A Uniform Description System (UDS) for Nanomaterials:
Workshop to Compare and Integrate Data Models and Ontologies for Nanoinformatics

Universities at Shady Grove, Rockville MD
10-11 June 2015

Agenda

10 June 2015 (start 8:30 am)

Workshop Opening
Opening remarks and introduction of participants (John Rumble)
Review of the UDS (Steve Freiman)
Workshop goals, structure, and outcomes (John Rumble)

Reviews of Attendees Nanoinformatics Resources
10 minutes presentations (Others may present if desired)

Nanomaterials Registry (Tony Hickey)
NIKC Database (Sandra Karchar)
caNanoLab (Sharon Gaheen)
ISA-TAB-Nano (Sharon Gaheen)
NanoHub (Michael Zentner)

Comparisons with and Mapping to the UDS for Nano-objects
Reviewing the detailed descriptors and discussing the similarities and differences between the UDS and other nanoinformatics resources
> Shape
> Size
> Physical structure
> Chemical composition
> Crystallographic structure
> Surface description

Group Dinner (6:00 pm)
See directions

11 June 2015 (start 8:30 am)

Comparison with and Mapping to the UDS for Collections of Nano-objects
Reviewing the detailed descriptors and discussing the similarities and differences between the UDS and other nanoinformatics resources
> General features
> Composition
> Physical structure
> Interfaces
> Size distribution
> Stability
> Topology

What to do about the differences?

Integrating the UDS with Properties and Functionalities
Can a similar model be built for nanomaterials properties and functionalities?
How do these models (ontologies) fit together?

Next steps
How to maintain coordination between the CODATA-VAMAS WG and other nanoinformatics efforts

Close of Workshop (3:00 pm)