



Pre AGM Talk on “Gas-phase Advanced Oxidation for Control of Air Pollution”

Organised by the Environmental Engineering Technical Division, IEM
BEM Approved CPD/PDP Hours: 2 Ref No: IEM16/HQ/192/T

Date: 30 July 2016 (Saturday)
Time: 9.00 am – 11.00 am
Venue: Auditorium Tan Sri Prof. Chin Fung
Kee, 3rd Floor, Wisma IEM,
Petaling Jaya
Speaker: Prof Matthew S. Johnson

SYNOPSIS

Gas-phase advanced oxidation (GPAO) is a new air cleaning technology based on the natural self-cleaning processes that occur in the Earth's atmosphere. The technology uses cold combustion to eliminate a broad range of air pollution with extremely low energy use relative to traditional methods. The performance of GPAO systems that have been tested at a fermentation factory, a water treatment plant, heavy industry and a manufacturer working with polymers will be discussed.

The GPAO systems treat volatile organic compounds, reduced sulfur compounds, amines, ozone, nitrogen oxides, particles and odor. For gas phase compounds and odors including VOCs (e.g. C₆H₆ and C₃H₈) and reduced sulfur compounds (e.g. H₂S and CH₃SH), removal efficiencies exceed 80%. The method is energy efficient relative to many established technologies and is applicable to pollutants emitted from diverse sources including food processing, foundries, water treatment, biofuel generation, and petrochemical industries.

BIODATA OF SPEAKER



Matthew S. Johnson has a PhD in Chemistry from the California Institute of Technology (Caltech) and is a Professor of Chemistry at the University of Copenhagen. He wrote the book 'Chemistry and the Environment' published by Cambridge University Press, together with colleague Sven

Harnung. He is author or coauthor of 95 peer-reviewed articles. Johnson is the inventor of Gas Phase Advanced Oxidation which is the basis of two new companies, Infuser and Airlabs. He serves as Science Advisor and Director of Infuser, and Chief Scientific Officer of Airlabs.

ANNOUNCEMENTS TO NOTE:

- Preferential admission to talk shall be accorded to IEM members (pre-registration and online registration are NOT required). Telephone and/or fax reservation will NOT be entertained.
- **Non-members** may also attend the talk but will need to pay a registration fee of **RM50** and an administrative fee of **RM15**. GST is inclusive.
- For members of affiliated organisations, there will be no registration fee payable. However, they are requested to produce their membership card as proof of membership. For the list of affiliated organisations, please refer to IEM website at www.myiem.org.my under International/MoU.
- Limited seats are available on a "first come first served" basis (maximum 100 participants).
- IEM members are required to produce membership cards for confirmation of attendance (CPD purpose).
- Latecomers will not be allowed to enter if the lecture hall is full nor be entitled to CPD.

*IEM members who fail to produce their membership cards will be charged a fee of **RM25.00**. GST is inclusive.*

ADMINISTRATIVE FEE

- Kindly be informed that an administrative fee of **RM15** is payable for talks organized by IEM. GST is inclusive.
- The fee would be used to cover overhead costs, building maintenance expenses as well as contribute to Wisma IEM Building Fund.
- All contributions will be deeply appreciated by IEM.
- Student Members are however exempted.

Your understanding is greatly appreciated.

CPD HOURS CONFIRMATION

Name:

Membership No:

Signature:

Ir. Santha Kumaran A/L Erusan @Krishnan
Chairman
Environmental Engineering Technical Division, IEM