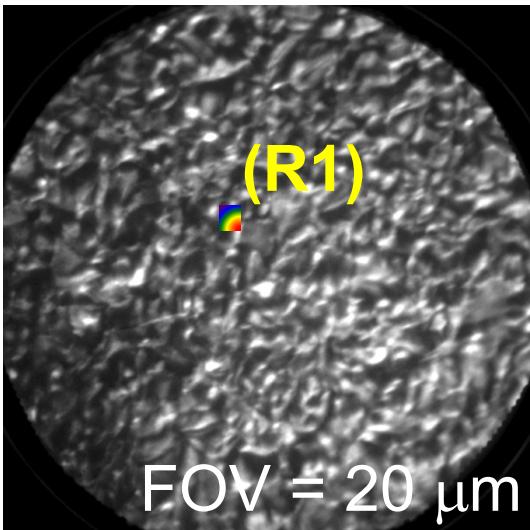


Meeting National Targets with Thin-film Photovoltaics

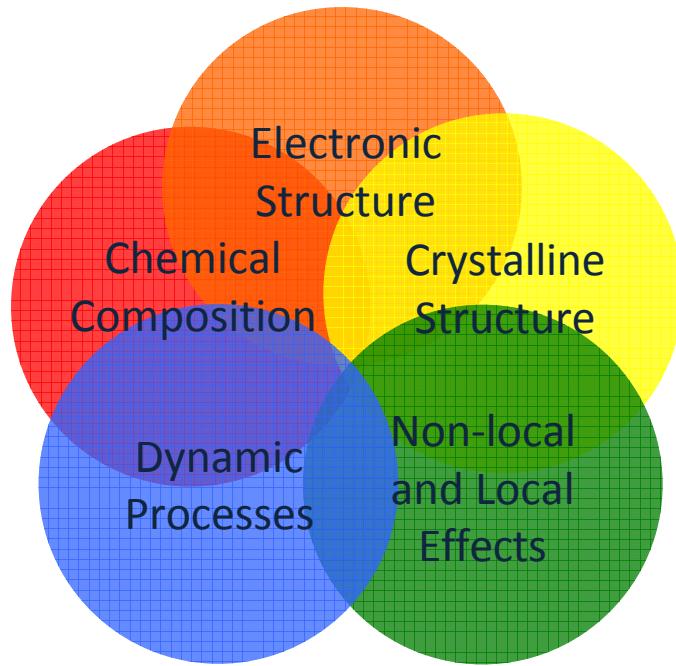
Performance enhancement of thin-film PVs

Understanding and controlling nanoscale properties is critical!

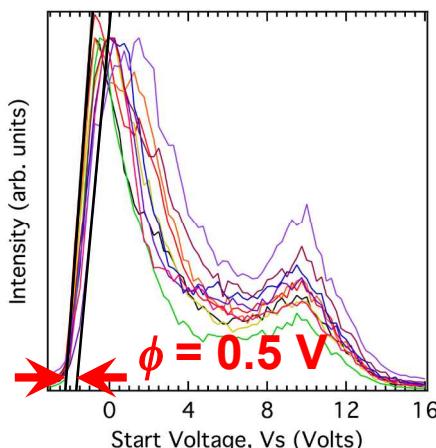
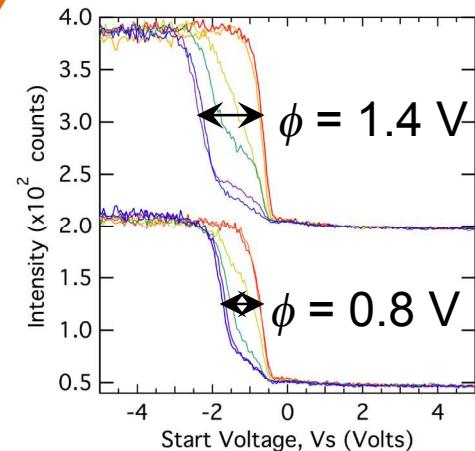
CuInGaSe_2
Photoemission Image



SPELEEM direct nanoscale measurement



CuInGaSe_2 p-n profiles



Sandia
National
Laboratories



Calvin Chan (PI), Senior Research Staff
Taisuke Ohta, Principle Research Staff
Guild Copeland, Technologist
Morgann Berg, Post-doc



NATIONAL RENEWABLE ENERGY LABORATORY

Kannan Ramanathan, Group Manager
Lorelle Mansfield, Scientist