

## **Energy materials: Production and Characterization**

**Shadia J. Ikhmayies**

**Isra University, Jordan**

This session focuses on materials research directed for the production and characterization of materials of potential use in energy conversion, energy technologies, and energy sustainability. The session covers a broad range of energy-related topics including photovoltaics (PV), solar fuels, bio-mass to liquid fuels, thermoelectric materials, electrode materials for batteries, hydrogen storage, and energy saving catalysts for the chemical industry.

### **Topics will include (but will not be limited to):**

- Bulk and thin films of groups III-V and II-VI solar cell material.
- Transparent conducting oxides.
- Nanostructures used in solar cells.
- Tunable bandgap semiconductors.
- Silicon wafers, thin films and solar cells.
- H<sub>2</sub> storage materials
- Hybrid (organic/ inorganic) PV cells