

HANDING YOUR MATERIALS DATA FOR MAXIMUM **IMPACT USING THE FAIR DATA PRINCIPLES**



July 26-27, 2023

Registrants will have access to materials and recordings until August 21, 2023.

Explore an introduction of the concepts of FAIR Data Principles for materials scientists and engineers and learn how to instruct data generators and users on how to implement these principles in their everyday handling of data in this new TMS online course.

As highlighted in the TMS accelerator study, *Building a Materials Data Infrastructure*, adoption of the FAIR Data Principles is critical for the development of a highly impactful materials data infrastructure. This is especially relevant to the data-intense field of materials science as machine learning continues to rapidly grow in both popularity and utility. In addition, the ability to optimize materials data and to share and use this data is critical to accelerating materials and manufacturing innovations.

WHAT YOU WILL LEARN -

This course will include the following modules:

- Introduction
- **Recommend Practices for Materials Data** Generators:
 - Fundamentals and Principles for Data Curation
 - Scientific Workflow and Applications
- Data Platforms and Tools

WHO SHOULD TAKE THIS COURSE

- Material scientists and engineers who generate material data
- Material scientists and enginners who are data users
- Those in value chain pipelines
- Those looking to apply the FAIR principles to practical uses
- Those looking to describe their own type of data
- Those looking for recommendations on the challenges of data archival

LEARN FROM THE EXPERTS



Pictured from left to right: Charles Ward (Lead Instructor), Air Force Research Laboratory (Retired); Kareem Aggour, GE Research; David Elbert, Johns Hopkins University; Matthew Jacobsen, Air Force Research Laboratory; Brian Puchala, University of Michigan; and Logan Ward, Argonne National Laboratory

