

Road Map & Policy of Energy & Fuels Symposium Schedule

MONDAY MORNING, Section A

Room 231 & 239

Ernest N. Morial Convention Center

Road Map & Policy of Energy & Fuels

Air Pollution, Human Health & the Environment

Cosponsored by ENFL

Q. Zhen, Organizer

S. Liu, Organizer, Presiding

V. C. Garcia, Presiding

Understanding the Linkage Between Air Quality and Human Health Adrian Pope¹

Satellite Measurements of Chemical, Meteorological, and Climate

Time (Talk #) Talk Title-Speaker

7:55 -8:40 am #227 Understanding the Linkage Between Air Quality and Human Health. **A. Pope**, Room 231

8:45 -9:30 am #228 Satellite Measurements of Chemical, Meteorological, and Climate Variables. **B. Doddridge**, Room 231

10:00-12:00 am ENFL Plenary, Dr. Fan, Room 231

12:15-1:00 pm #229 Accountability: Evaluating the Impact of Regulatory Policies on Air Quality, Human Health, and the Environment. **V.C. Garcia**, Room 231

MONDAY AFTERNOON, Section E

Room 239

Ernest N. Morial Convention Center

1:25 pm Introductory Remarks - **V. Garcia & F. Princiotta**, Room 239

1.30 pm # 190 Energy Future. **A. Janetos**, Room 239

2.15 pm # 191 Extreme Events and National Climate Assessments. **J. Bell &, B. Stewart**, Room 239

3.00 pm Intermission

3.10: #191 Global Atmospheric Composition, Weather, and Climate. **V. Ramaswamy**, Room 239

3.55 # 192 Climate Change Mitigation: Is It Too Late to Recover, **F. Princiotta**, Room 239

4:40 #193 Panel discussion on path forward related to the energy & environmental road map. Drs. **Pope, Doddridge, Garcia** (and speakers from Energy session)

7:00 -10.05 pm, Room 239. Speaker Preparation, **MONDAY EVENING**, Section A

MONDAY MORNING, Section E

Ernest N. Morial Convention Center

Room 240

Road Map & Policy of Energy & Fuels

Reducing America's Carbon Footprint through Nuclear Energy: Policy Perspectives & Other Non-Nuclear Technologies & Practices

Cosponsored by ENFL

S. (Bashir) Liu, Q. Zhen, Organizers

C. Sanders, M. Sanders, Presiding

Time (Talk #) Talk Title -Speaker

7:55 am Introductory Remarks.

8:00 am # 138. Nuclear Power Looking Forward: The Opportunity and the Implications. *R. Coward*

8:30 am # 129. Accident Tolerant Fuel: Update and Progress Report F. H. Smith,

9:00 am # 140. Understanding Energy Markets: How They Work, and Why They're Broken. **M. Crozat**

9.30 am # 141. Nuclear Energy in the U.K. - Lessons from Across the Pond I. Salter

10.00 am Intermission

10:15 am #142. Can parked cars and carbon taxes create a profit? The economics of vehicle-to-grid energy storage for peak reduction. *G. Freeman, H. Gandhi, A. White*

10:40 am #143. Synthesis of high-density fuels from biomass derivatives. **J. Xie, G. Nie, X. Zhang, J. Zou**

11:05 am #144. Study of deposition behaviour of asphaltenes sub-fraction with microfluidic system. **T. Cao, Y. Lin, A. Yen, S. Biswal, J. Macias**

11:30 am #145. Computational and experimental study of CO₂ capture by alkylamines. **K. Yang, J. Schell, R. Glaser**

MONDAY AFTERNOON, Section E

Room 240

Ernest N. Morial Convention Center

1.00 pm Panel Discussion Pre-Introduction. **C. Sanders**

1.15 pm # 195a America's Forray into Nuclear Power: Background & Challenges. **C. Sanders**

1.40 pm # 195b Government Policies for the Next Generation of Nuclear Power Production: New Build Strategies.

A. hab Abdel-Aziz

2.05 am # 195c Developing a Stable Waste Management Program, **M. Sanders**

2.35 pm # 195d Panel Discussion (Nuclear Safety), **M. Sanders & C. Sanders**

TUESDAY MORNING, Section D

Ernest N. Morial Convention Center

Room 239

Road Map & Policy of Energy & Fuels

Food, Energy, Water Resources & Economy: Evidence for Biophysical & Social

Constraints on Society

Cosponsored by ENFL

Q. Zhen, Organizer

S. (Bashir) Liu, Organizer, Presiding

K. W. King, Presiding

Time (Talk #) Talk Title-Speaker

7:55 Introductory Remarks.

8:00-8:45: #258. Tales from the Past: Indicators of Ancient Maya Societal Structures during the 'Classic Maya Collapse'. **Julie Hoggarth**

8:45-9:30: **#259.** Biophysical Economics: History and Uses. **Charles Hall**

BREAK (15 min)

9:45-10:30: **#260.** Accretaxis: the regulation of the growth of the global economy. **Andrew Jarvis**

10:30-11:15: **#261.** Extra-metabolic energy use and the rise in urban hyper-density. **Joseph Burger**

11:15-12:00: **#262.** Distributional Social Justice: Insights From a Doubly-Bounded Capital Exchange Model. **Garvin Boyle**

LUNCH (12:00-1:15 pm)

TUESDAY AFTERNOON, Section D

Ernest N. Morial Convention Center

Room 239

Road Map & Policy of Energy & Fuels

1:15-2:00: **#263.** The Production Boundary & Empirical Constructs: The Implicit Foundations of National Accounting. **Daniel Urban**

2:00-2:45: **#264.** U.S. Unconventional Resource Development – A Lesson Learned in Time. **Nathan Schaffer**

BREAK (15 min)

3:00-4:00: **#264.** Systems Thinking Linking Energy and the Economy: Size, Growth, and Structure.

Carey King

4:00-5:00: Panel Discussion - Moderated discussion (by *Carey King*) with all speakers + Q&A with audience

WEDNESDAY MORNING, Section D

Ernest N. Morial Convention Center

Room 239

Road Map & Policy of Energy & Fuels

Food, Energy, Water Resources & Economy: Evidence for Biophysical & Social Constraints on Society

Cosponsored by ENFL

S. Liu, Q. Zhen, Organizers

S. (Bashir) Liu, *C. A. Hall, Presiding*

M. King Hubbert: Is He Relevant?

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S. Liu, Q. Zhen, *Organizers*

S. Bashir, *C. A. Hall, Presiding*

Time (Talk #) Talk Title -Speaker

7:55 Introductory Remarks.

8:00 #423. Possible biophysical constraints on energy and hydrocarbon futures. **C.A. Hall**

8:40 #424. M. King Hubbert and a brief history of peak oil forecasts. **M. Inman**

9:10 #425. New Hubbert analysis for the United States. **C.A. Hall,**

9:40 Intermission.

9:55 #426. Hubbert analyses for individual countries. **J.L. Hallock, C.A. Hall**

10:25 #427. Hubbert analysis for coal. **D. Rutledge**

10:55 #428. The Economic EROI for 'fracked' crude oil and natural gas **R. Kaufmann**

11:25 #429. Analysis of the energy return on investment (EROI) of existing fields. **M. Masnadi, A. Brandt**

WEDNESDAY AFTERNOON, Section E, Energy Return on Investment (EROI)

Ernest N. Morial Convention Center

Room 239

Road Map & Policy of Energy & Fuels

Cosponsored by ENFL

S. Liu, Q. Zhen, *Organizers*

S. Bashir, C. A. Hall, *Presiding*

Time (Talk #) Talk Title -Speaker

12:55 Introductory Remarks.

1:00 #474. EROI of new technologies. **C.A. Hall**

1:25 #475. Energy return on investment: Problems and solutions. **C. King**

1:50 #476. Money return on investment. **A. Berman**

2:15 #477. Energy and Food Security **J. Schramski**

2:40 Intermission.

2:50 #478. Conventional economics vs. biophysical economics. **K. Klitgaard & C. Hall**

3:15 #479. Economic implications of EROIs. **C.A. Hall**

3:40 #480. Energy and human wellbeing. **J. Lambert**

4:05 #481. Energy and collapsing states. **N. Ahmed**

4:30 #482. The impact of energy price and climate change on coastal restoration **J.W. Day, A. Wiegman**