

# THE CLEARWATER CLEAN ENERGY CONFERENCE AGENDA

## SUNDAY – June 3, 2018

### Short Courses

**9:00 – 11:00 a.m. – Combustion 101–**  
*Alan Paschedag, Covanta, Inc., and*  
*J.J. Letcavits, American Electric Power*  
**11:15 a.m. – 1:15 p.m. – Practical**  
**Optimization of the Coal Supply Chain**  
*– G.H. Luttrell, Virginia Tech; and P. J.*  
*Bethell, Marshall Miller and Associates*  
**1:30 p.m. – 3:30 p.m. – Combustion**  
**Fundamentals – Prof. Ashwani K, Gupta,**  
*University of Maryland*  
**3:45 p.m. – 5:45 p.m. – Advanced**  
**Biomass Pellet Characteristics for**  
**Utility Scale Co-firing and Conversion**  
**Programs – Les Marshall, Ontario Power**  
*Generation Canada*

**3:00 p.m. – Exhibit Center Setup in the**  
**Island Ballroom**

## MONDAY – June 4, 2018

**8:00 a.m. - Technical Session**  
**Moderators' Meeting – Gulf Room**

**8:30 a.m. - Continental Breakfast –**  
**Exhibit Center**

**9:00 a.m. – Keynote Address: Scott**  
*Smouse, Senior Advisor to Deputy Assistant*  
*Secretary, for Clean Coal & Carbon*  
*Management, U.S. Department of Energy,*  
**USA**

**Panel: Emerging International**  
**Developments in Power Generation**  
*Moderator: Prof. Terry Wall, University of*  
*Newcastle, Australia*

**11:45 a.m. – Lunch – Exhibit Center**

**1:00 p.m. Panel: U.S. Energy Portfolio**  
**Today and in the Future**  
*Moderator: Bonnie Courtemanche,*  
*Director of Quality and Safety, Riley Power,*  
*Inc.*

**3:00 p.m. Break – Exhibit Center**

**3:30 p.m. – Four Concurrent Sessions**

- **Session 1 - Sand Key Room -**  
**Biomass Co-Firing**  
*Les Marshall, Ontario Power*  
*Generation, Canada*
- **Session 2 - Gulf Room -**  
**Innovative Low Carbon Fuels I**  
*Dongke Zhang, The University of*  
*Western Australia, Australia*
- **Session 3 - Palm Room -**  
**Supercritical CO<sub>2</sub> I**  
*Joshua Stanislawski, UNDEERC*  
**and Bhupesh Dhungel, Air Liquide**

- **Session 4 - Bay Room - Carbon Capture Utilization & Sequestration I**, *Dr. Erik Meuleman, ION Engineering, and Dr. David Hopkinson, National Energy Technology Laboratory, U.S. Department of Energy*

**5:30 p.m. Beach Party – Poolside**

**TUESDAY – June 5, 2018**

**7:30 a.m. Continental Breakfast in the Exhibit Center**

**8:00 a.m. Three Concurrent Sessions:**

- **Session 5 - Sand Key Room - Energy From Waste**  
*Alan Paschedag, Covanta*
- **Session 6 - Gulf Room - Innovative Low Carbon Fuels II**  
*Dongke Zhange, The University of Western Australia*
- **Session 7 - Palm Room - Oxy-Combustion I**  
*Dr. Klas Andersson (Chalmers University, Sweden) and Dr. Andrew Fry, Brigham Young University*

**10:00 a.m. Break in the Exhibit Center**

**10:30 a.m. Three Concurrent Sessions**

- **Session 8 - Sand Key Room - Fluidized Bed and Dense Particle Flows**, *Dr. Ronald Breault, National Energy Technology Laboratory, U.S. Department of Energy*
- **Session 9 - Gulf Room - Combustion Fundamentals**  
*Dr. Weihong Yang, KTH Royal Institute of Technology, Sweden*
- **Session 10 - Palm Room - Oxy-Combustion II**  
*Dr. Klas Andersson (Chalmers University, Sweden) and Dr. Andrew Fry, Brigham Young University*

**12:30 p.m. – Lunch – Exhibit Center**

**2:00 p.m. Panel: Energy From Waste**  
*Moderator: Prof. Ashwani Gupta,  
University of Maryland*

**3:30 p.m. Break**

**4:00 p.m. Four Concurrent Sessions**

- **Session 11 - Sand Key Room - Radiative Heat Transfer**  
*Brad Adams, Brigham Young University*
- **Session 12 - Gulf Room - Gasification**  
*Massood Ramezan, KeyLogic*
- **Session 13 - Palm Room - Chemical Looping I - Oxygen Carrier Development**, *Dr. Andrew Tong, Ohio State University and Dr. Mandar Kathe, Ohio State University*
- **Session 14 - Beach Room - Carbon Capture Utilization & Sequestration II**, *Dr. David Hopkinson, National Energy Technology Laboratory, U.S. Department of Energy and Prof. Jochen Lauterbach, University of South Carolina*

**6:00 p.m. - Conclusion of Technical Program**

**WEDNESDAY – June 6, 2018**

**7:30 a.m. Continental Breakfast – Exhibit Center**

**8:00 a.m. Four Concurrent Sessions:**

- **Session 15 - Beach Room - Combustion Technologies**  
*J.J. Letcavits, AEP and Alan Paschedag, Covanta*
- **Session 16 - Gulf Room - Recovery of Rare Earth Elements I**  
*Prof. Eric Eddings, University of Utah*
- **Session 17 - Palm Room - Chemical Looping II – Process and Reactor Design and Testing**  
*Thomas Flynn, Babcock and Wilcox, and Dr. Luke Neal, North Carolina State University*
- **Session 18 - Bay Room - Biomass To Fuel**  
*Prof. Viktor Scherer, Ruhr-Universität Bochum, Germany*

**10:00 a.m. Break – Exhibit Center**

**10:30 a.m. Four Concurrent Sessions**

- **Session 19 - Beach Room - Supercritical CO<sub>2</sub> II**  
*Joshua Stanislawski, UNDEERC and Bhupesh Dhungel, Air Liquide*
- **Session 20 - Gulf Room - Carbon Capture Utilization & Sequestration III - Dr. Erik Meuleman, ION Engineering**
- **Session 21 - Palm Room - Modeling I**  
*Dr. Edmundo Vasquez, Consultant, Boiler Combustion and Emission Controls*

- **Session 22 - Beach Room - Recovery of Rare Earth Elements II**  
*Prof. Eric Eddings, University of Utah*

**11:50 a.m. – Themed Lunch – Exhibit Center**

**1:30 p.m. – Panel: Adaptive Mining Chains – Moderator: Dr. Dave Osborne, Somerset International Australia Pty Ltd., AUSTRALIA**

**3:30 p.m. – Break in the Exhibit Center**

**4:00 p.m. – Exhibit Center Closes**

**4:00 p.m. – Four Concurrent Sessions**

- **Session 23 - Beach Room - Innovative Power Applications**  
*David Tucker, National Energy Technology Laboratory, U.S. Department of Energy and Dalia El Tawy, Siemens*
- **Session 24 - Gulf Room - Chemical Looping III – Process and Component Analysis**  
*Dr. Andrew Tong, Ohio State University, and Vasudev Pralhad Haribal, North Carolina State University*
- **Session 25 - Palm Room - Modeling II**  
*Dr. Edmundo Vasquez, Consultant, Boiler Combustion and Emission Controls*
- **Session 26 - Bay Room - Upgrading/ Beneficiation**  
*Dr. Dave Osborne, Somerset International Australia Pty Ltd., Australia*

**5:40 p.m. – Conclusion of the Technical Program**

**5:40 p.m. – Conference Committee Meeting – Palm Room**

## **THURSDAY – June 7, 2018**

**7:30 a.m. Continental Breakfast – Island Ballroom**

**8:00 a.m. – Panel: Gasification Technology – A Path Forward to Overcome Current Challenges**  
*Moderator: Massood Ramezan, KeyLogic*

**10:00 a.m. – Break – Island Ballroom**

**10:30 a.m. – Three Concurrent Sessions**

- **Session 27 - Beach Room - Load Following Issues & Turbines**  
*Massood Ramezan, KeyLogic LLC*
- **Session 28 - Gulf Room - Emerging Analytical Approaches**  
*Dr. Dave Osborne, Somerset International Australia Pty Ltd., Australia*
- **Session 29 - Bay Room - Carbon Capture Utilization & Sequestration IV**  
*Dr. Erik Meuleman, ION Engineering*

**11:50 a.m. – Lunch & Presentation of the Best Student Paper Award – Roundtable/Wrap-up Discussion – Island Ballroom**

## **FRIDAY – June 8, 2018**

**6:30 a.m. – Continental Breakfast for field trip participants – Lobby 2**

**7:00 a.m. – Departure of the Covanta/Hillsborough and Polk Power Plant Tours**

