

MONDAY SCHEDULE: August 1

Registration	7 am – 5 pm		
Breakfast	7 am - 8 am		Oglethorpe AB
VI BOD Meeting	8 am - Noon	VI Board of Directors Meeting	Pulaski
Lunch	Noon – 1 pm		Oglethorpe AB
MFPT BOD Meeting	1 pm – 5 pm	MFPT Board of Directors Meeting	Pulaski
BMV Class	8 am – 5 pm	Basic Machinery Vibrations	Mercer

TUESDAY SCHEDULE: August 2

Registration	6:30 am – 5 pm		
Breakfast	7:00 - 8:00 am		Savannah Ballroom BC
IMV Class	8 am – 5 pm	Introduction to Machinery Vibration	Academy
BMV Class	8 am – 5 pm	Basic Machinery Vibrations	Mercer
Pre-Conference Workshop 1	8 am - Noon	“Vibration Elements, The Vibration Fault Periodic Table”, Dan Ambre, Principal Engineer, Full Spectrum Diagnostics	Ballroom D
Pre-Conference Workshop 2	8 am - Noon	“Electrical Signature Analysis for Energy and Prognostics of Complete Motor and Generator Systems through Continuous Monitoring and Data Collection” Howard Penrose, Ph.D., MotorDoc® LLC	Ballroom E
Pre-Conference Workshop 3	8 am - Noon	“De-Mystifying Wireless Sensors with Hands On Acquisition and Analysis”, David Bukowitz, President, SensOS	Pulaski
Lunch	Noon – 1:00 pm		Savannah Ballroom BC
Pre-Conference Workshop 4	1:00 – 5:00 pm	“Basic Use of Proximity Probes on Fluid Film Bearings”, Ray Kelm, PE & Dustin Pavelek, PE, Kelm Engineering	Ballroom D
Pre-Conference Workshop 5	1:00 – 5:00 pm	“De-mystifying Digital Signal Analysis with Case Studies”, Robert Mihata, Dave McFate, and Tom Olson, Alta Solutions, Inc.	Ballroom E
Pre-Conference Workshop 6	1:00 – 5:00 pm	“Introduction to Digital Twin, Analytics, and Prognostics for the Condition Monitoring Practitioner”, David Siegel, Chief Technology Officer, Predictronics	Pulaski

WEDNESDAY SCHEDULE: August 3

Registration	6:30 am – 5 pm		
Breakfast	7 – 8 am		Savannah Ballroom BC
IMV Class	8 am – 5 pm	Introduction to Machinery Vibration	Academy
BMV Class	8 am – 5 pm	Basic Machinery Vibrations	Mercer

General Session	8 – 10:10 am		Location
		Opening Remarks: Robert Sayer, PE	Savannah Ballroom
		VI President Welcome: Gyorgy Szasz, Ph.D., President The Vibration Institute	
		MFPT Chairman Welcome: Preston Johnson Chairman, MFPT	
		VI Keynote Address: “Modal Analysis (Do Mode Shapes Matter?) and the Importance of Modal Analysis in Vibration Qualification Testing”, Dr. Peter Avitabile, PE, Professor Emeritus, Mechanical Engineering, Structural Dynamics and Acoustic Systems Lab, University of Massachusetts Lowell	
		MFPT Keynote Address: “Systems Health Decision Making: Transitioning from Equipment Monitoring to Systems Health Management”, Dr. Kai Goebel, VP, Director of Intelligent Systems Lab, PARC, a Xerox Company	
Break	10:10 – 10:30 am		
VI Equipment Specific Track (Pumps)	10:30 - Noon	"Pump Curve and Performance", Eugene Vogel, Pump Specialist, EASA	Oglethorpe
VI Equipment Specific Track (PD Blowers)	10:30 - Noon	“Vibration Analysis of Positive Displacement Blowers”, Walter Kelm, PE & Ray Kelm, PE, President, Kelm Engineering	Pulaski
VI Case Study Track	10:30 – 11:15	“Industrial Equipment Case Histories: Things are Not Always as They Seem”, Greg Henson, Consultant, Electro-Mechanical Diagnostic Services	Franklin
	11:15 - Noon	“Steam Turbine Transient Vibration Control using Force Reduction and Damping Techniques “, Mina Shenouda	

MFPT Track #1 Data Mgmt & AI	10:30 - Noon	"Utilizing Motor Data as Sensors for Machine Learning and Augmented Intelligence for Advanced Failure Notification, Classification and Time to Failure Estimation" Howard Penrose, Ph.D., MotorDoc® LLC	Forsyth
MFPT Track #2 Systems Engineering	10:30 – 11:15am 11:15 - Noon	"Small Turbofan Engine as Risk Reduction for Technology Maturation", Dr. Daniel Sutliff, Researcher, Acoustic Measurements and Analysis, Nasa Glenn Research Center "NASA Systems Engineering and Safety Culture: Aerospace Project Design and Implementation Challenges" John Lucero, Chief of Acoustics Branch, NASA Glenn Research Center	Chatham
MFPT Track #3 Diagnostics & Prognostics	10:30 - Noon	"US NAVY Remote Monitoring and Condition Based Maintenance+ Programs", Ryan Fogarty, Technical Warrant Holder for Remote Monitoring and Condition Based Maintenance+, NAVAL SEA SYSTEMS COMMAND	Johnson
Lunch	Noon – 1 pm		Savannah Ballroom
VI I/Iot/Sensor Technology Track	1:00 – 2:00 pm	"Wireless Sensor Technology– A New ERA For Data Security", Dr. M. David Howard, CEO , ERBESSD Instruments	Oglethorpe
VI Equipment Specific Track (Electric Motors)	1:00 – 2:00 pm	"Electrical Signature Analysis Applications in Windpower and Solar Update", Howard Penrose, Ph.D., President, MotorDoc®LLC	Pulaski
VI General Track	1:00 – 2:00 pm	"Introduction to the Vibration Fault Periodic Table", Dan Ambre, Principal Engineer, Full Spectrum Diagnostics	Franklin
MFPT Track #1 Data Mgmt & AI	1:00 – 2:00 pm	"Scaling Machine Reliability and Scaling the Power of VAs with AI-driven Machine Health", Ryan Delaney, Subject Matter Expert, Augury	Forsyth
MFPT Track #2 Systems Engineering	1:00 – 2:00 pm	"HUMS II Health and Usage Monitoring with Operating Regime Identification" Eric Bechhoefer, CEO/Chief Engineer, GPMS	Chatham
MFPT Track #3 Signal Processing	1:00 – 2:00 pm	"Hands-on Demonstration Machine Health Monitoring and Diagnostics Using a Cell Phone Video", Mark Richardson, President, Vibrant Technology & Suri Ganeriwala, President, SpectraQuest	Johnson

VI Equipment Specific Track (Pumps)	2:15 – 3:15 pm	"Vertical Pump Resonance and Practical Finite Element Modelling", Monroe Voyles III, Solutions Engineer, ITT Goulds Pumps	Oglethorpe
VI IIoT/Sensor Tech Track	2:15 – 3:15 pm	"Expanding the Power of Vibration Diagnostics using Magnetic Data" Rob Alexander, Augury	Pulaski
VI General Track	2:15 – 3:15 pm	OPEN	Franklin
MFPT Track #1 Data Mgmt & AI	2:15 – 3:15 pm	"Deep Learning Based Machine Failure Prevention for Mission-Critical Systems", Dr. David Wu, Associate Professor, Manufacturing Engineering, Virginia State University	Forsyth
MFPT Track #2 Diagnostics & Prognostics	2:15 – 3:15 pm	"Vibration Resonance Spectrometry (VRS) for Advanced Streaming Prognostics of Complex Engineering Assets", Dr. Yawen Wang, Professor, and Matthew Koithan, Student, Department of Mechanical and Aerospace Engineering, University of Texas Arlington.	Chatham
MFPT Track #3 Signal Processing	2:15 – 3:15 pm	"Using Creative Synchronous Averaging for Detecting Defects of a Belt-Driven Bevel Gearbox", Dr. Suri Ganeriwala, President SpectraQuest	Johnson
VI Equipment Specific Track (Electric Motors)	3:30 – 4:30 pm	"Motor Faults That Vibration Data Doesn't Always Detect", William Kruger, AllTest Pro	Oglethorpe
VI Equipment Specific Track (Conveyors)	3:30 – 4:30 pm	"Vibration Analysis of Belt Conveyors", Tony Wofford, Reliability Technician Clearwater Paper Corporation	Pulaski
VI General Track	3:30 – 4:30 pm	"Piping Vibration Assessment Methods", Gyorgy Szasz, Ph. D., President, The Vibration Institute; Engineer, Stress Engineering	Franklin
MFPT Track #1 Data Mgmt & AI	3:30 – 4:30 pm	"Model (Data Engineering), Monitor, and Analyze for Reliability", Preston Johnson, Sr. Solutions Manager, CB Technologies	Forsyth
MFPT Track #2 Sensors	3:30 – 4:30 pm	"Specifying Sensors and Measurement Technology, a Navy Perspective", Chris Nemarich, Electrical Engineering Manager, Naval Sea Systems Command	Chatham
MFPT Track #3 Signal Processing	3:30 – 4:30 pm	"Cepstrum Editing Techniques for Enhancing Bearing Fault Diagnosis", Dr. Suri Ganeriwala, President, SpectraQuest	Johnson
Vendor Expo & Beer & Wine Reception	4:40 – 7:00 pm		Grand Atrium

THURSDAY SCHEDULE: August 4

Registration	7 am – 5 pm		
Breakfast	7 am – 8 am		Savannah Ballroom
IMV Class	8 am – 5 pm	Introduction to Machinery Vibration	Academy
BMV Class	8 am – 5 pm	Basic Machinery Vibrations	Mercer

General Session	8 – 10 am		Location
		VI Invited Speaker: Update on ASA Alignment Standard, Eugene Vogel, Pump Specialist, EASA	Savannah Ballroom
		MFPT Invited Speaker: “Model-Based and Data-Driven Methods for Cyber Physical Systems Condition Monitoring and Health Management”, Dr. Robert Gao, Chair, Department of Mechanical and Aerospace Engineering, Case Western Reserve University.	
Break	10 – 10:30 am		
VI Signal Processing Track	10:30 - Noon	"Practical Applications of Signal Processing", Nelson Baxter, PE, ABM Technical Services	Oglethorpe
VI (IIoT & Sensor Technology Track)	10:30 – 11:15 am	“Implementing Industry 4.0 Wireless Vibration to Identify Rotating Equipment Issues, Improve Reliability and Reduce Unplanned Outages”, Frank Mignano, Manager – Condition Monitoring Americas, Schaeffler Group	Pulaski
	11:15 - Noon	"Wireless & Batteryless Remote Sensing as a Complement to Vibration Maintenance Routes", Chad Dyson, MHM Specialist, Everactive	
VI (General Track)	10:30 – 11:15 am	“Gas Turbine Vibration Case Study – Rotor Shaft Crack Examples”, Timothy S. Erwin, P.E., Mitsubishi Power Americas, Inc.	Franklin
	11:15 - Noon	“What To Do When Your Once per Rev Phase Marker Doesn't Work?”, Rett Jesse, PE, VP of Sales and Marketing, & John Edwards, Technical Product Specialist, Metrix Vibration	
MFPT Track #1 Data Mgmt & AI	10:30 – 11:15 am	“Towards a Hybrid Physical-AI based Approach for Fault Diagnosis of Gears”, Lior Bachar, PHM Laboratory, Ben-Gurion of Negev University, Be’er-Sheva, Israel	Forsyth
	11:15 - Noon	“Towards the Development of Operational Digital Twin”, Prof. Jacob Bortman, PHM	

		Laboratory, Department of Mechanical Engineering, Ben-Gurion University of the Negev, Israel	
MFPT Track #2 Systems Engineering	10:30 - Noon	"Overview of NASA's Advanced Air Transport Technology and Revolutionary Vertical Lift Technology Projects, with a Focus on Failure Prevention Research", Dr. Dale VanZante, Chief Technologist for Propulsion, NASA John H. Glenn Research Center	Chatham
MFPT Track #3 Failure Analysis	10:30 – 11:15 am	"Minimizing of effects of Transient Torsional Vibration in Electric Motor Driven Machinery", Mantosh Bhattacharya, SME: Turbomachinery, Petrofac	Johnson
	11:15 am - Noon	"Identification of Torsional Response of Rotating Machinery Train through Tests", Mantosh Bhattacharya, SME: Turbomachinery, Petrofac	
Lunch	Noon – 1 pm		Savannah Ballroom
VI Equipment Specific Track (Pumps)	1:00 – 2:00 pm	"The Effects of Off-Design Operational Flows and Speeds on the Vibration of Pumps", Andy Lerche, Sr. Staff Engineer, Mechanical Solutions, Inc.	Oglethorpe
VI Video Amplification Track	1:00 – 2:00 pm	"Introduction to ODS Videos", Dan Ambre, Principal Engineer, Full Spectrum Diagnostics	Pulaski
VI Signal Processing Track	1:00 – 2:00 pm	"Examination of the FFT Batch Process with Calculation of the RMS Energy ", Jack Peters, Accelent Technology, LLC	Franklin
MFPT Track #1 Fluid Systems Analysis	1:00 – 2:00 pm	"Lubrication Monitoring's Role in Realizing the Benefits Autonomous Operation ", Jeremy Sheldon, Chief Engineer, Condition Monitoring, Poseiden Systems	Forsyth
MFPT Track #2 Sensors	1:00 – 2:00 pm	"Accelerometer Performance Impact on IoT for CBM", Ed Spence, Managing Director, Machine Instrumentation Group	Chatham
MFPT Track #3 Failure Analysis	1:00 – 2:00 pm	"Catalyst Failure Analysis on a Reactive Silencers", Paul Liang, Sr. Staff Engineer, Durr Universal, Inc.	Johnson
VI Track Type Condition Monitoring	2:15 – 3:15 pm	"A strategic approach to combine condition monitoring technology, workforce and resources to optimize asset reliability and achieve performance goals", Sam Bainbridge Director, Technology Delivery & Guy Martorella, Sr. Director, Service Operations, SKF USA Inc.	Oglethorpe
VI Video Amplification Track	2:15 – 3:15 pm	"Utilizing Motion Amplification to its fullest for Vibration Analysis", Jeff Hay, PhD., RDI	Pulaski

VI Academic & Research Track	2:15 – 2:45 pm	“A Review of The Use of Finite Element Analysis in Vibration Studies”, Robert J. Sayer, PE, Applied Structural Dynamics	Franklin
	2:45 – 3:15 pm	“Study of the Fracture of a Load Cell Due to Intermittent Impact Loading”, Ashlyn Jackson, Student, Georgia Southern University.	
MFPT Track #1 Diagnostics & Prognostics	2:15 – 3:15 pm	"Design of Reliable Robotic Systems for Machinery Inspection", Dr. Michael Lipsett, Professor of Mechanical Engineering, University of Alberta, Edmonton	Forsyth
MFPT Track #2 Sensors	2:15 – 3:15 pm	“The Next Level: Pushing the Limits of Vibration Transmitters”, Robert Sheirik, Director of Research and Development, I-care Reliability	Chatham
MFPT Track #3 Human Performance	2:15 – 3:15 pm	“Digital Worker, Augmented Reality, Training and Failure Prevention”, Preston Johnson, Sr. Solutions Manager, CB Technologies	Johnson
VI General Track	3:30 - 4:30 pm	“Anomaly Detection Powered by Machine Learning for Predictive Maintenance”, Mohamed Wahba	Oglethorpe
VI Video Amplification Track	3:30 – 4:30 pm	"Video Vibration Amplification of Full Length Pumps and Turbomachinery", Chad Pasho, Director of Business Development, Mechanical Solutions, Inc.	Pulaski
VI General Track	3:30 – 4:30 pm	“Finite Element Redesign to Mitigate Structural Resonance “,Alex Tomsick, Red Wolf Reliability	Franklin
MFPT Track #1 Fluid Systems	3:30 – 4:30 pm	"Fluid Systems, the Lifeblood of Our Machinery: Fluid Systems Focus Group Formation", Paul Howard, Fluid Systems Subject Matter Expertise, Independent Consultant	Forsyth
MFPT Track #2 Sensors	3:30 – 4:30 pm	“Fiber Optic Sensing Applied to Structural and Machinery Health Monitoring”, Matthew Davis, Research and Development Director, Lunainc	Chatham
MFPT Track #3 Human Performance	3:30 – 4:30 pm	"Insight Driven Operation for Utilities: Driving Performance with Data" Drew Swanson, AI Sales Expert, Hybrid Intelligence. A Capgemini Company	Johnson
Vendor Expo & Beer & Wine Reception	4:40 – 7:00 pm		Grand Atrium

FRIDAY SCHEDULE: August 5

Registration	7 am – Noon		
Chapter Bkfast Meeting	7 am – 8 am		Savannah Ballroom
Breakfast	7 am – 8 am		Savannah Ballroom
MFPT General Session	8:15 – 10:00 am	MFPT Annual Meeting: Invited Speaker: "Social and cognitive digital twins. A metaverse approach", Dr. Diego Galar, Professor of Condition Monitoring, Luleå Tekniska Universitet and Head Of Maintenance & Reliability Head Of Maintenance & Reliability, Tecnalia Research & Innovation Focus Groups Panel Activities and Members Portal	Savannah Ballroom BC
IMV Class	8 am – 5 pm	Introduction to Machinery Vibration	Academy
BMV Class	8 am – 5 pm	Basic Machinery Vibrations	Mercer
VI Signal Conditioning Track	8:00 – 9:00 am	"Measuring Accelerance and Deriving All Other Frequency Response Functions", Eduardo Murphy Arteaga	Pulaski
VI General Track	8:00 - 9:00 am	"Adventures in Balancing", Nelson Baxter, PE, ABM Technical Services	Oglethorpe
VI General Track	9:15 – 10:15 am	"The Use and Abuse of the Single Degree-of-Freedom Vibration Model", Robert Sayer, PE, Applied Structural Dynamics	Pulaski
VI General Track	9:15 – 10:15 am	"Demystifying Oil Whirl and Oil Whip Instabilities in Turbomachinery", Aly El-Shafei, Ph. D., Managing Director, RITEC	Oglethorpe
Combined General Session	10:30 am - Noon	Vibration Institute Annual Meeting Gyorgy Szasz, Ph.D. President Janine Komornick, Manager of Operations Jeff Brand, Membership Specialist MFPT Awards: Preston Johnson "An Overview of the On-Line Training Program at the Vibration Institute", Austin Creasy, Ph.D., Technical Director of On-Line Training Invited Speaker: Ed Spence, The Machine Instrumentation Group, "Industry Survey Regarding IoT for CBM – A Review of Findings"	Savannah Ballroom BC
LUNCH NOT PROVIDED			

SATURDAY SCHEDULE: August 6

Breakfast	7 am – 8 am		Oglethorpe
Certification Exams	Begins @ 8 am		Pulaski