

Sanghamitra Neogi

CONTACT INFORMATION	Department of Aerospace Engineering Sciences University of Colorado Boulder, UCB 429 1111 Engineering Drive, Room ECAE 155 Boulder, CO 80309-0429 USA	<i>Phone:</i> (303) 735-7732 <i>Fax:</i> (303) 492-7881 <i>E-mail:</i> sanghamitra.neogi@colorado.edu <i>Web:</i> http://spot.colorado.edu/~sane3962
RESEARCH INTERESTS	Theoretical and Computational Materials Science · Analytical Theory · Classical and Ab initio Molecular Dynamics Simulations · Multiscale Methods · Statistical Learning Methods · Quantum Systems · Nanoscale Heat Transport · Electronic Transport · Electron-Phonon Coupling · Vibrations—Waves · Dissipative and Nonlinear Dynamics · Metamaterials · Effect of Defects on Transport · Solid-Solid Interfaces · Solid-Fluid Interfaces · Soft Matter · Composite Systems	
EDUCATION	Ph.D., Theoretical Condensed Matter Physics , July 2011 The Pennsylvania State University, University Park, Pennsylvania USA M.Sc., Physics , May 2002 Indian Institute of Technology, Kanpur, India B.Sc., Physics , December 2000 Jadavpur University, Kolkata, India	
PROFESSIONAL EXPERIENCE	University of Colorado Boulder , Boulder, Colorado, USA Department of Aerospace Engineering Sciences Assistant Professor August 2015 to Present Max Planck Institute for Polymer Research, Theory Group , Mainz, Germany Postdoctoral Research Associate November 2011 to August 2015 Visiting Research Scientist September 2015 to August 2016 The Pennsylvania State University , University Park, Pennsylvania, USA Graduate Teaching Assistant January 2003 to August 2011 Harish-Chandra Research Institute , Allahabad, Uttar Pradesh, India Visiting Scientist September 2002 to December 2002 Indian Association for the Cultivation of Science , Kolkata, West Bengal, India Visiting Student Fellow May 2001 to August 2001 Indian Institute of Science , Bangalore, Karnataka, India <i>One of 20</i> recipient of young research fellowship Summer, 1997 to 2000	
AWARDS AND FELLOWSHIPS	<ul style="list-style-type: none">• Women in the Sciences and Engineering Institute Graduate Travel Grant Award, Pennsylvania State University, Spring 2010• David C. Duncan Graduate Fellowship, Department of Physics, Pennsylvania State University, 2008, 2010• Graduate Teaching Assistant Award, Department of Physics, Pennsylvania State University, 2009• Summer School on Renormalization Group Methods for Interacting Electrons, Brasilia, Brazil, 2004 (travel award)	

- Physics Department Braddock Fellowship, Pennsylvania State University, 2003
- Young Research Fellowship, Indian Institute of Science (IISc.), India, 1997 to 2000 (**1 of 20 recipient chosen from all-over India, 3-yrs full tuition and stipend scholarship**)
- 7th rank (**1st among girls**) in 10+2 level examination conducted by Government of West Bengal Council of Higher Secondary Education, India (among ~ 500,000 students), 1997.
- 13th rank (**1st among girls**) in 10th level Madhyamik Examination conducted by Government of West Bengal Board of Secondary Education, India (among ~ 1 million students), 1995.

TEACHING
EXPERIENCE

University of Colorado Boulder, Boulder, Colorado, USA
Department of Aerospace Engineering Sciences

- Dynamics of Aerospace Structures, Spring 2016, Spring 2018
- Introduction to Statics, Structures, and Materials, Fall 2016, Fall 2017
- Molecular Simulation of Materials, Spring 2017

The Pennsylvania State University, University Park, Pennsylvania USA
Department of Physics, Graduate Teaching Assistant **January 2003 to August 2011**

Introductory physics courses for undergraduate engineering and science majors as well as advanced physics courses for physics majors. Duties at various times have included *course design*, activities planing, exam questions selection, leading weekly recitation and lab activities, grading, office hours, and substitute teaching for instructors, when needed, with commitment requiring 20 hours per week.

RESEARCH
PROPOSALS AND
GRANTS RECEIVED

3. “Thermal Interface Modeling to Shape Thermoelectric Performances (TIMSTEPS),” Defense Advanced Research Projects Agency, Defense Sciences Office, \$953,913 (initial award: \$694,034 + supplement \$259,879 to expedite research contribution); 10/01/2016-09/30/2019. (PI: S. Neogi)
2. “Mesoscale model development of multi-interface materials,” Multi-functional Materials Interdisciplinary Research Theme at the College of Engineering and Applied Sciences, University of Colorado Boulder, \$5,000; 2/14/2018-. (PI: S. Neogi, J. Brown)
1. “Controlling the quantum states of atom-like defects via topologically engineered phonon polariton modes,” Quantum Explorations in Science & Technology (QuEST) seed grant, the CU Boulder Research & Innovation Office (RIO) in partnership with the College of Engineering and Applied Science, the College of Arts and Sciences, JILA, and the National Institute of Standards and Technology (NIST), Boulder, \$50,000; 01/01/2019-. (PI: S. Neogi, Co-PI: F. Menges)

RESEARCH
PROPOSALS AND
GRANTS
DECLINED/PENDING

10. *Proposal Pending*: ”Multi-Scale Thermal Engineering of Materials for Hypersonic Vehicles,” Multi-functional Materials Interdisciplinary Research Theme at the College of Engineering and Applied Sciences, University of Colorado Boulder, \$60,000; (PI: S. Neogi, Co-PI: F. Menges, K. Maute)
9. *Concept Paper Pending*: ”Controlling the Quantum States of Atom-Like Defects via Phonon Engineering,” **granted CU Boulder’s slot to submit a concept paper to the W.M. Keck Foundation limited submission funding opportunity in the Science and Engineering category**, \$1 million. (PI: S. Neogi)
8. *Preliminary proposal Pending*: ”Materials with Artificial Intelligence to Conduct Heat and Electricity at Will”, NSF-Harnessing the Data Revolution (HDR): Institutes for Data-Intensive

Research in Science and Engineering - Ideas Labs (I-DIRSE-IL). (PI: S. Neogi)

7. *Preliminary proposal Pending:* "Quantum Spin Phononics," Enabling Quantum Leap: Quantum Idea Incubator for Transformational Advances in Quantum Systems (QII - TAQS). (PI: J. Price, co-PI: C. Regal, M. Raschke, S. Neogi, K. Lehnert)
6. *Preliminary Proposal Pending:* "Quantum Phononics: Proposal for a new IRG addressing the materials challenge for quantum information science" 2019 NSF MRSEC IRG CU Boulder Internal Solicitation. **Whitepaper chosen in the campus competition.** Current annual funding of a MRSEC IRG is ~\$2.4 M, involving on average ~8 faculty-level participants receiving funding over a six-year period. (Multi-PI team from Physics, Mechanical Engineering and Aerospace Engineering, with external collaborators from University of Maryland, Texas A&M, NIST and IBM, Zurich Lab)
5. *Whitepaper Declined:* "4D+C Design of Functional Materials Interfaces" 2019 NSF MRSEC IRG CU Boulder Internal Solicitation. (Multi-PI team from Chemical and Biological Engineering, Mechanical Engineering, Aerospace Engineering, with external collaborators from University of California, Los Angeles, and University of Michigan, Ann Arbor)
4. *Proposal Declined:* "Materials with Artificial Intelligence to Conduct Electricity at Will," **granted CU Boulder's slot to apply to the Johnson & Johnson Women in STEM²D Scholars Award Program limited submission funding opportunity under the Engineering category**, \$150,000 (2018); (PI: S. Neogi)
3. *Proposal Declined:* "Non-ideal Fabrication of Thin Films and Study of Interfacial Characteristics," Lam Research Corporation, "2018 Unlock Ideas Campaign for University Research Proposals," \$25,000 (2018); (PI: S. Neogi) PI was invited to submit the proposal.
2. *Proposal Declined:* "Control of decoherence and entanglement in solid-state spin systems via phonon engineering," **granted CU Boulder's one of two slots to apply to the Solicitation:** 2018 DOE Materials and Chemical Sciences Research for Quantum Information Science, Department of Energy, Basic Energy Sciences, \$911,376 (2018); (PI: S. Neogi)
1. *Proposal Declined:* Tuning decoherence and entanglement in quantum materials via phonon engineering, Solicitation: Early Career Research Program, Department of Energy, Basic Energy Sciences, \$811,950 (2018); (PI: S. Neogi)

REFEREED JOURNAL^u indicates undergraduate student, ^g indicates graduate student; ^p indicates postdoctoral scholar, ARTICLES ^{*} indicates principal investigator)

8. V. S. Proshchenko^p, P. P. Dholabhai^p, T. C. Sterling^g, and **S. Neogi**^{*}, "Heat and charge transport in bulk semiconductors with interstitial defects" *Phys. Rev. B*, **99**, 014207 (2019). (Impact Factor: 3.836)
7. S. Xiong, D. Selli, **S. Neogi** and D. Donadio, "Native surface oxide turns alloyed silicon membranes into nanophononic metamaterials with ultralow thermal conductivity" *Phys. Rev. B*, **95**, 180301(R) (2017). (Impact Factor: 5.1, measured in 2013)
6. C. Mangold, **S. Neogi** and D. Donadio, "Optimal thickness of silicon membranes to achieve maximum thermoelectric efficiency: a first principles study" *Appl. Phys. Lett.*, **109**(5), 053902 (2016). (Impact Factor: 3.495)
5. S. Volz, J. Ordonez-Miranda, A. Shchepetov, M. Prunnila, J. Ahopelto, T. Pezeril, G. Vaudel, V. Gusev, P. Ruello, E. M. Weig, M. Schubert, M. Hettich, M. Grossman, T. Dekorsy, F. Alzina, B. Graczykowski, E. Chavez-Angel, J. S. Reparaz, M. R. Wagner, C. M. Sotomayor-Torres, S. Xiong, **S. Neogi** and D. Donadio, "Nanophononics: State of the Art and Perspectives" *Eur.*

Phys. J. B, **89**(1), 1-20 (2016). (Impact Factor: 1.465)

(Highly cited paper according to Web of Science: As of January/February 2017, this highly cited paper received enough citations to place it in the top 1% of the academic field of Physics based on a highly cited threshold for the field and publication year.)

4. **S. Neogi**, J. S. Reparaz, L. F. C. Pereira, B. Graczykowski, M. R. Wagner, M. Sledzinska, A. Shchepetov, M. Prunnila, J. Ahopelto, C. M. Sotomayor-Torres, and D. Donadio, "Tuning thermal transport in ultra-thin silicon membranes by surface nanoscale engineering" *ACS Nano*, 9 (4), pp 3820-3828 (2015). (Impact Factor: **13.709**)
3. **S. Neogi** and D. Donadio, "Thermal transport in free-standing silicon membranes: Influence of dimensional reduction and surface nanostructures" *Eur. Phys. J. B*, **88**(3), 73 (2015). (Impact Factor: 1.465)
2. N. Kumar, **S. Neogi**, P. Kent, A. Bandura, J. Kubicki, D. Cole, D. Wesolowski and J. Sofo, "Hydrogen Bonds and Vibrations of Water on (110) Rutile," *J. Phys. Chem. C*, **113**, 13732-13740 (2009). (Impact Factor: 4.484)
1. **S. Neogi** and G. D. Mahan, "Generation of traveling solitons in one-dimensional monatomic quartic lattices," *Phys. Rev. B*, **78**(6), 064306 (2008). (Impact Factor: 3.836)

NON-PEER-
REVIEWED JOURNAL
ARTICLES

2. **S. Neogi** and G. D. Mahan (2016), "Lattice dynamics model calculation of Kapitza conductance at solid-fluid interfaces" (arXiv:1601.02999v1).
1. **S. Neogi** and G. D. Mahan (2009), "Pair distribution function of a square-well liquid," (arXiv:cond-mat/0909.3078v1).

PREPRINTS

6. V. S. Proshchenko^p **S. Neogi**^{*}, University of Colorado Boulder, Boulder; P. Taylor^{*}, Army Research Labs, Adelphi, MD; J. Gagnon, J. Pierce and R. Venkatasubramanian^{*}, Johns Hopkins University - Applied Physics Lab, Laurel, MD (2019), "First principle Density Functional Theory Modeling of Thermoelectric Transport Properties in N-type Bi₂Te_{3-x}Se_x Thin-film Materials".
5. V. S. Proshchenko^p, M. Settipalli^g, A. K. Pimachev^p, **S. Neogi**^{*} (2019), "Tunability of Thermopower of Layered Semiconductor Nanostructures with Strain".
4. V. S. Proshchenko^p, M. Settipalli^g, **S. Neogi**^{*} (2019), "Optimization of the Seebeck Coefficient in Symmetrically Strained Layered Systems".
3. V. S. Proshchenko^p, T. Sterling^g and **S. Neogi**^{*} (2019), "Electron, Phonon transport and electron-phonon scattering at strained semiconductor interfaces".
2. T. Sterling^g and **S. Neogi**^{*} (2019), "Microscopic description of heat transport across non-ideal semiconductor interfaces".
1. **S. Neogi** and D. Donadio (2019), "Spectral Analysis of Phonon Transport in Nanophononic Metamaterials".

INVITED TALKS

15. "Phonon and Electron Transport in Defected Nanostructured Semiconductors: An Overview," Nanoscience and Technology Division, Argonne National Laboratory, Argonne, IL, August, 2018.

14. "Thermal transport at the nanoscale: How to control the quanta of heat energy?," Department of Electrical Engineering, Henry Samueli School of Engineering and Applied Science, UCLA, CA, March, 2018.
 13. "Heat Transport in Nanostructured Semiconductors: Structure-Processing-Property-Relationships," International Conference on Computational & Experimental Engineering and Sciences (ICCES), Madeira, Portugal, June 26-30, 2017.
 12. "Thermal Transport at the Nanoscale: How to Control the Quanta of Energy?," Physics & Astronomy Colloquium Series, University of Wyoming, Laramie, WY, April, 2017.
 11. "Thermal Transport at the Nanoscale: How to Control the Quanta of Heat Energy?," Computational Mechanics and Physics of Solids Seminar Series and Mechanical Engineering Graduate Seminar, University of Colorado, Boulder, CO, USA, October, 2016.
 10. "Thermal Transport in Low-Dimensional Nanostructured Systems: Structure-Processing-Property Relationships," Mechanical and Aerospace Engineering Research Seminar, University of Colorado, Colorado Springs, CO, USA, August 2016.
 9. "Thermal Transport in Low-Dimensional Nanostructured Semiconductors: Structure-Processing-Property Relationships," National Institute of Standards and Technology: Applied Chemicals and Materials Division Seminar, Boulder, CO, USA, May 2016.
 8. "Structure-Processing-Property Relationships: Thermal Transport in Ultrathin Silicon Membranes," IISER (Indian Institute of Science Education and Research), Pune, India, November, 2015.
 7. "Structure-Processing-vibrational Property Relationships: Toward rational design of materials with desired functionality," IBM Research, Rüschlikon, Switzerland, June, 2015.
 6. "Structure-processing-vibrational property relationships: Toward rational design of materials with desired functionality," IBM T. J. Watson Research Center, Yorktown Heights, NY, USA, May, 2015.
 5. "Heat transport across nanostructures and interfaces," Department of Materials Science and Engineering, University of Illinois at Urbana-Champaign, Urbana, IL, USA, December, 2014.
 4. "Modeling heat transport across nanostructures and interfaces," Department of Materials Science and Engineering, Rensselaer Polytechnic Institute, Troy, NY, USA, December, 2014.
 3. Nanophonics Consultation Workshop (EUPHONON), (Consultation group participant), Lille, France, May, 2014.
 2. "Thermal Transport Across Model Interfaces," Group seminar Theoretical Physics I, Universität Augsburg, Augsburg, Germany, February, 2014.
 1. "Theoretical Investigation of Thermal Transport: Across Model Interfaces and Nanostructures," Sonderseminar des SFB 767, Universität Konstanz, Konstanz, Germany, December, 2013.
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19. Materials Research Society Spring Meeting, "Heat and Electron Transport in Multicomponent Systems with Imperfect Interfaces," Phoenix, AZ, USA, April, 2018.
 18. American Physical Society March Meeting, "Heat and Electron Transport in Multi-Component Nanostructures with Imperfect Interfaces," Los Angeles, CA, USA, March, 2018.

CONTRIBUTED
TALKS
PEER-REVIEWED
ABSTRACTS

17. American Physical Society March Meeting, "Defect induced carrier transport in semiconductor junctions," New Orleans, LA, USA, March13-17, 2017.
16. International Mechanical Engineering Congress & Exposition, "How Surface Resonators Influence Phonon Transport in Nanophononic Metamaterials," Phoenix, AZ, USA, November, 2016.
15. Materials Research Society Spring Meeting, "Spectral Analysis of Phonon Transport in Nanophononic Metamaterials," Phoenix, AZ, USA, April, 2016.
14. American Physical Society March Meeting, "Spectral Analysis of Surface Controlled Phonon Transport in Nanophononic Metamaterials," Baltimore, MD, USA, March, 2016.
13. "Mainz Materials Simulation Days 2015 - Non-Equilibrium Processes in Soft Matter", "Phononic thermal transport in ultrathin silicon membranes," Mainz, Germany, June, 2015.
12. "Phononics 2015: 3rd International Conference on Phononic Crystals/Metamaterials, Phonon Transport and Phonon Coupling", "Phononic thermal transport in nanostructured ultra-thin silicon membranes," Paris, France, June, 2015.
11. "Towards Reality in Nanoscale Materials VIII" Workshop, "To tune thermal transport in ultrathin silicon membranes by surface nanoscale engineering," Levi, Finland, February, 2015.
10. Materials Research Society Fall Meeting, "Phononic thermal transport in nanostructured ultrathin silicon membranes," Boston, MA, USA, December, 2014.
9. Phonons and fluctuations workshop (EUPHONON), "Phononic thermal transport in nanostructured ultra-thin silicon membranes," Le Mans, France, September, 2014.
8. Materials Research Society Spring Meeting, "Thermal Transport in Nanostructured Silicon Membranes," San Francisco, CA, USA, April, 2014.
7. DPG Spring Meeting, "Phononic Thermal Transport in Nanostructured Silicon Membranes," Dresden, Germany, April, 2014.
6. American Physical Society March Meeting, "Thermal Boundary Resistance Across Solid-Fluid Interface," Baltimore, MD, USA, March, 2013.
5. American Physical Society March Meeting, "Thermal Boundary Resistance at Ideal Gas Solid-Fluid Interfaces," Dallas, TX, USA. (**Recipient of travel grant award**). March, 2011.
4. American Physical Society March Meeting, "Kapitza Resistance at the Solid-Liquid Interface," Portland, OR, USA, March, 2010.
3. American Physical Society March Meeting, "Multiple traveling solitons in one-dimensional monatomic quartic lattices," New Orleans, LA, USA, March, 2008.
2. American Physical Society March Meeting, "Hydrogen Bonds and the Vibrational Modes of Water at Interfaces: ab-initio Molecular Dynamics meets Neutron Scattering," New Orleans, LA, USA, March, 2008.
1. American Physical Society March Meeting, "Stationary and traveling solitons in one-dimensional quartic lattices," Denver, CO, USA, March, 2007.

POSTERS
PEER-REVIEWED
ABSTRACTS

12. Materials Research Society Fall Meeting, "Statistical Learning and Prediction of Electronic Transport in Multilayered Non-Ideal Semiconductor Architectures," Boston, MA, USA, November 2018.

11. Materials Research Society Fall Meeting, “Tuning Band Structure and Electronic Transport in Multilayered Semiconductor Nanostructures,” Boston, MA, USA, November 2018.
10. Crystal defects for qubits, single photon emitters and nanosensors workshop, “Characterization of Phonons in Solid-State Spin Systems,” Bremen, Germany, July, 2018.
9. NSF/DOE Quantum Science Summer School (QS³), “Electron and Phonon Transport in Multilayered Materials,” Cornell University, Ithaca NY, USA. (Presented by M. Settipalli^g), June, 2018.
8. Advances in Numerical Methods for Simulation, Optimization, and Uncertainty Quantification of Coupled Physics Problems Workshop, “Electron and Phonon Transport in Multilayered Materials,” CU Boulder, CO, USA. (Presented by group), April, 2018.
7. Advances in Numerical Methods for Simulation, Optimization, and Uncertainty Quantification of Coupled Physics Problems Workshop, “Optimization of Electronic Transport in Defected Semiconductor Superlattices,” CU Boulder, CO, USA. (Presented by V. S. Proshchenko^p), April, 2018.
6. Materials Research Society Spring Meeting, “Optimization of Electronic Transport in Defected Semiconductor Superlattices,” Phoenix, AZ, USA. (Presented by V. S. Proshchenko^p), April, 2018.
5. Materials Research Society Spring Meeting, “Surface Nanoscale Engineering to Tune Phonon Dispersion and Lifetimes in Low-Dimensional Semiconductors ,” Phoenix, AZ, USA, April, 2017.
4. “Heat transfer at small scales” Workshop, “Thermal Transport Across Solid-Fluid Interfaces,” Zaragoza, Spain, October, 2013.
3. “Nanophonics” Workshop, “Thermal Transport Across Solid-Fluid Interface,” Bremen, Germany, August, 2013.
2. “Advanced Workshop on Energy Transport in Low-Dimensional Systems: Achievements and Mysteries” Workshop, “Thermal Boundary Resistance at Solid-Fluid Interface,” Trieste, Italy, October, 2012.
1. International Symposium on Quantum Fluids and Solids, “Ground state properties of ⁴He using a Jastrow-type product of two-atom wavefunctions as the many-body wavefunction,” Northwestern University, Evanston, IL, USA, August, 2009.

SERVICE

Development of quantum educational initiatives for the College of Engineering and Applied Sciences jointly with the Physics Department: an undergraduate minor and a professional masters degree.

“Engineering Voices: Listen to CU engineers share their experiences. Share your story. Ask questions. Learn something new,” Innovative Inclusion Ideas grant provided by College of Engineering & Applied Science and matched by Ann and H.J. Smead Aerospace Engineering Sciences, , \$3,000; 01/09/2019-. (PI: S. Neogi)

Member, K9 Committee on Nanoscale Thermal Transport, within the ASME Heat Transfer Division.

Panelist, DOE Office of Science (DOE-SC) workshop for “Basic Research Needs for Microelectronics,” October 23-25, 2018, Bethesda, MD, USA.

Local Organizing Committee Member, 21st International Conference on Ternary and Multinary Compounds (ICTMC 21) (Boulder, CO, USA), September 11-14, 2018.

PI Review Meeting Organizer, DARPA (DSO) Materials for Transduction (MATRIX) program, University of Colorado Boulder, Boulder, CO, USA, June 12-14, 2018.

Event Series Organizer, “Engineering Voices: Listen to CU engineers share their experiences. Share your story. Ask questions. Learn something new,” in collaboration with the BOLD center, University of Colorado Boulder, Boulder, CO, USA, March 16, 2018.

Member, Soft Materials Interdisciplinary College Search Committee, Fall 2017 to Spring 2018.

Member, Nature, Environment, Science & Technology (NEST) Studio for the Arts Search Committee, University of Colorado Boulder, Fall 2017 to Spring 2018.

Session Chair, Symposium: Micro/Nano-Mechanics and Low-Dimensional Materials, 2017 International Conference on Computational & Experimental Engineering and Sciences, (ICCES) Madeira, Portugal, June 26-30, 2017.

Session Chair, Session S36: Energy Conversion, American Physical Society March Meeting, New Orleans, Louisiana, USA, March 13-17, 2017.

Review Panel Member Chemical, Bioengineering, Environmental, and Transport Systems Program, NSF, 2017.

Panel Moderator, “Academic Job Search” panel, 2017 CU Boulder-MIT-Stanford Women in Aerospace Symposium, University of Colorado Boulder, Boulder, CO, USA, June 1, 2017.

PI, collaboration with the arts-sciences cross-campus initiative, entitled NEST (Nature, Environment, Science, and Technology) Studio for the Arts. NEST artists to make the research “energy transport pathways in composite materials” more accessible to the broad community through data visualization, projection mapping, and animation. **2018-**

Member, Multi-functional Materials Interdisciplinary Research Theme and Quantum Integrated Sensor Systems Interdisciplinary Research Theme at the College of Engineering and Applied Sciences, University of Colorado Boulder, Boulder, CO, USA.

Member, XSEDE Resource Allocation Committee (XRAC), comprised of approximately 40 invited scientific specialists from across the nation. XSEDE, the Extreme Science and Engineering Discovery Environment, is the most advanced, powerful, and robust collection of integrated advanced digital resources and services in the world and is supported by the National Science Foundation, that allocated more than \$7.3M worth of computing time to U.S. researchers in 2018. The XRAC convenes quarterly at different locations around the United States, meeting for a day and a half, starting on Sunday afternoon and finishing late Monday afternoon. “We ask the XRAC member for a three year commitment and to attend at least 3 of the 4 quarterly meetings. An XRAC member may be asked to review up to 10-15 proposals that are aligned with the area of expertise of the XRAC member,” 2017-2020.

Member and Consultation Group Participant, EUPHONON project that amalgamated the activities on phonon science and technology in Europe to establish a strong community in this emerging research field, 2014-2015.

PROFESSIONAL
JOURNAL
REFEREE

Science Advances, Nature Communications, ACS Macro Letters, The Journal of Physical Chemistry, Scientific Reports, Applied Physics Letters.

PROFESSIONAL
AFFILIATIONS

American Physical Society (APS); Materials Research Society (MRS); American Society of Mechanical Engineers (ASME).