



SOLAR QUEST

SEMINAR ANNOUNCEMENT

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“InP-Based Multijunction Solar Cells”

DATE: Tuesday, August 18, 2009
TIME: 10:00 am-11:30 am
PLACE: Seminar Room A-502
CCR Building, 5F

ABSTRACT

Currently the world's highest efficiency solar cells are triple junction solar cells made with III-V compound heterostructures. These structures require expensive single crystal substrates and are currently too expensive to be useful for large-scale terrestrial power applications, although they are currently the technology of choice for space power systems that provide onboard power for satellites, unmanned and manned spacecraft. However, these challenges may be overcome by use of wafer bonding and layer transfer techniques to create non-lattice-matched heterostructures on low-cost substrates, so we can enable new design freedoms for tandem solar cells. This approach combined, with monolithic micro-concentrator optics, may enable ultrahigh efficiency cells to enter the terrestrial photovoltaics arena.

Solar Quest Host: Assoc. Prof. Yoshitaka Okada, ext. 56501
Refreshments will be provided.

