

**TRACK E ADVISORY BOARD & DESCRIPTION**

This track has been changed to Solid Waste & Landfill gas including LMOP – Landfill gas, Waste to Energy, Biofuels, Remediation, Cement, CNG/LNG, Pipelines



Monday | 1PM - 3PM

**E1. WASTE TO ENERGY - CASE STUDIES**

- E1.1 GASIFICATION FOR WASTE WATER FACILITIES - PART 1: PROCESS BENEFITS**  
Jeffrey Snyder, Sr VP Business Development, Aries Clean Energy; Sara Head, Yorke Eng.
- E1.2 GASIFICATION FOR WASTE WATER FACILITIES - PART 2: PERMITTING CASE STUDY**  
Sara Head, Principal Scientist, Yorke Engineering, LLC; Jeffrey Snyder, Aries Clean Energy
- E1.3 PLASMA GASIFICATION OF WASTE IN THE U.S.: A CASE STUDY ON LARGE-SCALE**  
Richard Fish, President and CEO, AlterNRG Corp.
- E1.4 FOOD WASTE TO RENEWABLE NATURAL GAS: TECHNICAL AND ECONOMIC OPTIONS**  
Mark McDannel, Mgr, Energy Recovery Section, Los Angeles County Sanitation Districts
- E1.5 SIOUX FALLS LANDFILL GAS TO POET ETHANOL**  
Rachel Kloos, Plant Manager, Poet; Dustin Hansen, Landfill Superintendent, City of Sioux Falls, SD

Monday | 3:30PM - 5:30PM

**E2. BIOGAS, BIOFUELS, BIODIESEL, ALGAE**

- E2.1 CATAWBA COUNTY ECOCOMPLEX, A STUDY OF INDUSTRIAL SYMBIOSIS EMPLOYING**  
Barry Edwards, Director of Utilities & Engineering, Catawba County
- E2.2 BIOMASS TO DIESEL, A NEW WAVE IN RENEWABLE FUELS**  
Roberta (Bobbie) Hurley, Associate Vice President, AECOM
- E2.3 ENGINEERED BIOMASS PROJECTS: FINALLY TIME FOR THEIR DAY IN THE SUN?**  
Una Nowling, Technology Leader, Black & Veatch
- E2.4 OXYGEN REFORMING OF TAR AND METHANE IN BIOMASS-DERIVED SYNGAS**  
Larry Bool, Corporate Fellow, Praxair; Bradley Damstedt
- E2.5 ALGAE - CONVERSATION ABOUT WHAT TO DO NEXT**  
Aaron Morrison, President & CEO, Chaoticwaters, Inc.
- E2.6 MONITORING, PREDICTING, PREVENTING AND CONTROLLING ALGAL BLOOMS**  
Lisa Brand, CTO, LG Sonic

Tuesday | 7:30AM - 9:30AM

**E3. LMOP - LANDFILLS & LANDFILL GAS**

- E3.1 CONVERSION OF BIOGAS RENEWABLE TO POWER TO RNG - A VALUE PROPOSITION**  
Jeffrey Pierce, Senior Project Director, SCS Energy / SCS Engineers
- E3.2 ENCAPSULATOR TECHNOLOGY USEFUL FOR ODOR MITIGATION IN LANDFILLS**  
Matthew Frank, Marketing Communications Manager, Hazard Control Technologies, Inc.; Jeff Bonkoski, Ron Lowrey
- E3.3 BANKING 101: FINANCING INNOVATIVE BIOENERGY**  
Max Vernier, Business Unit Leader - Bioenergy Lending, Live Oak Bank
- E3.4 COVAP: COGENERATION FOR INDUSTRIAL WASTE WATER EVAPORATION**  
Ben Laurent, Senior Process Engineer, Heartland Water Technology, Inc.
- E3.5 SIOUX FALLS PIPELINE PROJECT - DELIVERING SUCCESS**  
Dustin Hansen, Landfill Manager, City of Sioux Falls

Tuesday | 10AM - 12PM

**E4. LFG/CNG/LNG, PIPELINES,**

- E4.1 HOW TO MEET RULE 30 AND RUL 21 REQUIREMENTS FOR RENEWABLE NATURAL GAS**  
Dave Church, VP Operations, Guild Associates, Inc.
- E4.2 RNG/CNG IN THE TRANSPORTATION SECTOR**  
Axel Schaefer, Managing Director, Greentech Avenue Environmental Services, Inc.
- E4.3 RENEWABLE GAS PIPELINES: WHAT REGULATIONS APPLY AND HOW TO OPERATE**  
Ryan Estabrook, President, Douglas Pipeline Company
- E4.4 BIFURCATING A CENTRAL PLANT FOR REDUNDANCY AND RELIABILITY**  
Jay Ehrfurth, Director - Power / Industrial, The Boldt Company; Mark Osten

Tuesday | 1PM - 3PM

**E5. REMEDIATION, RECYCLING & SPECIAL WASTES**

- E5.1 NEW PETROGEL SUPERABSORBENT TECHNOLOGY FOR OIL SPILL RECOVERY**  
T.C. Mike Chung, Professor, Penn State University
- E5.2 DEVELOPMENT PROSPECTS OF BUILDING MATERIALS INDUSTRY IN AL QASSIM**  
Hadeel Al Fawzan, Teaching Assistant, Qassim University
- E5.3 ADAPTING TRADITIONAL NAJDAH ARCHITECTURE TO THE NATURAL ENVIRONMENT**  
Nasser Alhemiddi, Professor, King Saud University
- E5.4 RECLAIMING AND RECYCLING COAL FLY ASH FOR BENEFICIAL USE**  
Bill Fedorka, Executive Director, Advanced Technology and Projects, SEFA Group

Tuesday | 3:30PM - 5:30PM

**E6. LANDFILL MANAGEMENT & COMPLIANCE**

- E6.1 RFS AND LCFS COMPLIANCE CONSIDERATIONS FOR LANDFILL GAS PROJECTS**  
Ashley Player, Senior Manager, Weaver
- E6.2 AIR PERMITTING PROJECTS AT HIGH SULFUR LANDFILLS**  
Wes Younger, Managing Consultant, Trinity Consultants
- E6.3 VERIFICATION TESTS WITH EMISSION MEASUREMENTS OF AIR POLLUTANTS**  
Eun-Song Lee, Student, Yonsei University; Yong-Chil Seo
- E6.4 COMBATING H2S CROSS-SENSITIVITIES ISSUES FOR LANDFILL GAS MONITORING**  
John Bickers, V.P. Business Development, MRU Instruments, Inc.
- E6.5 INNOVATION IN LFG GENERATION MODELING**  
John Carlton, Solid Waste Program Lead, HDR

Wednesday | 7:30AM - 9:30AM

**E7. SOLID WASTE & LFG PERFORMANCE**

- E7.1 THE PERFORMANCE SPARK IGNITION ENGINE USING GASOHOL WITH ADDITIVES**  
Iyiola Olusola Oluwaleye, Professor, Ekiti State University; J.O. Oyeniran

Wednesday | 10AM - 12PM

**E8. BIOGAS, BIOFUELS, BIODIESEL, LFG**

- E8.1 CFD STUDY ON GASIFICATION CHARACTERISTICS OF BIO-OIL**  
Hang Seok Choi, Professor, Yonsei University; MyungKyu Choi, Jae Gyu Hwang, HoonChae Park



ADVISORY BOARD TRACK E



This Track provides presentations on Advanced technologies and strategies, for compliance with SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> emission limits at coal-fired boilers. Includes SCR, DSI, and measurement and control in the cement and ash industry. Waste to Energy and Waste management.

Monday | 1PM - 3PM

E1. CONTROL TECHNOLOGIES

E1.1 NOX CONTROL, AND A LOT MORE, WITH CATALYTIC CERAMIC FILTERS

Rod Gravley, Technology Director, Tri-Mer Corporation; Kayla Olson, Kevin Moss

E1.2 EVALUATION AND APPLICATION OF AN AIR QUALITY MODELING SYSTEM TO ANALYZE IMPACTS OF INDUSTRIAL FACILITIES

Roberto San Jose, Head Professor, Technical University of Madrid (UPM); Jun L. Pérez, Rosa María Gonzalez-Barras

E1.3 ACID GAS REMOVAL CHARACTERISTICS OF CA(OH)<sub>2</sub> IN A REAL SITE

Han Jae-Won, Han-Yang University; Young-Ok Park, Korea Institute of Energy Research; Hui-Taek Kim, Han-Yang University

E1.4 FULL-SCALE DEMONSTRATION OF ENZYME-ENHANCED COAL COMBUSTION

CO-CHAIR - Wei-Ping Pan, Professor, Western Kentucky University

E1.5 IT'S ALL IN THE DUST CAKE

Nathan Schindler, Technical Sales Manager, Evonik Corporation; Florin Popovici, Emission Control Engineering Consulting

Monday | 3:30PM - 5:30PM

E2. WASTE TO ENERGY & WASTE MANAGEMENT

E2.1 PLASMA GASIFICATION; THE NEXT GENERATION OF WASTE-TO-ENERGY SERVICES

CO-CHAIR - Richard Fish, President, ALTER NRG CORP.; Kal Bhojak

E2.2 BIODIESEL PRODUCTION FROM WASTE FRYING OIL

Mohamed M. Aboabboud, Professor, El-Merghib University; Dr. Hesham G. Ibrahim

E2.3 ELECTRICITY PRODUCTION FROM SRF USING A DOWNDRAFT GASIFICATION PROCESS

Se-Won Park, Researcher, Yonsei University; Lee, Sung, Seo, Yonsei University; Oh, Samho environ-Tech; Gu, Institute for Advanced Engineering

E2.4 ENERGY FROM MUNICIPAL SOLID WASTE WITH MINIMAL CARBON EMISSION

Surendra Saxena, Professor Emeritus, FIU; Siva Pillai, Innovision

Tuesday | 7:30AM - 9:30AM

E3. SO<sub>2</sub>, NO<sub>x</sub> & SNCR

E3.1 HIGH ACCURACY IN-SITU SO<sub>3</sub>, SO<sub>2</sub> & H<sub>2</sub>SO<sub>4</sub> SENSOR FOR COMBUSTION SOURCES

CO-CHAIR - Bob Finken, Senior Vice President, Montrose Air Quality Services; Dr. Peter Zemek

E3.2 SUCCESSFUL SAMPLE HANDLING SYSTEMS FOR SO<sub>2</sub> AND NO<sub>x</sub> AT SCR

Philipp Zimmel, Area Sales Manager, JCT Analysentechnik GmbH

E3.3 IMPROVE PLANT ECONOMICS WITH EFFICIENT AMMONIA BASED DESULFURIZATION

David Repp, Sales Director, Jiangnan Environmental Technology, Inc.; Jie Li

E3.4 OPERATING CHALLENGES OF EXISTING AIR QUALITY CONTROL SYSTEMS

Suzette Puski, Principal Business Dev. Spec., Babcock Power

E3.5 EXPLORING OXIDATION AND SCR CATALYST ON GAS FIRED UNITS

Emily Kunkel, Senior Environmental Associates, Sargent & Lundy; Raj Giakwad, Dave Helm

E3.6 HUMIDITY CONTROL OPTIMIZING DRY SCRUBBER OPERATION

Jeff Bossong, COO, H2O LLC

Tuesday | 10AM - 12PM

E4. SCR & NO<sub>x</sub> CONTROL

E4.1 SOFT SENSORS FOR SO<sub>x</sub> AND NO<sub>x</sub> EMISSIONS

Patrick Bangert, CEO, algorithmica technologies Inc.

E4.2 COMBINED CYCLE PLANT NO<sub>x</sub> REDUCTIONS

Jeff Williams, Manager, Emerson; J. Nyenhuis

E4.3 CFD MODELING FOR EVALUATING CONVERSION OF COAL TO GAS FIRED BOILER

Praveen Gonuguntla, Senior CFD Engineer, Tridiagonal Solutions, Inc; Abhay Panwalkar, Bharat Heavy Electricals Limited

E4.4 SELECTABLE CONTROL SYSTEM FOR SCR MANAGEMENT

CO-CHAIR - Bernadette Shahin, National Applications Manager, M&C TechGroup

E4.5 MINIMIZING NO<sub>x</sub> AND HEAT RATE IN CHINESE COAL FIRED UTILITY BOILERS

Richard Conn, Sr. Director of Technology, Sunco International; Jeff Shan, Sunco International; May Chen, Blue Horizon

E4.6 FAST RAMP HOT SCR'S & UPGRADES TO COMPLY WITH FUTURE NO<sub>x</sub> BARCT RULES

CO-CHAIR - Robert McGinty, Sr. Product Mgr Gas Turbine & Ind. SCR Sys, Mitsubishi Hitachi Power Systems

Tuesday | 1PM - 3PM

E5. WASTE RECYCLING - CEMENT, FLY ASH

E5.1 FASTOX GASIFICATION: PROFITABLY ACHIEVE 100% RECYCLING

Michael Kleist, VP of Sales and Marketing, Sierra Energy; Mike Hart

E5.2 ADDRESSING FLY ASH RESISTIVITY WHEN CONTROLLING FLUE GAS ACIDITY

CO-CHAIR - Rabindra Sinha, VP - Sales, Marketing & Technology, ARKAY Technologies

E5.3 CEMENT STABILIZATION OF CONTAMINATED SOIL AND CCR

Paul Ruehl, US Environmental Remediation Coordinator, Lafarge Holcim

E5.4 CONCRETE AND CEMENT SPEC. COAL FLY ASH FROM A WASTE FLY ASH

Christopher Poling, Engineering Director, SCB International Materials

E5.5 CONVERT FOOD WASTE TO ENERGY AND PROFITS

David Blume, CEO, Blume Distillation

Tuesday | 3:30PM - 5:30PM

E6. COMPLIANCE TECHNOLOGIES & STRATEGIES

E6.1 MERCURY AND PYRITIC SULFUR REDUCTION IN CLEANED ILLINOIS BASIN COALS

CO-CHAIR - Allan Kolker, Research Geologist, U.S. G.S, Liliانا Lefficariu, Southern Illinois University; Maria Mastalerz, Indiana Geological Survey; Agnieszka Drobnik, Indiana Geological Survey, Clint Scott; Anne Scott, U.S. Geological Survey

E6.2 BACT EMISSION LIMITS: THE DEVIL IS IN THE DETAILS

David Shotts, Partner, ERM

E6.3 FUEL ECONOMY AND EMISSIONS TESTING CONDUCTED ON A REEFER TRAILER

Olivia Maier, Chemical Engineer, dynaCERT, Inc.; Robert Maier, Ruston Hoffman

E6.4 ULTRA-LOW TURNDOWN IN AN ULTRA-LOW EMISSIONS WORLD

CO-CHAIR - Meville Hedges, Territory Manager, Cleaver-Brooks, Inc.

E6.5 PRE AND POST COMBUSTION NO<sub>x</sub> CONTROL SYSTEM USING MICROWAVE TECH.

Valentino Tiangco, Biomass Program Manager, SMUD; Chang Yul Cha, CHA Corporation; Charles Gentry, California Energy Commission

Wednesday | 7:30AM - 4:00PM

Workshop 4 - Room 5A  
ESC | StackVision New User Mini (1-Day) Training  
Wednesday March 7, 2018  
(7:30 to 4 pm)

Danny Hintzman, ESC dhintzman@envirosys.com  
Email: jbrooks@envirosys.com with questions  
Phone: 512-250-7837, (512) 250-7952



This workshop will provide participants with a greater understanding of ESC's StackVision software. Topics will include: Using CEMScope, CalGas Management, Using StackVision Reports & Creating Linked Reports, Using Filters and Summaries, Data Controller Essentials and an Introduction to StackStudio.

TO REGISTER FOR THIS WORKSHOP

CONTACT : info@euec.com

COST \$100 for EUEC registrants