

### OREGON METALS INITIATIVE

# **WHO WE ARE**



#### OUR PARTNERS



























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#### RESEARCH PARTNERS

#### Jun Jiao

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#### Graham Tewksbury, PhD

Research Associate Professor, Oregon State University

#### **Dave Garner**

Assistant Professor of Mechanical Engineering at George Fox University

#### **RESEARCH UNIVERSITIES**









## **PROJECTS** SINCE 2021

Since 2021 alone, OMI has supported 27 Oregon companies with nearly \$4 million in matching funds across 70 distinct R&D projects, leveraging the best of our research university faculty, students and facilities on innovative R&D projects to grow Oregon companies and university research capabilities. An example of recent projects includes:

- Oregon Tool Evaluation of Sawchain Lubricants & Guide-bar Prototypes
- ATI High Temperature Investigation of the Nb2O5-HfO2 System
- Oregon Tool Spindle Assembly Test Machine
- Daimler Manufacture and implementation of cab entry and exit fall prevention system
- Boeing FEA modeling of Deep rolling
- Precision Metal Processing Fabrication of fluted shafts
- ATI Metals Thermal Conductivity Measurements of Additive Powders for Improved Modeling
- · ATI Metals Comprehensive Powder Layer Monitoring for Metal Additive Manufacturing
- Evraz Impact of processing/microstructure changes on final properties
- Weir ESCO Iso-Thermal Transformation in High-Strength Steels
- ATI Assessing the role of composition and temperature on the mechanical properties of niobium alloys
- Weir ESCO Site-Specific Calibration of DEM Material Models
- Skore, LLC Manufacture of a calibration and testing device for a martial arts and boxing training tool
- ATI Evaluation of Nb2O5-HlOzat High lemperatures with Additions of 1a2Os. and LrU2
- Con Met Vehicle Energy Harvesting
- · Weir ESCO Elevated temperature property determination of high strength steels
- Oregon Tool Fabrication and Validation of a Spindle-Assembly Test Machine
- Erectors, INC Create an installation tool for prefabricated wall panels
- Oregon Tool Transfer of Miniswath Test Machine
- · Oregon Tool Quantitative Measure to Assess Mower Clipping Vispersal, Uniformity of cut and quality of cut
- · OnTo Technology Cathode-Healing for Recycling and Manufacturing of Lithium-ion Batteries
- Weir ESCO Wire Additive Manufacturing feasibility study using the Meltio system
- Tillamook County Creamery Assoc. Enhanced Automation for food and beverage manufacturing equipment
- THP Localized surface properties modification for adhesion and wettability control using plasma jet technology
- NuScale Selection and testing of materials compatible with liquid metal fuel
- ・ さし Gen5 Packaging for Advanced Cell Sensing and Handling
- PCC Structurals Composite Chassis Design for an Electric Formula Student Vehicle
- Oregon Dairy & Nutrition Council Enhanced automation for cheese manufacturing equipment
- Erath Family Foundation Enhanced management of wine fermentations
- AgWest Farm Credit Enhanced automation and efficiency in cleaning processes of winery tanks

# Watch our case study video to see how the Oregon Metals Initiative supports OSU's engineering students, fuels innovation, and boosts Oregon's economy. OREGONMETALS.ORG 503-363-7084 INFO@OREGONMETALS.ORG