

University of Oregon

Data Information Literacy for Chemistry Graduate Students

Brian Westra | University of Oregon | bwestra@uoregon.edu

1

Partner with faculty and their research teams

Organic/inorganic chemistry and chemical biology team Inorganic and materials chemistry team

2

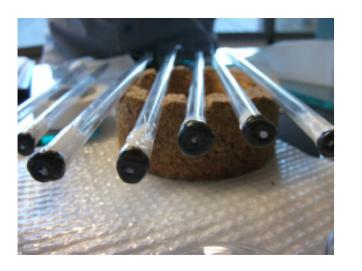
Literature review & environmental scan

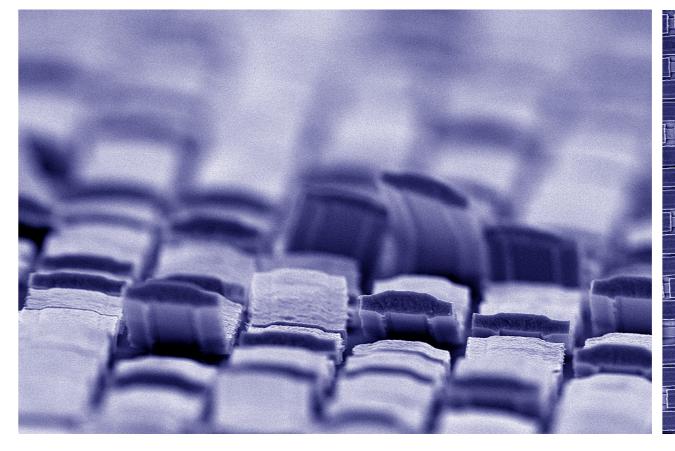
Data preservation and repositories
Lab notebooks, open notebook science
New models for scholarly communication
Linked data and semantic web
Chemical markup language
Non-proprietary identifiers

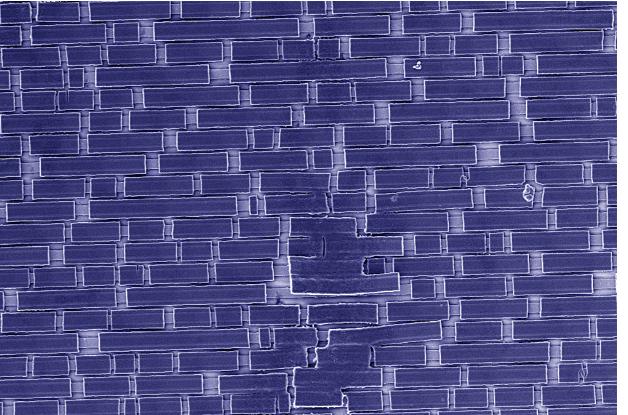


Interviews — Data Curation Profiles

File organization, version control, provenance
Variable level of team data guidance
Highly diverse subdisciplines and practices
Linking notebook/experiment ② data
Data preservation
Intellectual property and technology transfer
Data sharing and reuse









Assess

In-session activities
Post-session survey

5

Teach

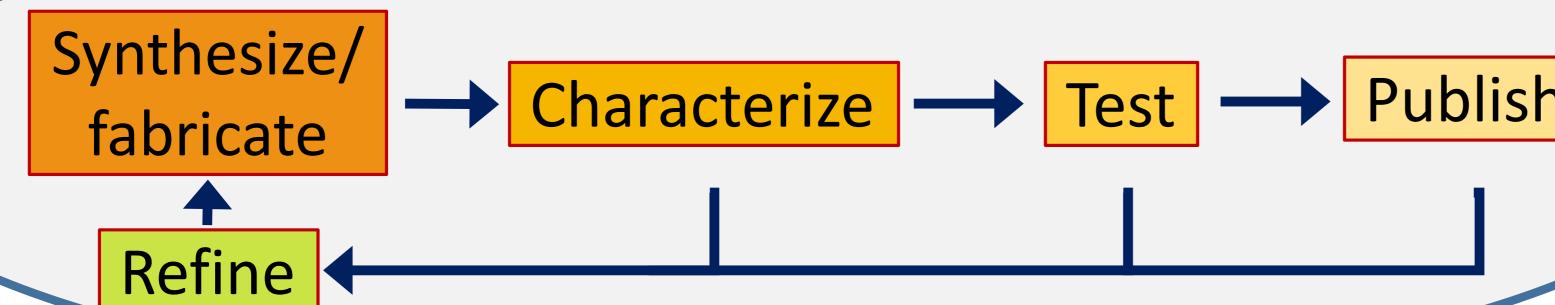
Active, context-based
Local use cases
Cross-team pollination of practices



Develop instruction

Learning outcomes
Resonance
Design elements





Examples of types of data produced

Fluorescence

NMR

X-ray crystallography
Scanning electron microscopy
Electrocatalysis