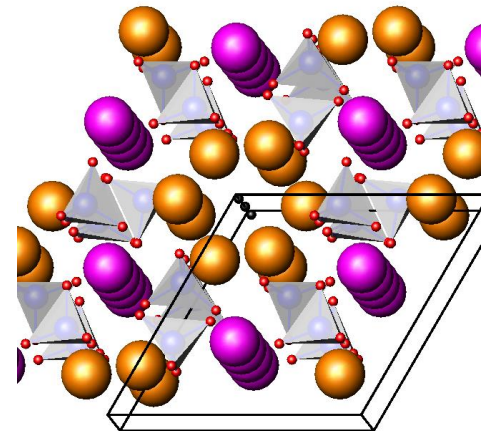


FYP Research Projects on Nano-Structured Metallic and Ceramic Functional Materials

Dong ZhiLi

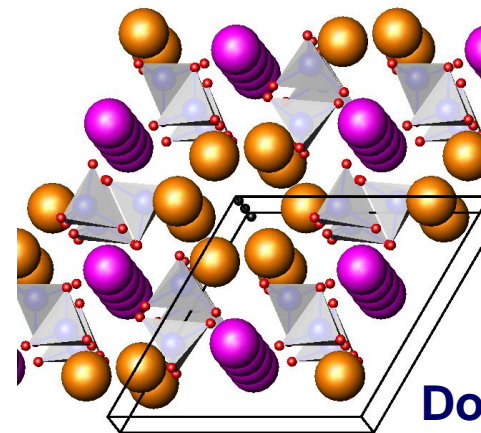
**School of Materials Science & Engineering,
Nanyang Technological University, 50 Nanyang
Avenue, 639798 Singapore**

E-mail: zldong@ntu.edu.sg



Prerequisite

- Hardworking
- Teamwork spirit
- Understand basics of both materials chemistry and materials physics
- Understand basics of scanning electron microscopy and powder x-ray diffraction, or eager to learn the techniques
- NO CGPA requirement



Dong Z L

Tentative FYP Projects: 2018-2019

- XRD/SEM characterization of titania coatings
2 FYP students
- XRD/SEM characterization of MOF with catalytic activities
1 FYP students (Bath University – MSE project)
- Processing-microstructure-property relationship of 3D printed metallic component
- Design and optimize bone-like Ti implants fabricated by EBM
1 or 2 FYP students (Simtech A*STAR – MSE project)
- Atomistic simulation study of mechanical properties and failure mechanisms of two-dimensional materials
1 FYP students (IHPC A*STAR - MSE project)



Assessment

The following components may contribute to the final grade of your FYP work

- Hardworking / discussions when needed / bimonthly report (end Sept 1 page; end Nov 1-2 pages; end Jan 2 pages; March Final report)
- Teamwork spirit/ motivated to learn lab skills to prepare for your future careers / respect lab technicians / lab safety (please label or dispose chemicals properly; please keep lab clean and tidy.)
- Results reasonable
- Final report well presented

