

Photovoltaics and LED Luminaires for

Sustainable Electricity Generation and Lighting

Date:

12th-13th Nov 2018

Time:

9 A.M to 5 P.M

Location:

Advanced Information Technology Institute,

Kofi Annan Centre of Excellence,

North Ridge, Accra.

Space is limited

To reserve your seat, please RSVP to Ing. Kingsford Atanga, 0249560723

For details, please visit: www.ieeegh.org



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Presented by Dr. David Pulfrey, FIEEE



Dr. Pulfrey is Professor Emeritus in the Department of Electrical and Computer Engineering at the University of British Columbia, Vancouver, Canada. He taught and researched for 40 years in the area of semiconductor devices, and continues to be interested in solar cells and light-emitting diodes, two devices that are important for sustainability in the generation and usage, respectively, of electrical energy.

The course is intended for engineers, academics and administrators who wish to either practice, teach or advocate electricity sustainability, such as would result from implementing photovoltaics for electric power generation and LEDs for general-purpose lighting.

Specifically considered are:

- Theory of solar cells and LEDs, and their incorporation into highly efficient modules and luminaires, respectively;
- Options, components, sizing and financial costs of standalone and utility-scale photovoltaic power systems;
- Options, components, sizing and financial costs of luminaires using white-light LEDs;
- Evaluation of the sustainability of photovoltaic systems and LED luminaires via life-cycle analyses of energy consumption, material usage, and greenhouse-gas emissions;
- Comparison of sustainability with electricity generation by fossil-fuel combustion and diesel engines, and with lighting by conventional bulbs and kerosene lamps.



