

November 6–8—AGMA Gear Failure Analysis (Fall)

St. Louis, Missouri. Explore gear failure analysis in this hands-on seminar where students not only see slides of failed gears but can hold and examine those same field samples close up. Experience the use of a microscope and take your own contact pattern from field samples. Gear engineers, users, researchers, maintenance technicians, lubricant experts, and managers should consider attending. Instructors include Rod Budny (RBB Engineering) and Andy Milburn (Milburn Engineering, Inc.). For more information, visit www.agma.org.

November 19–21—Power-Gen International 2019

New Orleans, Louisiana. Power-Gen International provides comprehensive coverage of the trends, technologies and issues facing the generation sector. Displaying a wide variety of products and services, Power-Gen International represents a horizontal look at the industry with key emphasis on new solutions and innovations for the future. Topics include plant performance, cyber security, energy storage, flexible generation and more. Learn more at www.power-gen.com.

November 19–22—Formnext 2019

Frankfurt, Germany. Formnext is more than an exhibition and conference. It's an entire platform for companies from the world of additive manufacturing. Here, a veritable who's-who from the realms of design and product development, industrial tooling, production solutions, quality management, and measurement technology comes together with leading providers in basic materials and component construction. It will also explore clever ways in which AM can be integrated into process chains in industrial production. In addition, top international speakers and other experts will be on hand to engage conference attendees in in-depth discussions at the highest technical level. For additional information, visit formnext.mesago.com/events/en.html.

November 20–21—Automation Fair

Chicago, Illinois. Automation Fair (Rockwell Automation) offers the latest technology on information solutions, innovations, smart devices, lifecycle services and more. Industry forums include automotive, chemical, food and beverage, life sciences, material handling, metals and mining, OEM, oil and gas and water/wastewater. The Automation Fair show floor will showcase over 150 interactive exhibits featuring the newest products, solutions and services. Attendees will experience the latest innovations firsthand and talk to solution experts from Rockwell Automation and members of the PartnerNetwork companies. Automation Fair offers more than 125 education and training sessions including hands-on labs, technical presentations and professional development hour credits. For more information, visit www.rockwellautomation.com.

November 26–28—SPS – Smart Production Solutions

Nuremberg, Germany. The exhibition, featuring 1,650 automation technology providers, will showcase current products and solutions in industrial automation as well as trend-setting technologies of the future. Exhibition visitors will benefit from the wide range of products and services offered by national and international automation and digitalization providers, and within one day will still be able to gain a complete over-

view of the market. Digitization is having a major impact on the automation industry. Topics such as big data, cloud technology, 5G and artificial intelligence are often presented jointly with automation providers on the basis of practical examples and demos. In addition, topic-related showcases and presentations at the exhibition forums help to illustrate digital transformation in the manufacturing industry. For more information, visit sps-exhibition.com.

December 3–5—AGMA Epicyclic Gear Systems: Application, Design and Analysis

Seattle, Washington. Learn and define the concept of epicyclic gearing including some basic history and the differences among simple planetary gear systems, compound planetary gear systems and star drive gear systems. Cover concepts on the arrangement of the individual components including the carrier, sun, planet, ring and star gears and the rigid requirements for the system to perform properly. Critical factors such as load sharing among the planet or star gears, sequential loading, equal planet/star spacing, relations among the numbers of teeth on each element, calculation of the maximum and optimum number of planet/star gears for a specific system will be covered. This session provides an in-depth discussion of the methodology by which noise and vibration may be optimized for such systems and load sharing guidelines for planet load sharing. The instructor is Raymond Drago and Steve Cymbala. For more information, visit www.agma.org.

December 9–12—CTI Symposium Germany 2019

Berlin, Germany. CTI Symposium Germany provides the latest automotive transmission and drive engineering for passenger cars and commercial vehicles. The international industry event delivers the appropriate platform to find new partners for purchase and sales of whole systems and components. Automobile manufacturers, transmission and component companies give an overview and outlook on technical and market trends including digital manufacturing, IoT, zero-emissions, electric vehicles, hybrid transmissions and more. Speakers include representatives from Porsche, Volkswagen, StreetScooter, Continental, BorgWarner, Magna Powertrain and more. For more information, visit drivetrain-symposium.world/.

January 6–10—Sci-Tech 2020

Orlando, Florida. From its creation in 1963, the American Institute of Aeronautics and Astronautics (AIAA) has organized conferences to serve the aerospace profession as part of its core mission. Spanning over 70 technical discipline areas, AIAA's conferences provide scientists, engineers, and technologists the opportunity to present and disseminate their work in structured technical paper and poster sessions, learn about new technologies and advances from other presenters, further their professional development, and expand their professional networks that furthers their work. Five focus areas include science and technology, aviation, space, propulsion and energy/defense. For more information, visit scitech.aiaa.org/.