



SEMINARIO

Theoretical and experimental study of bulk and nanosize materials for energy and environment-related applications

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JUEVES 10 DE JULIO A LAS 12:00

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In the presentation overview of research activities of the Department for Solar Energy, Institute for Energy Technology, Kjeller, Norway will be given. It includes fabrication and characterization of silicon-based solar cells, production of silicon nanoparticles, development of thin films of materials for energy generation, energy saving and environmental applications. The materials research is focused on transparent and conducting films, antireflection coatings, passivation layers, light absorbers, smart windows, and batteries. In the next part of the presentation, I will tell about theoretical and experimental research on electronic structure, electrical and optical properties of ZnO. More emphasis will be given to studies of defects in ZnO.