

# TRIBOLOGY: FRICTION, WEAR, AND LUBRICATION

A SUMMER PROFESSIONAL PROGRAM | JUNE 27–JULY 1, 2022

*Note: All times are US Eastern Daylight Time. Schedule is subject to change.*

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
8:30–9:30 AM	1. Course Overview (NS)	7. Surface Temperature (NS)	13. Wear of Polymers (NR)	19. Liquid and Solid Lubricants (SJ)	25. Axiomatic Design of Complex Tribological Systems (NPS)	
9:30–10:00 AM	BREAK					
10:00–11:00 AM	2. Introduction to Tribology (NPS)	8. Sliding Wear (SJ)	14. Wear of Coatings I (NR)	20. Boundary and Thin Film Lubrication (SJ)	26. Biotribology (SJ)	
11:00 AM–12:00 PM	3. Surface Topography and Surface Properties (NS) (SJ)	9. Abrasive and Erosive Wear (SJ)	15. Wear of Coatings II (NR)	21. Fluid film Lubrication (SJ)	27. Nanotribology (NR)	
12:00–1:30 PM	LUNCH BREAK					
1:30–2:30 PM	4. Sliding Friction: Mechanisms & Models (NS) (SJ)	10. Wear of Ceramics and Brittle Materials (SJ)	16. Wear-Mechanism Maps (NS)	22. Problem Solving by Design V: Lubrication (SJ)	<b>Course Presenters:</b> (NPS) Prof. Nam P. Suh (NS) Dr. Nannaji Saka (SJ) Dr. Said Jahanmir (NR) Dr. Nicholas X. Randall (VW) Dr. Vern Wedeven	
2:30–3:30 PM	5. Tribological Testing I: Theory (NR)	11. Problem Solving by Design I: Friction (SJ)	17. Problem Solving by Design III: Wear (SJ)	23. Tribology-by-Design (T/D): Theory, Test, and Analysis Tools (VW)		
3:30–4:00 PM	BREAK					
4:00–5:00 PM	6. Tribological Testing II: Demonstrations (NR)	12. Problem Solving by Design II: Wear (SJ)	18. Problem Solving by Design IV: Wear of Polymers and Coatings (NR)	24. Problem Solving by Design VI: T/D Methodology & Case Study (VW)		
	5:30 PM - Welcome Reception (Students, Faculty, and SP Staff)	5:00–6:00 PM - Social Hour (Students and Faculty)	6:30 PM - Program Dinner (Students, Faculty, and SP Staff)	5:00–6:00 PM - Social Hour (Students and Faculty)		
					4/26/2022	