Elena Roxana Margine

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PROFESSIONAL PREPARATION

University of Bucharest	Romania	Physics B.S., 1999
University of Bucharest	Romania	Physics M.S., 2001
Pennsylvania State University	USA	Physics Ph.D., 2007
University of Lyon	France	Physics Postdoc, 2007-2008
University of Oxford	UK	Materials Postdoc, 2008-2010
University of Oxford	UK	Materials Marie Curie Fellow, 2011-2012

APPOINTMENTS

2019-present Associate Professor, Department of Physics Applied Physics, and Astronomy & Materials Science and Engineering Program, Binghamton - SUNY

2015-2019 Assistant Professor, Materials Science and Engineering Program, Binghamton University - SUNY

2014-2019 Assistant Professor, Department of Physics, Applied Physics and Astronomy, Binghamton University - SUNY

2013-2014 Research Assistant Professor, Department of Physics, Applied Physics and Astronomy, Binghamton University - SUNY

GRANTS

2023-2026 DOE, "Toward Exascale Computing of Electron-Phonon Couplings for Finite-Temperature Materials Design"
Co-PI, 17% of $2,700,000

2023-2026 NSF DMR-CMMT, "Collaborative Research: Ab Initio Engineering of Doped-Covalent-Bond Superconductors"
Co-PI, 50% of $378,000

2021-2025 NSF OAC, "Frameworks: An Interoperable Software Ecosystem for Many-Body Electronic Structure Calculations"
Co-PI, 22% of $3,856,970

2021-2024 NSF DMR-CMMT, "Towards Ab Initio Prediction of Superconducting Properties"
Single PI, $400,000

2021-2023 NSF EAGER DMR-CMMT "EAGER: SUPER: Collaborative Research: Ab Initio Engineering of Doped-Covalent-Bond Superconductors"
PI, 50% of $226,947

2020-2022 NSF DMR-CMMT, "School on Electron-Phonon Physics from First Principles"

Co-PI, $117,867

2017-2021 NSF OAC, "SI2-SSE: Expanding the Scope of Materials Modeling with Electron Phonon Wannier (EPW) Software"
PI, 75% of $500,000

2017-2024 NSF DUE, "Institutional Partnership to Create Successful Student Transition in Smart Energy & Materials"
Co-PI, $4,153,852

2014-2015 SUNY-4E, "Joint theoretical-experimental quest for novel carbon-based materials for energy-related applications"
Co-PI, 18% of $150,000

AWARDS

2011-2012 Marie Curie Intra-European Fellowship (UK)
2007 Alumni Association Dissertation Award, Penn State University (USA)
2005-2006 Duncan Graduate Fellowship, Penn State University (USA)
2001-2003 Braddock Graduate Fellowship, Penn State University (USA)
2000-2001 Erasmus Fellowship, Brandenburg Technical University (Germany)
1999-2001 Fellowship, Brandenburg Technical University (Germany)
1995-1999 Scholarship, University of Bucharest (Romania)

PROFESSIONAL ACTIVITIES

Developer open-source EPW code (http://epw-code.org/)

Organizer ICTP/Psi-k/CECAM School on Electron-Phonon Physics from First Principles (ICTP Trieste - Italy, 19-23 Mar 2018)

Virtual School on Electron-Phonon Physics and the EPW code (14-18 Jun 2021)

Wannier 2022 Summer School (ICTP Trieste - Italy, 16-20 May 2022)

Wannier 2022 Developers Meeting (ICTP Trieste - Italy, 23-27 May 2022)

School on Electron-Phonon Physics from First Principles (University of Texas at Austin - USA, 13-19 Jun 2022)

Symposium "New developments in first principles calculations of charge and heat transport" (Psi-K 2022 conference, Lausanne - Switzerland, 22-25 Aug 2022)

Focus session "Electrons, Phonons, Electron Phonon Scattering and Phononics" (APS March Meeting 2023, Las Vegas - USA, 5-10 Mar 2023)

Virtual School on Many-Body Calculations using EPW and BerkeleyGW (5-9 Jun 2023)

NSF Cyberinfrastructure for Sustained Scientific Innovation (CSSI) Principal Investigator (PI) Meeting (Houston - USA, 26-27 Sep 2023)

Focus session "Electrons, Phonons, Electron Phonon Scattering and Phononics" (APS March Meeting 2024, Minneapolis - USA, 3-8 Mar 2024)

Reviewer	NSF and DOE
Peer-reviewer	Physical Review B, Scientific Reports, Applied Physics Letters, Chemical Physics Letters, New Journal of Physics, npj Computational Materials, etc.
Guest editor	Journal of Physics Matter
Session chair	American Physical Society March Meeting 2018, 2022, 2023

UNIVERSITY AND EXTERNAL SERVICES

2023-	APS/DCOMP member-at-large
2019-2021	Harpur College Academic Honesty Committee Member
2018, 2019	Postdoctoral Search Committee Member for S-STEM Scholar Program
2017	Search Committee Member for Research Development Specialist Position
2015-	Physics Graduate Admission Committee Member
2015-	Doctoral and Master Thesis Committee Member
2014, 2022-	Faculty Search Committee Member

THESIS ADVISOR AND POSTGRADUATE-SCHOLAR SPONSOR

Jack Langhorn	Ph.D. student	Binghamton University (09/22-current)
Charlsey Tomassetti	Ph.D. student	Binghamton University (09/20-current)
Christopher Renskers	Ph.D. student	Binghamton University (09/20-current)
Gyanu Kaffle	Ph.D. student	Binghamton University (09/18-08/23)
Hari Paudyal	Ph.D. student	Binghamton University (09/17-08/22)
Bao-Tian Wang	Postdoc. researcher	Binghamton University (09/15-08/16)
Samad Hajinazad	Postdoc. researcher	Binghamton University (09/20-08/21)
Hari Paudyal	Postdoc. researcher	Binghamton University (09/22-02/23)
Hitoshi Mori	Postdoc. researcher	Binghamton University (09/22-current)
Shashi Mishra	Postdoc. researcher	Binghamton University (04/23-current)
Aidan Thorn	Postdoc. researcher	Binghamton University (09/23-current)