



SEMINAIRE

(de 13 h à 14 h, salle Belledonne, IMEP-LaHC, Bât. BCAi, Minatec, ouvert à tous : enseignants, étudiants, chercheurs, administratifs, techniciens)

Jeudi 08 octobre 2015

“Photovoltaic material research
in Department of Material Science at Tallinn University of Technology”

by Taavi RAADIK

Dept. of Mat. Science, Tallinn Univ. of Technol., Estonia.

In the seminar, Dr. Taavi Raadik is introducing photovoltaic material research in Department of Material Science at TUT. He gives overview of unique monograin layer solar cell technology and its fabrication process as well as different thin film technologies that are used to produce solar cells in their lab. More effort is put to the physical and electrical characterization methods of solar cells and semiconductor materials, such as photoluminescence -, raman - and modulation spectroscopy. Final part of the presentation is focused on the modulation spectroscopy methods in photovoltaic material research. Its advantages compared with other optical methods and the information that can be obtained using these methods. The temperature dependent modulation spectroscopy results are presented about the prospective solar energy materials such as SnS, CdTe, Cu_3BiS_3 and $\text{Cu}_2\text{ZnSnSe}_4$.

Taavi Raadik obtained his Ph.D in Chemical and Materials Technology at Tallinn University of Technology. He is currently a Research Scientist in the Department of Material Science at Tallinn University of Technology. His interests are primarily in the areas of semiconductors and solar cells and their characterization with different electro-optical techniques.

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