

東京大学微細構造解析プラットフォーム 公開講演会

"In situ correlation between structure and transport properties of charges and condensed matter using



electron microscopy"

Prof. Eva Olsson

Department of Applied Physics, Chalmers University of Technology, SE- 412 96 Gothenburg, Sweden.

Individual interfaces, defects and atoms influence the properties of materials and devices. A knowledge about the effect of an individual microstructural feature on the properties can be used to both extract a fundamental understanding of the material properties and to design new materials and devices with unique and tailored performance. Transmission electron microscopy (TEM) and scanning electron microscopy (SEM) holders for in situ dynamic experiments and manipulation including studies of transport of charges and condensed matter expand the dimensions of information that can be extracted and allow a direct correlation between local structure and properties. This talk will address method developments enabling studies of water biomaterials, interaction with electrical soft transport measurements and optical experiments involving solar cell structures in TEMs and SEMs.

February 21 (Fri), 2014 15:00~16:30 Main meeting room at Institute of Engineering Innovation, UT (工学部総合研究機構 9号館1階 大会議室) Organizer: Prof. Yuichi Ikuhara Phone: 03-5841-7688