BIOGRAPHICAL SKETCH

Manh-Huong Phan
Associate Professor & Research Fellow
Group Leader, Laboratory for Advanced NanoBioSpins
Department of Physics
University of South Florida
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Research Interest & Expertise

Thermomagnetic and thermoelectric materials for energy-efficient refrigeration technologies; Giant magneto-impedance materials for magnetic sensor technology; Multiferroic thin films and nanostructures for spintronic devices; Magnetic polymer composites for structural health self-monitoring applications; Nanobiosensors and magnetic nanoparticles for biomedical applications; Collective phenomena in complex oxides and magnetic nanostructures.

Professional Preparation

2006 Ph.D. (Engineering Physics) University of Bristol, United Kingdom
2003 M.S. (Applied Physics) Chungbuk National University, South Korea
2000 B.S. (Solid State Physics) Hanoi National University, Vietnam

Appointments

2015-present	Associate Professor (Permanent), Physics Dept., University of South Florida, USA
2010-15	Research Assistant Professor, Physics Dept., University of South Florida, USA
2008-10	Senior Research Associate, Physics Dept., University of South Florida, USA
2006-07	Postdoctoral Fellow, Advanced Composites Centre for Innovation and Science, University of Bristol, UK
2001-03	Research Assistant, Physics Dept., Chungbuk National University, South Korea
2000-01	Research Scientist, Physics Dept., Hanoi National University, Vietnam

Publications *(selected from a total of **182** peer-reviewed publications; h-index: **29**; total citations: **3318**)*

- "Giant Magnetoimpedance Materials: Fundamentals and Applications" -**M.H. Phan** and H.X. Peng, invited review paper in **Progress in Materials Science 53**, 323 (2008); 5 year impact factor: **23.719** *– the top 10 most cited articles in this journal (2008-2013).*
- "Review of the Magnetocaloric Effect in Manganite Materials"-**M.H. Phan** and S.C. Yu, invited review paper in **Journal of Magnetism and Magnetic Materials 308**, 325 (2007); **548** citations – *the most cited article of the year 2012 in this journal*.
- "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): *Featured cover.*
- "Synthesis, inductive heating, and magnetoimpedance based detection of multifunctional Fe_3O_4 nanoconjugates" - J. Devkota, M.T. Trang, N.X. Phuc, P. Mukherjee, H. Srikanth, and **M.H. Phan**, **Sensors and Actuators B – Chemical 190**, 715 (2014)
- "Macroscopic phase diagram and magnetocaloric study of metamagnetic transitions in spin chain $Ca_3Co_2O_6$,''- P. Lampen, N.S. Bingham, **M.H. Phan**, H.T. Yi , S.W. Cheong, and H. Srikanth, **Physical Review B 89**, 144414 (2014)

- "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)
- "Exchange bias effect in Au-Fe_3O_4 composite nanoparticles" - S. Chandra, N. A. Frey, **M.H. Phan**, S. Srinath, M. A. Garcia, Y.M. Lee, C. Wang, S. Sun, O. Iglesias, and H. Srikanth, **Nanotechnology 25**, 055702 (2014)
- "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)
- "The scaling and universality of conventional and inverse magnetocaloric effects in Heusler alloys" – A. Biswas, P. Zhang, T-L Phan, T.D. Thanh, N.H. Dan, S.C. Yu, H. Srikanth, and **M.H. Phan**, **Applied Physics Letters 103**, 162410 (2013)
- "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. Piqué, T.L. Phan, S.C. Yu, and H. Srikanth, **Applied Physics Letters 102**, 062414 (2013)
- "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)
- "Impact of nanostructuring on the magnetic and magnetocaloric properties of microscale phase-separated $La_{5/8-y}Pr_yCa_{3/8}MnO_3$ manganites" - N.S. Bingham, P. Lampen, **M.H. Phan**, N.D. Hoang, H.D. Chinh, C.L. Zhang, S.W. Cheong, and H. Srikanth, **Physical Review B** 86, 064420 (2012)
- "Surface spin disorder and exchange-bias in hollow maghemite nanoparticles" - H. Khurshid, W. Li, **M.H. Phan**, P. Mukherjee, H. Srikanth, and G.C. Hadjipanayis, **Applied Physics Letters 101**, 022403 (2012)
- "Spin dynamics and criteria for onset of exchange bias in superspin glass Fe/γ -Fe_2O_3 core-shell nanoparticles" -S. Chandra, H. Khurshid, W. Li, G. C. Hadjipnayis, **M.H. Phan**, and H. Srikanth, **Physical Review B 86**, 014426 (2012)
- "Asymmetric hysteresis 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)
- "Coexistence of conventional and inverse magnetocaloric effects and critical behaviors in $Ni_{50}Mn_{50-x}Sn_x$ (x = 13 and 14) alloy ribbons" - T.L. Phan, P. Zhang, N. H. Dan, N. H. Yen, P. T. Thanh, T. D. Thanh, S.C. Yu, and **M.H. Phan**, **Applied Physics Letters 101**, 202408 (2012)
- "Table-like magnetocaloric effect and enhanced refrigerant capacity in $Eu_8Ga_{16}Ge_{30}$-EuO composite materials" - A. Chaturvedi, S. Stefanoski, **M.H. Phan**, G.S. Nolas, and H. Srikanth, **Applied Physics Letters 99**, 162513 (2011)
- "Transverse Susceptibility as a probe of the magnetocrystalline anisotropy driven phase transition in $Pr_{0.5}Sr_{0.5}CoO_3$" - N. A. Frey, N. S. Bingham, **M.H. Phan**, H. Srikanth, D. D. Stauffer, and C. Leighton, **Physical Review B 83**, 024406 (2011)
- "Origin of the magnetic anomaly and tunneling effect of europium on the magnetism in $Eu_8Ga_{16}Ge_{30}$ type-I clathrates" - **M.H. Phan**, V. Franco, A. Chaturvedi, S. Stefanoski, G.S. Nolas, and H. Srikanth, **Physics Review B 84**, 054436 (2011)
- "Collapse of charge ordering and enhancement of magnetocaloric effect in nanocrystalline $La_{0.35}Pr_{0.275}Ca_{0.375}MnO_3$" –**M.H. Phan**, S. Chandra, N.S. Bingham, H. Srikanth, C.L. Zhang, S.W. Cheong, T.D. Hoang, H.D. Chinh, **Applied Physics Letters 97**, 242506 (2010)
- "Carbon Nanostraws: Nanotubes filled with superparamagnetic particles" –S. Pal, S. Chandra, **M.H. Phan**, P. Mukherjee and H. Srikanth, **Nanotechnology 20**, 485604 (2009)

- "Novel nanostructure and magnetic properties of CoFeHfO films" -N.D. Ha, **M.H. Phan** and C.O. Kim, **Nanotechnology 18**, 155705 (2007)
- "Excellent magnetocaloric properties of $La_{0.7}Ca_{0.3-x}Sr_xMnO_3$ ($0.05 \leq x \leq 0.25$) single crystals" **-M.H. Phan**, S.C. Yu and N.H. Hur, **Applied Physics Letters 86**, 072504 (2005)
- "Neutron irradiation effect on permeability and magnetoimpedance of amorphous and nanocrystalline magnetic materials" - **M.H. Phan**, H.X. Peng, M.R. Wisnom, S.C. Yu, C.G. Kim and M. Vázquez, **Physical Review B 71**, 134423 (2005)
- "Origin of asymmetrical magnetoimpedance in Co-based amorphous microwires due to dc bias-current" -**M.H. Phan**, S.C. Yu, C.G. Kim and M. Vázquez, **Applied Physics Letters 83**, 2871 (2003)

Synergistic Activities, Distinctions, and Selected Achievements

- **Associate Editor**, Journal of Electronic Materials, Springer Publishers (ISI journal, IF = 1.675), 2015-present
- **Conference Co-chair**, The Energy Materials Nanotechnology (EMN) Fall Meeting, November 22 - 25, 2014, Orlando, USA
- **Outstanding referee**, Journal of Magnetism and Magnetic Materials - 2013
- **Section Editor**, Physics Express, Simplex Academic Publishers (2013-present)
- **Section Editor**, ScienceJet, Simplex Academic Publishers (2012 - present)
- **Section Editor**, Austin Journal of Nanomedicine & Nanotechnology (2014 - present)
- **Editorial Board Member**, ISRN Condensed Matter Physics (2011-present)
- **Guest Editor**, Special Issue on "*Advanced Magnetic Materials: Genetics, Mechanism, and Therapies*" Hindawi Publishing Corporation, 2012
- **International Advisory Committee**, Donosita International Conference on Nanoscale Magnetism and Applications (DICNMA), September 9 - 13, 2013, San Sebastián, Spain
- **Membership Referee,** The World Academy of Science (TWAS), 2013
- **Co-organizer,** the Session "*Soft Magnetic Materials, GMI and Applications*" at Donosita International Conference on Nanoscale Magnetism and Applications (DICNMA), September 9 - 13, 2013, San Sebastián, Spain
- **Local Organizing Committee**, Nano-Bio Collaborative International Conference, March 22-24, 2012, Tampa, Florida, USA
- **Magnetic Materials Committee Member**, the Minerals Metals and Materials Society (TMS), 2011-present
- **Technical Reviewer** for over 80 physical & engineering journals, such as *Nature*, *Nature Materials*, *Advanced Materials*, *Advanced Functional Materials*, *Advanced Energy Materials*, *ACS Nano*, *Small*, *Nanoscale*, *Applied Physics Letters*, *Nanotechnology*, *and Journal of Applied Physics*.
- **Outstanding referee**, Journal of Physics D: Applied Physics - 2007
- **Research Grant Reviewer/ Physics Panel Reviewer** for National Science Foundation (2015), American Association for the Advancement of Science (2014), USF Research Foundation (2014), CRDF Global-Urals Branch of the Russian Academy of Sciences Joint Basic Research Competition, USA (2013, 2014), Engineering and Physical Sciences Research Council (EPSRC), United Kingdom (2011), and Kentucky Science and Engineering Foundation R&D Excellence Awards, USA (2009, 2011, 2014)
- **eBook Proposal Reviewer**, Bentham Science Publishers, 2012
- **Book Chapter Reviewer**, Bentham Science Publishers, 2012

- **Book chapter reviewer**, Elsevier Publishers, 2013
- **International Adjudicator**, PhD dissertations, Indian Institute of Science, Bangalore, India (2013, 2014); Andhra University, India (2012, 2013)
- **Session Chairs**, *59th Annual MMM Conference on Magnetism and Magnetic Materials* – 2014, *58th Annual MMM Conference on Magnetism and Magnetic Materials* – 2013, *Donosita International Conference on Nanoscale Magnetism and Applications (DICNMA)- 2013; 12th Joint MMM/Intermag Conference* – 2012*; 19th International Conference on Magnetism (ICM)* -2012; *56th Annual MMM Conference on Magnetism and Magnetic Materials* – 2011; *Symposium on Magnetic Materials for Energy Applications* – 2011; *55th Annual MMM Conference on Magnetism and Magnetic Materials* – 2010; *American Physical Society (APS) Meeting* – 2009; *53rd Annual Conference on Magnetism and Magnetic Materials* – 2008; and *International Symposium on Advanced Magnetic Materials and Applications* – 2007
- **Coordinator**, The Global Education Program between USF and Vietnamese Universities (2011-present)

Selected Invited Talks:

- "*Advanced magnetoimpedance based biosensing using functionalized nanoparticles*" at the 59th Annual Magnetism and Magnetic Materials (MMM) Conference, November 3-7, 2014, Hawaii, USA
- *"Magneto-impedance Based Detection of Magnetic Biomarkers: Opportunities and Challenges"* at the Energy Materials Nanotechnology (EMN) Fall Meeting, December 7 – 10, 2013 Orlando, Florida, USA
- *"Nanostructured Magnetocaloric Materials for Energy-efficient Refrigeration: Current Research and Future Directions"* at Materials Research Society (MRS) Meeting, April 1-5, 2013, Moscone West, San Francisco, USA
- *"Novel Clathrate-based Composite Materials for Energy-efficient Refrigeration"* at The 19th International Conference on Magnetism (ICM), July 8-13, 2012, Busan, Korea
- *"Nanostructured Multiphase Materials for Energy-efficient Refrigeration"* in "2nd International Workshop on Functional Materials" , July 16, 2012, Cheongju, South Korea
- *"Recent Advances and Future Research Directions in Giant Magneto-impedance Materials"* at Advanced Electromagnetics Symposium, April 16-19, 2012, Paris, France
- *Magnetocaloric Manganites: Progress and Challenges*" at the International Symposium on Advanced Magnetic Materials and Applications (ISAMMA07), 28 May – 1 June 2007, Jeju, South Korea

Thesis/Dissertation Committees:

- Mr. N. Bingham, PhD thesis, 2013 (*Co-Major Professor*)
- Mr. A. Chaturvedi, PhD thesis, 2011 (*Co-Major Professor*)
- Ms. K. Stojak, MS thesis, 2013 (*Co-Major Professor*)
- Mr. P. Anh, MS thesis, 2012 (*Committee Member*)
- Mr. J. Gass, PhD thesis, 2012 (*Committee Member*)
- Mr. T. Wangensteen, PhD thesis, 2012 (*Committee Member*)
- Mr. C. Bauer, MS thesis, 2011 (*Committee Member*)
- Ms. P. Lampen, PhD thesis, 2015 (*Co-Major Professor*)
- Mr. J. Devkota, PhD thesis, 2015 (*Major Professor*)
- Mr. S. Chandra, PhD thesis, 2013 (*Committee Member*)
- Mr. N. Le, PhD thesis, 2015 (*Committee Member*)

- Mr. H. Tran, PhD thesis, 2016 (*Committee Member*)
- Mr. K. Bhattari, PhD thesis, 2015 (*Committee Member*)
- Mr. M. Hordagoda, PhD thesis, 2015 (*Committee Member*)
- Mr. C. Hettiarachchi, PhD thesis, 2016 (*Committee Member*)
- Ms. Z. Nemati Porshokouh, PhD thesis, 2016 (*Co-Major Professor*)
- Mr. V. Kalappattil, PhD thesis, 2016 (*Co-Major Professor*)
- Ms. E. Clements, PhD thesis, 2016 (*Co-Major Professor*)
- Mr. B. Casas, MS thesis, 2015 (*Co-Major Professor*)
- Ms. T. Eggers, PhD thesis, 2017 (*Major Professor*)
- Mr. Kaustuv Manna, 2013, Indian Institute of Science, Bangalore, India (*International Adjudicator*)
- Mr. Chanchal Sow, 2013, Indian Institute of Science, Bangalore, India (*International Adjudicator*)
- Mr. Ramesh Singampalli, PhD thesis, 2013, Andhra University, India (*International Adjudicator*)
- Mr. D. Tirupathi Swamy, PhD thesis, 2012, Andhra University, India (*International Adjudicator*)
- Mr. Venkateswararao Alaparthi, PhD thesis, 2012, Andhra University, India (*International Adjudicator*)
- Mr. K. Venkata Lakshmi Narayana, PhD thesis, 2012, Andhra University, India (*International Adjudicator*)

Advisors:

PhD supervisor – Prof. Hua-Xin Peng and Prof. Michael Wisnom (Director), Advanced Composites Centre for Innovation and Science, University of Bristol, UK

Postdoctoral supervisor – Prof. Hari Srikanth, Department of Physics, USF, USA

Advisees:

Current postdoctoral/visiting researchers: Dr. Raja Das, Dr. Hafsa Khurshid, Dr. J. Alonso (*funded by Spanish government*), and Dr. X.L. Hou* (*funded by Chinese government*)

Current Ph.D. Students: Ms. Paige Lampen, Mr. Jagan Devkota, Ms. Kristen Stojak, Mr. Vijaysankar Kalappattil, Ms. Zohreh Nemati Porshokouh, Ms. Eleanor Clements, Ms. Tatiana Eggers, Mr. Brian Casas, and Mr. Hongxian Shen* (*funded by Chinese government*)

Current undergraduate students: Ms. Deborah Israel, Mr. Rupin Singh* (BS honor thesis), Ms. Trang Tran*

Students graduated: Dr. Nicholas Bingham at USF (Ph.D., April 2013; *now a postdoctoral research fellow at the Paul Scherrer Institute in Switzerland*), Dr. Anurag Chaturvedi (Ph.D., June 2011; *now a postdoctoral researcher at University of Alabama*), Mr. Jeff Wingo (B.S., June 2014; *now a Ph.D. student at University of California - Irvine*), Mr. Ramon Alejandro Ruiz (B.S., June 2013; *now a Ph.D. student at University of California – Berkeley*), Ms. Kristen Stojak (M.Sc., June 2013; *now a Ph.D. student at USF*), Ms. Marienette Morales (M.S., June 2009; *now a Ph.D. student at the University of Trieste, Italy*), Mr. Nicholas Laurita (B.S., June 2011; *now a Ph.D. student at Johns Hopkins University*)

Former postdoctoral researchers: Dr. Anis Biswas (Nov. 2011 – Nov. 2013*; now a postdoctoral researcher at Ames Laboratory, USA);* Dr. Sayan Chandra (Nov. 2013 – June 2014; *now a postdoctoral researcher at National Institute for Scientific Research, Canada*)

Visiting student and researchers: Mr. Ahmed Talaat*, Visiting Ph.D. student, 03/2015-present, University of the Basque Country, Spain (*funded by Spanish government*); Mr. Jonathan Cruz Vargas, Visiting M.S. student, 03/2015-present, Instituto de Investigacion en Materials, Mexico (*funded by Spanish government*); Mr. L. Dao*, Visiting Ph.D. student, July 1 – Dec 30, 2014, Hanoi

University of Science, Vietnam (*funded by NAFOSTED*); Dr. P. Zhang*, Visiting Ph.D. student, Jan. 20 – Feb. 11, 2013, Chungbuk National University, South Korea; Mr. Y.Y. Yu*, Visiting researcher, October 1 – April. 30, 2013, LG, South Korea; Dr. F. Qin*, Visiting scientist, December 10-28, 2012, University of Bristol, UK; Ms. D.T.M. Hue, Visiting Ph.D. student, July 4 – October 3, 2012, Hanoi University of Science and Technology, Vietnam (*funded by NAFOSTED*); Dr. H.T. Ngo, Visiting scientist, June-August 2011, Hanoi National University, Vietnam; Dr. R. Caballero-Flores, Visiting scientist, July 1 – Sept. 30 2011, Universidad de Sevilla, Spain; and Dr. A. Figueroa, Visiting Ph.D. student, April-July 2010, Universidad de Zaragoza, Spain

REU students: Ms. Izzi Berman* (June 1- August 4, 2014), Mr. Luis Martinez (June 1- August 4, 2014), Mr. Jeff Wingo (June 1 - August 2, 2013); Ms. Rosemary Sheldon (June 1 - August 5, 2011)

Other research advisory activities: Ms. D.T.M. Hue*, Ph.D. student, Hanoi University of Science and Technology, Vietnam (2012 - present); Dr. S. Chandra, Ph.D. thesis, University of South Florida, USA (2009 - 2013); Dr. F. Qin*, Ph.D. thesis, University of Bristol, UK (2007 - 2010); Mr. N.D. Tho*, B.S. thesis, Hanoi National University, Vietnam (2000 – 2001)

(Unless specified, co-supervised students and researchers with Dr. Hari Srikanth of Functional Materials Laboratory at USF)*

Student Awards:

- Mr. B. Casas, *GMAG-APS Student Travel Award*, American Physical Society Meeting, San Antonio, TX, March 2-6, 2015
  Mr. J. Devkota, *Best Poster Award*, The 8th Energy Materials Nanotechnology (EMN) Fall Meeting, Orlando, Florida, USA, November 22-25, 2014
- Dr. Javier Alonso, *Best Poster Award*, The 59th Annual Magnetism and Magnetic Materials (MMM) Conference, November 3-7, 2014, Hawaii, USA
- Mrs. K. Stojak, *Travel Award*, The 59th Conference on Magnetism and Magnetic Materials (MMM), Honolulu, Hawaii, USA, November 3 - 7, 2014
- Ms. I. Berman, *USF-REU Travel Award to the APS March Meeting*, San Antonio, Texas, March 2 – 6, 2015
- Mr. J. Devkota, *IEEE Magnetics Society Summer School Travel Award*, Rio de Janeiro, Brazil, August 10-16, 2014; *USF Physics Tharp Research Award*, 2014; *GMAG-APS Student Travel Award*, American Physical Society Meeting, Baltimore, Maryland, March 18-22, 2013
- Mr. J. Wingo, *The PhD fellowship in Physics from University of California - Irvine, 2014; Best Oral Presentation Award and APS 2014 Student Travel Award*, USF Physics, August 12, 2013
- Ms. K. Stojak, *Best Poster Presentation Award*, NanoFlorida conference, USF, Sept. 2012
- Mr. A. Ruiz, *The 2014 NSF Graduate Research Fellowship*; *The Presidential Doctoral Fellowships in Applied Physics* at University of California – Berkeley, Yale University, and Penn State University. Featured in *USF news* and *Tampa Bay TV news*; *Best Poster Presentation Award*, NanoFlorida conference, USF, Sept. 2012; *Full support to attend Summer School in Magnetism and Magnetic Materials*, National High Magnetic Field Laboratory, Tallahassee, FL (Jul. 2012).
- Mr. N. Bingham, *Travel Grant Award*, 2nd Annual IEEE Magnetics Society Summer School (Sept 20-25, 2009), Nanjing, China; *Travel Grant Award*, 1st Centennial of Superconductivity: Trends on Nanoscale Superconductivity and Magnetism International Workshop (June 28-July 1st, 2011), California, Colombia, USA
- Ms. P. Lampen, *NSF Travel Grant Award*, the 2011 IEEE Magnetics Society Summer School (May 22-28), New Orleans, LA, USA
- Mr. N. Laurita, Offered the full PhD Fellowships in Applied Physics at *Johns Hopkins University* and *Carnegie Mellon University*, 2011

Teaching Experience:

- "*Advances in Pure and Applied Physics*" for graduates at USF (2008 – present)
- "*Lectures on Materials Physics*" for undergraduates at USF (Spring, 2011; Fall 2013)
- "*Lectures on Advanced Materials Physics*" for graduates at USF (Spring, 2014)
- "*Directed Research Courses*" for graduates at USF (Spring 2012; Spring, Summer, Fall 2013; Spring, Summer, Fall 2014)

Collaborators (*past 5 years, alphabetical order*)**:**

Prof. Sang-Wook Cheong (Rutgers University), Prof. Huynh-Dang Chinh (Hanoi University of Technology, Vietnam), Prof. Victorino Franco (University of Seville, Spain), Prof. Aleksadr S. Kamzin (Ioffe Physico-Technical Institute, Russian Academy of Sciences), Prof. Tho Nguyen (The University of Georgia, USA), Dr. Vladimir Larin (Microfiber Technology Industry, Moldova), Dr. Anh-Tuan Le (Hanoi University of Science and Technology, Vietnam), Prof. Chris Leighton (University of Minnesota), Prof. David Mandrus (University of Tennessee), Prof. Michael McHenry (Carnegie-Mellon University), Prof. Subhra Mohapatra (University of South Florida), Prof. Pritish Mukherjee (University of South Florida), Prof. George Nolas (University of South Florida), Dr. The-Long Phan (Chungbuk National University, South Korea), Prof. Hua-Xin Peng (Bristol University, England), Dr. Faxiang Qin (National Institute for Materials Science, Japan), Prof. Nguyen Xuan Phuc (Institute of Materials Science, Vietnam), Prof. Nguyen Thu Huong (Hanoi National University), Prof. Michael Shatruk (Florida State University), Prof. Hariharan Srikanth (University of South Florida), Prof. Jayan Thomas (University of Central Florida), Prof. Manuel Vazquez (Institute of Materials Science, Spain), Prof. Sarath Witanachchi (USF), Prof. Seong-Cho Yu (Chungbuk National University, South Korea), and Prof. Arkaday Zhukov (Spain).

Host of Researchers' Visits and Organizer of Special Physics Seminars:

- Prof. Pedro Gorria, University of Oviedo, Spain (November 26 – 27, 2014)
- Prof. Dong-Hyun Kim, Chungbuk National University, South Korea (November 26 – 27, 2014)
- Dr. Ioanna Giouroudi, Vienna University of Technology, Austria (November 26 – 27, 2014)
- Prof. Tho Nguyen, The University of Georgia, USA (November 26 – 27, 2014)
- Prof. David Mandrus, The University of Tennessee, USA (September 11 – 13, 2014)
- Prof. Manuel Vázquez, Institute of Materials Science of Madrid, CSIC, Spain (November 8 – 12, 2013)
- Prof. Oscar Iglesias, Dpt. Fisica Fonamental, University of Barcelona, Spain (July 8 – August 7, 2013)
- Prof. Huynh Dang Chinh, Department of Chemistry, Hanoi University of Scince and Technology, Vietnam (June 12, 2013)
- Dr. Binh Duong, NanoScience Technology Center, University of Central Florida, USA (June 4, 2013)
- Dr. Faxiang Qin, Advanced Composites Centre for Innovation and Science, University of Bristol, United Kingdom (December 10-28)
- Prof. Nguyen TK Thanh, Department of Physics & Astronomy, University College London, Gower Street, London, WC1E 6BT, United Kingdom (March 21-24, 2012)
- Prof. Arkady Zhukov, IKERBASQUE, Basque Foundation for Science, 48011 Bilbao, Spain (May 16-18, 2012)
- Prof. Nguyen Xuan Phuc, Institute of Materials Science, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet, Hanoi, Vietnam (September 19-21, 2012)
- Prof. Seong-Cho Yu, Department of Physics, Chungbuk National University, South Korea (October 7-10, 2012)

Funded Research Grants:

- Department of Energy (DOE) Research Grant "*Ground state magnetism and cooperative phenomena in correlated electron oxide materials*" United States: $420,000 (2013-2016)
  (Dr. M.H. Phan as Co-PI, University of South Florida), *Featured in USF news*.
- CAS Research Grant *"Upgrading a novel impedance-based probe technique for investigating dynamic magnetic and AC magnetotransport properties in new spintronic materials"* United States: $1,500 (2013-2014)
  (Dr. M.H. Phan as PI, University of South Florida)
- USF Faculty International Travel Grant, 2012, United States: $2,500.00
  (Dr. M.H. Phan as PI, University of South Florida)
- New Researcher Grant – USF Research Foundation *"Nanostructured multiple phase materials for energy-efficient refrigeration"* United States: $18,730.65 (2011-2012)
  (Dr. M.H. Phan as PI, University of South Florida)
- Department of Energy (DOE) Research Grant "*Magnetic frustration and cooperative phenomena in correlated electron oxide materials*" United States: $405,000 (2010-2013)
  (with Dr. H. Srikanth as PI, University of South Florida)
- National Foundation for Science and Technology Development (NAFOSTED) Grant *"Synthesis and characterization of functional magnetic nanoparticles for biomedical applications"* Vietnam: $31,200 (2012-2014)
  (with Dr. N.T. Huong as PI, Hanoi National University, Vietnam)
- Korea Research Grant *"Advanced magnetocaloric materials for magnetic refrigeration applications"* Korea: $i00,000 (2011-2014)
  (with Dr. S.C. Yu as PI, Chungbuk National University, South Korea)
- Engineering and Physical Sciences Research Council (EPSRC) Grant "*Magnetic microwire as an alternative to optical fibres for self-monitoring composites*", United Kingdom: $160,000 (2008 – 2009)
  (with Dr. H.X. Peng as PI, University of Bristol)