



Hydrogen Society and Ideas for an Emission Free Future Energy System

By Prof Birgit Scheppat

Prof Scheppat, one of the foremost authorities on hydrogen technology will share insights about the latest developments in the sector and how it is changing the provision of electricity in Germany. She will also explore its relevance for Africa and why it is the 'fuel of the future.'

It is significant to note that the usage of renewable energy in Germany has increased remarkably to the point that 80% of the electricity available on the grid is produced from renewable energies, especially wind and solar.

However, the usage of renewable energy led to heavy loads and excess current on the grid. Additionally, traffic emission is a major burden on the CO₂ balance in Germany and, therefore, drastic decarbonisation is necessary. A new form of energy which offered solutions to the above challenges was found in hydrogen, which is emission-free, produced from purified water and is non-toxic.

The material costs for the electrolysis or the fuel cell are minimal compared to batteries. The easily storable hydrogen can be used in the most diverse applications from bicycles, buses, and to airplanes without causing pollution.

About the Speaker

Professor Birgit Scheppat studied Physics at the University of Kaiserslautern, Germany and completed her doctoral thesis titled "Diamond-like Carbon Layers" in 1988. She moved from academia to industry and joined Phototronics Solartechnik (PST), München, where she worked on '*Thin film solar cells characterisation.*'



The following are some of her notable achievements:

- Extensive experience in project management, including project management of photovoltaics at Neuenburg vorm Wald - the first solar hydrogen project.
- Founding member of a start-up in the field of traffic management systems,
- MBB Senstec: Development of Laser Systems for Automatic Toll Systems.
- Winner of the 2000 Avantex Award for Innovations.
- Joined the RheinMain University of Applied Sciences in 2000 as Professor of Hydrogen Technology.
- Founding member of the Hydrogen and Fuel Cell Initiative Hessen e.V.
- Deputy Chairperson of the German Hydrogen Association and a member of the Executive Board of the German Physical Society (DPG), in addition to serving on the Board of Trustees Forschungs Campus FC3 (Responsible for Energy).

Date: Wednesday, 25 July 2018

Time: 18:00

Venue: Auditorium 1

Enquiries

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