Hari Srikanth, Ph.D.
Professor of Physics
Director – Functional Materials Laboratory
Fellow –American Physical Society
Fellow –Institute of Nanotechnology
Associate Editor –Journal of Applied Physics
University of South Florida
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Employment/Professional Experience:

2009-present	Professor, Physics Department, University of South Florida, Tampa, FL
2004-2009	Associate Professor, Physics Dept., USF, Tampa, FL
2000-04	Assistant Professor, Physics Dept., USF, Tampa, FL
1998-00	Assistant Professor for Research, Advanced Materials Research Institute, University of New Orleans, LA
1998	National Research Council Associate, Rome Labs, Hanscom AFB, MA
1995-98	Postdoctoral Researcher, Physics Dept., Northeastern Univ., Boston, MA
1994-95	Postdoctoral Researcher, University of Nebraska, NE

Education:

1994 Ph. D (Physics), Indian Institute of Science, Bangalore, India
1987 M. Sc (Physics), Madura College, Madurai, India
1985 B. Sc (Physics), Madura College, Madurai, India

Areas of Specialization

- Functional nanostructured materials: Fabrication, Properties, Applications
- Magnetism at the nanoscale
- Electronic and magnetic properties of complex oxides and strongly correlated materials
- Multifunctional materials

Research Interests

- Synthesis, assembly and electromagnetic properties of nanoparticles and nanocomposites
- Fabrication and physical properties of functional oxide thin films and heterostructures
- Magnetocaloric effect and magnetic refrigeration materials
- Giant Magnetoimpedance materials and sensors
- Physics of spin and charge frustrated materials
- Complex oxides with multiple phases
- Radio-frequency and microwave properties of materials
- Physics of strongly correlated electron systems
- Magnetic materials for nanomedicine applications

Highlights of professional achievements

- Lead PI grants over **$5 Million** received during past 14 years from National Science Foundation, Department of Energy, Army Research Office, DARPA agencies. (Details of grant funding available on request)
- Total grant funding in multi-PI grants over **$11 Million**
- **Fellow, American Physical Society (FAPS) (**inducted 2014)
- **Fellow, Institute of Nanotechnology (FIoN)** (inducted 2014)
- **Associate Editor**, Journal of Applied Physics (March 2014 – present)
- **Publication Chair and Steering Committee Member**, MMM and joint MMM/Intermag conferences in 2011, 2012 and 2013.
- Served as a publication editor (JAP) for the MMM conferences multiple times since 2006.
- **MMM AdCom** Member (IEEE appointee: 2012-2015)
- **Editorial Review Board Member**, IEEE Magnetics Letters (2010-2014)
- Organized symposia for APS, MRS and other professional societies and served on the program committee for several MMM and INTERMAG conferences.
- **Program Committee Member**, American Vacuum Society Magnetic Interfaces and Nanostructures Division (MIND) 2013-present.
- Peer reviewer for NSF, DoE, DoD agencies and over 15 journals.
- USF College of Arts and Sciences, Faculty Council Member and Tenure & Promotion committee (2010 – 15)
- **Over 200 journal publications (*h*-index: 28, source: Web of Science) and 2 patents**
- **Over 120 invited talks/colloquia/seminars**
- **Over 200 contributed presentations at international conferences**

Teaching/Education related activities

Courses taught/scheduled at the University of South Florida:

- PHY 2048 (Calculus-based General Physics 1): Fall 2001
- PHY 2049 (Calculus-based General Physics 2): Fall 2000, Spring 2001, Spring 2002
- PHZ 2103 (Problem Solving): Fall 2000, Spring 2001
- PHY 3101 (Modern Physics): Fall 2002, Spring 2003, Fall 2007, Fall 2008, Spring 2009, Fall 2009, Spring 2010, Fall 2010, Fall 2011, Fall 2012, Spring 2015
- PHY 3221 (Mechanics I): Fall 2004, Fall 2005, Fall 2006, Spring 2012
- PHY 4222 (Mechanics II): Spring 2005, Spring 2006, Spring 2007, Fall 2012
- PHZ 4434 (Introduction to Materials Physics): Spring 2011, Fall 2013
- PHY 6938 (Materials Physics 1): Fall 2003, Fall 2004 (Graduate course)
- PHY 6938 (Materials Physics 2: Applied Materials): Spring 2004 (Grad course)
- PHZ 6436 (Applied Materials Physics): Spring 2014 (Grad course)
- On sabbatical leave for one semester in Spring 2008
- On sabbatical leave for two semesters (Fall 2015, Spring 2016)

2000-present Physics department Graduate Committee
2000-present Major Professor & Thesis advisor for 21 graduate students

Graduate Students: (Current)

- **Ms. Kristen Stojak,** Ph. D. student (Fall 2013 -); Polymer nanocomposites
- **Mr. Vijaysankar Kalapattil**, Ph.D. student (Fall 2012 -); Ferrite-ferroelectric thin films
- **Ms. Zohreh Nemati Porshokouh,** Ph.D. student (Spring 2013 -); Magnetic nanostructures

- **Ms. Eleanor Clements,** Ph.D. student (Fall 2013-); Magnetism and Superconductivity
- **Mr. Brian Casas,** Ph.D. student (Fall 2013-); Complex oxides
- **Ms. Tatiana Eggers**, Ph.D. (Fall 2014-); Spin transport in thin films

Students Graduated:

- **Dr. Jagannath Devkota, PhD (2015).** (Dissertation: Enhanced magnetoimpedance and microwave response of soft ferromagnetic materials for biodetection and energy sensing); currently a postdoctoral associate at University of Georgia since June 2015
- **Dr. Paige Lampen, PhD (2015).** (Dissertation: Low dimensionality effects in complex magnetic oxides); Currently a postdoctoral associate at University of Tennessee/Oak Ridge National Lab since June 2015 with Prof. David Mandrus.
- **Dr. Sayan Chandra, PhD (2013).** (Dissertation: Magnetization dynamics and related phenomena in nanostructures); Posdoctoral Researcher with Prof. Federico Rosei at EMT-INRS, Montreal (Canada) from June 2014
- **Dr. Nicholas Bingham, PhD (2013).** (Dissertation: Magnetism in complex oxides probed by magnetocaloric effect and transverse susceptibility); Postdoctoral Researcher with Prof. Laura Heyderman at Paul-Scherrer Institute (Switzerland) from July 2013
- **Dr. James Gass, PhD (2012)**. (Dissertation: "Functional magnetic nanoparticles"); Research engineer at Ocean Optics Inc., Florida
- **Dr. Anurag Chaturvedi, PhD (2011).** (Dissertation: "Novel magnetic materials for sensing and cooling applications"); Postdoctoral research associate with Prof. Takao Suzuki at MINT Center, University of Alabama - Tuscaloosa
- **Ms. Marienette Morales, M.S (2009).** (Thesis: Static and dynamic properties of magnetic nanoparticles and ferrofluids); Ph.D. student at University of Trieste, Italy
- **Dr. Natalie Frey**, **PhD (2008**). (Dissertation: "Surface and interface magnetism in nanostructures and thin film heterostructures"). Graduated in May 2008. Postdoctoral Research Associate with Prof. Shouheng Sun at Brown University from October 2008-September 2009; National Research Council Postdoctoral Associate at NIST (Gaithersburg) from October 2009. Staff member at USPTO since March 2012.
- **Dr. Ranko Heindl**, **PhD (2006)** (Dissertation: "Tunable ferrite-ferroelectric films for microwave applications"); Assistant Professor at San Jose State University since August 2012
- **Dr. Jeff Sanders**, **PhD (2006).** (Dissertation: "Spin polarization measurements and sensor applications in thin films and carbon nanotube based devices"). Currently employed as Assistant Professor of Physics at Embry-Riddle Aeronautical University, Daytona, FL
- **Mr. Drew Rebar**, **M.S (2006)** (Thesis: Magnetocaloric effect in ferrite nanoparticles and clathrates); Currently a PhD candidate at Louisiana State University
- **Ms. Chamila Siyambalapitiya**, **M.S. (2006)** (Thesis: Growth, electrical and magnetic properties of Fe3O4 thin films); PhD from Electrical Engineering (USF); Currently a Research Scientist at Florida International University in Miami, FL
- **Ms. Jessica Wilson**, **M.S. (2004)** (Thesis: Synthesis and properties of magnetic polymer nanocomposites); Employed with a patent attorney firm in Tampa

(Jeff, Ranko and Natalie were recipients of two-year **NSF IGERT** fellowships; Paige is a USF Presidential Graduate Fellow)

Postdoctoral Advisees:

- **Dr. Raja Das**, USF (September 2014 – present)
- **Dr. Javier Alonso Masa**, USF (January 2014 – present)
- **Dr. Hafsa Khurshid**, USF (Sept 2011 - present)

- **Dr. Anis Biswas**, USF (Sept 2011 – Nov 2013); Currently, Postdoctoral Associate with Prof. Vitalij Pecharsky at Ames Laboratory, Iowa State University.
- **Dr. Susmita Pal**, USF (Feb 2008 – August 2010)
- **Dr. Manh-Huong Phan**, USF (Dec 2007 – Aug 2010); Promoted to **Research Assistant Professor** at USF as of Sept. 2010 and continuing to collaborate with me. Currently a **Research Associate Professor** (since 2015)
- **Dr. Natalie Frey**, USF (May 2008 – September 2008)
- **Dr. Srinath Sanyadanam**, USF (Jan. 2004 – July 2006). Current job: Assistant Professor, Physics Department, Hyderabad Central University, Hyderabad, India
- **Dr. Pankaj Poddar,** USF (Oct. 2002 – March 2005). Current job: Staff Scientist, Nanoscience Division, National Chemical Laboratories, Pune, India.
- **Dr. Leonard Spinu**, University of New Orleans (1999 – 2000), Current job: Associate Prof. of Physics, University of New Orleans.
- **Dr. Jason Wiggins**, University of New Orleans (1998 – 1999), last known job: Nanotechnology Programme Manager at Oxford University, UK.

Undergraduate Advisees:

- **Ms. Jessica Wilson** (2001)
- **Ms. Krystal McCann** (2002)
- **Mr. Drew Rebar** (2003, REU student)
- **Mr. Josef Norgan** (2003)
- **Mr. James Almand** (2004)
- **Mr. Joshua Poling-Goldenne** (2004. REU student)
- **Ms. Suzanne Morrow** (2005, REU student)
- **Ms. Bethany Zack** (2005, REU student)
- **Ms. Melody Miner** (2006, REU student)
- **Mr. Aaron Stalford** (2007)
- **Ms. Kristen Stojak** (2008, REU student)
- **Mr. Nicholas Laurita** (2009 - 2011)
- **Ms. Daria Karpenko** (2010)
- **Ms. Rosemary Sheldon** (2011, REU)
- **Mr. Ramon Ruiz** (2011 - 2013)
- **Mr. Corey Bathurst** (2011)
- **Mr. Jeffrey Wingo** (2012-current)
- **Ms. Deborah Israel (**2014**)**
- **Mr. Luis Martinez (**2014, REU)
- **Ms Izzi Berman** (2014, REU)

Journal Publications:

(2814 citations as of June 2015. h-index: 29.
Source: Thomson Reuters Web of Science)
(Hari's students are in italics and postdocs in bold italics)

2015

1. "Impacts of nanostructuring and magnetic ordering of Nd^{3+} on the magnetic and magnetocaloric response in $NdMnO_3$" –***S. Chandra***, ***A. Biswas***, M. H. Phan and **H. Srikanth**, **Journal of Magnetism and Magnetic Materials 384**, 138 (2015)

2. "Mossbauer spectroscopy studies of phase evolution in $SrFe_{12}O_{19}$/LCMO composites" –*P. Lampen-Kelley*, A. S. Kamzin, K. E. Romachevsky, D. T. M. Hue, H. D. Chinh, **H. Srikanth** and M. H. Phan, **Journal of Alloys and Compounds 636**, 323 (2015)
3. "Enhanced cryogenic magnetocaloric effect in $Eu_8Ga_{16}Ge_{30}$ clathrate nanocrystals" –***A. Biswas, S. Chandra***, S. Stefanoski, J. S. Blasquez, J. J. Ipus, A. Conde, M. H. Phan, V. Franco, G. S. Nolas and **H. Srikanth**, **Journal of Applied Physics 117**, 033903 (2015)
4. "Simultaneous enhancements of polarization and magnetization in epitaxial PZT/LSMO multiferroic heterostructures enabled by ultrathin $CoFe_2O_4$ sandwich layers" –D. Mukherjee, M. Hordagoda, *P. Lampen*, M. H. Phan, **H. Srikanth**, S. Witanachchi and P. Mukherjee, **Physical Review B 91**, 054419 (2015)
5. "Anisotropy effect in magnetic hyperthermia: A comparison between spherical and cubic exchange coupled FeO/Fe3O4 nanoparticles" –***H. Khurshid***, ***J. Alonso***, *Z. Nemati*, M. H. Phan, P. Mukherjee, M. L. Fernandez-Gubieda, M. Barandiaran, H. Srikanth, **Journal of Applied Physics 117**, 17A337 (2015)
6. "Superparamagnetic properties of carbon nanotubes filled with $NiFe_2O_4$ nanoparticles" –*K. Stojak-Repa*, *D. Israel*, ***J. Alonso***, M. H. Phan, **H. Srikanth**, E. Palmero and M. Vazquez, **Journal of Applied Physics 117**, 17C723 (2015)
7. "Magnetoreactance based detection of MnO nanoparticle embedded Lewis Lung carcinoma cancer cells" –*J. Devkota*, M. Howell, S. Mohapatra, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 117,** 17D123 (2015)
8. "FeCo nanowires with enhanced heating powers and controllable dimensions for magnetic hyperthermia" –***J. Alonso, H. Khurshid***, *V. Sankar, Z. Nemati*, M. H. Phan, E. Garayo, J. A. Garcia and **H. Srikanth**, **Journal of Applied Physics** 117, 17D113 (2015)

2014

9. "Heisenberg-like ferromagnetism in 3d-4f intermetallic $La_{0.75}Pr_{0.25}Co_2P_2$ with localized Co moments" –*P. Lampen*, M. H. Phan, **H. Srikanth**, K. Kovnir, P. Chai and M. Shatruk, **Physical Review B 90**, 174404 (2014)
10. "A soft ferromagnetic multiwire-based inductance coil sensor for sensing applications" –*J. Devkota*, T. Luong, J. S. Liu, H. Shen, F. X. Qin, J. F. Sun, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 116**, 234504 (2014)
11. "Impacts of amorphous and crystalline cobalt ferrite layers on the GMI response of a soft ferromagnetic amorphous ribbon" –D. Mukherjee, *J. Devkota*, *A. Ruiz*, M. Hordagoda, R. Hyde, S. Witanachchi, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 116**, 123912 (2014)
12. "Enhanced magnetism in highly ordered magnetite nanoparticle-filled nanohole arrays" –B. Duong, ***H. Khurshid***, P. Gangopadhyay, *J. Devkota*, *K. Stojak*, **H. Srikanth**, L. Tetard, R. A. Norwood, N. Peyghambarian, M. H. Phan and J. Thomas, **Small 10**, 2840 (2014)
13. "Magnetocaloric effect and crictical behavior in Pr0.5Sr0.5MnO3: An analysis of the validity of Maxwell relation and the nature of the phase transitions" –R. Caballero-Flores, *N. S. Bingham*, M. H. Phan, M. A. Torija, C. Leighton, V. Franco, A. Conde, T. L. Phan, S. C. Yu and **H. Srikanth**. **Journal of Physics –Condensed Matter 26**, 286001 (2014)
14. "Magneto-impedance Based Probe of Various Concentrations of Corrosive Chemicals" - *J. Devkota*, N.T. Huong, **H. Srikanth**, and M.H. Phan, **IEEE Transactions on Magnetics 50**, 4004404 (2014)
15. "Laser target evaporation Fe2O3 nanoparticles for water-based ferrofluids: focus on biomedical applications" –J. P. Novoselova, A. P. Safronov, O. M. Samatov, I. V. Beketov, H. Khurshid, Z. Nemati, H. Srikanth, T. P. Denisova, R. Andrade, V. Kurlyandskaya, **IEEE Transactions on Magnetics** (in press 2014)

16. "Macroscopic phase diagram and magnetocaloric study of metamagnetic transitions in the spin chain system $Ca_3Co_2O_6$" –*P. Lampen*, ***N. S. Bingham***, M. H. Phan, **H. Srikanth**, H. T. Yi and S. W. Cheong, **Physical Review B 89,** 144414 (2014)

17. "Impacts of surface spins and inter-particle interactions on the magnetism of hollow Fe_2O_3 nanoparticles" –***H. Khurshid***, *Z. Nemati*, M. H. Phan, P. Mukherjee and **H. Srikanth**, **Journal of Applied Physics 115**, 17E131 (2014)

18. "Tuning exchange bias in Fe/γ-Fe_2O_3 core-shell nanoparticles: Impacts of interface and surface spins" –***H. Khurshid***, M. H. Phan, P. Mukherjee and **H. Srikanth**, **Applied Physics Letters 104**, 072407 (2014)

19. "Large magnetocaloric effect, moment and coercivity enhancement after coating Ni nanoparticles with Ag" –S. Srinath, P. Poddar, R. Das, D. Sidhaye, B. L. V. Prasad, *J. Gass* and **H. Srikanth**, **ChemPhysChem 15**, 1619 (2014)

20. "Impact of structural disorder on the magnetic ordering and magnetocaloric response of amorphous Gd-based microwires" –***A. Biswas***, Y. Y. Yu, *N. S. Bingham*, H. Wang, F. X. Qin, J. F. Sun, S. C. Yu, V. Franco, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 115,** 17A318 (2014)

21. "Tailoring magnetic and microwave absorption properties of glass-coated soft ferromagnetic amorphous microwires for microwave energy sensing" –*J. Devkota*, P. Colosimo, A. Chen, V. S. Larin, H. Srikanth and M. H. Phan, **Journal of Applied Physics 115**, 17A525 (2014)

22. "Sensing RF and microwave energy with fiber Bragg grating heating via soft ferromagnetic glass-coated microwires" –P. Colosimo, A. Chen, *J. Devkota*, **H. Srikanth** and M. H. Phan, **Sensors and Actuators A: Physical 210**, 25 (2014)

23. "Exchange bias effect in Au-Fe_3O_4 nanocomposites" –*S. Chandra*, *N. A. Frey Huls*, M. H. Phan, ***S. Srinath***, M. A. Garcia, Youngmin Lee, Chao Wang, Shouheng Sun, O. Iglesias and **H. Srikanth**, **Nanotechnology 25,** 055712 (2014)

24. "Synthesis, inductive heating, and magnetoimpedance-based detection of multifunctional Fe3O4 nanoconjugates" –*J. Devkota*, T. T. T. Mai, *K. Stojak*, P. T. Ha, H. N. Pham, X. P. Nguyen, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Sensors and Actuators B 190,** 715 (2014)

25. "Enhanced magnetism and ferroelectricity in epitaxial PZT/CFO/LSMO multiferroic heterostructures grown using dual laser ablation technique" –D. Mukherjee, M. Hordagoda, *P. Lampen*, M. H. Phan, **H. Srikanth**, S. Witanachchi and P. Mukherjee, **Journal of Applied Physics 115**, 17D707 (2014)

26. "A highly sensitive magnetic biosensor for detection and quantification of anticancer drugs tagged to superparamagnetic nanoparticles" –*J. Devkota*, *J. Wingo*, T. T. T. Mai, X. P. Nguyen, N. T. Huong, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 115**, 17B503 (2014)

27. "Impacts of first order phase transition and phase coexistence on the universal behavior of inverse magnetocaloric effect" –***A. Biswas***, *N. S. Bingham*, T. L. Phan, N. H. Dan, S. C. Yu, M. H. Phan and **H. Srikanth**, **Journal of Applied Physics 115**, 17A907 (2014)

28. "Soft ferromagnetic microribbons with enhanced GMI properties for high frequency sensor applications" –*J. Devkota*, *A. Ruiz*, F. X. Qin, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Physics Express 4**, 10 (2014)

2013

29. "Influence of magnetic field on critical behavior near a first order transition in optimally doped manganites: The case of La1-xCaxMnO3 (0.2 <= x <= 0.4)" –P. Zhang, *P. Lampen*, T. L. Phan, S. C. Yu, T. D. Thanh, N. H. Dan, V. D. Lam, **H. Srikanth** and M. H. Phan, **Journal of Magnetism and Magnetic Materials 348**, 146 (2013)

30. "Inverse magnetocaloric and exchange bias effects in single crystalline LSMO nanowires" – *S. Chandra*, ***A. Biswas***, S. Datta, B. Ghosh, A. K. Raychaudhuri and **H. Srikanth**, **Nanotechnology 24**, 505712 (2013)

31. "Magnetic entropy change in core-shell and hollow nanoparticles" –*S. Chandra*, ***A. Biswas***, ***H. Khurshid***, W. F. Li, G. C. Hadjipanayis and **H. Srikanth**, **Journal of Physics-Condensed Matter 25,** 426003 (2013)

32. "The scaling and universality of conventional and inverse magnetocaloric effects in Heusler alloys" –***A. Biswas***, T. L. Phan, N. H. Dan, P. Zhang, S. C. Yu, **H. Srikanth** and M. H. Phan, **Applied Physics Letters 103,** 162410 (2013)

33. "Mechanism and controlled growth of shape and size variant core-shell FeO/Fe_3O_4 nanoparticles" –***H. Khurshid***, W. Li, *S. Chandra*, M. H. Phan, G. C. Hadjipanayis, P. Mukherjee and **H. Srikanth**, **Nanoscale 5**, 7942 (2013)

34. "Synthesis and magnetic properties of hybrid nanostructures of Pt-Fe_xO_y" –H. Khurshid, S. Chandra, P. Mukherjee and H. Srikanth, **Journal of Materials Chemistry C 1,** 6553 (2013)

35. "Synthesis, structure and magnetic properties of $SrFe_{12}O_{19}$/LCMO hard/soft phase composites" –D. T. M. Hue, *P. Lampen*, T. V. Manh, V. D. Viet, H. D. Chinh, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 114**, 123901 (2013)

36. "Nanocolumnar Interfaces and Enhanced Magnetic Coercivity in Preferentially oriented Cobalt Ferrite Thin Films Grown Using Oblique-Angle Pulsed Laser Deposition" –D. Mukherjee, M. Hordagoda, R. Hyde, *N. Bingham*, **H. Srikanth**, S. Witanachchi and P. Mukherjee, **ACS Applied Materials and Interfaces 5**, 7450 (2013)

37. "Ferrite nanoparticles for future heart diagnostics" –N. H. Hong, A. T. Raghavendar, O. Ciftja, M. H. Phan, *K. Stojak*, **H. Srikanth** and Y. H. Zhang, Applied Physics A-Materials Science and Processing 112, 323 (2013)

38. "Universality in the entropy change for the inverse magnetocaloric effect" –***A. Biswas***, *S. Chandra*, T. Samanta, B. Ghosh, S. Datta, M. H. Phan, A. K. Raychaudhuri, I. Das and **H. Srikanth, Physical Review B** 87, 134420 (2013)

39. "Mechanical and magnetocaloric properties of Gd-based amorphous microwires fabricated by melt-extraction technique" - F. Qin, H. Wang, H.X. Peng, *N.S. Bingham*, D.W. Xing, J.F. Sun, V. Franco, **H. Srikanth**, and M.H. Phan, **Acta Materialia 61,** 1284 (2013)

40. "Impact of reduced dimensionality on the magnetic and magnetocaloric response of $La_{0.7}Ca_{0.3}MnO_3$" –*P. Lampen*, *N. S. Bingham*, M. H. Phan, H. Kim, M. Osofsky, A. Pique, T. L. Phan, S. C. Yu and **H. Srikanth**, **Applied Physics Letters 102**, 062414 (2013)

41. "The universal behavior of inverse magnetocaloric effect in antiferromagnetic materials" –***A. Biswas***, *S. Chandra*, T. Samanta, M. H. Phan, I. Das and **H. Srikanth**, **Journal of Applied Physics 113**, 17A902 (2013)

42. "Detection of low concentration magnetic nanoparticles using an integrated RF magnetic biosensor" –*J. Devkota*, *A. Ruiz*, C. Wang, S. Mohapatra, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 113**, 104701 (2013)

43. "Magnetoresistance, magnetoreactance, magnetoimpedance effects in single and multi-wire systems" –*J. Devkota, A. Ruiz*, P. Mukherjee, **H. Srikanth** and M. H. Phan, A. Zhukhov and V. S. Larin, **Journal of Alloys and Compounds 549**, 295 (2013)

44. "Enhanced GMI effect in soft ferromagnetic amorphous ribbons with pulsed laser deposition of cobalt ferrite" –*A. Ruiz*, D. Mukherjee, J. Devkota, M. Hordagoda, P. Mukherjee, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 113,** 17A323 (2013)

45. "Synthesis and magnetic properties of core-shell FeO/Fe_3O_4 nano-octopods" –***H. Khurshid***, *S. Chandra*, W. F. Li, M. H. Phan, G. C. Hadjipanayis, P. Mukherjee and **H. Srikanth**, **Journal of Applied Physics 113**, 17B508 (2013)

46. "Magnetoimpedance biosensor with enhanced sensitivity for highly sensitive detection of Nanomag-D beads" –*J. Devkota*, *A. Ruiz*, P. Mukherjee, **H. Srikanth** and M. H. Phan, **IEEE Transactions on Magnetics 49**, 4060 (2013)

47. "Growth and physical property study of single nanowire (diameter ~ 45 nm) of half-doped manganite" –S. Datta, *S. Chandra*, S. Samanta, K. Das, **H. Srikanth** and B. Ghosh, Journal of Nanomaterials, Article Number: 162315 DOI: 10.1155/2013/162315 Published: 2013

2012

48. "Asymmetric hysteresis loops and its dependence on magnetic anisotropy in exchange biased Co/CoO core-shell nanoparticles" –*S. Chandra*, ***H. Khurshid***, M. H. Phan and **H. Srikanth**, **Applied Physics Letters 101**, 232405 (2012)

49. "Magnetic phase transitions and magnetocaloric effect in La-Ca-Mn-Fe-O manganites" –*P. J. Lampen*, Y. D. Zhang, T. L. Phan, P. Zhang, S. C. Yu, **H. Srikanth** and M. H. Phan, **Journal of Applied Physics 112**, 113901 (2012)

50. "Magnetoresistance, magneto-reactance and magnetoimpedance effects in single and multi-wire systems" –*J. Devkota*, *A. Ruiz*, P. Mukherjee, **H. Srikanth**, M. H. Phan, A. Zhukov and V. Larin, **Journal of Alloys and Compounds 549**, 295 (2012)

51. "Challenges in the stoichiometric growth of polycrystalline and epitaxial PZT/LSMO multiferroic heterostructures using pulsed laser deposition" –D. Mukherjee, R. Hyde, M. Hordagoda, *N. Bingham*, **H. Srikanth**, S. Witanachchi and P. Mukherjee, **Journal of Applied Physics 112**, 064101 (2012)

52. "Influence of microstructure and interfacial strain on the magnetic properties of epitaxial Mn_3O_4/LSMO layered composite thin films" –D. Mukherjee, *N. S. Bingham*, M. Hordagoda, M. H. Phan, **H. Srikanth**, S. Witanachchi and P. Mukherjee, **Journal of Applied Physics 112**, 083910 (2012)

53. "Magnetocaloric properties of nanocrystalline $LaMnO_3$: Enhancement of refrigerant capacity and relative cooling power" –***Anis Biswas***, *Sayan Chandra*, M. H. Phan and **H. Srikanth**, ***Journal of Alloys and Compounds* 545**, 157 (2012)

54. "Evidence of a canted magnetic state in self-doped $LaMnO_{3+d}$: A magnetocaloric study" –*S. Chandra*, ***A. Biswas***, S. Datta, B. Ghosh, V. Siruguri, A. K. Raychaudhuri, M. H. Phan and **H. Srikanth**, **Journal of Physics –Condensed Matter 24**, 366004 (2012)

55. "Impact of nanostructuring on the magnetic and magnetocaloric properties of microscale phase separated LPCMO manganites" –*N. S. Bingham*, *P. Lampen*, M. H. Phan, T. H. Hoang, H. D. Chinh, C. L. Zhang, S. W. Cheong and **H. Srikanth**, ***Physical Review B* 86**, 064420 (2012)

56. "Excellent magnetocaloric properties of melt extracted Gd-based amorphous microwires" –*N. S. Bingham*, H. Wang, F. Qin, H. X. Peng, J. F. Sun, V. Franco, **H. Srikanth** and M. H. Phan, **Applied Physics Letters 101**, 102407 (2012)

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157. "Magnetic properties of magneto-rheological fluids with uniformly dispersed Fe nanoparticles" –*P. Poddar, J. L. Wilson*, **H. Srikanth**, Y. –H. Yoo, N. M. Wereley, S. Kotha, L. Barghouty and R. Radhakrishnan **Journal of Nanoscience and Nanotechnology 4**, 192 (2004)

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158. "In-plane and out-of-plane transverse susceptibility in close-packed arrays of monodisperse

Fe nanoparticles" – *P. Poddar, J. L. Wilson*, **H. Srikanth**, D. F. Farrell and S. A. Majetich **Physical Review B 68**, 214409 (2003)

159. "Surface modification and magnetism in nanostructured materials" –**H. Srikanth** and T. S. Sudarshan, **Surface Engineering in Materials Science II (TMS Proc. Book)**, pp 15 – 22 (2003)

160. "Magnetic studies of crystal-engineered molecular nanostructures" –**H. Srikanth**, *R. Hajndl*, B. Moulton and M. Zaworotko, **Journal of Applied Physics 93**, 7089 (2003)

161. "Growth and Characterization of BSTO/Hexaferrite thin films" – *R. Hajndl, J. Sanders*, **H. Srikanth** and N. J. Dudney, **Journal of Applied Physics 93**, 7999 (2003)

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162. "Crystal engineering of a nanoscale Kagome lattice" –B. Moulton, J. Lu, *R. Hajndl*, **H. Srikanth** and M. J. Zaworotko, **Angewandte Chemie 41,** 2821 (2002)

163. "Giant magnetoresistance, structural and magnetic properties of glass-coated Fe-Ni-Cu microwires" –J. Tang, K. –Y. Wang, L. Spinu, **H. Srikanth**, P. J. Schilling and N. Moelders, **Journal of Magnetism and Magnetic Materials 249**, 73 (2002)

164. "The transverse susceptibility of uniaxial ferromagnets" –L. Spinu, A. Stancu, **H. Srikanth** and C. J. O'Connor, **Applied Physics Letters 80**, 276 (2002)

165. "Relaxation and interaction effects on transverse susceptibility measurements of nanoparticle systems" –L. Spinu, A. Stancu, L. D. Tung, P. Postolache, J. Fang, **H. Srikanth** and C. J. O'Connor, **Journal of Magnetism and Magnetic Materials 242**, 604 (2002)

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166. "Magnetic studies of polymer-coated Fe nanoparticles synthesized by microwave plasma polymerization" –**H. Srikanth**, *R. Hajndl, C. Chirinos, J. Sanders*, A. Sampath and T. S. Sudarshan, **Applied Physics Letters 79**, 3503 (2001)

167. "Micromagnetic study of reversible transverse susceptibility" –L. Spinu, A. Stancu, H. Srikanth and C. J. O'Connor, **Physica B 306**, 221 (2001)

168. "Mapping of switching and anisotropy fields in magnetic nanoparticles" –**Srikanth Hariharan, Materials Physics and Mechanics 4**, 1 (2001)

169. "RF probe studies of magnetic nanostructures" –L. Spinu, C. J. O'Connor and **H. Srikanth**, ***(****invited paper****)*** **IEEE Transactions on Magnetics 37**, 2188 (2001)

170. "Dynamic transverse susceptibility in Au-Fe-Au nanoparticles" –**H. Srikanth**, E. E. Carpenter, L. Spinu, J. Wiggins, W. L. Zhou and C. J. O'Connor, **Materials Science and Engineering A** 304-306, 901 (2001)

171. "Vortex Dynamics and Magnetic Anisotropy in $RuSr_2GdCu_2O_8$" –**H. Srikanth**, L. Spinu, T. Kodenkandath, J. B. Wiley and J. Tallon, **Journal of Applied Physics 89,** 7487 (2001)

172. "Switching behavior and strain dependence in epitaxial CrO_2 thin films" –L. Spinu, **H. Srikanth**, C. J. O'Connor, A. Gupta, X. W. Li and G. Xiao, **IEEE Transactions on Magnetics 37**, 2596 (2001)

173. "Strain dependence and magnetic anisotropy in chromium dioxide thin films" –L. Spinu, **H. Srikanth**, X. W. Li, A. Gupta and G. Xiao, **Materials Research Symposium Proceedings Vol. 648,** P3.31.1 (2001)

174. "RF susceptibility of La_{1-x}Sr_{x}MnO_{3} single crystals : Magnetic Signatures of Structural Changes -P.V. Parimi, **H. Srikanth**, M. Bailleul, S. Sridhar,R. Suryanarayanan, L. Pinsard and A. Revcolevschi, **Materials Research Symposium Proceedings Vol. 602**, 137 (2001)

175. "Dynamic studies of gamma-Fe2O3 nanoparticle systems" -L. Spinu , D. Fiorani, **H. Srikanth**, F. Lucari, F. D'Orazio, E. Tronc, and M. Nogués, **Journal of Magnetism and Magnetic Materials 226-230**, 1927 (2001).

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176. "Superparamagnetism and transverse susceptibility in magnetic nanoparticles" –L. Spinu, **H. Srikanth,** J. Wiemann, S. Li, J. Tang and C. J. O'Connor, in press, **IEEE Transactions on Magnetics 36**, 3032 (2000).

177. "Probing magnetic anisotropy effects in epitaxial CrO_2 thin films" -L. Spinu, **H. Srikanth**, A. Gupta, X. W. Li and G. Xiao, **Physical Review B 62**, 8931 (2000).

178. "Synthesis and Characterization of new mixed-metal triple layered perovskites, Na2La2Ti3-xRuxO10" –J. N. Lalena, A. U. Falster, W.B. Simmons Jr., E. E. Carpenter, J. Wiggins, **S. Hariharan** and J. B. Wiley, **Chemistry of Materials 12**, 2418 (2000)

179. "Magneto-impedance of glass coated Fe-Ni-Cu microwires" -J. Wiggins, **H. Srikanth**, K. -Y. Wang, L. Spinu and J. Tang, **Journal of Applied Physics 87**, 4810 (2000)

180. "Dynamic RF susceptibility in magnetic nanoparticles" -L. Spinu, **H. Srikanth**, E. E. Carpenter and C. J. O'Connor, **Journal of Applied Physics 87**, 5490 (2000)

181. "Synthesis and magnetic properties of Gold-Iron-Gold Nanocomposites" - Everett E. Carpenter, Amar Kumbhar, Joan A. Wiemann, **Hariharan Srikanth**, Jason Wiggins, Weilie Zhou and Charles J. O'Connor, **Materials Science and Engineering A, 286** 81 (2000)

Publications prior to 2000

182. "Radio-frequency impedance measurements using a tunnel-diode oscillator (TDO) technique" -**H. Srikanth,** J. Wiggins and H. Rees, **Review of Scientific Instruments 70**, 3097 (1999).

183. "High frequency electrodynamics of $La_{1-x}Sr_xMnO_3$ single crystals" -**H. Srikanth**, B. Revcolevschi, S. Sridhar, L. Pinsard and A. Revcolevschi, **Materials Research Symposium Proceedings**, **"Science and Technology of Magnetic Oxides"**, Vol. 494, pp 311-316 (1998)

184. "Systematics of two-component superconductivity in high quality YBCO single crystals from microwave measurements" - **H. Srikanth**, Z. Zhai, S. Sridhar and A. Erb , **Physical Review B 57**, 7986 (1998).

185. "Disorder effects in electronic structure of substituted transition metal compounds" –D. D. Sarma, A. Chainani, S. R. Krishnakumar, E. Vescovo, C. Carbone, W. Eberhardt, O. Rader, Ch. Jung, Ch. Hellwig, W. Gudat, **H. Srikanth** and A. K. Raychaudhuri, **Physical Review Letters 80**, 4004 (1998).

186. "Microwave properties of YBCO crystals grown in $BaZrO_3$ crucibles: influence of c-axis currents" –**H. Srikanth,** Z. Zhai, S. Sridhar, **Journal of Physics and Chemistry of Solids 21**, 2105 (1998)

187. "Magneto-electrodynamics in $DyNi_2B_2C$: RF and Microwave experiments" -D. P. Choudhury**, H. Srikanth,** S. Sridhar and P. C. Canfield, **Physical Review B 58,** 14490 (1998).

188. "Microwave response of YBCO crystals: Evidence for a multi-component order parameter" -**H. Srikanth,** Balam. A. Willemsen, T. Jacobs, S. Sridhar, A. Erb, E. Walker and R. Flukiger, **Physical Review B (Rapid Communications) 55**, R14733 (1997).

189. "Evidence for multi-component superconducting order parameter in YBCO single crystals from microwave measurements" -S. Sridhar, **H. Srikanth,** Z. Zhai, Balam A. Willemsen, T. Jacobs, A. Erb, E. Walker and R. Flukiger, (Proceedings of Fifth International conference on Materials and Mechanisms of Superconductivity, **Physica C**, **282-287,** 256 (1997).

190. **"**Observation of coherent Josephson response in the non-linear ab-plane microwave impedance of YBCO single crystals" -Z. Zhai, **H. Srikanth,** S. Sridhar, A. Erb, E. Walker and R.

Flukiger, (Proceedings of Fifth International conference on Materials and Mechanisms of Superconductivity, Physica C 1997), **Physica C 282-287**, 1601 (1997).

191. "Microwave properties of Pr-doped YBCO: Influence of magnetic scattering" - **H. Srikanth**, S. Sridhar, D.A. Gajewski and M.B. Maple, **Physica C 291**, 235 (1997).

192. "Depairing, vortex response and critical fields in YNiBC" -S. Oxx, D.P. Choudhury, B. Willemsen, **H. Srikanth**, S. Sridhar, B.K. Cho, P.C. Canfield, **Physica C, 264** 103 (1996).

193. "Comment on "Vortex Glass and Lattice Melting Transitions in a YNiBC single crystal" -S. Sridhar, S. Oxx, Balam A. Willemsen, **H. Srikanth** and D.P. Choudhury, **Physical Review Letters 77**, 2145 (1996).

194. "Magnetic susceptibility studies on Pr-doped YBCO single crystals in the insulating regime" -B. Jayaram, **H. Srikanth**, B.M. Wanklyn, C. Changkang, E. Holzinger-Schweiger and G. Leising, **Physical Review B 52**, 89 (1995).

195. "Metal-insulator transition in perovskite oxides: Tunneling experiments" -A.K. Raychaudhuri, K.P. Rajeev, **H. Srikanth** and N. Gayathri, **Physical Review B 51**, 7421 (1995).

196. "Transition from metallic to tuneling type conductance in N-N and N-S point contacts" -**H. Srikanth** and A.K. Raychaudhuri, **Physical Review B 46**, 14713 (1992).

197. "Microshort to tunneling transition in Au-YBCO (single crystal) point contacts" -**H. Srikanth** and A.K. Raychaudhuri, **Physical Review B 45**, 383 (1992).

198. "Point contact tunneling studies on Pr-doped YBCO single crystals" -**H. Srikanth,** A.K. Raychaudhuri, J.L. Peng and R.L. Greene , **Physica C 218**, 245 (1993).

199. "Tunneling studies on single crystals of Ca-doped BSCCO superconductors" -**H. Srikanth** et al. **Physica C 200**, 372 (1992).

200. "Normal state tunneling conductance of perovskite oxides" -**H. Srikanth** et al. **Physica C 195**, 87 (1992).

201. "Modelling Tunneling data of N-S point contact junctions" -**H. Srikanth** and A.K. Raychaudhuri, **Physica C 190**, 229 (1992).

202. "Effect of surface on the conductance characteristics of Au-BSCCO point contact junctions" -**H. Srikanth** and A.K. Raychaudhuri, **Journal of Applied Physics 70**, 7478 (1991).

203. "Low temperature studies on normal perovskite oxides: role of correlation and disorder" - A.K. Raychaudhuri, K.P. Rajeev, **H. Srikanth** and R. Mahendiran, **Physica B 197**, 124 (1994).

204. "Phonon spectroscopy of perovskite oxides using point contact techniques" –**H. Srikanth** and A. K. Raychaudhuri, ***Phonon Scattering in Condensed Matter VII*** (Ed. Meissner and Pohl, Springer, Heidelberg, p 158 (1993)

205. "Tunneling studies on sodium tungsten bronzes near the metal-insulator transition" -**H. Srikanth** and A.K. Raychaudhuri, **Journal of Physics : Condensed Matter 5**, L551 (1993).

206. "Versatile system for point contact spectroscopy" -**H. Srikanth** and A.K. Raychaudhuri, **Cryogenics 31**, 421 (1991).

207. "A comparison of barrier-type tunnel junction and point contact junction formed on the same high Tc superconductor" –**H. Srikanth** and A. K. Raychaudhuri, **Pramana 36**, 621 (1991)

208. "Point contact tunneling on ceramic YBCO using STM tips" –**H. Srikanth**, M. Rajeswari and A. K. Raychaudhuri, **Pramana 36,** 207 (1991)

Invited Talks at Conferences/Universities/National Labs/other forums

1. **Visiting Professor**, Department of Physics, Indian Institute of Technology, Bombay (Jan-Feb 2016)

2. **Visiting Professor,** Department of Physics, Indian Institute of Science, Bangalore (Feb-March 2016)
3. **Invited Speaker**, 7th International workshop on Amorphous and Nanostructured Magnetic Materials (ANMM' 2015), Iasi, Romania (September 2015)
4. **Visiting Professor**, Basque Center for Materials (BCM), Bilbao, Spain (July 2015)
5. **Invited Speaker,** 'International Conference on Magnetism (ICM)', Barcelona, Spain (July 2015)
6. **Invited Speaker**, 'Recent Trends in Nanomagnetism, Spintronics and their Applications' (RTNSA 2015), Ordizia, Spain (June 2015)
7. **Invited Speaker,** 'Advanced nanocomposite materials for energy-efficient magnetic refrigeration', Frontiers in Materials Processing, Applications, Research and Technology (FiMPART'15), Hyderabad, India (June 2015)
8. **Invited Speaker,** "Complex Magnetic Nanostructures" Workshop, Aegina, Greece (June 2015)
9. **Invited Seminar,** Delft University of Technology (May 2015)
10. **Visiting Professor,** Slovak Academy of Sciences, Kosice, Slovakia (April-May 2015)
11. **Invited Speaker**, TMS Conference, Fifth Symposium on Magnetic Materials for Energy Applications, Orlando, FL (March 2015)
12. **Keynote Speaker,** Workshop on nano and biomaterials, University of San Luis Potosi, San Luis Potosi, Mexico (December 2014)
13. **Nanomagnetism Tutorial,** Instituto Potosino de Investigacion Cientifica y Tecnologica, San Luis Potosi, Mexico (September 2014)
14. **Invited Speaker,** XXIII IMRC Symposium on 'Phase transitions in magnetic materials: from fundamentals to applications', Cancun, Mexico (August 2014)
15. **Invited Speaker,** European Conference on Magnetic Sensors and Actuators (EMSA 2014), Vienna, Austria (July 2014)
16. **Visiting Professor,** Slovak Academy of Sciences, Kosice, Slovakia (June-July 2014)
17. **Lectures on nanomagnetism,** Materials Research Institute, National University of Mexico (May 2014)
18. **Invited Speaker**, International Conference on Superconductivity and Magnetism(ICSM 2014), Antalya, Turkey (May 2014)
19. **Invited Speaker,** Bionanomaterials Conference, Nerja (Spain) (April 2014)
20. **Lectures on nanomagnetism,** University of Pais Vasco, Bilbao (Spain) (April 2014)
21. **Invited Speaker,** Nano and Giga challenges in Electronics, Photonics and Renewable Energy symposium 2014, Arizona State University, Phoenix, AZ (March 2014)
22. **Invited Speaker,** Magnetic Materials and Applications (MagMA 2013), IIT Guwahati, India (December 2013)
23. **Colloquium**, Physics Department, Louisiana State University, Baton Rouge, LA, Nov. 2013
24. **Invited Speaker,** Donostia International Conference on Nanoscale Magnetism (DICNMA), San Sebastian, Spain (Sept 2013)
25. **Invited Speaker,** International Conference on Materials for Advanced Technologies (ICMAT'13), Singapore (July 2013)
26. **Invited Speaker,** Bilbao Workshop on Magnetic Materials, Bilbao, Spain (May 2013)
27. **Seminar,** Physics Department, University of Alabama, Tuscaloosa (April 2013)
28. **Seminar,** Physics Department, University of Nebraska, Lincoln (March 2013)
29. **Seminar,** Physics Department, University of Delaware (March 2013)
30. **Invited Speaker,** American Ceramics Society (ACeRS) annual meeting (ICACC '13), Daytona Beach (January 2013)
31. **Invited Speaker**, 2013 Joint MMM/Intermag conference, Chicago IL, January 2013

32. **Invited speaker**, ALS User meeting workshop on "Advanced characterization of critical magnetic materials", Lawrence Berkeley Lab, Berkeley CA, October 10, 2012
33. **Seminar**, Physics Department, Indian Institute of Science, Bangalore (July 2012)
34. **Invited speaker**, Multifunctional Materials 7 (MFM-7) Workshop, Gamboa, Panama (August 2012)
35. **Seminar**, Institut National de la Recherche Scientifique (INRS)- Énergie, Matériaux et Télécommunications, Varennes, Quebec, Canada, June 10, 2012
36. **Seminar**, Department of Physics, University of Connecticut, Storrs, CT, April 19, 2012
37. **Seminar**, Department of Physics, University of Colorado –Colorado Springs, CO, March 13, 2012
38. **Seminar**, Department of Physics, Colorado State University, Fort Collins, CO, March 12, 2012
39. **Invited talk**, Symposium on Advanced Materials and Processing for Photonics and Energy, 36th International Conference on Adanced Ceramics and Composites (ICACC '12), Daytona Beach (Jan. 25, 2012)
40. **Invited talk**, Intel Corporation (Components Research), Hillsborough, OR (Dec. 2011)
41. **Seminar**, Lawrence Berkeley National Lab, Berkeley, CA (Oct. 12, 2011)
42. **Invited Speaker**, Soft Magnetic Materials (SMM 20) Conference, Kos Island, Greece (Sept. 18-22), 2011
43. **Invited Speaker,** Multifunctional Materials (MFM-6) Workshop, Kodiak, Alaska (July 31 – Aug 3, 2011)
44. **Invited Talk,** Department of Physics, Imperial College, London,UK (June 7, 2011)
45. **Invited Talk,** Department of Physics, Cambridge University, Cambridge, UK (June 6, 2011)
46. **Invited Talk,** CSIC –Universidad Autonama Madrid, Madrid, Spain (May 30, 2011)
47. **Visiting Professor,** University of Sevilla, Seville, Spain (May 22 – June 1, 2011) – Series of 4 lectures on "Nanomagnetism: Concepts, Fabrication, Characterization, Applications"
48. **Invited Speaker,** DOE-BES Physical Behavior of Materials Meeting, Warrenton, VA (March 6 – 9, 2011)
49. **Invited Speaker**, TMS Conference, Symposium on Magnetic Materials for Energy Applications, San Diego, CA (Feb. 27 – March 3, 2011)
50. **Invited Speaker**, Conference on Strongly Correlated Materials (iConQuest 2010), New Delhi, INDIA (December 20-23, 2010)
51. **Seminar,** Northwestern University, Department of Physics, Evanston, IL (Oct. 14, 2010)
52. **Invited Speaker**, Symposium on Magnetic and Transport Properties of Oxides, CIMTEC 2010, Montecatini Terme, ITALY (June 6-11, 2010)
53. **Seminar,** "Functional magnetic nanostructures", CNR-ISMN, Bologna, ITALY (June 11, 2010)
54. **Seminar,** "Functional magnetic nanostructures", University of Uppsala, Uppsala, SWEDEN (June 4, 2010)
55. **Seminar,** "Functional magnetic nanostructures", KTH –Royal Institute of Technology, Stockholm, SWEDEN (June 3, 2010)
56. **Seminar,** "Functional magnetic nanostructures", IFW-Dresden, Dresden, GERMANY (May 31, 2010)
57. **Invited Speaker**, Focus Topic on "Bulk properties of oxides", APS March Meeting, Portland, OR (March 15-19, 2010); Title "Magnetism in complex oxides probed by

transverse susceptibility and magnetocaloric effect"

58. **Invited Speaker**, "Functional Magnetic Nanostructures" –Evening with a Scholar lecture to the Tampa Bay community leaders/entrepreneurs, November 6, 2009
59. **Condensed Matter Seminar,** Department of Physics, University of Florida, Gainesville FL (November 16 2009)
60. **Colloquium,** Advanced Materials Research Institute, University of New Orleans, October 6, 2009
61. **Invited Speaker**, International Conference on Materials for Advanced Technologies (ICMAT 2009), Singapore (June 2009)
62. **Invited Speaker**, US-Indo Technology Forum on "New Directions and Novel Applications in Magnetism", Mumbai, India (March 1 – 4, 2009)
63. **Invited Speaker**, Workshop on Magnetic Nanomaterials, S. N. Bose Center for Basic Sciences, Kolkata, India (January 26-28, 2009)
64. **Invited speaker**, Defense Sciences Research Council (DSRC –a division of DARPA) sponsored 'Advanced Materials for Enhanced Passive Components' Workshop, Oct. 30-31, 2008
65. **Condensed Matter Seminar**, Department of Physics, University of Delaware, Newark, DE (October 14, 2008)
66. **Center for Integrated Electronics Seminar**, Department of ECE, Rensselaer Polytechnic Institute, Troy, NY (October 1, 2008)
67. **Invited Speaker**, Novel Trends in Magnetic Materials for Electromagnetic Applications Workshop, Santorini, Greece (September 3 – 5, 2008)
68. **Invited Speaker,** York post-Intermag workshop, University of York (UK), May 13, 2008
69. **Condensed Matter Seminar**, University of Leeds, Leeds, UK, May 14, 2008
70. **Device Materials Group Seminar**, MS&E, Cambridge University, UK, May 15, 2008
71. **Materials Science Colloquium**, Argonne National Laboratory, April 10, 2008
72. **Invited Speaker**, Symposium I: Synthesis and metrology of nanoscale oxides and thin films, 2008 Materials Research Society (MRS) Spring meeting, San Francisco, CA, March 2008
73. **Invited Speaker,** 2008 American Physical Society (APS) March meeting in the Focus Topic on Complex Oxides, New Orleans, LA, March 2008
74. **Colloquium**, Department of Physics, University of Wyoming (Feb 22, 2008)
75. **Seminar**, NIST (Boulder), Feb 21, 2008
76. **Condensed Matter Seminar**, Physics Department, Washington University – St. Louis, Feb. 11, 2008
77. **Condensed Matter Seminar**, Oak Ridge National Laboratory, Jan. 28, 2008
78. **Condensed Matter Seminar**, Department of Physics, Indian Institute of Science, Bangalore, India (Oct. 11, 2007)
79. **Invited Speaker** –Magnetism and Spintronics, IUMRS-International Conference on Advanced Materials(ICAM), Bangalore, India, Oct. 2007
80. **Invited Speaker**, 13th Czech and Slovak Conference on Magnetism (CSMAG 2007), Kosice, Slovakia, July 2007
81. **Invited Speaker** in Symposium J "Materials for Advanced Sensors and Devices" at the International Conference on Materials for Advanced Technologies (ICMAT 2007), Singapore, July 2007
82. **Seminar** –Physics Department, Nanyang Technical University, Singapore, July 6, 2007
83. **Seminar** –Department of Physics, Indian Institute of Technology, Madras, June 25,

2007

84. **Condensed Matter Seminar,** University of Central Florida, Orlando, FL, Jan. 29, 2007
85. **Invited Speaker** –Nanomaterials Symposium, TMS 2007, Orlando, FL, Feb. 2007
86. **Colloquium** at University of Illinois – Urbana Champaign, ECE Department, (Oct 19, 2006)
87. **Invited Talk -** "Transverse susceptibility as a probe of magnetic anisotropy in oxides" at the **CIMTEC 2006** (June 5 – 9, 2006, Acireale, Sicily).
88. **Invited speaker** on "Functional Magnetic Nanostructures Based on Polymer Nanocomposites and Self-Assembled Arrays" at the Materials Research Society (MRS) Fall 2005 meeting, Boston, MA (Dec. 2005)
89. **Colloquium** at University of Wisconsin – Milwaukee, Department of Physics, (Dec. 9, 2005)
90. **Colloquium** at Physics Department, Wayne State University, Detroit (Nov. 17, 2005)
91. **Colloquium** at INRS-EMT, University of Quebec, Montreal (Oct. 14, 2005).
92. **Colloquium** at Institute of Photonics, Lasers and Biophotonics, State University of New York at Buffalo, Buffalo, NY (Aug. 26, 2005)
93. "Magnetic anisotropy and spin dynamics in functional magnetic nanostructures" – **Srikanth Hariharan**, Colloquium, Department of Physics, Northeastern University, Boston, MA (Dec. 15, 2004)
94. "Materials processing and tunable magnetism in polymer nanocomposites" –**Srikanth Hariharan (invited)**, Thirteenth Processing and Fabrication of Advanced Materials (PFAM-13) conference, Singapore, Dec. 6 – 8 (2004).
95. "Transverse susceptibility and magnetization dynamics in magnetic nanostructures" – **Srikanth Hariharan (invited)**, Seeheim Conference on Magnetism (SCM 2004), Seeheim Germany, June 27-July 1, 2004
96. "Probing magnetic anisotropy and spin polarization in spintronic materials" –**Srikanth Hariharan (invited)**, IEEE NTC workshop in Quantum Device Technology, Clarkson Univ., Potsdam, NY (May 17-21, 2004).
97. "Cooperative magnetism and transverse susceptibility in nanocomposite materials" – Srikanth Hariharan, Invited seminar at Data Storage Center, Carnegie-Mellon University**,** Pittsburgh (Nov. 21, 2003).
98. Tutorial on Magnetic Nanostructures –**Srikanth Hariharan**, Presented at the AVS Florida Chapter meeting at UCF, Orlando (March 2003)
99. "Dynamic magnetization and RF susceptibility in nanocomposite materials" **– Srikanth Hariharan**; **Invited Talk** at the **American Physical Society (APS)** March meeting, Austin, TX (March 2003)
100. "Surface modification and magnetism in nanostructured materials" –**Srikanth Hariharan**; Talk presented in Symposium on "Surface Engineering in Materials" at The Materials and Minerals Society (TMS) annual conference, San Diego, CA (March 2003)
101. "Spin dynamics in novel magnetic systems" –**Srikanth Hariharan, Physics Department Colloquium** at Florida International University, Miami, FL (Nov. 2002)
102. "Spin dynamics in novel magnetic systems" –**Srikanth Hariharan**; **Physics Department Seminar** at University of Florida, Gainesville, FL (September 2002)
103. "Surface modification and magnetism in nanostructured materials" –**Srikanth Hariharan**; **Invited talk at the Florida Chapter American Vacuum Society (AVS) meeting**, Orlando, FL (March 2002)
104. "Spin dynamics in novel magnetic systems" –**Srikanth Hariharan**; **Colloquium at University of Central Florida**, Physics Department (September 2001)

105. "Mapping of switching and anisotropy fields in magnetic nanoparticles" –**Srikanth Hariharan**; **Invited talk in Symposium on Advanced Data Storage Materials at the International Conference on Materials for Advanced Technologies (ICMAT),** Singapore (July 2001)
106. "Spin dynamics in magnetic nanoparticles and thin films" –**Srikanth Hariharan**; **Colloquium at the Oak Ridge National Laboratory**, Solid State Division (June 2001)
107. "Dynamic RF response in novel magnetic systems" –**Srikanth Hariharan**; **Invited seminar at MARTECH**, Florida State University, Tallahassee, FL (February 2001)
108. "Radio-frequency probe studies of magnetic nanostructures" –**H. Srikanth**, L. Spinu and C. J. O'Connor; **Invited talk at the joint 8th IEEE Magnetics/MMM conference**, San Antonio, TX (January 2001)

(Over 200 contributed conference presentations (oral/poster) from my group in my research career spanning two decades. Not listed in CV)

Other Invited talks/colloquia/seminars (prior to joining USF)

1. Colloquium, Physics Dept., Univ. South Florida, Tampa, FL (March 2000)
2. Colloquium, Physics Dept., Clemson Univ. SC (March 2000)
3. Colloquium, Physics Dept., Clarkson Univ., NY (Feb. 2000)
4. Seminar at MRSEC, Physics Dept., Univ. of Maryland, MD (Oct. 1999)
5. Invited talk at Dept. of Physics, Southern Univ.-Baton Rouge, LA (Mar. 1999)
6. Presentation at DARPA/AMRI/Industry symposium, New Orleans, LA (Feb. 1999)
7. Seminar at Tulane University, New Orleans, LA (Jan. 1999)
8. Seminar at Lousiana State University (Physics Dept.), Baton Rouge, LA (Nov. 1998)
9. Seminar at University of New Orleans (Physics Dept.), New Orleans, LA (Sept. 1998)
10. Coloquium at Advanced Materials Research Institute, New Orleans, LA (April 1998)
11. Colloquium at Texas A&M University, College Station, TX (March, 1998)
12. Condensed matter seminar at Brown University, Providence, RI (January 1998).
13. Solid State seminar at Brookhaven National Lab (Jan 1998).
14. Condensed Matter seminar at Northeastern University, Boston, MA (November 1997).
15. Solid state seminar at Brookhaven National Lab (January 1997)

Membership in Professional Societies

American Physical Society (APS) (Fellow)
Materials Research Society (MRS)
American Vacuum Society (AVS)
The Metals, Minerals and Materials Society (TMS)
Institute of Nanotechnology (IoN) -Fellow
Institute for Electrical and Electronic Engineers (IEEE) –Magnetics Society (Senior Member)

Professional/Conference Service

- **Associate Editor**, Journal of Applied Physics (March 2014 - present)
- **Publications Chair,** 2018 International Conference on Magnetism (ICM), San Francisco
- **Program Committee,** INTERMAG 2015 (Beijing, May 2015)
- **Symposium Co-Organizer,** Energy Materials Nanotechnology Conference (Orlando, Nov. 2014)
- **Program Committee**, MMM 2014 (Hawaii, Nov. 2014)
- **Program Committee,** American Vacuum Society Magnetic Interfaces and Nanostructured Devices (MIND) 2014
- **Session Chair,** International Conference on Superconductivity and Magnetism(ICSM), Antalya, Turkey (2014)
- **Session Chair,** Electromagnetic Sensors and Applications(EMSA) Conference, Vienna, Austria (2014)
- **Publication Chair and Steering Committee,** Magnetism and Magnetic Materials (MMM) conference, Denver, CO (Nov. 2013)
- **Lead organizer**, Symposium on 'Current trends in magnetic refrigeration', IMRC 2013 conference, Cancun, Mexico (August 2013)
- **Co-organizer**, Multifunctional Materials (MFM-7) Workshop, Panama, August 2012
- **Publication Chair and Steering Committee Member**, 2013 Joint INTERMAG/MMM Conference, Chicago, IL (January 2013)
- **Program Committee,** 2012 INTERMAG, Vancouver, Canada (May 2012)
- **Publication Chair and Steering Committee Member**, 2011 MMM Conference, Scottsdale, AZ (November 2011)
- **Session Chair**, Session AT: Magnetocaloric Materials I, joint MMM/INTERMAG conference, January 2010, Washington DC
- **Co-organizer, MRS 2010 Spring Meeting Symposium N** "Functional oxide nanostructures and heterostructures", April 2010, San Francisco, CA
- **Publications Editor, 11th** Joint INTERMAG/MMM conference, Washington DC, January 2010
- **Scientific Committee Member**, Symposium E: Magnetic materials at the nanoscale, 11th International Conference on Advanced Materials (ICAM 2009), Rio de Janeiro, Brazil (Sept 2009)
- **Session Chair**, Session BF: Ferrites, INTERMAG conference, May 2009, Sacramento, CA
- **Publications Editor & Program Committee member**, 53rd MMM Conference to be held in Austin, TX (Nov. 2008)
- **Advisory Committee Member**, "Disorder, Complexity and Biology (DISCOMB '09)" to be held in Banaras Hindu University, Varanasi, India (Jan 2009)
- **Publications Editor & Program Committee member**, 52nd MMM, Tampa, FL (Nov. 2007)
- **Session Chairman**, 52nd MMM conference, Tampa, FL [Nov. 2007, GB: Multiferroics]
- **Co-organizer of GMAG/DMP sponsored Focus Topic** "Magnetic Nanostructures: Materials & Phenomena" at the 2007 APS March Meeting, Denver, CO.
- **Publications Editor & Program Committee member**, 10th joint INTERMAG/MMM Conference, Baltimore, MD (Jan. 8 – 11, 2007)
- **Best Poster Award Selection Committee**, 10th joint INTERMAG/MMM Conference, Baltimore, MD (Jan. 8 – 11, 2007)
- **Session Chairman,** CIMTEC 2006 Conference, Acireale, Sicily (June 2006). Session title: "Magnetic Ceramics".
- **APS Sorters Meeting**, AIP Headquarters, College Park, MD, Dec. 2006
- **Session Chairman**, APS March Meeting 2006, March 13 – 17, 2006, Baltimore, MD

[G22 Focus Session: "Magnetic Nanoparticles I"]

- **Publications Editor & Program Committee Member**, 50th annual Magnetism and Magnetic Materials (MMM) conference (Nov. 2005, San Jose, CA)
- **Session Chairman**, "CH: Itinerant Magnetism", 50th annual Magnetism and Magnetic Materials (MMM) conference (Nov. 2005, San Jose, CA)
- **Session Chairman**, 49th annual Magnetism and Magnetic Materials (MMM) conference, November 7 - 11, 2004 in Jacksonville, FL.
- **Conference Report,** Invited by conference organizers and publisher to write the conference report for the second Seeheim Conference on Magnetism (SCM 2004), Seeheim, Germany (July 2004)
- **Advisory Committee Member,** Low Temperature Physics (LT-24) conference, Orlando, FL (2005)
- **Local Chairman**, 47th annual Magnetism and Magnetic Materials (MMM) conference, November 11 – 15, 2002 in Tampa.
- **Session Chairman**, 47th annual Magnetism and Magnetic Materials (MMM) conference, November 11 – 15, 2002 in Tampa. [Responsible for chairing session FG on "Ferrites, Garnets and other Microwave Materials"]
- **Session Chairman,** 8th joint IEEE Magnetics/MMM conference, Jan. 2001, San Antonio, TX
- **Organizing committee member**, Conference on Spectroscopies of Novel Superconductors (SNS), Cape Cod, MA (1997)

Proposal and Panel Reviewer activites for federal funding agencies

1. **Proposal Reviewer, NSF IGERT program,** Division of Engineering
2. **Proposal Reviewer, NSF CAREER program**, Division of Materials Research (DMR)
3. **Proposal Reviewer, Materials World Network Program**, NSF DMR
4. **Panelist, NSF IMR/MRI program**, Division of Materials Research (DMR)
5. **Panelist for NSF** Chemical Transport Systems Division
6. **Panel Reviewer for NSF** Division of Manufacturing and Industrial Innovation (DMII) SBIR/STTR Phase I and Phase II programs
7. **Panelist for NSF** Electronics, Photonics and Device technology proposals. NSF – ECCS division (multiple years)
8. **Panel Reviewer for NSF** Nanoscale Science and Engineering programs
9. **Proposal reviewer for NSF** Division of Materials Research (DMR) Ceramics and Condensed Matter Physics Programs (2000 – present)
10. **Proposal reviewer for Army Research Office (ARO)** Materials Science program
11. **Proposal reviewer for Department of Energy (DoE)** Basic Energy Sciences program
12. **Proposal reviewer for ACS Petroleum Research Fund**
13. **Proposal reviewer for US Civilian Research Development Foundation (CRDF)**

Reviewer activities for professional journals

- Nature -Scientific Reports
- Physical Review Letters
- Physical Review B
- Journal of Applied Physics (Associate Editor)
- Applied Physics Letters
- IEEE Transactions of Magnetics
- Journal of Magnetism and Magnetic Materials
- Journal of Physics: Condensed Matter
- Advanced Functional Materials

- Materials Letters
- Journal of Alloys and Compounds
- Journal of Physics and Chemistry of Solids

University Governance and Service activities [@ Univ. of South Florida]

- USF College of Arts and Sciences Faculty Advisory Council (2010 – present)
- Tenure & Promotion Committee, School of Natural Sciences and Mathematics (SNSM), CAS, 2011-present
- Physics Department Faculty Advisory Committee (FAC) (2002 – 2005, 2007 – 2009, 2010 - 2013); FAC Chair (2012-2013), (2014-present)
- Physics Faculty Search Committees (01 – present)
- Steering Committee: USF Functional Multi-scale Materials by Design (FMMD) initiative
- College of Arts & Sciences Tenure & Promotion Committee (2005 – 2007)
- Physics Department Graduate Committee (2000 – present)
- Physics Department Graduate Admissions Committee (2005 - present)
- CAS Dean's Search Committee (2004)
- Colloquium Chairman (2001 – 2002)
- USF College of Arts and Sciences Nobel Laureate Lecture series organizing committee (2002 – 2004)