

# Machinery Vibration and Rotordynamics

January 6-10, 2025

Location: DoubleTree by Hilton Houston Intercontinental Airport hotel  
15747 John F. Kennedy Blvd. Houston, TX

Some of the contents being presented are reproduced and adapted from the "Torsional Dynamic Overview" course developed by Brian Murphy, Rotating Machinery Analysis, Inc. copyrighted material

Monday

8:30 – 10:00	Vibration Concepts and Terminology for Rotordynamics	Ertas-1
10:00 – 10:30	Break	
10:30 – 12:00	Basic Concepts and History of Rotordynamics	Ertas-2
12:00 – 1:00	Lunch Break	
1:00 – 2:30	Synchronous Vibration and Case Studies	Ertas-3
2:30 – 3:00	Break	
3:00 – 4:30	Asynchronous Vibrations and Case Studies	Ertas-4

Tuesday

8:30 – 10:00	Design and Application of Fluid Film Bearings	Ertas-5
10:00 – 10:30	Break	
10:30 – 12:00	Fluid Film Bearing Failures, Identification and Corrections	Ertas-6
12:00 – 1:00	Lunch Break	
1:00 – 2:30	Planning and Making Rotordynamic Measurements	Ertas-7
2:30 – 3:00	Break	
3:00 – 4:30	Making Analysis and Measurements Work Together	Ertas-8

Wednesday

8:30 – 10:00	Liquid Seals and Their Effect on Pump Rotordynamics	San Andrés-9
10:00 – 10:30	Break	
10:30 – 12:00	Gas Seals and Their Effect on Steam Turbine and Compressor Rotordynamics,	San Andrés-10
12:00 – 1:00	Lunch Break	
1:00 – 2:30	Squeeze Film Dampers, Design, Operations, Models and Technical Issues	San Andrés-11
2:30 – 3:00	Break	
3:00 – 4:30	Gas Bearings for Turbomachinery	San Andrés-12

Thursday

8:30 – 10:00	Torsional Vibrations Overview and Analysis	Delgado-15
10:00 – 10:30	Break	
10:30 – 12:00	Torsional Vibrations, continued	Delgado-16
12:00 – 1:00	Lunch Break	
1:00 – 2:30	Rotordynamics Overview and API Requirements	Delgado-17
2:30 – 3:00	Break	
3:00 – 4:30	Introduction to Computer Modeling of Rotordynamics	Delgado-18

Friday

8:30 – 10:00	Computer Modeling of Transient Rotordynamics	Delgado-19
10:00 – 10:15	Break (note 15 minute today)	
10:15 – 11:30	Computer Modeling Demonstration	Delgado-no files
11:30-12:15	Lunch Break (note 3/4 hour today)	
12:15 – 2:00	Computer Modeling Demonstration	Delgado-no files
2:00 – 2:15	Break (note 15 minute today)	
2:15 – 3:45	Computer Modeling Demonstration	