



45<sup>TH</sup> **TURBOMACHINERY** & 32<sup>ND</sup> **PUMP SYMPOSIA**  
HOUSTON, TEXAS | SEPTEMBER 12 – 15, 2016  
GEORGE R. BROWN CONVENTION CENTER

# PUMPS 101

Daniel Wood – Chemours

John P. Joseph – Rotating Equipment Systems, LLC

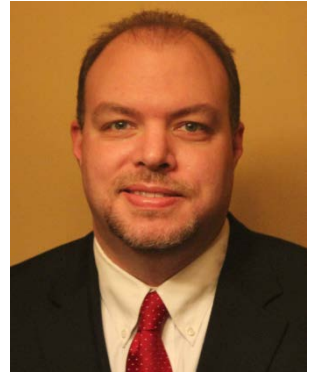


TEXAS A&M  
UNIVERSITY



# About Dan Wood...

- **Principal Rotating Machinery Consultant with The Chemours Company Engineering Technology Group**
- **Expertise in pump application, system design and the diagnosis of problem pumping systems**
- **25+ years experience in pumps and pumping systems**
- **B.S. Mechanical Engineering, University of Cincinnati**
- **Voting member for 3-A standards on centrifugal pumps**
- **International Pump Users Symposium Pump Advisory Committee**
- **Department of Energy PSAT instructor**
- **ASME B73 standards committee member**
- **Level III vibration analyst**



# John P. Joseph II

- independent consultant with Rotating Equipment Systems Technical Associates, in Houston

He was previously with BP Amoco where he provided technical and maintenance support for rotating equipment systems to existing asset organizations in BP Amoco, and to Project Management on new projects. Prior to that, Mr. Joseph was with the Amoco Petroleum Products Refinery, in Texas City. He supervised the rotating equipment engineers and specialists for the refinery. Mr. Joseph spent 6.5 years as Superintendent of Central Shops and 3 years in Amoco's Refining and Transportation Engineering Department, in Chicago. Previous assignments at the Amoco Texas City refinery also included the Rotating Equipment Consulting Group, the Project Engineering Group, and as a Maintenance Engineer on the Hydrocracking Unit. Mr. Joseph received his B.S. degree (Mechanical Engineering, 1972) from the University of Texas at El Paso.

This course is aimed at engineers and technical professionals who need a broad-based introduction to basic pump selection, application, and operation. This course starts with the basics and builds to provide a full understanding of centrifugal, rotary, and reciprocating pumps. The course will include the following topics: centrifugal, rotary, and reciprocating pump similarities/differences; centrifugal, rotary, and reciprocating pump configurations; nine fundamental principles for reliable pump operation; developing pump specifications; understanding pump curves; developing system curves; choosing a type of pump for a specific application. The course will answer the question, “What are the things I need to worry about when selecting, specifying, and operating pumps?” At the completion of the course, attendees will hold a strong understanding of basic concepts. This knowledge will act as a springboard to further growth of understanding of more complex pump concepts. An emphasis is placed on providing practical information with minimal theory; comprehension of the information presented requires little to no mathematical skills in hydraulic or mechanical design. This is NOT a pump design and/or maintenance class.