

Peter Mark Jansson Ph.D PP PE
<https://www.bucknell.edu/fac-staff/peter-jansson>

Bucknell University

Bucknell Center for Sustainability and the Environment – Olin Science 462
Department of Electrical and Computer Engineering – Breakiron 370
Lewisburg, Pennsylvania 17837 USA Tel +1 (570) 577 3398
email: pmj005@bucknell.edu

Integrated Systems

124 Meixell Circle
Lewisburg, Pennsylvania 17837 USA
Tel + 1 (609) 618 1110
email: petermarkjansson@gmail.com

Graduate Education: University of Cambridge, admitted to the Ph.D., by research, *Department of Engineering*
Graduate Education: Rowan University, *Master of Science in Engineering* [4.0 gpa]
Undergraduate Education: Massachusetts Institute of Technology, *Bachelor of Science - Course I* [3.5 gpa]
Avocations: Music, Reading, Sports, Consulting, Construction, Mission Trips

PROFESSIONAL EXPERIENCE

Bucknell University

August 2011 to present

Lewisburg, Pennsylvania

Faculty Director (BCSE) & Associate Professor – Electrical and Computer Engineering

Creating exciting pedagogy and research in; electric power system fundamentals, sustainable technologies, Mach Effect detection systems, smart grid technology, electronics, permaculture and hybrid/electric transportation and novel grid storage. Supporting ILST, Renewable Energy Scholars, student researchers, BCSE, BFSCA, and wrestling team. Ongoing research into Mach's Principle and its application to novel electric technologies

Rowan University

January 2001 to August 2011

Glassboro, New Jersey

Associate Professor – Electrical and Computer Engineering

Creation of lectures and pedagogy for; sustainable design in engineering, electric power systems fundamentals, advanced power systems, networks and circuits, engineering electromagnetics, engineering clinic consultant, senior engineering frontiers course, freshman and sophomore engineering clinics as well as special junior/senior clinic projects in wind and photovoltaic system design, wind resource assessment, environmental design, energy auditing and lighting analysis, life cycle assessment tools, utility strategic planning, streetlight asset management. Ongoing research in Mach's Principle and new electric generation technologies.

Integrated Systems

September 1986 to present

Lewisburg, Pennsylvania

President and Principal Consultant

Responsible for management consulting as well as engineering and project management for this wholly owned consulting company. The firm specializes in sustainable development as well as engineering consulting in the areas of renewable energy technology (wind and PV – photovoltaics - predominantly), electric utilities, energy, strategic planning, marketing and resource management. Recent projects include large scale grid-integrated PV (largest PJM PV system in 2007 – 3MW). Engineered > 60 MW of renewable energy systems in last 15 years.

University of Cambridge

October 1998 to Dec 2000

Cambridge, England

Manager, Supervisor and Course Lecturer

Responsible for project work and management of the Industrial Sustainability Group within the Institute for Manufacturing [Department of Engineering]. Projects for the European Commission and the U.K.'s Engineering and Physical Sciences Research Council in the area of sustainable manufacture. During Michaelmas 1998 and 1999 supervised many students in the management studies and manufacturing engineering tripos (courses include - technology and the environment; organizational behavior; quantitative methods). Lectures to the first year engineers, MET II engineering classes included the topics of civil and environmental engineering, industrial sustainability, global climate change, limits to growth, energy futures and business & environment issues. Completed Ph.D. work in Innovation in Electricity – an Empirical, Newtonian Approach.

Richard Stockton College of New Jersey

January 1996 to June 1998

Pomona, New Jersey

Adjunct Professor - Natural Sciences and Mathematics

Responsible for lectures, instruction, testing and student evaluation in the College's quantitative Energy Management course in Physics and Environmental Sciences - Junior & Senior level.

Atlantic Energy

November 1994 to March 1998

September 1979 to March 1998

Egg Harbor Township, New Jersey

Manager - Market Development

Team Leader - Marketing Process Re-engineering / Transformation

As member of Leadership Team directed reengineering; developing and implementing this energy company's new marketing process to achieve higher operational efficiency, new market business results [increasing new customers and profits]. Reviewed and improved existing processes and systems, developed \$9M of new, profitable offers to marketplace in second year of initiatives (1996), exceeding \$40M in third year (1997) with > 6 cent increase in earnings.

July 1996 to July 1997

President - Atlantic Energy International, Inc.

Responsible for the start-up, executive leadership and administration for Atlantic Energy's new international business. This unit leveraged AEI's corporate competencies in utility system management, design and operation and consulted to developing nations around the globe offering services and equipment to meet their energy infrastructure needs until its acquisition.

July 1994 to October 1994

Manager - Strategic Customer Support

As a Leadership Team member developed energy plans, long term contracts and customer partnership strategies with our largest 100 key customers, representing \$145M in revenues. Accountabilities included corporate cost containment, downsizing and electric price strategy to achieve return on equity commitments and position AE for emerging competitive environment.

March 1993 to June 1994

Manager - Information Services

As department head leader led the transition of the information services group away from mainframe centric, centralized system focus to a more client focused, distributed processing environment. Led development of new IT [information technology] strategy while achieving 15% reduction in costs in first year with this staff function of 100 professionals.

January 1992 to February 1993

Manager - Substation

Managed the supervision of engineering staffs and field crews charged with operation, reliability, maintenance and construction of the utility's 110 electrical substation facilities throughout southern New Jersey. Work groups included 135 professional staff in relay & control engineering, substation engineering, communications, relay as well as two regional substation construction operational groups. Initiated first activity-based operation & maintenance budgeting within AE's organization in this division.

July 1989 to March 1991

October 1991 to December 1991

Regional Director - Ocean

Managed the efforts of energy service representatives in this region as they provided customer service to over 180,000 residential, commercial and industrial customers of the company. Leader of utilities civic engagement activities for this largest region of their service area. Operations included three-phase new business, marketing and investigation orders for region.

March 1991 to September 1991

Construction Supervisor - West Creek Operations

Responsible for reliable operation of the system and safety of utility line crews, trouble crews, field supervisors, metermen, and storeroom operations for the district. Responsible for training assignment, manpower scheduling, construction logistics, safety inspections, field inspections, customer interaction, work prioritization and direct supervision of district staff.

April 1988 to July 1989

Special Projects Manager - Customer Service

Managed this "first of its kind", 40,000 point utility load management project through regulatory approvals, marketing design, system design, implementation and project operation.[message testing, direct mail, one-way FM-radio system, general contractor, electrical permit licensing, etc.]

August 1982 to March 1988

Senior Project Coordinator - Conservation and Load Management

Developed load research and marketing research activities, plans and processes for the company. Studied and analyzed alternative energy technologies, evaluating various energy conservation techniques and programs.

December 1979 to July 1982

Associate Engineer - Environmental Affairs

Responsible for establishing environmental monitoring network, quality assurance and reporting for the company's coal-fired electrical generating stations. Developed in-house air quality modeling capability reducing dependence on expensive external consultants.

September to December 1979

Junior Engineer - Equipment and Structural Design

Responsible for engineering and design of equipment in company transmission and distribution substations.

Consulting Engineer Services

Sewell, New Jersey

June 1978 to August 1979

Consultant/Design Engineer/Draftsman

Responsible for residential and commercial development engineering, designs and site plans in this highly competitive engineering industry. Principal design engineer for company including presenting at planning and zoning board meetings in jurisdictions throughout southern N.J.

PROFESSIONAL ASSOCIATIONS, REGISTRATIONS and SERVICE ACTIVITIES

Registered Professional Engineer - State of New Jersey - License #31573	(8/86 - present)
Registered Professional Engineer - State of Pennsylvania - License #74741	(8/07 - present)
Registered Professional Planner - State of New Jersey - License #3490	(12/86 - present)
New Jersey Higher Education Partnership for Sustainability (NJHEPS) – Vice President	(6/04 -6/08)
Electric Power Research Institute - <i>Atlantic Electric Committee Member</i>	
Storage and Renewables Task Force, (11/91 - 12/94), Renewable Resource Systems Task Force	(1/87 - 12/89)
Solar Programs Committee - Secretary	(1/88 - 12/94)
Edison Electric Institute - <i>Atlantic Electric Committee Member</i> - Renewable Technologies	(6/92 – 3/98)
Utility Photovoltaic Group - <i>Atlantic Electric Member</i>	(10/92 - 12/95)
USAPV - User Scale Applications of Photovoltaics - <i>Secretary</i>	(6/93 – 12/95)
USAPV - User Scale Applications of Photovoltaics - <i>Board Member</i>	(6/93 – 3/98)
Institute of Electrical and Electronics Engineers – <i>Member No. 41406933</i>	(6/01 – present)
Institute of Electrical and Electronics Engineers – <i>Member Power and Energy Society</i>	(6/01 – present)
Institute of Electrical and Electronics Engineers – <i>Member Instrumentation & Measurement Society</i>	(6/03 – present)
Institute of Electrical and Electronics Engineers – <i>Member Aerospace and Electronic Systems Society</i>	(6/03 – present)
Institute of Electrical and Electronics Engineers – <i>Elected Senior Member</i>	(11/06 – present)
American Institute of Aeronautics and Astronautics	(6/02 – 5/08)
American Society for Engineering Education – <i>Member No. 301699</i>	(9/03 - present)
International Society for Industrial Ecology - <i>Member</i>	(6/01 – 8/14)
American Society of Civil Engineers - <i>Member</i>	(6/97 – present)
Engineers Without Borders – <i>Professional Member – Rowan University Chapter</i>	(11/10 – 8/11)
National Society of Professional Engineers - <i>Member</i>	(6/81 - present)
New Jersey Society of Professional Engineers [NJSPE] - <i>Member</i>	(6/81 – 8/11)
NJSPE - <i>State Officer (Trustee-at-Large)</i>	(6/92 - 5/96)
Professional Engineering Society of Southern N.J. [PESSNJ] - <i>Member</i>	(6/81 - 8/11)
PESSNJ - <i>President</i>	(6/92 - 6/93)
PESSNJ - <i>MathCounts Coordinator</i>	(6/89 -10/98)
Pennsylvania Society of Professional Engineers [PSPE] - <i>Member</i>	(8/11 – present)
Co-Editor: <i>Research Journal of Chemistry and the Environment</i>	(11/05 – 7/18)
Associate Editor: <i>The International Journal of Technology, Knowledge and Society</i>	(1/07 – 1/11)
Associate Editor: <i>The World Universities Journal</i>	(5/08 – 5/10)
Bucknell University – <i>Institute for Leadership in Sustainable Technology (Co-Founder)</i>	(7/15 – 7/18)
Bucknell University – <i>University Fellow</i>	(9/19 - present)
Bucknell University – <i>Committee on Athletics - Chair</i>	(8/18 - present)
Bucknell University – <i>Sustainability Working Group, Faculty Advisor to BCSE</i>	(8/11 – 7/18)
Bucknell University – <i>Faculty Advisor to Grand Challenges Scholar Program</i>	(8/14 – 7/18)
Bucknell University – <i>Faculty Advisor to Student Branch of IEEE</i>	(8/11 – 9/17)
Bucknell University – <i>Faculty Academic/Spiritual Advisor to Wrestling Team</i>	(8/13 - present)
Bucknell University – <i>KEEN Grant Team Member – Co-Faculty Multidisciplinary Senior Design</i>	(8/11 – 5/17)
Bucknell University – <i>College of Engineering – International Committee</i>	(8/11 – 7/14)
Bucknell University – <i>College of Engineering – Graduate Committee</i>	(8/14 – 7/15)
Rowan University – <i>College of Engineering – Assessment Committee</i>	(9/01 – 8/11)
Rowan University – <i>Electrical & Computer Engineering Department Assessment Coordinator</i>	(6/01 – 8/11)

AWARDS and RECOGNITION

Awarded a Four Year Appointment as a **Swanson Fellow** at Bucknell University for September 2011 through August 2015
Elected a **Visiting Fellow** to **Clare Hall – University of Cambridge** for Sabbatical Year July 2009 – June 2010
2007 *International Journal of Technology, Knowledge and Society* – **International Paper Award – Runner Up**
Tau Beta Pi - Epsilon of New Jersey inducted as a member April 2007
New Jersey Society of Professional Engineers (NJSPE) - **1993 New Jersey Young Engineer of the Year**
 NJSPE - **2003 Nominee for NSPE Engineering Education Excellence Award**
Professional Engineering Society of Southern New Jersey (PESSNJ) - **1991, 1992 Chapter Young Engineer of the Year**
 PESSNJ - **2003 Chapter Engineering Education Excellence Award**
Association of Energy Engineers (AEE) - Philadelphia Chapter - **2004 Energy Professional Development Award**
Association of Energy Engineers - Region 1 - **2006 Energy Professional Development Award**
New Jersey Higher Education Partnership for Sustainability (NJHEPS) – **NJHEPS 2005 Advancement Fellow**

COMMUNITY SERVICE ACTIVITIES

Board of Directors – DreamCatcher Community Supported Agriculture (CSA)	(1/19 – present)
Bucknell University Chapel, Guitarist in Chapel Worship Team	(1/12 – 12/18)
RANCH HOPE, Inc. [Residential rehabilitation ministry serving boys and girls] - Board of Managers	(4/97 – 12/13)