Energy and Environmental Systems over Nano/Meso/Macor Scales

Content: This session is aimed to discuss environmental energy systems and technologies for the future, such as solid oxide and polymer electrolyte fuel cells, Li-ion secondary battery, hydrogen production/transport/storage systems, biomass power generator, absorption technology of CO2, catalytic converter to reduce the toxic emissions, low friction lubricant to reduce the machinery energy losses, and so on. The energy and environmental problems will be discussed among researchers and engineers working on transdisciplinary areas, from nano-scale (hole, electronic, atomic, molecular levels) to macro-scale (continuum level), including intermediate meso-scale.