GLOBAL INITIATIVE OF ACADEMIC NETWORK (GIAN)
Ministry of Human Resources Development
Government of India

5 DAY COURSE ON

Air Pollution Control Technologies
8th Oct. – 12thOct., 2018

Venue

JNTUH College of Engineering, Kukatpally, Hyderabad

About GIAN:
Govt. of India approved a new program titled Global Initiative of Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education, viz., all IITs, IIMs, Central Universities, IISc Bangalore, IISERs, NITs and IIITs subsequently cover good State Universities where the spinoff is vast. The GIAN website may be visited for detailed information.

Overview
Ambient air pollution is a serious issue in India, particularly in North India. Several gaseous and particulate pollutants are emitted in to the atmosphere from stationary and non-stationary sources. Stationary sources include coal fired power plants, petroleum refineries, lime kilns, metal smelters, and cement kilns. Generally, the emission control technologies will be based on the principles of absorption, adsorption, thermal and catalytic incineration. This course will introduce the attendees to the basic principles of control technologies for key pollutants of concern which include gaseous criteria pollutants, hazardous organic compounds, and particulate matter. The course will also include two field trips to the local industries to provide students the opportunity to observe the emission control technologies utilized.
The main topics of the course is presented as follows:

Course: Air Pollution Control Technologies : 8th Oct. – 12th Oct., 2018

Main Topics:

- Over view of air pollution control technologies.
- Methods for controlling NOx emissions.
- Over view of particulate matter control techniques.
- Over view of VOC control technologies.

Number of participants for the course will be limited to fifty.

Benefits of Attending the Course:
Candidates who have attended the course and followed the material should benefit in strengthening their background in the areas of air pollutioncontrol techniques.

Who should attend:
This course is intended to provide graduate students, teachers, researchers, executives, engineers and researchers from manufacturing, service and government, organizations including NGOs and R&D laboratories.
Students at all levels (BTech/MSc/MTech/PhD) or Faculty from reputed academic institutions and technical institutions are invited to attend. **For the participation in the course, registration with GIAN is mandatory.**

Registration to the portal is one-time affair and will be valid for the lifetime of GIAN. Once registered in the portal, an applicant will be able to apply for any number of GIAN courses as and when necessary. One-time Non-refundable fee of Rs. 500/- is to be charged for this service. For registration, the website is: *www.gian.iitkgp.ac.in/GREGN/index*

Course Fee:
The participation fees for taking the course is as follows:

Participants from abroad : US $500
Industry/ Research Organizations: Rs. 5000/-
Academic Institutions **:** Rs. 3000/-
Full time Students : Rs. 1000/-
Full time SC/ST students : Rs. 500/-

There will be a concession of 50% of the fee for the faculty working in the constituent and affiliated colleges of JNTUH. The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr free internet facility, Tea, Snacks, Lunch.

Evaluation and Grading
There will be evaluation at the end of each module on the understanding of the concepts by the participant made during the course. Based on the evaluations finally a letter grade will be awarded to the participant. A completion certificate shall also be issued.

The Faculty

Dr. R.K.M. Jayanty has more than 49 years of experience in the field of environmental analytical chemistry. Dr. Jayanty has been instrumental in coordination of several methods development and laboratory analyses of organic species in multimedia (air, water, and industrial environments); audit material development, instrument evaluation and testing; and QA/QC. From 1999 to 2015, he was the Program Manager for the EPA chemical speciation of $PM_{2.5}$ filter samples collected in the nationwide network operations. Dr. Jayanty is currently working on international air quality monitoring programs. Dr. Jayanty's technical expertise includes methods development, evaluation, and field validation studies related to measuring toxic and related air pollutants in ambient air and stationary sources. As a leading expert in the field of air quality monitoring and analyses, he has been invited as a keynote speaker at several Asia-region conferences (including India, Thailand, China, Taiwan, South Korea and Japan). Dr. Jayanty has provided training on $PM_{2.5}$ chemical speciation to the staff at the Indian Central Pollution Control Board (CPCB), to initiate the pilot $PM_{2.5}$ speciation network at six cities in India. He has participated in several international air quality studies in India, Saudi Arabia, Ghana and Tanzania. Dr. Jayanty is an internationally recognized scientist and has been the recipient of several prestigious awards and honors including those from the American Chemical Society (ACS) and the Air & Waste Management Association (A&WMA). He is a Fellow of the ACS, A&WMA and other professional associations. He has served as expert panel member for several review boards. He is a member of the *Editorial Review Board* of the Journal of A&WMA. He has published more than 150 technical papers, reports, and presentations.

Dr. V. Venkateswara Reddy : working as Professor, Department of Civil Engineering, JNTU college of Engineering Hyderbad (JNTUCEH) JNTU Hyderabad, India. He earned PhD in Civil Engineering from JNTU Hyderabad. Dr. V. Venkateswara Reddy focuses on Hydraulics and Water Resources and Expertise in Rainfall-Runoff Modelling, Surface Hydrology, Neural Networks and Genetic Algorithms, Image processing and GIS applications, monitoring of Air, Water and Soil pollutants and their control technologies and Sustainable technologies for environmental remediation. He has published 30 papers in various international journals and presented research papers in national and international conferences. He has received R&D projects from various state and central government organizations.

Dr. V. Himabindu is an Professor, Centre for Environment, and Co-ordinator, Centre for Alternative Energy Options, Centre for Environment, Institute of Science and Technology, Jawaharlal Nehru Technological University Hyderabad (JNTUH), India. She received Ph. D in Chemistry from JNTU Hyderabad. She is the recipient of 18 research and development grants from the prestigious Indian Govt. and Private organizations. She has authored and edited more than 120 peer- review articles.

Her research focuses on monitoring of Air, Water and Soil pollutants and their control technologies, Bio fuels production, Energy materials, Sequestration of CO_2 gases from industrial air emissions and Hydrogen energy.

About the JNTUH:

The J.N.T University was in existence since 1972. It is a teaching and research oriented university consisting of 4 constituent engineering colleges JNTUH College of Engineering, Hyderabad (JNTUHCEH), JNTUH College of Engineering, Jagityala (JNTUHCEJ), JNTUH College of Engineering, Manthini (JNTUHCEM), JNTUH College of Engineering, Sulthanpur (JNTUHCES) and more than 400 affiliated colleges. In addition to the constituent colleges, the other units of JNTUH are School of Information Technology (SIT), Institute of Science and Technology (IST), School of Management Studies (SMS) and Academic Staff College (ASC). The university has numerous collaborative, teaching and research programs with universities from abroad and within India and with industries in the state of Telangana. The university offers engineering programs at both UG and PG level and many science and humanities programs at PG level. In addition, university also offers Ph.D in engineering, science and humanities disciplines.

Contact Information:

CourseCoordinators

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