Pelecky, and J.A. Cowen; *J. Appl. Phys.* **67**, 5970-5972 (1990).
- 5) *Dimensionality Crossover in CuMn Spin-Glass Films*, P. Granberg, P. Nordblad, P. Svedlindh, L. Lundgren, R. Stubi, G.G. Kenning, D.L. Leslie-Pelecky, J. Bass and J.A. Cowen; *J. Appl. Phys.* **67**, 5252-5254 (1990). -
- 4) *2D and 3D Spin Glass Dynamics in Thin Cu(Mn) Films*, J. Mattson, P. Granberg, P. Nordblad, L. Lundgren, R. Stubi, D. Leslie-Pelecky, J. Bass and J. Cowen; *Physica B* **165 & 166**, 461-462 (1990).
- 3) *'Universality' of Finite Size Effects in CuMn and AgMn Spin-Glasses*, R. Stubi, J.A. Cowen, D. Leslie-Pelecky and J. Bass; *Physica B* **165 & 166**, 459-460 (1990).
- 2) *Finite-Size Effects in Cu-Mn Spin Glasses*, G.G. Kenning, Jack Bass, W.P. Pratt, Jr., D. Leslie-Pelecky, Lilian Hoines, W. Leach, M.L. Wilson, R. Stubi, and J.A. Cowen; *Phys. Rev. B* **42**, 2393-2415 (1990).
- 1) *New Method of Characterizing Majority and Minority Carriers in Semiconductors*, D.L. Leslie-Pelecky, D.G. Seiler, M.R. Loloee and C.L. Littler; *Appl. Phys. Lett.* **51**, 1916-1918 (1987).

### **OTHER(NON-REFEREED) PUBLICATIONS**

- 7) *Integrating Research and Education: Moving from Individual Faculty Initiatives to Institutionalization*, Diandra Leslie-Pelecky, in Rice, M.L. (Ed.). *Recruiting and Training Future Scientists: How Policy Shapes the Mission of Graduate Education*. (MASC Report No. 107). Lawrence, Kansas, University of Kansas Merrill Advanced Studies Center. (2003)
- 6) *How Scientists Can Help With K-12 Education*, Diandra Leslie-Pelecky, American Physical Society APS News, **11**, 3 (2002) , (<http://www.aps.org/apsnews/0302/030210.html>)
- 5) *The Role of Physics Departments in Teacher Preparation*, edited by Gayle A. Buck, Jack G. Hehn, D.L. Leslie-Pelecky, American Institute of Physics, (2001)
- 4) *Why Teacher Preparation?*, Diandra L. Leslie-Pelecky and Gayle A. Buck, *American Physical Society Forum on Education Newsletter*, Fall 2000 (<http://www.aps.org/units/fed/fall2000/index.html>)
- 3) *NSF Reviews Undergraduate Science Education*, Diandra L. Leslie-Pelecky and Robert C. Hilborn, *Physics News in 1996*, edited by Phillip F. Schewe, American Institute of Physics (1997).
- 2) *Advice for Applying to Summer Research Programs*, D.L. Leslie-Pelecky, *Society of Physics Students Newsletter* **28(3)**, 10 (1996).
- 1) *Magnetic and Structural Properties of Ultrafine Ni Particles Produced by the Reduction of Metal Salts*, Diandra L. Leslie-Pelecky, X.Q. Zhang, G. Krichau and Reuben D. Rieke, *Proceedings of the American Chemical Society Division of Polymeric Materials: Science and Engineering* **73**, 66 (1995).

### **RADIO**

- *The Science of NASCAR* WUWM interview for *Lake Effect* with Mitch Teich. November 2, 2007 ([www.wuwm.com/view\\_le.php?articleid=315](http://www.wuwm.com/view_le.php?articleid=315))
- *Science: Why Is It?—CDs*, American Association for the Advancement of Science, Broadcast nationally on June 1, 1999 ([www.scienceupdate.com](http://www.scienceupdate.com))
- *Science: Why Is It?—Magnetize*, American Association for the Advancement of Science, Broadcast nationally on Sept 14, 1999 ([www.scienceupdate.com](http://www.scienceupdate.com))

### **TELEVISION**

- *Bristol Physics 101*, aired August 25, 2007 on *EPSON*

## **SELECTED RECENT INVITED TALKS AND WORKSHOPS**

- *Materials at 200 mph: Materials Making NASCAR Faster and Safer*, to be presented at the March Meeting of the American Physical Society (March 2008)
- *From Nanomaterials to NASCAR*, Michigan State University (September 2007)
- *Biomedical Applications of Magnetic Nanomaterials*, American Chemical Society Northeastern Section Meeting, Ursinus College (May 2007)
- *Built for Speed: NASCAR Physics*, presentation for the public at the April Meeting of the American Physical Society, Jacksonville, FL (April 2007)
- *Biomedical Application of Magnetic Nanomaterials*, Florida Atlanta University (March 2007)
- *Building SPEED: The Science of NASCAR*, National Science Foundation Press Breakfast, American Association for the Advancement of Science Meeting, San Francisco, CA (February 2007)
- *Biomedical Applications of Magnetic Nanomaterials*, University of Texas – Dallas, Richardson TX (February 2007)
- *Communicating Research to the Public*, Hawaii EPSCOR Meeting, Honolulu, HI (November 2006)
- *Practical Advice from the Trenches: How to Survive Academia without Giving Up Your Career, Your Family or Your Sanity*, Conference on Addressing the Concerns of Balancing Research and Teaching for New Faculty, American Association of Physics Teachers/American Physical Society/American Astronomical Society (November 2006)
- *Communicating Research to the Public*, NSF EPSCoR/OLPA Workshops, Arlington VA (3 presentations in June and July, 2006)
- *Biomedical Applications of Magnetic Nanoparticles and Fluids*, March American Physical Society Meeting, Baltimore, MD (March 2006)
- *A Toolbox for A Fulfilling NSF's Broader-Impacts Review Criterion*, Workshop presented at the AAAS Meeting, St. Louis, MO (February 2006)
- *Targeting Cancer with Magnets and other Biomedical Applications of Magnetic Nanoparticles*, IBM Almaden, San Jose, CA (February 2006)
- *The Broader Impacts Toolbox Workshop: Helping Researchers Effectively Meet the National Science Foundation's Broader Impacts Criterion*, American Geophysical Union Conference, San Francisco, CA (December 2005)
- *Practical Advice from the Trenches: How to Survive Academia without Giving Up Your Career, Your Family or Your Sanity*, Conference on Addressing the Concerns of Balancing Research and Teaching for New Faculty, American Association of Physics Teachers/American Physical Society/American Astronomical Society (November 2005)
- *Broadening Scientists Perspectives: More Inclusive Science*, American Institute of Physics, Industrial Physics Forum Academic-Industrial Workshop: A Compelling Public Case for Science: The Scientist as Citizen, Gaithersburg, MD (2005)
- *Biomedical Applications of Magnetic Nanoparticles*, 52<sup>nd</sup> Annual Midwest Solid State Conference, Columbia, MO (2005)
- *Broadening Middle-School Student Images of Science and Scientists*, American Association of Physics Teachers Summer Meeting, Salt Lake City (2005)
- *Biological Applications of Magnetic Nanomaterials*, Twenty-Fourth Annual Conference on Properties and Applications of Magnetic Materials, Chicago, IL (May 2005)
- *Nanoscale Magnets in Biological Applications*, University of Nebraska Medical Center, Omaha NE (April 2005)
- *Nanoscale Magnetism: The Applications of Disorder*, Columbia University, New York City, NY (March 2005)
- *Nanoscale Magnets in Biological Applications*, Creighton University, Omaha, NE (Feb 2005)
- *Nanostructured Magnetic Alloys: From Crystalline Ferromagnets to Amorphous Magnetic Glasses*, UC-Santa Barbara, Santa Barbara CA (April 2004)
- *Magnetic Ordering Transitions in Disordered Ferromagnetic Nanostructures*, Advanced Photon Source, Argonne National Laboratory, Argonne IL (July 2003)

- *Scientists in K-12 Education: Can We Make a Meaningful Difference?*, MIT, Cambridge, MA (October 2003)
- *Nanomagnets from A(morphous) to C(rystalline)*, Lawrence University, Appleton WI (April 2003)
- *Balancing Research and Education/Outreach While Maintaining Sanity*, Conference on Addressing the Concerns of Balancing Research and Teaching for New Faculty, American Association of Physics Teachers/NSF (November 2002)
- *The Academic Response: Perspectives from a Junior Faculty Member on the Research Enterprise*, American Institute of Physics Workshop at the Industrial Physics Forum, Williamsburg VA (October 2002)
- *Nanomagnets from A to C: The Transition from Amorphous to Crystalline*, University of North Florida, Jacksonville FL (July 2002)
- *Juggling Skills for New Faculty: Balancing Research and Education/Outreach*, Conference on Addressing the Concerns of Balancing Research and Teaching for New Faculty, American Association of Physics Teachers/NSF (November 2001)
- *Nanomagnets from A to C*, NIST, Boulder CO (June 2001)
- *Nanomagnets from A to C*, University of Massachusetts, Amherst MA (May 2001)
- *The Role of Disorder in Nanostructured Magnetic Alloys*, Spring MRS Meeting (April 2001)
- *Balancing Research and Education/Outreach*, Conference on Addressing the Concerns of Balancing Research and Teaching for New Faculty, American Association of Physics Teachers/NSF (November 2000)
- *Disordered Magnetic Alloy Nanostructures*, Ohio State University (October, 2000)
- *Disordered Magnetic Alloy Nanostructures*, Carnegie Mellon University (October, 2000)

### **CONTRIBUTED TALKS**

- *Surface Anisotropy and the Anomalous Temperature Dependence of the Peak Temperature in Chemically Synthesized MnO Nanoparticles*, M.A. Morales, R. Skomski, S. Fritz, G. Shelburne, J. Shield, Min Ying, Stephen O'Brien, and D.L. Leslie-Pelecky, 10<sup>th</sup> Joint Intermag/MMM Conference, Baltimore, MD (Jan 2007)
- *Magnetic Nanoparticles and their Biomedical Applications*, Q-SPINS MRSEC Annual Symposium, Lincoln NE (2005)
- *Iron- and Cobalt-Based Magnetic Fluids Produced By Inert-Gas Condensation*, Nguyen H. Hai, Raymond Lemoine, Shaina Rembolt, Michelle Strand, Jeffrey E. Shield, David Schmitter, Robert H. Kraus, Jr., Michelle Espy, Diandra L. Leslie-Pelecky, 5<sup>th</sup> International Conference on Biomedical Applications of Magnetic Carriers, Lyon, France (May 2004)
- *Ferromagnetic and Glassy Transitions in Nanostructured GdAl<sub>2</sub>*, D Williams, R. Brown, D.L. Leslie-Pelecky, T. Pekarek, C. Stark, P.M. Shand, 2003 March Meeting of the American Physical Society, Austin, TX (2003)
- *Confronting the Strength of Elementary Students' Stereotypical Images of Scientists*, Gayle A. Buck, D.L. Leslie-Pelecky, S.R. Kirby, National Association of Research in Science Teaching, New Orleans, LA (2002)
- *Relaxation in Disordered Ferromagnets and Spin Glasses*, Ralph Skomski, Diandra Leslie-Pelecky, 2001 March Meeting of the American Physical Society, Seattle, WA (2001)
- *The Magnetic and Structural Properties of SmCo<sub>5</sub>:C Nanocomposites*, Magnetism and Magnetism Materials Conference, San Jose, CA (1999)
- *Science Day at the Mall: Levers, Logistics and Legalese*, 62<sup>nd</sup> Annual Meeting of the American Association of Physics Teachers, San Antonio TX (1999)
- *Exchange-Coupled Nanocomposite Sm(Co,Fe) Magnets via Mechanical Alloying of Elemental Powders*, March Meeting of the American Physical Society, Los Angeles CA (1998)
- *In-Plane Anisotropy of Cobalt Nanoparticles*, March Meeting of the American Physical Society, St. Louis MO (1996)
- *Teaching Skills for Success – Professional Development Skills for Scientists and Engineers*, January Meeting of the American Association of Physics Teachers, Orlando FL (1995)
- *Using the Newspaper to Increase Science Literacy in Students and the General Public*, January Meeting of the American Association of Physics Teachers, Orlando FL (1995)
- *Tailoring the Magnetic Properties of SmCo<sub>5</sub>:Nb<sub>33</sub>Cr<sub>67</sub> via Ball Milling*, March Meeting of the American Physical Society, San Jose CA (1995)

- *Magnetic and Structural Properties of Ultrafine Ni Particles Produced by the Reduction of Metal Salts*, August Meeting of the American Chemical Society, Chicago IL (1995)
- *Making Graduate Students More Competitive for Jobs through Participation in Research and Outreach Activities*, Summer Meeting of the American Association of Physics Teachers, Spokane, WA (1995)
- *Self-Stabilized Magnetic Colloids: Ultrafine Co Particles in Polymers*, Magnetism and Magnetic Materials Conference, Philadelphia PA (1995)
- *Universal Scaling of the Relaxation Near a Model Glass Transition*, March Meeting of the American Physical Society, Pittsburgh, PA (1994)
- *Dielectric Relaxation in Orientationally Disordered Cyclo-Octanol*, American Physical Society, Seattle WA (1993)
- *Temperature Dependence of the Electron-Spin-Resonance Linewidth of Multilayered CuMn/Cu Spin Glasses*, March Meeting of the American Physical Society, Indianapolis, IN (1992)
- *Lights, Camera, Action – Science Theatre*, Spring Meeting of the American Association of Physics Teachers/American Physical Society, Washington DC (1992)
- *Finite Size Effects on the Electron-Spin-Resonance Linewidth of Multilayered CuMn Spin Glasses*, March Meeting of the American Physical Society, Anaheim CA (1991)
- *Finite Size Effects on the Electron-Spin-Resonance Linewidth of CuMn Spin Glasses*, March Meeting of the American Physical Society, St. Louis MO (1990)
- *A New Approach to Semiconductor Characterization Using Hall Coefficient and Magnetoresistance Measurements*, 5th Annual Spring meeting of the Texas Section of the American Physical Society, Abilene, TX (1987)
- *A Novel Characterization Method Using Hall Coefficients and Magnetoresistance Measurements*, Joint Meeting of the Texas Chapter of the American Vacuum Society, the North Texas Section of the Electrochemical Society and the North Texas Materials Characterization Society (First Place, Student Paper Competition, 1987)
- *A New Approach to the Characterization of Bulk and LPE  $Hg_{1-x}Cd_xTe$  Using Hall Coefficient and Magnetoresistance Measurements*, March Meeting of the American Physical Society, New York, NY (1987)

### **CONTRIBUTED TALKS AND POSTERS BY COLLABORATORS AND STUDENTS**

- *Ferromagnetism in Melt-Spun  $Gd_{0.946}Fe_{0.054}$* , P.M. Shand, N.H. Jensen, J.G. Bohnet, J. Goertzen, J.E. Shield, D. Schmitter, G. Shelburne and D. L. Leslie-Pelecky, March Meeting of the American Physical Society, New Orleans LA (2008)
- *Biodistribution, Clearance, and Biocompatibility of Iron-Oxide Magnetic Nanoparticles in Rats*, Tapan K. Jain, Maram K. Reddy, M.A. Morales, D. L. Leslie-Pelecky and Vinod Labhasetwar, 34<sup>th</sup> Annual Meeting and Exhibition of the Controlled Release Society, Long Beach CA (2007)
- *Critical Behavior Near the Ferromagnetic Transition in Nanostructured Gadolinium*, Paul Shand, Justin Bohnet, Jared Goertzen, Jeffrey Shield, Geoffrey Shelburne, David Schmitter, Diandra Leslie-Pelecky, March Meeting of the American Physical Society, Denver CO (2007)
- *Ferromagnetic  $Gd_{100-x}Fe_x$  ( $x=4-40$ ) Nanostructures*, D. Schmitter, JU. Goertzen, G. Shelburne, T.M. Pekarek, J.E. Shield, P.M. Shand, D. Haskel, D.L. Leslie-Pelecky, March Meeting of the American Physical Society, Denver CO (2007)
- *Perceptions of Science Role Models as Held by Adolescent Girls and Women Scientist Role Models*, Gayle Buck, D.L. Leslie-Pelecky, Vicki Plano Clark, American Educational Research Association, Chicago IL (2007)
- *Comparing and Exploring the Perceptions of Science Role Models for Adolescent Girls*, G. Buck, V. Plano Clark, and D.L. Leslie-Pelecky, National Association for Research in Science Teaching, New Orleans, LA (2007)
- *Scaling Analysis Of The Ferromagnetic Transition In Melt-Spun Gadolinium Nanocrystals*, J.G. Bohnet and P. M. Shand, D. Schmitter, J. Goertzen, G. Shelburne and D. L. Leslie-Pelecky, Argonne Undergraduate Research Symposium Chicago, IL (2006)
- *How Nanomaterials Will Speed Up Computers, Strengthen Bridges, Cure Cancer and Reduce the Appearance of Fine Lines and Wrinkles*, University of Northern Iowa Sigma Xi Lecture Cedar Falls, IA (2006)

- *Magnetization Processes in Granular Magnets with Competing Exchange*, R. Skomski, P. Shand, D. Leslie-Pelecky and D. Sellmyer, Magnetism and Magnetic Materials Conference, San Jose, CA (2005)
- *Magnetic Nanoparticle Fluids for Bioapplications*, N. H. Hai, D. Schmitter, R. Lemoine, M. Strand, Shaina Rembolt, S. Wignall, D. L. Leslie-Pelecky, Osaka University-Asia Pacific-Vietnam National University, Hanoi Forum, Hanoi, Vietnam (2005).
- *Effects of Surfactants on Oxidation Resistance of Iron Nanoparticle Fluids*, Shannon Fritz, Nguyen H. Hai, Steve Wignall, and Diandra Leslie-Pelecky, Magnetism and Magnetic Materials Conference, San Jose, CA (2005)
- *Bilayer Stabilized Iron-oxide Nanoparticles: a Drug Carrier System for Anticancer Agents*, Tapan K. Jain, Marco A. Morales, Sanjeeb K. Sahoo, Diandra L. Leslie-Pelecky and Vinod Labhasetwar, Society for Controlled Release, Miami, FL (2005)
- *An Exploratory Case Study on the Impacts of Role Identity and Sociocultural Setting on a Female Scientist's Graduate School Experience*. G. Buck, D. Leslie-Pelecky, Y. Lu, V. Plano Clark, & J. Creswell. National Association for Research in Science Teaching, Dallas, TX (2005)
- *Authorizing Inquiry*, Margaret Macintyre Latta, Gayle Buck, Diandra Leslie-Pelecky, National Association for Research in Science Teaching, Dallas, TX (2005)
- *Learning How to Make Inquiry Discernible: A Participatory Action Research Project*, Gayle Buck, Margaret Macintyre Latta, Diandra Leslie-Pelecky, American Educational Research Association, Montreal, QB (2005)
- *Changing the Graduate School Experience: Impacts on the Role Identity of Women*, G. Buck, D. Leslie-Pelecky, Y. Lu, V. Plano Clark, & J. Creswell, American Educational Research Association, Montreal, QB (2005)
- *Broadening Middle-School-Student Images of Science and Scientists*, Diandra Leslie-Pelecky, Gayle Buck and Angela Zabawa, Materials Research Society Meeting, Boston MA (2004)
- *Spin Glass or Random Anisotropy?: The Origin of Magnetically Glassy Behavior in Nanostructured GdAl<sub>2</sub>*, Paul Shand, Christopher Stark, Deborah Williams, Marco A. Morales, Thomas Pekarek, and Diandra Leslie-Pelecky, Magnetism and Magnetic Materials Conference, Jacksonville FL (2004)
- *Research Experiences for Teachers in Materials Science: Building an Apparatus for Depositing Magnetic Nanoparticles in Liquids*, Michelle Strand and Diandra L. Leslie-Pelecky, Materials Research Society Meeting, Boston MA (2004)
- *Magnetic Studies on Iron-Oxide Nanoparticles Coated with Oleic Acid and Pluronic<sup>®</sup> Co-polymer*, M.A. Morales, Tapan Kumar Jain, V. Labhasetwar, and D. L. Leslie-Pelecky, Magnetism and Magnetic Materials Conference, Jacksonville FL (2004)
- *Magnetic Fluids Produced by Inert-Gas Condensation*, Nguyen H. Hai, Raymond Lemoine, Shaina Rembolt, Steve Wignall, Michelle Strand, Jeffrey E. Shield, David Schmitter, Diandra L. Leslie-Pelecky, Magnetism and Magnetic Materials Conference, Jacksonville FL (2004)
- *Magnetic Properties of Gd Nanoparticles Fabricated by Inert Gas Condensation*, David Schmitter, P. Shand, R. Lemoine, T. Pekarek & Diandra Leslie-Pelecky, March Meeting of the American Physical Society, Austin TX (2003)
- *AC Susceptibility of Mechanically-Milled GdAl<sub>2</sub>*, P. M. Shand, C. Stark, T. M. Pekarek, D. Williams, R. Brown, D. L. Leslie-Pelecky March Meeting of the American Physical Society, Austin TX (2003)
- *Curie-Weiss Analysis of Ferromagnetic and Glassy Transitions in Nanostructured GdAl<sub>2</sub>*, D. Williams, P. M. Shand, C. Stark, T. Pekarek, R. Brown, Lanping Yue, D. L. Leslie-Pelecky, Magnetism and Magnetic Materials Conference, Tampa FL (2002)
- *Improving the Science Preparation of Future Teachers*, D.L. Leslie-Pelecky and Jack G. Hehn, Texas State University Conference on the Texas Teacher Preparation, San Marco, TX (2002) (<http://uweb.txstate.edu/~dd14/tp/hehntalk.html>)
- *Magnetically Glassy Behavior in Nanostructured GdAl<sub>2</sub>*, L. Yue, Diandra L. Leslie-Pelecky, T. Pekarek and P. Shand, March Meeting of the American Physical Society, Seattle, WA (2001)
- *Cooperative Freezing in Spin Glasses and Nanostructures*, Ralph Skomski and Diandra Leslie-Pelecky, Magnetism and Magnetic Materials Conference, San Antonio, TX (2001)

- *High-Temperature Magnetic Properties of Mechanically Alloyed  $\text{SmCo}_5$  and  $\text{YCo}_5$* , I.A. Al-Omari, R. Skomski, R.A. Thomas, D. Leslie-Pelecky and D.J. Sellmyer, Magnetism and Magnetic Materials Conference, San Antonio, TX (2001)
- *Fabrication of Disordered Nanostructured  $\text{Ni}_3\text{C}$  by Mechanical Alloying*, Lanping Yue, Elaine Kirkpatrick, Brent Royuk and Diandra L. Leslie-Pelecky, March Meeting of the American Physical Society, Minneapolis, MN (2000)
- *ScienceWorks: A University-Based Science Outreach Group*, Rochelle Payne Ondracek and Diandra Leslie-Pelecky, American Society for Engineering Education National Conference, Charlotte NC (1999)
- *Undergraduate Research Opportunity Programs at the University of Nebraska - Lincoln: Five Initiatives to keep Students (of Color) in the Educational Pipeline*, Royce E. Ballinger, Stephen P. Ducharme, Diandra L. Leslie-Pelecky, Keith D. Parker, Layton Brookes, Vaughn N. Robertson, Flora Murillo, John J. Stezowski, Annual Meeting of the National Higher Education Conference on Students of Color, Minneapolis, MN (1999)
- *Structural and Magnetic Properties of Mechanically Milled  $\text{SmCo}_5\text{:C}$* , E.M. Kirkpatrick and Diandra L. Leslie-Pelecky, Magnetism and Magnetic Materials Conference, San Jose, CA (1999)
- *Chemical Synthesis of Nanostructured Cobalt at Elevated Temperature*, Diandra L. Leslie-Pelecky, M. Bonder, T. Martin, E.M. Kirkpatrick, X.Q. Zhang, S.-H. Kim and Rueben D. Rieke, MMM/Intermag, San Francisco CA (1998)
- *Structural and Magnetic Properties of Chemically Synthesized Mg-Co Alloys*, E.M. Kirkpatrick, Diandra L. Leslie-Pelecky, S.-H. Kim and Rueben D. Rieke, Magnetism and Magnetic Materials Conference, Miami FL (1998)
- *Teaching Materials Science and Engineering to Elementary Students*, Rochelle Payne Ondracek and Diandra Leslie-Pelecky, American Association of Physics Teachers Meeting, Lincoln NE (1998)
- *ScienceWorks*, Richard A. Thomas and Diandra Leslie-Pelecky, American Association of Physics Teachers Meeting, Lincoln NE (1998)
- *High-Frequency Dielectric Response of Orientationally Disordered Cyclo-Octanol*, M.A. Miller, N.O. Birge, D.L. Leslie-Pelecky, March Meeting of the American Physical Society, Kansas City, MO (1997)
- *Bringing Science to the Community Through ScienceWorks*, Scott Kirkpatrick and Diandra Leslie-Pelecky, Nebraska/Arkansas/Oklahoma/Kansas Section Meeting of the American Association of Physics Teachers Manhattan KS (1997)
- *Introducing Middle School Students to Materials Science*, Elaine Kirkpatrick and Diandra Leslie-Pelecky, Nebraska/Arkansas/Oklahoma/Kansas Section Meeting of the American Association of Physics Teachers Manhattan KS (1997)
- *Magnetic and Structural Properties of  $\text{Ni:Ni}_3\text{C}$  Nanocomposites*, Elaine Kirkpatrick, M. Bonder, Terry Martin, X.-Q. Zhang, S.-H. Kim, R.D. Rieke and Diandra L. Leslie-Pelecky, 1997 Midwest Solid State Conference, Manhattan KS (1997)
- *Magnetic Properties of Mechanically Alloyed  $\text{SmCo}_5\text{:Fe}$* , R.L. Schalek, S.C. Axtell, Alice M. Milton and Diandra L. Leslie-Pelecky, Spring TMS meeting, Anaheim, CA (1996)
- *Exchange Spring  $\text{SmCo:Fe}$  Magnets via Mechanical Alloying*, Richard L. Schalek, Diandra L. Leslie-Pelecky, Alice M. Milton and, S.C. Axtell, March Meeting of the American Physical Society, St. Louis MO (1996)
- *Fabrication of Samarium Cobalt-Based Exchange-Spring Magnets via Mechanical Alloying*, Richard L. Schalek, Diandra L. Leslie-Pelecky, Alice M. Milton and, S.C. Axtell, InterMag 96, Seattle WA (1996)
- *A Short Introductory Course on Materials Science and Engineering for Middle School Students*, Martin Liphardt, Leonie Boshoff-Mostert and Diandra L. Leslie-Pelecky, Summer Meeting of the American Association of Physics Teachers, College Park MD (1996)
- *Tailoring of the Magnetic Properties of Nanocomposited  $\text{SmCo}$  Using Mechanical Alloying*, Richard L. Schalek, Diandra L. Leslie-Pelecky, John Knight, D.J. Sellmyer and Steven C. Axtell, InterMag 95, San Antonio TX (1995)
- *The Electron-Spin-Resonance Linewidth in Sputtered  $\text{CuMn/Cu}$  Multilayers*, C.N. Hoff, F. van Wijland, J.A. Cowen, D. L. Leslie-Pelecky, A. Gavrin and C.-L. Chien, March Meeting of the American Physical Society, Pittsburg, PA (1994)
- *Finite Size Effects on the ESR Linewidth of  $\text{CuMn}$  Spin Glasses*, D.L. Leslie-Pelecky and J.A. Cowen, 17<sup>th</sup> International IUPAP Conference on Thermodynamics and Statistical Mechanics, Rio de Janeiro, Brazil (1989)

- *The Transition 'Back' from 2 to 3 Dimensions*, R. Stubi, D. Leslie-Pelecky and J.A. Cowen, 34<sup>th</sup> Annual Conference on Magnetism and Magnetic Materials, Boston MA (1989)
- *Dimensionality Crossover in CuMn Spin Glass Films*, P. Granberg, P. Nordblad, P. Svedlindh, L. Lundgren, J. Bass, J.A. Cowen, G.G. Kenning, D. Leslie-Pelecky and R. Stubi, 34<sup>th</sup> Annual Conference on Magnetism and Magnetic Materials, Boston MA (1989)
- *Investigation of n-type LPE HgCdTe Samples Using Magnetoconductivity Tensor Analysis*, C.L. Littler, D.G. Seiler, R.L. Schalek, D.L. Leslie-Pelecky, D.G. Seiler, M.R. Loloee, March Meeting of the American Physical Society, New Orleans, LA (1988)
- *Investigation of Anomalous n-type LPE HgCdTe Samples Using the Magnetoconductivity Tensor Method*, R.L. Schalek, D.L. Leslie-Pelecky, D.G. Seiler, M.R. Loloee, 6<sup>th</sup> Annual Fall Meeting of the Texas Section of the American Physical Society, Kingsville, TX (1987)

## **CONTRIBUTED POSTERS**

- *Analysis of the Ferromagnetic Transition in Melt-Spun Gadolinium Nanocrystals*, J. G. Bohnet, P. M. Shand, J. Goertzen, J. E. Shield, D. Schmitter, G. Shelburne, and D. L. Leslie-Pelecky, Council on Undergraduate Research Posters on the Hill Program, Washington, DC, April 25, 2007.
- *Ferromagnetism above the Gd Curie Temperature in  $Gd_{100-x}Fe_x$  ( $x = 0$  to 10) Nanostructures*, David Schmitter, Jared Goertzen, Geoffrey Shelburne, Thomas M. Pekarek, Jeffrey E. Shield, Paul M. Shand, Daniel Haskel and Diandra L. Leslie-Pelecky, 10<sup>th</sup> Joint Intermag/MMM Conference, Baltimore, MD (Jan 2007)
- *Effects of Surfactants on Oxidation Resistance of Iron Nanoparticle Fluids*, Shannon Fritz, Kishore Sreenivasan, Steve Wignall, Jeffrey A. Shield and Diandra Leslie-Pelecky, Fourth International Nanomedicine and Drug Delivery Symposium, Omaha NE (2006)
- *Project Fulcrum: Broadening Students' Images of Scientists*, Laura DuClos, 80th Annual National Meeting of the American Society of Parasitologists, Mobile, AL (July 2005)
- *Helping Students Learn to Question*, C.N. Ross, A. Zabawa and D.L. Leslie-Pelecky, Evolution 2005 (jointly sponsored by the Society for the Study of Evolution, the Society of Systematic Biologists, and the American Society of Naturalists), Fairbanks, AK (2005)
- *Helping Students Learn to Question*, C.N. Ross, A. Zabawa and D.L. Leslie-Pelecky, American Society for Primatologists, Portland, OR (2005)
- *Iron Oxide Nanoparticles for Sustained Delivery of Anticancer Agents*, M. A. Morales, Tapan K. Jain, Sanjeeb K. Sahoo, Vinod Labhasetwar, and Diandra Leslie-Pelecky, 52<sup>nd</sup> Annual Midwest Solid State Conference, Columbia, MO (2005)
- *Oxidation Resistance of Iron-Based Magnetic Nanoparticle Fluids Prepared by Inert-Gas Condensation*, Kishore Sreenivasan, Shannon Fritz, Nguyen H. Hai, Raymond Lemoine, Steve Wignall, Jeffrey E. Shield, and Diandra L. Leslie-Pelecky, 52<sup>nd</sup> Annual Midwest Solid State Conference, Columbia, MO (2005)
- *Fluorescent Magnetic Microspheres for Improved Bioassay Techniques*, S.G. Fritz, M.A. Morales, M. A. Espy, S. Daniels, R.H. Kraus, Jr., D.L. Leslie-Pelecky, Q-SPINS MRSEC Annual Symposium, Lincoln NE (2005)
- *Iron Oxide Nanoparticles for Sustained Delivery of Anticancer Agents*, M. A. Morales, Tapan K. Jain, Sanjeeb K. Sahoo, Vinod Labhasetwar, and Diandra Leslie-Pelecky, Q-SPINS MRSEC Annual Symposium, Lincoln NE (2005)
- *Oxidation Resistance of Iron-Based Magnetic Nanoparticle Fluids Prepared by Inert-Gas Condensation*, Kishore Sreenivasan, Shannon Fritz, Nguyen H. Hai, Raymond Lemoine, Steve Wignall, Jeffrey E. Shield, and Diandra L. Leslie-Pelecky, Q-SPINS MRSEC Annual Symposium, Lincoln NE (2005)
- *MRSEC Participation in Project Fulcrum: A Partnership in Middle-School Education*, David Schmitter, Luis Rosa, Kristin Kraemer, Gayle Buck and Diandra Leslie-Pelecky, Q-SPINS MRSEC Annual Symposium, Lincoln NE (2005)
- *A Single-Step Process for Fabricating Magnetic Nanoparticle Fluids Using Inert-Gas Condensation*, Nguyen H. Hai, Raymond Lemoine, Shaina Rembolt, Steve Wignall, Michelle Strand, Jeffrey E. Shield, David Schmitter, and Diandra L. Leslie-Pelecky, Materials Research Society, Boston MA (2004)
- *The Effect of Disorder on the Magnetic Properties of Mechanically Milled Rare-Earth-Cobalt Alloys*, Gordon Conference on Magnetic Nanostructures, Ventura CA (2000)

- *Structural And Magnetic Properties Of Nickel/Nickel Carbide Nanostructures Fabricated By Chemical Reduction*, Diandra L. Leslie-Pelecky, M. Bonder, E.M. Kirkpatrick, S.-H. Kim, and R.D. Rieke, Fourth International Conference on Nanostructures, Stockholm, Sweden (1998)
- *Disorder-Enhanced Coercivity In Mechanically Milled Sm-Co Alloys*, Diandra L. Leslie-Pelecky, R. Schalek, Fourth International Conference on Nanostructures, Stockholm, Sweden (1998) (**Winner of Best Poster Award**)
- *Sputtered Carbon-Cobalt Magnetic Films*, J. Launhardt, S. Rohde, E.M. Kirkpatrick and D. L. Leslie-Pelecky, 61<sup>st</sup> Annual Summer Meeting of the American Association of Physics Teachers, Lincoln, NE (1998) (**winner of Honorable Mention Award**).
- *Mechanically Alloyed GdAl<sub>2</sub>: Is It a Spin Glass?* W. Solley Catlett and Diandra L. Leslie-Pelecky, 61<sup>st</sup> Annual Summer Meeting of the American Association of Physics Teachers Lincoln, NE (1998)
- *Ageing Effects and Disorder-Enhanced Coercivity in Mechanically Milled Sm-Co Alloys*, Diandra Leslie-Pelecky, Elaine Kirkpatrick and Richard Schalek, 46<sup>th</sup> Midwest Solid State and Solid State Theory Conference, Ames, IA (1998)
- *ScienceWorks: Household Chemistry*, D.G. Sloss, M.K. Smith and D.L. Leslie-Pelecky, American Chemical Society Meeting, San Francisco CA (1997)
- *ScienceWorks: Bringing Science Alive*, D. Sloss and D.L. Leslie-Pelecky, American Chemical Society Meeting, Orlando, FL (1996)
- *ScienceWorks: Having Fun with Science*, D. Sloss and D.L. Leslie-Pelecky, American Chemical Society Meeting, (1996)
- *Use of the Electron-Spin-Resonance Linewidth in Studying Scattering in Multilayered Systems*, D.L. Leslie-Pelecky, C.N. Hoff, F. van Wijland, J.A. Cowen, A. Gavrin and C.-L. Chien, 38<sup>th</sup> Annual Conference on Magnetism and Magnetic Materials, Minneapolis, MN (1996).