

**SHORT COURSE T7**  
**on**  
**ROOT CAUSE FAILURE ANALYSIS IN INDUSTRIAL TURBOMACHINERY**

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**David L. Ransom** is a Program Manager at Southwest Research Institute, in San Antonio, Texas. His professional experience over the last fifteen years includes engineering and management responsibilities at Boeing, Turbocare and Rocketdyne. His research interests include the development of experimental and analytical methods for the improvement of fluid machinery reliability, especially in the areas of rotordynamics, structural dynamics, finite element analysis, root cause failure analysis, and test rig development. He has authored 18 technical papers in the field of rotordynamics, thermodynamics and root cause failure analysis. David received his M.S. (Mechanical Engineering, 1997) and his B.S. (Engineering Technology, 1995) from Texas A&M University. He is also a licensed Professional Engineer in the State of Texas.

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**David C. Seib** is a Principal Engineer at Dresser-Rand, in Olean, New York. He has 25 years experience with metallurgical aspects of Turbo-machinery, primarily power turbines, FCCU expanders, and centrifugal compressors. David received his his B.S. (Materials Engineering, 1984) from North Carolina State University. He is a licensed Professional Engineer in the State of New York.

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**Harold Simmons** is a Technical Adviser at Southwest Research Institute® providing technical support and guidance in machinery dynamics and failure analyses investigations of turbomachinery, gas turbines, and industrial fans for electric power and energy industry clients. For over 35 years, Harold has led numerous onsite failure analysis and turbomachinery troubleshooting investigations. He has developed protocols especially suited to diagnosing blade failure problems based on bench testing and generalized aerodynamic simulation. Harold is now focused on mentoring younger engineers in this field and on advancements in the wind turbine industry.

Mr. Simmons is registered as a Professional Engineer in Texas and graduated from the University of Florida with a BSME in 1963.

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