ENVISIONING ENERGY SOLUTIONS
WORKSHOP FOR DOCTORAL STUDENTS
THE GENERATOR // 101C Gross Hall // Duke University

12:00pm
WELCOME
Brian Murray
Director of the Energy Initiative

12:15pm
An Energy Modeler's Perspective on Future Energy Systems
Joseph DeCarolis
Associate Professor of Civil, Construction, and Environmental Engineering
North Carolina State University

1:00pm
SELECT RESEARCH PRESENTATIONS

Welfare Effects of Energy Storage
Justin Kirkpatrick
University Program in Environmental Policy

Bandar Alqahtani
Nicholas School of the Environment

Development of an Inexpensive Solar Soiling System to Analyze Global Influence of Dust and Particulate Matter on Photovoltaic Efficiency
Michael Valerino
Pratt School of Engineering

Impact of Solar Tariff Change on Households' Decision: Evidence from Arizona's Unbundled Solar Rates
Qingran Li
University Program in Environmental Policy

2:00pm
BREAK
2:15pm
SELECT RESEARCH PRESENTATIONS

Evaluating Global Industrial Black Carbon Emissions: Insights from Income-emission Trajectory
Muye Ru
Nicholas School of the Environment

Hadi Eshraghi,
Department of Civil, Construction, and Environmental Engineering, NC State

Lessons from the World’s Longest Oil Pipeline Network
Tom J. Cinq-Mars
History

Energy-efficient Sampled-based Motion Planning for Underwater Robots
Yuankai Zhu
Mechanical Engineering and Material Science

Photocathodes for Solar Water Splitting
Yihao Zhao
Mechanical Engineering and Material Science

3:15PM
BREAK

3:30pm
INTERDISCIPLINARY DOCTORAL RESEARCH AT DUKE
Edward J. Balleisen
Vice Provost for Interdisciplinary Research

3:45pm
OPPORTUNITIES FOR CROSS-DISCIPLINE ENERGY RESEARCH

4:45pm
RECAPITULATION

5:00pm
HAPPY HOUR