Exploring the Pivotal Role of Next Generation X-rays in Bridging the Scale-Gaps in Next Generation Energy Materials under Extremes

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BROOKHAVEN NATIONAL LABORATORY

a passion for discovery

Office of Science
U.S. DEPARTMENT OF ENERGY

WORKSHOP OBJECTIVE

Prompted by US DOE's interest in solving this "lingering" problem or challenge

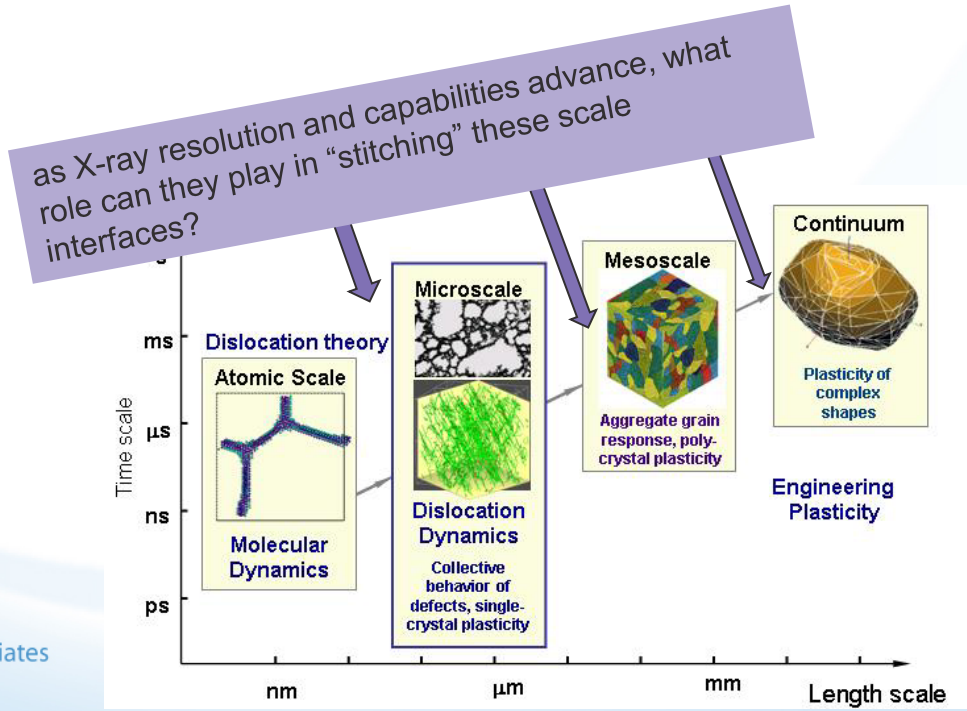
Identification of synergies, interfaces and coupling between the x-ray field and

a) **the simulation world that spans the scales from atomistic to continuum**

&

b) **the science of materials under extremes**

Aiming to identify the pivotal role and frontier science that X-ray techniques can play towards the scale-bridging challenges leading to a comprehensive understanding the behavior of next generation energy materials under extremes (nuclear, high pressure/temperature, etc.)



Understanding the behavior or a REAL material in its continuum description UNDER extreme states

Gratitude

BNL Photon Sciences and CFN UEC
Stony Brook University
BSA
➔PS organization staff that took care of every detail and logistical challenge

Logistics

Would like to have all the talks from the workshops to post on the NSLS website and link to the meeting summary which will be in the June issue of ***e-News***. Please indicate/approve the use of your talk presented during the workshop (or if you can provide a useable copy of the talk)

Also, objective of the workshop organization is to generate a White Paper where everyone presenting is welcomed to be part of the process

Workshop may be considered as the next step to a previously organized workshop at BNL on materials under extremes

Characterization of Advanced Materials under Extreme Environments for Next Generation Energy Systems