

209th iCeMS Seminar

July 14, 2017
3 pm–4:30 pm

Kyoto University KUIAS/iCeMS Main Building
2F Seminar Room

Prof **Winfried Teizer**

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Molecular Motors — A Different Kind of Transport

Nature has generated sophisticated and complex molecular motors, employed for nanoscale transport at the intracellular level. As a complementary tool to nanofluidics, these motors have been envisioned for nanotechnological devices. In order to pave the way for such applications, a thorough understanding of the mechanisms governing these motors is needed. Because of the complexity of their in-vivo functions, this understanding is best acquired in-vitro, where functional parameters can independently be controlled. I will report on work that studies and harnesses the transport properties of molecular motors on functionalized structures of reduced dimensionality, such as carbon nanotubes, lithographically designed electrodes, microwires and loops. In addition, I will show recent results that demonstrate the use of molecular motors in investigating neurodegenerative diseases and the dynamics of cluster formation in active elements.

More details are available at the iCeMS website:
www.icems.kyoto-u.ac.jp

Contact iCeMS Packwood Lab at dpackwood@icems.kyoto-u.ac.jp
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