Faculty

Subijoy Dutta, P.E. *Managing Director, S&M Engineering, LLC*

Mr. Dutta, a registered professional engineer (P.E.), is fully engaged in water and environmental protection with his leadership in S&M Engineering, LLC (SNM), a Maryland corporation. SNM has a registered office in Kolkata and affiliate offices in Delhi, and Mumbai, India. He finished his B.E. degree in Mechanical Engineering from the Assam Engineering College, Guwahati, India. Mr. Dutta worked in Shillong, India, for about four years before moving to UW-Milwaukee to pursue his MS (Mechanical) degree. A year later, he transferred to the University of Oklahoma (OU) in Norman. After completing two MS degrees, one in Mechanical and the other in Petroleum & Geological Engineering from the OU, Mr. Dutta joined OU as a research faculty and opened his own consulting company, S&M Engineering Services. Later he joined the Tinker Air Force Base in Oklahoma City, where he arranged to clean up five waste sites within a very short time. This earned him a National Award for Environmental Excellence in 1992 from the Air Force Chief of Staff in Washington, DC. Later, Mr. Dutta joined the US Environmental Protection Agency in DC and worked there for 20 years. During that time he worked with a multi-discipline team involving various EPA regional offices and industries to develop the best management practices guide for treatment technologies to minimize emissions and migration of contaminants. He also provided active support to help the Central Pollution Control Board in India in their development of regulations for municipal solid waste management and medical waste. Mr. Dutta's 35-plus years' experience as an environmental professional spanned across protection and restoration of human health and the environment involving municipal, hazardous and medical waste sites management. His work in protecting the human health and the environment covers the Yamuna River basin in India, Iloilo River in Philippines, Bagmati River in Nepal, and the Yangtze river in China. Mr. Dutta conducted a number of national and international environmental assessments, remedial design and a few site cleanups. He provided training seminars in medical waste management in cities/universities in India and US. Mr. Dutta visited medical facilities in India and provided training to the hospital management and staff in safe management of infectious waste and the effectiveness of Segregation at source. He provided training seminars in medical waste management in cities/universities in India and the US.

Mr. Dutta formed the Rivers of the World Foundation, a charitable organization. He is actively working on over 10 rivers in India, Philippines, Nepal, China, and Indonesia. He has authored the following two books: *Environmental Treatment Technologies for Municipal, Industrial and Medical Wastes Remedial Scope and Efficacy*, 2nd edition, Taylor & Francis (CRC Press), and *Sustainable Mining Practices – A Global Perspective*, published by Balkema Publishers.

Guest Speaker:
Emission Control and Monitoring of Gases during Waste Handling/Treatment

William E. (Bill) Roper, PhD, PE

Professor Roper is an adjunct professor with the College of Science at George Mason University and an expert in multiple technologies and methodologies that have engineering, environmental and public policy applications. He has spent a lifetime engaged in civil & environmental engineering and public policy. Dr. Roper has developed and led major R&D programs in areas such as dredging operations, wetlands, construction productivity, invasive species control, energy efficiency and geospatial technology. For many years, he has served as the director of the U.S. Army Corps of Engineers Worldwide Civil Works Research and Development Program as a Senior Executive Service (SES) official. Dr. Roper also served as director of the U.S. Army Topographic Engineering Center (TEC). His professional experience includes senior management positions in the U.S. Department of Transportation, U.S. Environmental Protection Agency, U.S. Army, Arlington County Government, academia and the private sector. Additionally, Dr. Roper has been active with the Water Science and Technology Board, the Infrastructure and Constructed Environment Board, and the Transportation Research Board of the National Academy of Engineering.

Guest Speaker:
Waste Management for COVID 19 Pandemic

Dr. Kumar Kanti *Das , FRCS*

Intermediate science 1960 St. Edmund's College, Shillong
MBBS 1965 National Medical College,Kolkata
Trained in Safdar Jung Hospital ,Delhi 1965—1966
Moved to USA 1967 and trained in:
- Griffin Hospital, Derby, Connecticut 1967-1968
- Wilson Memorial hospital, Johnson City, NY 1968- 1972
- FRCS (Canada) 1975
- FACS 1977

Practiced as General Surgeon in Binghamton, NY from 1972 to 1985
Moved to India 1987 and worked as Chief Surgeon Red Cross Hospital, Silchar from 1987 to 2002
Joined SMSB (Kalyani Hospital) 2002 and is working as Director, currently

Live, Interactive Webinars
- Emission Control and Monitoring of Gases during Waste Handling/Treatment
- Waste Management for COVID 19 Pandemic

HalfMoon Education Inc.
PO Box 278
Altoona, WI 54720-0278

NON-PROFIT
U.S. POSTAGE PAID
EAU CLAIRE, WI
PERMIT NO. 2016

Live, Interactive Webinars

Emission Control and Monitoring of Gases during Waste Handling/Treatment
- Thursday, March 10, 2022 | 9:00 am - 12:15 pm CST

Waste Management for COVID 19 Pandemic
- Friday, March 11, 2022 | 9:00 am - 12:15 pm CST

To register, view detailed presenter biographies, and see other learning opportunities, please visit:

www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900

HalfMoon Education Live Webinars

Emission Control and Monitoring of Gases during Waste Handling/ Treatment

Thursday, March 10, 2022 | 9:00 am - 12:15 pm CST

Credits: Professional Engineers: 3.0 PDHs (No credit offered in NY)

Waste Management for COVID 19 Pandemic

Friday, March 11, 2022 | 9:00 am - 12:15 pm CST

Credits: Professional Engineers: 3.0 PDHs (No credit offered in NY)

To register, visit us online at- CLICK HERE

www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900

HalfMoon Education Inc.
WWW.HALFMOONSEMINARS.ORG

Emission Control and Monitoring of Gases during Waste Handling/Treatment

Thursday, March 10, 2022 | 9:00 am - 12:15 pm CST (incl. a 15-min break)

Tuition: $150 per registrant

Credits: Professional Engineers: 3.0 PDHs (No credit offered in NY)

Agenda

Waste Categories – Municipal and Industrial

What is waste and why?

- Categorization of waste
- Regulatory background

Municipal Waste

Recognizing waste types
Source of waste
Types of waste

Industrial Waste

Waste characteristics
Visual observations

Climate Change and Health Impacts of Emissions during Waste Handling

Emission/migration points - general waste management steps

- Staging and site preparation
- Pre-treatment
- Treatment
- Post-treatment

Climate Change – Findings and Observations

European Commission (EC)
National Aeronautics and Space Administration (NASA)
Gases and their potential (EC)
Comparison of global surface temperature changes and solar irradiation since 1880

Minimizing Global Warming and Related Disasters – Monitoring and Control of Emissions

Point source emissions vs. non-point sources (power plant vs. burning MSW)
Monitoring technologies

- Traditional lab, field, visual
- Remote sensing – high resolution sensors for environmental applications

Control technologies

Brief Overview of Waste Treatment Process – with a Focus on Emissions

Brief Overview of the General Process

Site assessments and investigations
Site characterization
Development and screening of alternatives
Remedial design/remedial action
Closure and post-closure care

22 USECMGAS 3 10 WEBR LH

To register and to see other learning opportunities, please visit:

www.halfmoonseminars.org

or call our Customer Service Department at (715) 835-5900

Waste Management for COVID 19 Pandemic

Friday, March 11, 2022 | 9:00 am - 12:15 pm CST (incl. a 15-min break)

Tuition: $150 per registrant

Credits: Professional Engineers: 3.0 PDHs (No credit offered in NY)

Agenda

Medical Waste Identification and Profile

Categories of infectious waste

- Common municipal wastes
- Deceptive/innocuous hazardous wastes
- Items of routine usage (not wastes)

Common infectious wastes

- Global variations in classification of infectious wastes
- Isolation waste
- Cultures, stocks and associated biologicals
- Human blood and blood products
- Pathological waste
- Used sharps
- Contaminated animal carcasses
- Unused sharps

Hospital/medical waste identification and profile

- General waste
  - Paper, plastics
- Infectious waste
  - Linens, clothing, food waste, body fluids
- Hazardous waste
  - Chemotherapy and antineoplastic chemicals
  - Formaldehyde
  - Photographic chemicals

Medical waste minimization options

- Segregation of individual waste streams
- Management and control practices

Waste management for COVID-19 pandemic

- COVID-19-waste (C-19-waste) in the United States, Spain, Italy, South Korea and other countries
- Interim guidance from WHO and CDC to cope with the massive increase in C-19 waste
- Guidance on safe handling of COVID patients for health care staff and other areas of the hospital/facility
- Protocols to safely operate a duplex facility – (a) the COVID patients in one area and (b) routine and emergency health care patients in another/area
- Handling, disinfection and disposal of C19-waste – massive vaccination, sampling and testing

Global vaccines, testing and related wastes

- Wates types, issues
- Vaccine types (CDC/WHO)
- Cross infections

Medical waste treatment technologies

- Autoclave treatment
- Short wave RF treatment
- Chemical/mechanical treatment
- Microwave treatment

Key factors for effective treatment

- Segregation
- On-site vs. off-site considerations

Emission control and best management practices (BMPs)

22 USWM4CVD 3 11 WEBR LH

Credit Information

Each webinar offers 3.0 PDHs to professional engineers licensed in all states except New York.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700) and North Carolina (S-0130). HalfMoon Education is not seeking course approval for professional engineers licensed in New York. Other states do not preapprove continuing education providers or courses.

Completion certificates will be awarded to participants who complete this event, respond to prompts and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Additional Learning

Project Management for Engineers
- Fri, Feb 11, 2022|8:30 am - 5:00 pm CST

Foundation Damage and Repair: Science, Materials and Techniques
- Tues, Feb 15, 2022|9:30 am - 5:00 pm CST

Drones in Construction
- Wed, Feb 16, 2022|8:30 am - 4:30 pm CST

Deep Dive into AIA Standard Forms of Agreement Between Owner and Contractor
- Thurs, Feb 17, 2022|9:00 - 11:00 am CST

Fire-Resistant Landscapes and Construction
- Fri, Feb 18, 2022|10:00 am - 5:00 pm CST

The Impact of Geosynthetics on Site Design
- Tues, Feb 22, 2022|10:00 am - 12:00 pm CST

Slope Stabilization and Landslide Prevention
- Wed, Feb 23, 2022|8:30 am - 5:00 pm CST

How to Obtain, Interpret, and Change a FEMA Flood Map
- Wed, Feb 23, 2022|12:00 - 3:15 pm CST

How to Use Berms and Swales for Stormwater Infiltration
- Thurs, Feb 24, 2022|9:00 - 11:00 am CST

Soils in Construction
- Thurs, Feb 24, 2022|12:00 - 4:00 pm CST
- Fri, Feb 25, 2022|12:00 - 4:00 pm CST

Introduction to HEC-RAS Modeling
- Fri, Feb 25, 2022|8:30 am - 5:00 pm CST

Patent Law for Engineers
- Mon, Feb 28, 2022|8:30 am - 4:00 pm CST

Roadway Design
- Mon, Feb 28, 2022|8:30 am - 4:30 pm CST

AIA Contract Document Workshop
- Tues, March 1, 2022|8:30 am - 5:00 pm CST

Shallow Foundation Design
- Thurs, March 3, 2022|11:00 am - 2:15 pm CST
- Fri, March 4, 2022|11:00 am - 2:15 pm CST

Developing Infrastructure for Electric Vehicles
- Mon, March 7, 2022|9:30 am - 4:30 pm CST

Engineered Lumber Design and Construction
- Tues, March 8, 2022|8:30 am - 12:10 pm CST
- Wed, March 9, 2022|8:30 am - 12:10 pm CST

Complying with Commercial Provisions of the 2021 International Energy Conservation Code
- Wed, March 9, 2022|8:00 am - 4:00 pm CST

Designing and Constructing All-Electric Buildings
- Wed, March 9, 2022|11:00 am - 2:15 pm CST
- Thurs, March 10, 2022|11:00 am - 2:15 pm CST

For more information and other online learning opportunities visit:
www.halfmoonseminars.org

Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of each webinar are available for purchase. See course listing online for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.