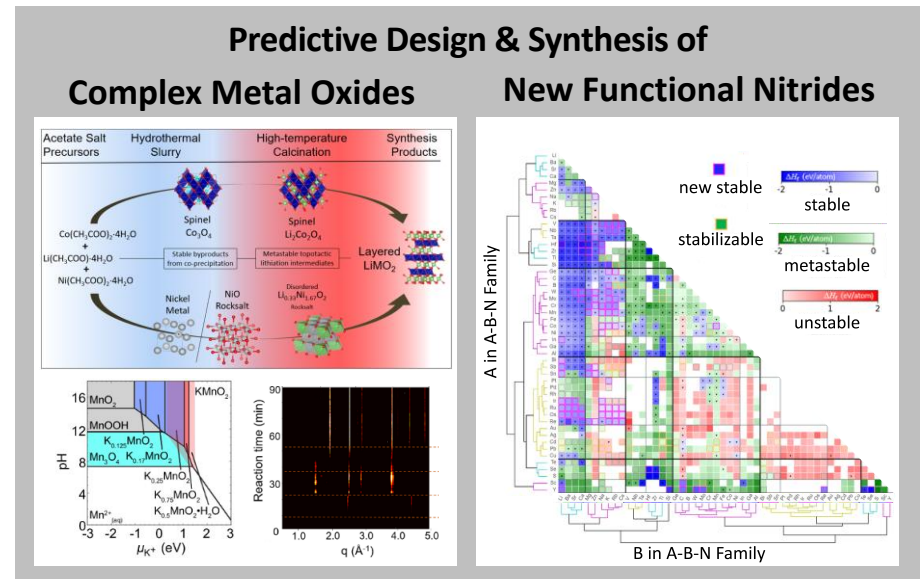


Center for Next Generation of Materials by Design (CNGMD)

William Tumas (National Renewable Energy Laboratory); Class: 2014-2020

MISSION: To dramatically transform the discovery of functional energy materials through multiple-property search, incorporation of metastable materials into predictive design, and the development of theory to guide materials synthesis.



www.cngmd-efrc.org

RESEARCH PLAN

Integrate theory, synthesis, characterization and data analytics to establish the foundational science for metastability and theory-guided synthesis.

- Quantify the synthetically accessible limit of metastability
- Predict synthetic pathways for high-energy polymorphs & metastable materials
- Determine functionality and synthetic pathways for new oxides and nitrides



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