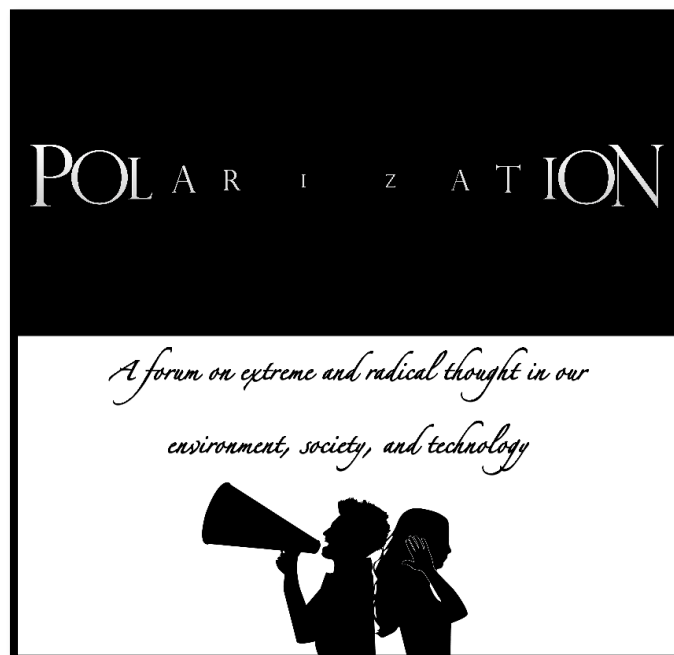
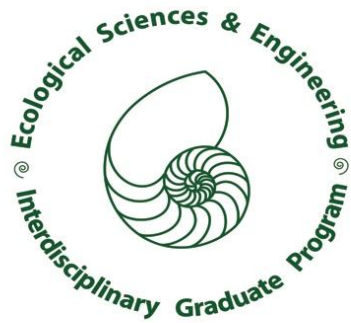


# The 10<sup>th</sup> Annual Ecological Sciences and Engineering Symposium



September 28-29, 2016

Purdue University

West Lafayette, IN

## **Polarization: A forum on extreme and radical thought in our environment, society, and technology**

We live in an era in which ideologies often seem diametrically opposed and common ground is frequently elusive. Whether such apparent polarization is real or imagined is certainly open to debate, but our impression of polarization undoubtedly influences our mindsets and social discourse on scales ranging from the individual to the global. Environmental, social, and technological problems are especially liable to be viewed through a black-and-white lens, and the American political scene and social media are just two potential facilitators of such perspectives.

We have identified four subthemes as core focal areas:

- **The Positives and Negatives of Polarization**
- **The Emergence and Dissolution of Radical Movements**
- **Polarization within Academia**
- **An Open Showcase for Extreme and/or Radical Ideas**

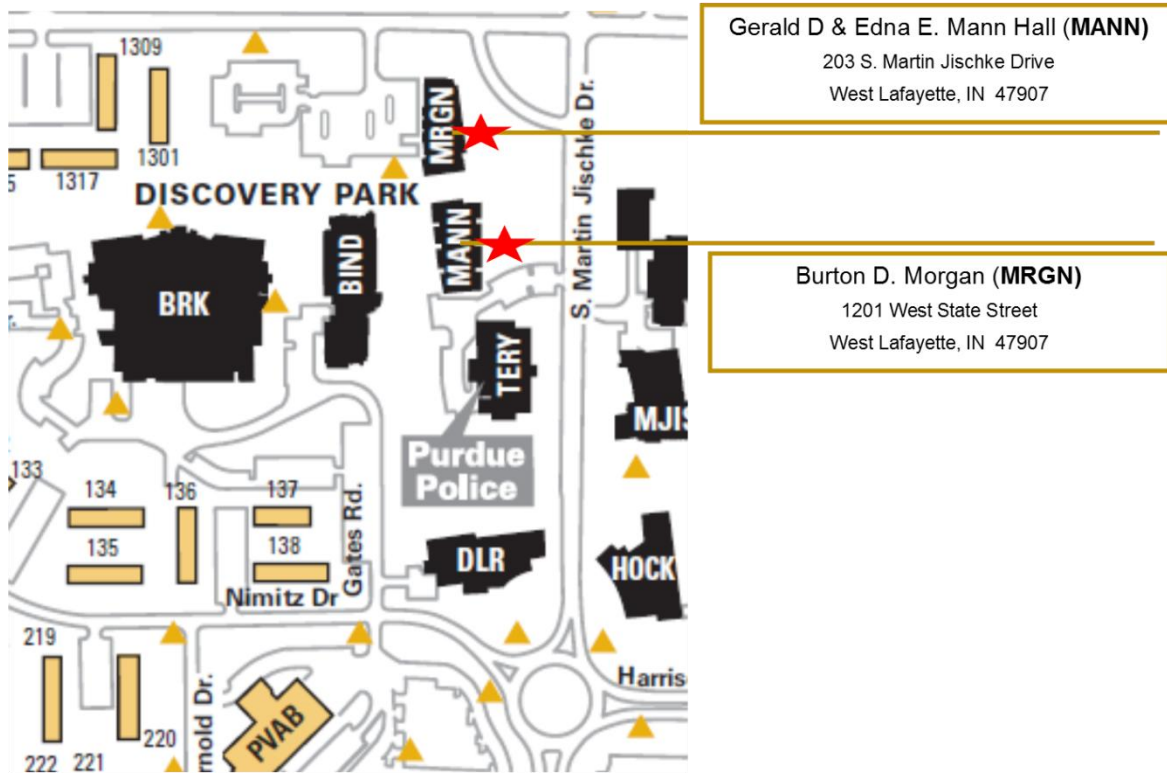
Through this symposium, we hope to promote discussion surrounding the relevance and implications of polarization regarding the interconnected domains of environment, society, and technology.

## Schedule of Events

September 28, 2016		
Time	Activity	Location
7:00 pm	Refreshments	MRGN 121
7:30 pm	Keynote Address Dr. Riley Dunlap, Oklahoma State University	MRGN 121

September 29, 2016		
Time	Activity	Location
9:30 am – 10:30 am	Breakfast Discussion: Revisiting the Keynote	MRGN Cafe
10:30 am – 12:00 pm	Poster and Art Gallery Session	MANN Atrium
12:00 pm – 1:00 pm	<p>“Global Café” Style Lunch Discussion</p> <ul style="list-style-type: none"> <li>• Agriculture: Ben Gramig</li> <li>• Energy: Dan Schuster</li> <li>• Environmental Policy: Riley Dunlap</li> <li>• Climate Change Policy: Liam Fitzgerald</li> <li>• Humans &amp; the Environment: Linda Prokopy</li> <li>• Communications: Kim Osborne</li> <li>• Wealth &amp; Inequality: Suresh Rao</li> </ul>	MRGN Café
1:00 pm – 1:30 pm	<p>Lecture and Discussion Series</p> <p>Room 1 - Mann 203 “Polarization: The Need for Civil Discourse to Address Global Climate Issues” – Al Gilewicz</p> <p>Room 2 - Morgan 129 “What’s missing from this picture? Long-term thinking about people, policy and environmental conflict” – Zoe Nyssa</p>	<p>MANN 203</p> <p>MRGN 129</p>
1:30 pm – 2:00 pm	<p>Lecture and Discussion Series</p> <p>Room 1 - Mann 203 "Beyond Polarization: Fragmentation or Unity?" – Suresh Rao</p> <p>Room 2 - Morgan 129 "Online echo chambers: Personalized news and political polarization" – Kim Osborne</p>	<p>MANN 203</p> <p>MRGN 129</p>
2:00 pm – 3:30 pm	3MT Competition	MRGN 121
3:30 pm – 4:45 pm	<p>Panel Discussion: Polarized Campus</p> <ul style="list-style-type: none"> <li>• Panelist 1: Bryan Pijanowski</li> <li>• Panelist 2: Al Gilewicz</li> <li>• Panelist 3: Mel Gruver</li> </ul>	MRGN 121
4:45 pm	Award Ceremony	MRGN 121

# Symposium Map



All events will be held in Discovery Park at either Gerald D & Edna E. Mann Hall (MANN) or Burton D. Morgan (MRGN).

## Symposium Information

### Morning Panel: “Revisiting the keynote”

#### Past ESE Symposium Chairs

2007 – Brent Ladd, Program Coordinator

2008 – Brianna Dorie

2009 – Becca Perry - Hill

2010 – Rebecca Logsdon and Elizabeth Trybula\*

2011 – Michael Schuster

2012 – Nathan Shoaf\* and Lauren Logan

2013 – Katherine Touzinsky and Raymond Red Corn\*

2014 – Heather Pasley\* and Belyna Bentlage

2015 – Charlotte Lee and Zachary Reaver\*

2016 – Dante Francomano

\* Will be participating on the panel

### Lunch Discussion: “Global Café: How does polarization impact our world?”

**Agriculture:** Ben Gramig, Agricultural Economics, Purdue

**Energy:** Dan Schuster, Energy and Utilities, Purdue

**Environmental Policy:** Riley Dunlap, Sociology, Oklahoma State

**Climate Change Policy:** Liam Fitzgerald, Citizens’ Climate Lobby

**Humans & the Environment:** Linda Prokopy, Forestry and Natural Resources, Purdue

**Communications:** Kim Osborne, Communications, Purdue

**Wealth & Inequality:** Suresh Rao, Civil Engineering, Purdue

## Featured Speakers

### **Keynote: “Political Polarization, Environment, and Climate Change”**

#### **Dr. Riley Dunlap**

Oklahoma State University

Regents Professor of Sociology and Laurence L. and Georgia Ina Dresser Professor

Dr. Riley Dunlap of Oklahoma State University is a professor of Environmental Sociology. His work involves trending public environmental concern, the American environmentalism movement, and climate change. He is currently serving as a member of the National Advisory Committee for the U.S. Sustained National Climate Assessment conducted by NOAA and the U.S. Global Change Research Program.

### **Lecture: “Polarization: The Need for Civil Discourse to Address Global Climate Issues”**

#### **Al Gilewicz**

Purdue University

Director of Energy and Utilities

Al is the Director of Energy and Utilities at Purdue. He is interested in energy management and consumption both at the university-level and beyond. His work with Energy and Utilities at Purdue will provide insight into real-world of energy consumption in a polarized social, economic, and political environment.

### **Lecture: “What’s missing from this picture? Long-term thinking about people, policy and environmental conflict”**

#### **Zoe Nyssa**

Purdue University

Assistant Professor of Anthropology

Dr. Nyssa is an assistant professor in the Department of Anthropology at Purdue. Previously, she held fellowships at the John F. Kennedy School of Government at Harvard University, the Harvard University Center for the Environment, and the Max Planck Institute for History of Science in Berlin. She serves as a consultant to a number of environmental organizations, including the Smithsonian Institution and the Society for Conservation Biology. Her research focuses on environmental decision making and impacts of conservation practices on human and ecological systems.

**Lecture: "Beyond Polarization: Fragmentation or Unity?"**

**Suresh Rao**

Purdue University

Lee A. Rieth Distinguished Professor in Environmental Engineering and Professor of Civil Engineering and Agronomy

Dr. Rao is a Lee A. Rieth Distinguished Professor in Environmental Engineering and Professor of Civil Engineering and Agronomy at Purdue. He has taught the weekly ESE colloquium class for many years. His research and teaching are largely interdisciplinary, focusing on diverse topics such as hydrological modeling, resilience of complex systems, and sustainability.

**Lecture: "Online echo chambers: Personalized news and political polarization"**

**Kim Osborne**

Purdue University

C-SPAN Chair Professional in Residence and Professor of Communications

Dr. Osborne is a C-SPAN Chair Professional in Residence and Professor of Communications at Purdue. She has provided communications services to many leaders of national governments, large companies, universities, and non-profits. Her research focuses on how communications impact decision making.

**Panel: "A Polarized Campus"**

**Al Gilewicz**

Purdue University

Director of Energy and Utilities

Al is the Director of Energy and Utilities at Purdue. He is interested in energy management and consumption both at the university-level and beyond. His work with Energy and Utilities at Purdue will provide insight into real-world of energy consumption in a polarized social, economic, and political environment.

**Mel Gruver**

Purdue University

Assistant Dean Civic Engagement and Leadership Development

Mel is the Assistant Dean of Civic Engagement and Leadership Development at Purdue. She develops and coordinates programs for students to address issues in the community and has done extensive work with networking and community outreach.

**Bryan Pijanowski**

Purdue University

Professor of Landscape Ecology and Director of Purdue's Center for Global Soundscapes

Dr. Pijanowski is a Professor of Landscape Ecology in the Department of Forestry and Natural Resources at Purdue. He is also the Director of Purdue's Center for Global Soundscapes. His interdisciplinary research focuses on integrating the arts into ecological systems through the use of soundscape ecology.



## 2016 Symposium Sponsors

- School of Aeronautics and Astronautics
- Agricultural & Biological Engineering
- Agricultural Economics
- Department of Anthropology
- Botany and Plant Pathology
- Construction Management Technology
- Burton D. Morgan Center for Entrepreneurship
- Center for the Environment
- Chemical Engineering
- Department of Chemistry
- Clean Manufacturing Technology Institute
- College of Liberal Arts
- Discovery Learning Research Center
- Discovery Park
- Electrical and Computer Engineering Technology
- Energy Center
- Energy, Engineering, and Sustainability
- School of Engineering Education
- Environmental and Ecological Engineering
- Office of the Executive Vice President for Research and Partnerships
- Physical Facilities Fiscal Affairs
- Forestry and Natural Resources
- Health and Kinesiology
- School of Health Sciences
- Laboratory for Renewable Resource Engineering
- Purdue University Libraries
- School of Nursing
- Physical Facilities
- Department of Political Science
- Psychological Sciences
- Purdue Climate Change Research Center
- The Office of Interdisciplinary Graduate Programs

Contact [ese@purdue.edu](mailto:ese@purdue.edu) if you would like to sponsor the ESE 2017 Symposium.