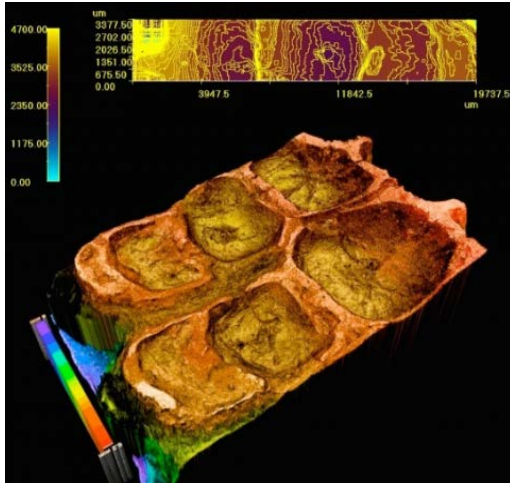


Florida Engineering Experiment Station Network (FLEXNet)

AVAILABLE
ONLINE
ON-DEMAND

Professional Education Course



Materials Tribology

Materials Tribology is an area of research that focuses on measuring and modeling the origins of friction and wear, which is a universal occurrence within systems containing moving assemblies of contacting materials. All designs with moving assemblies involve friction, lubrication, and wear. This 10 hour course examines the fundamentals of tribology for use in mechanical design and materials development.

Course Information

All course video lectures for this professional development course are delivered online, and are accessible an unlimited number of times for 1 month following registration.

Course slides are downloadable.

No travel is required for participation in this online professional Materials Tribology course, and you can begin anytime.

Course Video Lectures

1. Brief History, Economics, & Fluid Mechanic
2. Tribotesting, Tribometers, & Uncertainty
3. Rough Surfaces
4. Contact Pressures - Hertzian Contacts
5. The Real Area of Contact
6. Simple Friction Models: Asperity Interactions
7. Coatings, Thin Films, and Tribofilms
8. Simple Wear Models and Wear Rates
9. Delamination and Tribocorrosion
10. Thermal Modeling
11. Flash Temperature and PV Limits
12. Materials: Metal, Ceramics, & Polymers
13. Solid Lubricants
14. Composites
15. BioTribology

Course Instructor

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FLEXNet Professional Development

On-Demand

Begin: At Registration • **Ends:** 30 Days After
\$1,000 Per Registration • Canvas e-Learning

[Register Here](#)