

2025 STLE Houston Section Lube School

Speaker Biographies and Abstracts

Track A

Lubrication Fundamentals – David Turner / Zoe Knippa

David Turner is a Sr. Technical Services Representative with the Lubricants Fluid Technology group of CITGO Petroleum Corporation in Houston, Texas. David is a graduate of Lamar University in Beaumont, Texas, holding a Bachelor of Science degree in Chemical Engineering. He has more than 40 years of experience in the lubricants industry, in formulation, manufacturing, selection, application, and technical service of lubricants and greases. He is a member of STLE and ASTM and has authored several papers for NLGI. He is the chairman of ASTM D02.G on Lubricating Grease and is co-chair of the NLGI Technical Committee. He is the recipient of the NLGI Clarence E. Earl Memorial Award (twice), the ASTM Award of Excellence, the NLGI Meritorious Service Award, the NLGI Fellows Award, the NLGI Chevron Lubricants Award, the NLGI Shell Lubricants Award for Instructor Excellence, the ASTM Eagle Award, the NLGI Award for Achievement, the NLGI Golden Grease Gun Award (twice) and the ASTM Sidney D. Andrews Scroll of Achievement. He is an NLGI Certified Lubricating Grease Specialist (CLGS), an STLE Oil Monitoring Analyst (OMA I), and an STLE Certified Lubrication Specialist (CLS).

Zoé V. Knippa is a Technical Sales Representative at Vanderbilt Chemicals, where she focuses on additives used in industrial lubricants, automotive lubricants, and grease. She joined the US Navy straight out of high school, where she spent several years working towards her degree during deployment and various duty stations. She received her BS in Biology and Theology, graduating *cum laude* from the University of St. Thomas in Houston.

Her degree plan had a heavy concentration in Chemistry, which she applies daily in her current role. She has a background in base oils, and worked in Oil & Gas Logistics prior to that.

Although Vanderbilt Chemicals is based out of Norwalk CT, she resides in Texas where she serves as a board member of the STLE Houston Section. She lives with her husband, two children, and dog who thinks she runs the place.

This course will provide an overview of lubricants and their use. Major topics are lubrication fundamentals (wear, functions of a lubricant, lubricant composition, lubricant properties, types of lubricants), contamination control (water, particulates, air, other lubricants, built-in, added, breathers) and reliability topics (proper oil sampling, condition monitoring, lubricant tests and their meaning). Because of the nature of the class and the reference notes provided, this class is an all-day (morning + afternoon) class.

Track B

Thermal Dielectric Fluids in Advanced Cooling Applications– David Collins, Soltex Inc

David Collins is a seasoned business development and technical professional with over 35 years of experience in the industrial, oil and gas, refinery, and transportation sectors. Currently serving on the management leadership team at Soltex, Inc., David drives inorganic growth initiatives, including acquisitions, product development, and geographical expansion. His career spans influential roles in global organizations such as Hunt Refining, BG Products, Martin Midstream and BP Castrol, where he led market expansion, technical innovation, and strategic development across North America, Asia, and South America. David's expertise includes delivering multimillion-dollar revenue growth, establishing international distribution networks, and managing technical services for critical industries. A Kansas State University engineering graduate with advanced marketing training from Trinity College, he is actively involved in industry groups like the Open Compute Project, ASTM, and the Society of Tribologists and Lubrication Engineers. His leadership and vision have consistently propelled business success and industry advancement.

This training session provides a comprehensive introduction to the market and technical applications of thermal dielectric fluids, a critical component in modern cooling systems. Participants will gain insights into the unique properties of these non-conductive fluids, designed to manage heat efficiently while ensuring electrical component safety. The session covers their pivotal role in data center cooling, where they enable high-performance, energy-efficient operation of servers and IT infrastructure. It also explores their applications in industrial electrical systems, such as transformers, stationary battery, and power electronics, highlighting their importance in maintaining optimal performance under demanding conditions. Additionally, the training touches on the emerging use of thermal dielectric fluids in electric vehicle (EV) battery cooling systems, emphasizing their contribution to enhanced safety, extended battery life, and improved energy density. By bridging market trends with technical knowledge, this session equips attendees with the foundational understanding necessary to navigate and innovate in the evolving landscape of thermal management solutions.

Modern Automotive Lubricant Formulations- The Paradox of OEM Specs and Market Demand for Rationalization – Rob Richardson, Richardson Consulting Solutions

Rob Richardson has over 38 years of experience in fuels and lubricants, polymers, and natural ingredients spanning the automotive, industrial, apparel, and cosmetics industries. Rob has B.S. in Biology/Chemistry with studies in Polymer Sciences from Southwestern College. He has spent time in laboratory, formulating, quality, sales and marketing, business management, and business development functions and have held positions up to and including President/COO level roles, including roles at Wynn Oil Co, Lubrizol Corp, BG Products, and Petra Automotive. Rob has authored papers

published for SAE, ASTM and NLGI and has received speaking awards from ACS and NLGI. He has 8 U.S. and foreign patents and consider innovation to be central to sustainable business growth. Rob is happily married to his wife, Wendy of 37 years and a proud father of two and grandfather of two. When not working, Rob enjoys grandparenting, golfing, hunting, ranching, hiking, traveling and reading.

This presentation will cover the challenge for lubricant formulators, and marketers, has never been greater. The days of simple and uniform industry specifications covering a majority of market applications for lubricants are a distant memory. Today, OEM specifications continue to proliferate in nearly every lubricant category, from engine oil to rear axle fluids and everything in between. This is true from both an additive perspective, and a viscosity grade perspective. The result is a virtually unsolvable Rubic's cube left for the lubricant formulator, and lubricant marketer to solve while listening to end-users who cannot manage maintenance that involve literally hundreds of lubricants. The response from lubricant additive companies, and finished lubricant suppliers, is all over the map. Some try to toe-the-line with OEM specific additives and formulations, while others have chosen the "multi-vehicle" or rationalized approach, heavily leaning into the "suitable for use" approach rather than "meets the requirements of...". This presentation does not pretend to promote a specific answer, rather to expose the reality of this dilemma on the entire industry as well as the end user and to illustrate various approaches in specific lubricant categories.

Bearings, Part I and II – John Cummins, Hydrotex LLP

John Cummins is Executive Vice President of Product Technology and Investing Partner of Hydrotex LLP a Texas specialty lubricant and chemical company founded in 1936. Responsible for Research and Development, Technical Services and Dean of Hydrotex Lubrication University

40+ years of experience in the Lubrication Industry and 26 years of experience in the Grease Industry.

Retired Captain in the Naval Reserves with a military career spanning Vietnam through Desert Storm.

He is a member of Society of Tribologists and Lubrication Engineers (STLE), a Certified Lubrication Specialist (CLS™), member of the Society of Automotive Engineers (SAE) and the National Lubricating Grease Institute (NLGI)

He is a Contributing Writer for: TLT Tribology & Lubrication Technology (STLE); Compoundings (Magazine of the Independent Lubrication Manufacturers Association); Lube & Greases Magazine; and Reliability Magazine

This presentation will cover an overview of the Fundamentals of Bearings and Bearing Lubrication. This will be a two-part series covering Journal Bearings and Rolling Element Bearings. Bearings are everywhere in the machines we use. There are many designs of journal bearings and rolling element bearings to handle different levels of radial, axial and moment loads on the shafts they support. Differentiating these designs is essential for fit-for-purpose lubrication and even whether to use an oil or a grease for lubrication.

The simple journal bearing has been in existence for about 4,000 years. About 450 years ago, Leonardo da Vinci published his design of a Roller Bearing with his *Study of the Ball Bearing*. Even with all of this bearing history, 56% of Journal Bearing failures and 80% of Roller Bearing failures are lubrication related. A better understanding of bearings and their proper lubrication may be beneficial to improving sustainability and machine reliability.

Keynote Address

The State of STLE – Jack McKenna, Sealand Chemical

Jack McKenna is vice president of corporate accounts for Sea-Land Chemical Co. in Cleveland, Ohio, took the reins as STLE's 2024-2025 president, with his one-year term beginning in May 2024. McKenna is a native Chicagoan and graduate of Ithaca College in Ithaca, N.Y. He has more than 30 years of experience in the specialty chemical distribution industry. He has served in a number of positions in his 27 years with Sea-Land Chemical Co.

McKenna is the past chair of the STLE Chicago Section (2005), where he has been an active member of the executive committee for more than 20 years. He also served STLE as a board member from 2009-2015 in sections affairs, the audit committee and strategic planning.

In 2021, he became a member of the Executive Committee, serving one-year terms as treasurer, secretary and vice president. Joining him on the Executive Committee are Vice President Kevin Delaney (Vanderbilt Chemicals Co.), Secretary Steffen Bots (LUBESERV), Treasurer Dr. William B. Anderson (Afton Chemical Corp.), Immediate Past President Dr. Hong Liang (Texas A&M University) and STLE Executive Director Rebecca Lintow.

This keynote will cover how **????**