QPEC-G-COE Seminar



量子相エレクトロニクス研究センター



G-COE プログラム―未来を拓く物理科学結集教育研究拠点―

"Organic semiconducting polymers as molecular material for electronic devices"

Dr. Tomo Sakanoue

(Central Research Institute of Electric Power Industry, Japan)

日時:2011年11月24日(木) 16:00~17:30

場所:工学部6号館3階セミナー室C (372号室)

ABSTRACT

There is a growing interest in semiconducting polymers because of their excellent solution processability. However, the mechanisms of the charge transport in semiconducting polymer films is rather complicated since the most of the polymer films are amorphous or semicrystalline and contains some disorders originated from the chemical impurities and the structural defects. In this talk, I will present a recent review of high mobility semiconducting polymers as well as the charge transport characteristics based on charge modulation spectroscopy (CMS) [1]. Furthermore, I will talk

recent studies of the polymer light-emitting devices and transistors which use ionic liquids for realizing high charge density organic optoelectronic devices.

[1] T. Sakanoue and H. Sirringhaus, Nature Mater. 9, 736 (2010)

(紹介教員:岩佐義宏 教授)