SECTION 10: CURRICULUM VITAE

NAME
Goodman, David W., Ph.D., CEA

CONTACT INFORMATION
Department of Electrical & Computer Engineering Technology
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EDUCATION
- Ph.D. (Engineering Technology), Purdue University, West Lafayette, IN, 2009, Area of Specialization: Informal Energy Education
- Master of Science (Mechanical Engineering Technology), Purdue University, West Lafayette, IN, 2005, Area of Specialization: Sustainable Energy Systems
- Bachelor of Science (Electrical Engineering), Purdue University, West Lafayette, IN, 1995, Area of Specialization: Electrical Power Systems
- Associate of Science (Robotics Technology), Vincennes University, Vincennes, IN, 1989

LICENSURE AND PROFESSIONAL CERTIFICATIONS
- Certified Energy Auditor, Association of Energy Engineers, #2083, 2013-16.

ACADEMIC APPOINTMENTS
- Assistant Professor (Electrical & Computer Engineering Technology), Purdue School of Engineering and Technology IUPUI, August 2009 to present
- Visiting Lecturer (Mechanical Engineering Technology), Purdue School of Engineering and Technology IUPUI, January 2009 to May 2009

NON-ACADEMIC APPOINTMENTS
- Assistant Director US Department of Energy Industrial Assessment Center at IUPUI, Purdue School of Engineering and Technology IUPUI, 2011 to present
- Consultant, Goodman Consulting, Beech Grove, IN, 2009 to present
- Energy Efficiency Specialist, Purdue Technical Assistance Program, West Lafayette, IN, 2007-2008
- Medium Voltage Electrical Engineer, General Electric, Burlington, IA, 2001-2002
- Electrical Engineer, Owens-Illinois, Toledo, OH, 1995-2000
- Intern, PSI Energy, Vincennes, IN, 1992-1994
- Electronics Technician, Emerson Radio Corp., Princeton, IN, 1990-1991

PROFESSIONAL AFFILIATIONS

- Governor, Board of Governors for Indiana Chapter of the Association of Energy Engineers
- Life Member, American Solar Energy Society (ASES)
- Member, American Society of Heating Refrigeration and Air Conditioning (ASHRAE), 2002-present
- Member, Association of Energy Engineers (AEE), 2010-present
- Member, American Society for Engineering Education (ASEE), 2009-present
- Advisor, Engineers Without Borders Academic Chapter Indiana 2010-2014
- Co-Advisor, IUPUI Energy Club, 2010-2012

PROFESSIONAL AWARDS

- Legends in Energy, 2015 Association of Energy Engineers, Orlando, FL

TEACHING IN RANK

Teaching Awards

- Frank E. Burley Distinguished Professor Award, IUPUI, 2013.
- Outstanding Teaching Award, IUPUI, 2014.

Teaching Assignments

Table 1: Teaching Load for Academic Year 2009-2010

Semester	Course	Title	Credit Hours	Contact Hours/week	Initial Enrollment
Fall 2009	ECET-23100	Electrical Power & Controls	4	4.5	17
	ECET-49900	Alternative Energy Systems	4	4.5	11
Spring 2010	H-39900	Honors Independent Study: Daric Fitzwater, ME	3	3	1
	ECET-37100	Instrumentation, Automation, & Process Control	4	4.5	19

Table 2: Teaching Load for Academic Year 2010-2011

Semester	Course	Title	Credit Hours	Contact Hours/week	Initial Enrollment
Fall 2010	ECET-49900	Alternative Energy Systems	4	4.5	7
	MET-49900	Alternative Energy Systems	4	4.5	3
Spring 2011	ECET-37100	Instrumentation, Automation, & Process Control	4	4.5	16
Summer 2011	TECH-58100	Directed Project Chad Eckerle	1	2	1
		Directed Project Jon Wang	1	2	1

Table 3: Teaching Load for Academic Year 2011-2012

Semester	Course	Title	Credit Hours	Contact Hours/week	Initial Enrollment
Fall 2011	ECET-23100	Electrical Power & Controls	4	4.5	10
	ECET-49900 (TECH-30000)	Alternative Energy Technology	4	4.5	13
	ECET-49100	Senior Capstone 2	2	3.5	8
	TECH-58100	Directed Project Chad Eckerle	1	2	1
		Directed Project Jon Wang	1	2	1
Spring 2012	ECET-49000	Senior Capstone 1	1	3	20
	ECET-49100	Senior Capstone 2	2	3.5	10
	TECH-58100	Directed Project Chad Eckerle	1	2	1
	CEG Grant	Course Release	3	-	-

Table 4: Teaching Load for Academic Year 2012-2013

Semester	Course	Title	Credit Hours	Contact Hours/week	Initial Enrollment
Fall 2012	ECET-49000	Senior Capstone 1	1	3	9
		Senior Capstone 1	1	3	19
	ECET-49100	Senior Capstone 2	2	3.5	3
		Senior Capstone 2	2	3.5	11
	TECH-30300	Energy Efficiency & Auditing	3	3	10
	TECH-58100	Energy Assessment	3	3	5
	ECET-49900	Independent Study April Schelske	1	1	1
		Independent Study Tony West	1	1	1
	TECH-58100	Directed Project Chad Eckerle	1	2	1
	ME-59700	Industrial Energy Assessment: Tools and Applications	3	3	7
Spring 2013	TECH-30100	Renewable Energy Systems	3	3	6
	ECET-49100	Senior Capstone 2	2	3.5	26
	TECH-58100	Directed Project Chad Eckerle	1	2	1
	TECH-58100	Renewable Energy Technology	1.5 (co-teach)	1.5	5

Table 5: Teaching Load for Academic Year 2013-2014

Semester	Course	Title	Credit Hours	Contact Hours/week	Initial Enrollment
Fall 2013	TECH-58100	Energy Assessment	3	3	9
	ECET-49100	Senior Capstone 2	2	3.5	13
	ME-50103	Industrial Energy Assessment: Tools and Applications	3	3	8
Spring 2014	TECH-30100	Renewable Energy Systems	3	3	17
	ECET-49100	Senior Capstone 2	2	3.5	23
	TECH-58100	Renewable Energy Technology	1.5 (co-teach)	1.5	4

Table 6: Teaching Load for Academic Year 2014-2015

Semester	Course	Title	Credit Hours	Contact Hours/week	Initial Enrollment
Fall 2014	TECH-58100	Energy Assessment	3	3	4
	ECET-37100	Instrumentation, Automation, & Process Control	4	1	20
	ECET-49100	Senior Capstone 2	2	3.5	11
	ME-50103	Industrial Energy Assessment:Tools and Applications	3	3	15
Spring 2015	TECH-30100	Renewable Energy Systems	3	3	13
	ECET-49100	Senior Capstone 2	2	3.5	24
	TECH-58100	Renewable Energy Technology	3	1.5 (co-teach)	7

Table 7: Teaching Load for Academic Year 2015-2016

Semester	Course	Title	Credit Hours	Contact Hours/week	Initial Enrollment
Fall 2015	ECET-37100	Instrumentation, Automation, & Process Control	4	1	20
	TECH-30300	Energy Efficiency & Auditing	3	3	8
	ECET-49100	Senior Capstone 2	2	3.5	11
	ME-50103	Industrial Energy Assessment:Tools and Applications	3	3	33

Invited Lectures

- Goodman, D. and Arash Edalatnoor. Presentation: Role and Impact of the Industrial Assessment Center. American Foundry Society. 2015, Indianapolis.
- Goodman, D. Presentation: Role and Impact of the Industrial Assessment Center on Triple Bottom Line of Indiana Manufacturers. Indiana Automotive Council. 2014, Indianapolis.
- Goodman, D. Panel Discussion: Role of Solar in Microgrids. Microgrid Interconnections and Energy Storage Symposium. 2014, Indianapolis.
- Goodman, D., Grocox, A., and Striebeck, C. Panel Discussion: Solar Workforce. WIndiana Conference. 2011, Indianapolis.
- Goodman, D., Hammond, S., and Bowman, L. Panel Discussion: Intercultural Experience Panel. Engineers Without Borders: Great Lakes Regional Conference. 2010, Indianapolis.

PROFESSIONAL DEVELOPMENT CONFERENCES ATTENDED IN RANK

- American Society for Engineering Education Annual Conference. Seattle, WA. June 14-17, 2015.
- US Department of Energy, Directors Conference. New Brunswick, NJ. July. 27-29, 2014.
- Engineering Education Research (EER) Leader NetWorkshop Meeting. Indianapolis, IN June 19, 2014.
- American Society for Engineering Education Annual Conference. Indianapolis, IN. June 15-18, 2014.
- US Department of Energy, Directors Conference. Niagara Falls, NY. July. 22-23, 2013.
- American Society for Engineering Education Annual Conference. Atlanta, GA. June 23-26, 2013.
- Society of Automotive Engineers 2013 World Congress. Detroit, MI. April 16-18, 2013.
- American Society for Engineering Education Annual Conference. San Antonio, TX. June 10-13, 2012.
- US Department of Energy, New Directors Training Conference. New Brunswick, NJ. Nov. 13-16, 2011.
- 334th World Energy Engineering Congress. Chicago, IL. Oct. 12-15, 2011.
- WIndiana Conference, Indianapolis, IN July 20-21, 2011.
- American Society for Engineering Education Annual Conference. Vancouver, BC, Canada. June 26-29, 2011.
- American Solar Energy Society Annual Conference. Raleigh, NC. May 17-21, 2011.
- Indiana Campus Compact: Service Engagement Summit. Indianapolis, IN. April 1-2, 2011.
- Engineers Without Borders: Great Lakes Regional Conference. Indianapolis, IN. Nov. 19-21, 2010.
- Lugar Collegiate Energy Summit. Indianapolis, IN. Sep. 17, 2010.
- American Society for Engineering Education Annual Conference. Louisville, KY. June 20-24, 2010.
- IU Energy Workshop. Bloomington, IN. Aug. 6-7, 2009.

STUDENT SUPERVISION IN RANK

Mentor (Graduate-Thesis-Chair/Co-Chair)

- Amin Amini, Thesis, Masters of Science in Mechanical Engineering, IUPUI, 2017
- Jing Li, Thesis, Masters of Science in Mechanical Engineering, IUPUI, 2015

Mentor (Graduate-Thesis-Member)

- Arash Edalatnoor, Thesis, Masters of Science in Mechanical Engineering, IUPUI, 2015
- Cameron Lancaster, Thesis, Masters of Science in Mechanical Engineering, IUPUI, 2015
- Drew Witte, Thesis, Masters of Science in Electrical Engineering, IUPUI, 2014
- Akram Khatib, Thesis, Masters of Science in Mechanical Engineering, IUPUI, 2014

Mentor (Graduate-Directed Project-Chair/Co-Chair)

- Michael Cooprider, Directed Project, Masters of Science in Technology, IUPUI, 2016
- Chad Eckerle, Directed Project, Masters of Science in Technology, IUPUI, 2013
- David Campolongo, Directed Project, Masters of Science in Technology, IUPUI, 2012
- Bryan Weddle, Directed Project, Masters of Science in Technology, IUPUI, 2012
- Mark Lewis, Directed Project, Masters of Science in Technology, IUPUI, 2011
- Jacob Faiola, Directed Project, Masters of Science in Technology, IUPUI, 2011
- Jon Wang, Directed Project, Masters of Science in Technology, IUPUI, 2011
- Modibo Traore, Directed Project, Masters of Science in Technology, IUPUI, 2011
- Collin Green, Directed Project, Masters of Science in Technology, IUPUI, 2010

Mentor (Graduate-Directed Project-Member)

- Mike Sacro, Directed Project, Masters of Science in Technology, IUPUI, 2015
- Austin Strong, Directed Project, Masters of Science in Technology, IUPUI, 2014
- Mike Hutchins, Directed Project, Masters of Science in Technology, IUPUI, 2014
- Laban Zurowski, Directed Project, Masters of Science in Technology, IUPUI, 2014
- Eric Olsen, Directed Project, Masters of Science in Technology, IUPUI, 2013
- LeVern McFadden, Directed Project, Masters of Science in Technology, IUPUI, 2013
- Jie Zhou, Directed Project, Masters of Science in Technology, IUPUI, 2012
- Courtney Thornberry, Directed Project, Masters of Science in Technology, IUPUI, 2011
- Michael Dinges, Directed Project, Masters of Science in Technology, IUPUI, 2010

Mentor (Undergraduate-International Internship)

- Dennis Ganaus. 2014.Cooperative State University at Mannheim, Germany (Supervised the international research component of the Bachelors of Science Degree in Service Engineering at IUPUI)
- Frederic Zarzecki. 2011. ESIEE University at Amiens, France (Supervised the international research component of the Bachelors of Science Degree in Electrical Engineering at IUPUI)

Mentor (Undergraduate-McNair Scholar)

- Jordan Rhodes. 2011. Sustainable Design project

Mentor (Undergraduate-Multidisciplinary Undergraduate Research initiative (MURI))

- Dylan Howard, 2014-2015 MURI project
- Victor Cuevas, 2014-2015 MURI project
- Abdul Ayoub, 2014-2015 MURI project
- Rudy Frazier, 2014-2015 MURI project
- Arooj Mohammed, 2014-2015 MURI project
- Delaram Moghaddam, 2012-2013 MURI project
- Rawda Hamid, 2012-2013 MURI project
- Trien Nguyen, 2012-2013 MURI project
- Ronald Hnin, 2012-2013 MURI project
- Mike Testerman, 2011-2012 MURI project
- Scott Polley, 2011-2012 MURI project
- Gideon Lian, 2011-2012 MURI project
- Dan Robinson, 2011-2012 MURI project
- Caleb Harbert, 2010-2011 MURI project
- Scott Polley, 2010-2011 MURI project
- Thurston Tresler, 2010-2011 MURI project
- Rhonda Dufour, 2009-2010 MURI project
- Daric Fitzwater, 2009-2010 MURI project
- Elizabeth Freije, 2009-2010 MURI project
- Baihaqi Ismail, 2009-2010 MURI project
- Ryan Mason, 2009-2010 MURI project
- Amirtaher Abdollahi Namin, 2009-2010 MURI project
- Nick Snyder, 2009-2010 MURI project

PROFESSIONAL SERVICE IN RANK

International Service, Invited Assessments Trips

(** Student)

- Goodman, D., Ludlow, S., Anderson, C., Szczesiul, C., **Torres, E., **Sego, J., and **Monaghan, J. Ecuador Needs Assessment: Engineers Without Borders. Santo Domingo, Ecuador. Mar. 13-22, 2010. (Funded by EWB-IUPUI Chapter)
- Goodman, D., Cowan, J. D., **Tabas, J., Greene, C., Hogan, J., and Jean-Baptiste, L. Haiti Needs Assessment. Port Au Prince, Haiti. April 3-10, 2010. (Funded by Haitian Association of Indiana)

Service to Professional Societies

- American Society of Engineering Educators (ASEE) Nationally Elected Office
  - ETD Treasurer, July 2015 – June 2017
  - CIEC Program Chair, July 2015 – June 2016
  - CIEC Program Vice Chair, July 2014 – June 2015
- Association of Energy Engineers (AEE), Indiana Chapter
  - Board of Governors Member, October 2014 - Present
- ASEE Conference Moderator
  - Engineering Technology Division. National Conference, Indianapolis, June 2014
  - Architectural Division. National Conference, Atlanta, June 2013
  - Engineering Technology Division. National Conference, Atlanta, June 2013
  - Engineering Technology Division. National Conference, San Antonio, June 2012
  - Architectural Engineering Division. National Conference, Vancouver, June 2011
  - Engineering Technology Division. National Conference, Vancouver, June 2011
- ASES Solar Tour Site Exhibitor, Indianapolis, IN, 2011
- ASES Solar Tour Site Exhibitor, Indianapolis, IN, 2010

Manuscripts Reviewed

- ASEE Engineering Technology Division
  - Peer Reviewer, Abstracts, November 2013
  - Peer Reviewer, Final Papers, February 2013
  - Peer Reviewer, Abstracts, November 2012
  - Peer Reviewer, Final Papers, February 2012
  - Peer Reviewer, Abstracts, November 2011
  - Peer Reviewer, Final Papers, February 2011
  - Peer Reviewer, Abstracts, November 2010
- ASEE Architectural Engineering Division
  - Peer Reviewer, Final Papers, February 2011
  - Peer Reviewer, Abstracts, November 2010
- Environmental Protection Agency
  - Grant Peer Reviewer, P3 Applications, March 2013
  - Grant Peer Reviewer, SBIR Applications, August 2010
- IUPUI
  - Peer Reviewer, Applications for Chancellor's Awards, April 2010
- McGraw-Hill
  - Book Chapter Design Review, "Electricity for the Trades, 2e by Frank Petruzella", August 2012.

Professional Presentations

- Goodman, David W. (2010). Eco Ready Shelter. *National Kitchen & Bath Association: Regional Meeting*, Indianapolis, IN.

UNIVERSITY SERVICE IN RANK

Department Committees

- Member, Department Graduate Committee, 2010 to present
- Member, Search and Screen Committee, two positions in MET Department (2010-2011)

School Committees

- PLM Core Working Group, ENT Representative, 2014 to present
- Faculty Senate, Senate Representative for the Department of Engineering Technology, Fall 2010 to present
- Purdue School of Engineering and Technology Research Committee, 2009 to 2012

University Committees

- Member, Campus Sustainability Resource Committee, 2014 to present
- Member, Campus Sustainability Education Committee, 2013 to present
- Member, Campus Sustainability Steering Committee, 2010 to present
- Co-Chair, Energy and the Built Environment Campus Sustainability Committee, 2010 to 2013
- Transatlantic Climate Bridge Member, 2010 to 2011

GRANTS, FELLOWSHIPS, AND AWARDS IN RANK

External Teaching Grants and Fellowships

- Goodman, D. (PI, 100% effort). "Supplemental IAC Funding to Develop Ultrasonic Leak Detection Tools for Non-air Industrial Gasses". ($51,984). 2015-2016.
- Chen, J (PI, 40% effort), Goodman, D. (Co-PI, 25% effort), Razban, A (Co-PI, 25% effort), Anwar, S (Co-PI, 5% effort), Xie, J (Co-PI, 5% effort) "DE-FOA-0000490 Establishing an Industrial Assessment Center". ($1,320,000). 2011-2016.

External Research Grants and Fellowships

- Goodman, D. (PI, 100% effort). "Pump Efficiency Validation". Proportion Air Inc. ($9,353). 2013-2014.
- Goodman, D. (PI, 100% effort). "Accelerated pH Electrode Failure Data Capture Initiative". Endress & Hauser Inc. ($9,969). 2011-2012.

External Service Grants and Contracts

- Goodman, D. (PI, 100% effort). "Equipment Grant". Carrier Corp. ($5,000). 2013.
- Goodman, D. (PI, 100% effort). "Equipment Tax Abatement Study". Roll Formed Corporation. ($5,000). 2013.
- Goodman, D. (PI, 100% effort). "Equipment Grant". Carrier Corp. ($5,000). 2012.
- Goodman, D. (PI, 100% effort). "National Product Review: Electrical Service Protection". Ductcrete Inc. ($2,000). 2011.

Internal Teaching Grants and Contracts

- Goodman, D. (PI), Tabas, J. "International Engineering in Malta", IUPUI Office for Study Abroad Grant ($6,000) 2015 (70% effort).
- Goodman, D. (PI), Tabas, J. "International Engineering in Malta", IUPUI Yurtseven Grant ($3,000) 2015 (70% effort).
- Goodman, D. (PI), Durkin, R., Stephens, C. "Aquaponics", IUPUI Multidisciplinary Undergraduate Research Institute (MURI) Grant ($13,500) 2014 (50% effort).
- Goodman, D. (PI), Mikesky, A., Tabas, J. "Web Interface-Phase 1", IUPUI Multidisciplinary Undergraduate Research Institute (MURI) Grant ($6,000) 2012 (40% effort).
- Izadian, A. (PI), Goodman, D. "Renewable Energy Conversion", IUPUI Multidisciplinary Undergraduate Research Institute (MURI) Grant ($8,885) 2012 (20% effort).
- Goodman, D. (PI). "Sustainable Technology Certificate", IUPUI Curriculum Enhancement Grant (CEG) ($30,000) 2011 (35% effort).
- Goodman, D. (PI), Mikesky, A., Tabas, J. "Energy Harvesting-Phase 2", IUPUI Multidisciplinary Undergraduate Research Institute (MURI) Grant ($10,685) 2011 (80% effort).
- Goodman, D. (PI), Mikesky, A., Tabas, J., Izadian, A. "Energy Harvesting", IUPUI Multidisciplinary Undergraduate Research Institute (MURI) Grant ($8,885) 2010 (80% effort).
- Goodman, D. (PI), Fox, P., Cowan, D. J., "Eco Ready Shelter", IUPUI Multidisciplinary Undergraduate Research Institute (MURI) Grant ($11,900) 2009 (35% effort).
- El-Mounayri, H. (PI), Goodman, D., Wasfy, T., Vice, C. "Renewable Energy Living Lab", IUPUI Multidisciplinary Undergraduate Research Institute (MURI) Grant ($11,200) 2009 (30% effort).

Internal Service Grants and Contracts

- Solution Center Grant ($2,000) (PI, 100% effort), July 2011.

TEACHING PUBLICATIONS IN RANK

(* Primary Author, ** Student Co-Authors, † Mentored)

Refereed Journals

- * **Goodman, D**. (2015). Effects of an Informal Energy Exhibit on Knowledge and Attitudes of Fourth Grade Students. *Journal of Education and Learning*. Vol.9 (2) pp. 145-157.
- * **Goodman, D**., Fox, P., and Cowan, J. (2014). Educating Engineers and Technologists for a Green/Sustainable Future. *Journal of Engineering Technology*. Volume 31, Number 1, Spring 2014, Page 26-36.
- * **Goodman, D**., Fox, P., Cowan, J., and Tabas, J. (2013). How to Establish Successful International Experiences for Engineering and Technology Students. *Technology Interface International Journal*: Volume 14, Number 1, Fall/Winter 2013, Page 108-113.

Refereed Conference Proceedings

- * **Goodman, D**. (2016). Using Industrial Experiences for Recruitment and Retention. Conference for Industry and Education Collaboration, Austin, TX. (accepted)
- * **Goodman, D**. and Durkin, R. (2012). AC 2012-4428: Energy Demos: Class Project versus Commercial Equipment. American Society for Engineering Education Conference, Atlanta.
- * **Goodman, D**. and Cooper, H. L. (2011). AC 2011-1636: Informal Energy Education: Fuel Cell Exhibit Pilot Study. American Society for Engineering Education Conference, Vancouver.
- *Cowan, D. J., Fox, P., Hundley, S., Tabas, J., and **Goodman, D**. (2010). AC 2010-551: The DORMaTECHture Project: A Multi and Interdisciplinary Educational Experience. American Society for Engineering Education Conference, Louisville.
- *Chen, R., **Goodman, D**., Izadian, A., and Cooney, E. (2010). AC 2010-229: Teaching Renewable Energy through Hands-on Project-Based Learning for Engineering Technology Students. American Society for Engineering Education Conference, Louisville.
- *Cowan, D. J., Fox, P., Hundley, S., **Tabas, J., and **Goodman, D**. (2010). Sustainability and Education: The Need for New Degree Options. American Society of Civil Engineers: Earth Space Conference, Honolulu. Page 3821-3832.
- *Fox, P., Hundley, S., Cowan, D. J., **Tabas, J., and **Goodman, D**. (2009). Teaching Sustainability: Course, Program and Degree Considerations. Portland International Center for Management of Engineering Technology Conference, Portland. Page 2240-2245.

Industrial Reports - Referred by Rutgers University, aggregate data posted for US Department of Energy. Clients are Confidential. Feasibility and methods research for energy efficiency.

- **Ayoub, A., **Amini, A., **Saad, M., **Wu, A., **Bhargav, A., †**Goodman, D**. and †Razban, A. (2015). IP-0048 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Flowers, J., **Saad, M., **Xander., **Bhargav, A., **Hurtman, J., **Wu, A., †**Goodman, D**. and †Razban, A. (2015). IP-0047 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).

- **Rice, J., **Amini, A., **Saad, M., **Xander., **Bhargav, A., †**Goodman, D**. and †Razban, A. (2015). IP-0046 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Bhargav, A., **Ip, N., **Hurtman, J., Rice, J., †**Goodman, D**. and †Razban, A. (2015). IP-0045 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- ** Kreutzjans, A., **Amini, A.,**Hurtman, J., **Al-Mahdi, **Ip, N., **Bhargav, A., †**Goodman, D**. and †Razban, A. (2015). IP-0044 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Ip, N., **Hurtman, J., **Wu, A., **Edalatnoor, A., **Murakami, S., †**Goodman, D**. and †Razban, A. (2015). IP-0043 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Amini, A., **Gieryn, A., **Flowers, J., **Elaiyan, A., **Ip, N., †**Goodman, D**. and †Razban, A. (2015). IP-0042 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Amini, A., **Saad, M., **Murakami, S., **Khandelwal, M., **Bhargav, A., **Amdekar, T., **Kinn, D., †**Goodman, D**. and †Razban, A. (2015). IP-0041 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Kreutzjans, A., **Khandelwal, M, **Elaiyan, A., **Edalatnoor, A., **Hurtman, J., **Amini, A., **Amdekar, T., **Kinn, D., †**Goodman, D**. and †Razban, A. (2015). IP-0040 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Edalatnoor, A., **Amini, A., **Bell, J., †**Goodman, D**. and †Razban, A. (2015). IP-0039 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Ayoub, A., **Khandelwal, M., **Elaiyan , A., **Rice, J., **Amdekar, T., **Jian, P., †**Goodman, D**. and †Razban, A. (2015). IP-0038 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Ayoub, A., **Amini, A., **Tamura, K., **Edalatnoor, A., **Amdekar, T., **Ip, N., †**Goodman, D**. and †Razban, A. (2015). IP-0037 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Flowers, J., **Bhargav, A., **Vipra, N., **Saad, M., **Wu, A., **Rice, J., †**Goodman, D**. and †Razban, A. (2015). IP-0036 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Jain, P., **Kreutzjans, A., **Rice, J., **Tamura, K., **Ayoub, A., †**Goodman, D**. and †Razban, A. (2015). IP-0035 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Wu, A., **Jain, P., **Ip, N., **Tamura, K., **Bell, J., **Kinn, D., **Ayoub, A., †**Goodman, D**. and †Razban, A. (2015). IP-0034 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Ayoub, A., **Jian, P., **Amdekar, T., **Edalatnoor, A., **Vipra, N., **Flowers, J., †**Goodman, D**. and †Razban, A. (2015). IP-0033 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Ayoub, A., **Ip, N., **Saad, M., **Edalatnoor, A., **Kinn, D., †**Goodman, D**. and †Razban, A. (2014). IP-0032 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Edalatnoor, A., **Jian, P., **Wu, A., **Tamura, K., **Rice, J., **Ayoub, A., **Amdekar, T., **Flowers, J., **Ip, N., **Bell, J., **Vipra, N., †**Goodman, D**. and †Razban, A. (2014). IP-0031 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).

- **Edalatnoor, A., **Flowers, J., **Ip, N., **Ayoub, A., **Kreutzjans, A., **Bhargav, A., **Wu, A., †**Goodman, D**. and †Razban, A. (2014). IP-0030 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Bhargav, A., **Li, J., **Ayoub, A., **Ip, N., **Kreutzjans, A., †**Goodman, D**. and †Razban, A. (2014). IP-0029 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Li, J., **Lancaster, C., **Ayoub, A., **Shazly, A., †**Goodman, D**. and †Razban, A. (2014). IP-0028 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Lancaster, C., **Edalatnoor, A., **Li, J., **Bhargav, A., **Ayoub, A., **Zeedyk, B., †**Goodman, D**. and †Razban, A. (2014). IP-0027 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Edalatnoor, A., **Malguarnera, M., **Bhargav, A., **Wu, A., **Zeedyk, B., **Lancaster, C., †**Goodman, D**. and †Razban, A. (2014). IP-0026 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Khatib, A., ** Wu, A., **Edalatnoor, A., **Bhargav, A., **Lancaster, C., **Malguarnera, M., **Li, J., †**Goodman, D**. and †Razban, A. (2014). IP-0025 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Malguarnera, M., **Khatib, A., **Edalatnoor, A., **Bhargav, A., **Lancaster, C., **Wu, A., †**Goodman, D**. and †Razban, A. (2014). IP-0024 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Edalatnoor, A., **Baker, R., **Li, J., **Khatib, A., **Holcomb, R., **Lancaster, C., †**Goodman, D**. and †Razban, A. (2014). IP-0023 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Li, J., **Edalatnoor, A., **Holcomb, R., **Ip, N., **Krow, R., **Malguarnera, M., †**Goodman, D**. and †Razban, A. (2014). IP-0022 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Khatib, A., **Baker, R., **Li, J., **Edalatnoor, A., **Elshazly, A., **Lancaster, C., †**Goodman, D**. and †Razban, A. (2014). IP-0021 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Baker, R., **Khatib, A., **Holcomb, T., **Edalatnoor, A., **Krow, R., **Lancaster, C., **Ip, N., **Malguarnera, M., †**Goodman, D**. and †Razban, A. (2013). IP-0020 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Holcomb, R., **Khatib, A., **Li, J., **Edalatnoor, A., **Krow, R., **Lancaster, C., †**Goodman, D**. and †Razban, A. (2013). IP-0019 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Khatib, A., **Baker, R., **Clark, A., **Holcomb, R., **Li, J., †**Goodman, D**. and †Razban, A. (2013). IP-0018 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Holcomb, R., **Cambridge, J., **Clark, A., **Khatib, A., †**Goodman, D**. and †Razban, A. (2013). IP-0017 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Clark, A., **Cambrideg, J., **Holcomb, R., **Khatib, A., **Baker, R., †**Goodman, D**. and †Razban, A. (2013). IP-0016 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Nofal, M., **Cambridge, J., **Holcomb, R., **Khatib, A., **Li, J., **Baker, R., †**Goodman, D**. and †Razban, A. (2013). IP-0015 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).

- **Nofal, M., **Cambridge, J., **Holcomb, R., **Khatib, A., †**Goodman, D**. and †Razban, A. (2013). IP-0014 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Clark, A., **Baker, R., **Mahmood, T., **Holcomb, R., **Khatib, A., †**Goodman, D**. and †Razban, A. (2013). IP-0013 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Nofal, M., **Cambridge, J., **Holcomb, R., **Khatib, A., †**Goodman, D**. and †Razban, A. (2013). IP-0012 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Nofal, M., **Cambridge, J., **Mahmood, T., **Khatib, A., **Holcomb, R., †**Goodman, D**. and †Razban, A. (2013). IP-0011 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Cambridge, J., **Nofal, M., **Clark, A., **Baker, R., **Holcomb, R., **Khatib, A., **Mahmood, T., †**Goodman, D**. and †Razban, A. (2013). IP-0010 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Cambridge, J., **Mahrouka, W., **Frazier, S., **Nervo, S., **Sharma, A., **Clark, A., **Nofal, M., †**Goodman, D**. and †Razban, A. (2012). IP-0009 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Mahrouka, W., **Nofal, M., **Frazier, S., **Cambridge, J., **Clark, A., †**Goodman, D**. and †Razban, A. (2012). IP-0008 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Clark, A., **Nofal, M., **Frazier, S., **Cambridge, J., **Mahrouka, W., †**Goodman, D**. and †Razban, A. (2012). IP-0007 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Nofal, M., **Cambridge, J., **Frazier, S., **Nervo, S., **Mahrouka, W., **Clark, A., †**Goodman, D**. and †Razban, A. (2012). IP-0006 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Cambridge, J., **Mahrouka, W., **Frazier, S., **Nervo, S., †**Goodman, D**. and †Razban, A. (2012). IP-0005 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Cambridge, J., **Nofal, M.,**Frazier, S., **Nervo, S., **Mahrouka, W., †**Goodman, D**. and †Razban, A. (2012). IP-0004 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Cambridge, J., **Nofal, M., **Frazier, S., **Nervo, S., †**Goodman, D**. and †Razban, A. (2012). IP-0002 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).
- **Cambridge, J., **Nofal, M., **Frazier, S., **Nervo, S., †**Goodman, D**. and †Razban, A. (2012). IP-0001 Energy Assessment Report. IAC Database (https://iac.rutgers.edu/database/).

Poster Presentations

- †**Howard, D., **Cuevos, V., **Ayoub, A., Frazier, R., Mohammed, A., and Mentors: **Goodman, D**., Durkin, R., and Stephens, C. Aquaponics System. CRL – Research Day Poster Symposium, April 2015.
- †**Nguyen, T., **Moghaddam, D., **Hamid, R., and Mentors: **Goodman, D**., Mikesky, A., and Tabas, J. VIRO: The Future of Online Learning Interfaces. CRL – Research Day Poster Symposium, April 2013.
- †**Nguyen, T., **Goodman, D**. and Petrache, H. "Hydrogen Generation from Water Disassociation Using Small Currents and Harmonics," IUPUI Research Day, April, 2013.
- †**Alshehri, S., Izadian, A., and **Goodman, D**. "A New Inverter Design and Parameter Sizing Procedure," MURI Poster Presentation, IUPUI, Summer 2012.
- †**DiGregory, C., Izadian, A., and **Goodman, D**. "Combined Adaptive Controller for A Buck Boost Circuit," MURI Poster Presentation, IUPUI, Summer 2012.
- †**Jones, G., Izadian, A., and **Goodman, D**. "A New Power Inverter Circuit Analysis, Modeling, and Operation," MURI Poster Presentation, IUPUI, Summer 2012.

RESEARCH PUBLICATIONS IN RANK

(* Primary Author, ** Student Co-Authors, † Mentored)

Refereed Journals

- **Campos, U., **Zamenian, H., Koo, D., and **Goodman, D**. (2015). Waste-to-Energy (WTE) Technology Applications for Municipal Solid Waste (MSW) Treatment in the Urban Environment. *International Journal of Emerging Technology and Advanced Engineering*. Vol. 5 (2), pp. 504-508.
- †* **Goodman, D**., and **Edalatnoor, A. (2015). Waste, Just another Resource: A Case for Waste Wood. *International Journal of Mechanical Engineering and Technology*. Vol. 6 (3). pp 25-33.
- †* **Goodman, D**., **Edalatnoor, A., and Cooprider, M. (2015). Waste, Just another Resource: A Case for Process Water. *International Journal of Mechanical Engineering and Technology*. Vol. 6 (4). pp. (accepted, in process)

Refereed Conference Proceedings

- *** Goodman, D**. and Durkin, R. (2015). Diaphragm Pump Controller Performance Testing: 20-50% Efficiency Improvement. 2015 World Energy Engineering Congress, Orlando. (Accepted: in process, proceedings published October 2015)
- †**Cambridge, J., * **Goodman, D**., ** Frazier, S., **Nofal, M., and Razban, A. (2013). Compressed Air Efficiency: A Case Study Combining Variable Speed Control with Electronic Inlet Valve Modulation. Society of Automotive Engineers World Congress, Detroit.
- †* **Goodman, D**., **Fitzwater, D., and **Zarzecki, F. (2011). Effect on System Efficiency from Combining Solar Thermal and Photovoltaic Energy Systems in non-Grid Applications: Phase 1. American Solar Energy Society: Solar 2011 Conference Proceedings, Raleigh.

PUBLICATIONS SUBMITTED IN RANK
(* Primary Author, ** Student Co-Authors, † Mentored)

Refereed Journals

- *** Goodman, D**. and Durkin, R. (2015). Energy Efficiency Performance of Controllers on Air Operated Double Diaphragm Pumps. *International Journal of Modern Engineering*. (Submitted: in process)
- *Razban, A., **Goodman, D**., and **Khatib, A. (2015). AHU Simulation and Control: Wireless DAQ for Heating and Cooling Coil Energy Usage Reduction. *Journal of Energy Conversion and Management.* (Submitted: in process)
- *** Goodman, D**. (2016). High Impact Experiences: EWB Service in Ecuador. (In process, plan to submit October 2015)
- *** Goodman, D.** (2016). Effects of an Informal Energy Exhibit on Knowledge and Attitudes of Fifth Grade Students. (In process, plan to submit October 2015)