

Dr. Karen R. Pearson

Professor | Chairperson
Department of Science and Mathematics
Chair FIT Sustainability Council
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Objective

To lead the development of college level programming and learning opportunities supporting a comprehensive graduate and liberal arts education delivered to students through a multi-faceted program of core studies augmented by classroom/non-classroom learning settings and the thoughtful incorporation of leading edge technology. Execute this vision in an organization that provides a broad opportunity to expand pathways to increase student engagement in both classroom and real-world experiences and the opportunity to develop philanthropic/funding pathways to support new programs and partnerships. Curricula such as this provide the best opportunity to educate the next generation of innovators; problem solvers and global leaders trained to reason critically and thoughtfully address future challenges and issues.

Ph.D. Inorganic Chemistry, Washington State University

May 2003

Research: Synthesis and Characterization of Organic-Inorganic Perovskite Materials with Device Applications.
Advisor: Roger D. Willett
Supported by: NSF and IBM Corp.

B.A. Chemistry, Clark University

May 1998

Senior Research: Synthesis and Characterization of Low Dimensional Linear Magnetic Chain Polymers
Supported by: NSF and CHEMDESIGN Corp.
Research Advisors: Mark M. Turnbull, Christopher P. Landee

Faculty Appointments and Research

Fashion Institute of Technology: SUNY Professor of Science and Mathematics

Fall 2004-Present

- Co-Chair Presidents Council on Sustainability
- Associate Department Chair (Fall 2016-present)
- Assistant Department Chair (Fall 2012-Spring 2016)
- Acting Director of On-line Learning and Academic Technologies (Fall 2007-Fall 2008 and Fall 2011)

IBM T. J. Watson Research Center

Summer 1999, 2000 & 2/2001-5/2002

- Synthesis and characterization of perovskite materials with device applications.

Selected Awards/Grants

- National Endowment of the Art (NEA) ArtWorks -New Sustainable Design: To advance design innovation and the use of sustainable materials, via a public conference and seminar series. *New Sustainable Design: How Materials Advance Innovation* explores the dynamic intersections between materials development, cutting-edge design, environmental stewardship, economics and society. (6/2018)
- FIT's Presidents Award for Faculty Excellence in Curricular Innovation, 5/2015.
- SUNY Chancellor Award for Excellence in Teaching, a state-wide acknowledgement conferred by the Chancellor's Office, State University of New York, 5/2011.
- FIT Sustainability Council grant, Green roof extension for education and sustainability research, 5/2016.
- Faculty Development Grant Award, *Pathways to practical, scalable systems for sustainable development*, Finca Morpho Permaculture Farm, Costa Rica. {Teaching (soil chemistry workshop, sustainable fabrics, renewable energy technology), field work, and exploration of permaculture farming and the design of zero waste communities and agriculture systems facilitated and supported coupling between research and sustainable development and project-based science learning.} 1/2016
- FIT Diversity Council grant, *Women in Design-Related Technologies*, 2012.
- FIT Sustainability Council grant, *Teaching Sustainability: A Cross-disciplinary Outreach*, 2011.

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- National Science Foundation: Advancing Technical Education (ATE); Advancing Design Related Technical Education: A Three Way Partnership (TECHFIT) NSF Award #1003034; 2010-2013.

Campus Leadership

- Committee Participation:
 - Chair, Presidents Sustainably Committee (Spring 2016-present, member Fall 2011-present)
 - Chair, Faculty Senate Committee on Instructional Technology (Fall 2013-Spring 2016)
 - Faculty Senate Committee: Nominations and Elections (Fall 2015-Spring 2016)
 - Chair, Faculty Development Grants and Award Committee (Fall 2014-Spring 2016)
 - Academic Technologies Working Group (Fall 2014- present)
- FIT Search Committees:
 - Executive Director for Grants Administration
 - Assistant Direct of the Writing Studio
 - Director for Environmental Health and Safety
 - Executive Director for Continuing and Professional Education
- Faculty Advisor and Campus Coordinator
 - Bio-design Challenge - Microbial Production of Fabrics. Fall 2015-Present
- SUNY Task Forces:
 - FACT2 Campus Representative
 - SUNY Virtual and Alternative Labs Task Group

Selected Presentations and Activities (last 36 months)

- **American Chemical Society 2016 National Meeting, San Diego, CA, April 2016**
 - Presentation and Panelist: Educational Innovation in Design-related STEM through Interdisciplinary Sustainable Science Education
- **Towson University, April 2016**
 - Invited Speaker: Design-related STEM Education
- **Center for Excellence in Teaching, FIT, March 10, 2016**
 - "Practical Pathways to Sustainable Development." Discussion about the role of science in sustainable development, including textiles, construction and interior design materials, based on project-based knowledge transfer at Finca Morpho Permaculture Farm in Costa Rica.
- **American Association of Colleges and University Crossing Boundaries:**
 - Working Group: Transforming STEM Education, Seattle, WA, November 2016
- **SUNY-STEM Conference, Broadening Participation In STEM: SUNY'S Commitment To Developing A Diverse STEM Workforce, Albany, New York (October 2013)**
 - Presentation: *Building STEAM: Preparing Women for Employment in Design-Related Technology*
- **CIT 2013 - Transformation in Higher Education: Sharing Ideas and Showing Results, SUNY-IT, Utica, NY, May 2013**
 - Presentation: *K-12, College to Industry Educational Collaboration at FIT: SCIENCE + ART/DESIGN = INNOVATION*
- **2013 European Geophysical Union General Assembly, Vienna, Austria**
 - Presentation: *Online Higher Education in the Natural Sciences*
 - Co-Convenor: *Teaching Geosciences: new challenges and opportunities* (Session organizer and chair)
- **ATE-NSF Principal Investigators' Conference, Washington DC, 2012, 2011 & 2010**
 - Presentation(s): Related to work completed as part of the TECHFIT Project (see above)
 - *Teaching Tomorrow's Technicians today: Preparing America's Future Workforce*
 - *21st Century Leadership: Overcoming Barriers and Boundaries*
- **ATE Student Success: Building a Diverse and Entrepreneurial Workforce**
 - Instructional Technologies, SUNY, Stony Brook, 2012.
- **SUNY-STEM Conference, SUNY, Albany, 2011**
 - "Partnering for Green + Sustainable Design-related STEM Curriculum: Improving Outcomes for Women and the Environment"; K.R. Pearson and E. Maldonado

*Please see the included activities list below for additional details.