

**September 10–15—IMTS 2018** Chicago, Illinois. More than 115,000 industrial decision-makers attend the International Manufacturing Technology Show to get ideas and find answers to their manufacturing problems. They will see new technology demonstrated in areas like aerospace, automotive, machine shop, medical and power generation. The IMTS Conference Program will focus on six topics in 2018 including Process Innovations, Alternative Manufacturing, Plant Operations, Automation, Quality and Industry 4.0/IIoT. Co-located shows include Hannover Messe USA: Integrated Automation, Motion & Drives, Surface Technology, ComVac and Industrial Supply. The Smartforce Student Summit will once again promote student and educator attendance and other familiar attractions such as AMT's Emerging Technology Center will highlight the latest manufacturing technologies. For more information, visit [www.imts.com](http://www.imts.com).

**September 11–14—Basic Training for Gear Manufacturing (Fall)** Hilton Oak Lawn, Chicago, Illinois. Learn the fundamentals of gear manufacturing in this hands-on course. Gain an understanding of gearing and nomenclature, principles of inspection, gear manufacturing methods, and hobbing and shaping. Utilizing manual machines, attendees will develop a deeper breadth of perspective and understanding of the process and physics of making a gear as well as the ability to apply this knowledge in working with CNC equipment commonly in use. Although the Basic Course is designed primarily for newer employees with at least six months' experience in setup or machine operation, it has proved beneficial to quality control managers, sales representatives, management, and executives. Instructors include Dwight Smith, Peter Grossi and Allen Bird. For more information, visit [www.agma.org](http://www.agma.org).

**September 17–20—Gear Dynamics and Gear Noise Short Course 2018** Columbus, Ohio. The Gear Dynamics and Gear Noise Short Course will be offered this year on the Ohio State campus from September 17 to 20, 2018. It has been offered for over 38 years and is considered extremely valuable for gear designers and noise specialists who encounter gear noise and transmission design problems. Attendees will learn how to design gears to minimize the major excitations of gear noise: transmission error, dynamic friction forces and shuttling forces. Fundamentals of gear noise generation and gear noise measurement will be covered along with topics on gear rattle, transmission dynamics and housing acoustics. This course includes extensive demonstrations of specialized gear analysis software in addition to the demonstrations of many Ohio State gear test rigs. A unique feature of the course is the interactive workshop session that invites attendees to discuss their specific gear and transmission noise concerns. For more information, visit [www.nvhgear.org](http://www.nvhgear.org).

**September 18–20—CTI Symposium China** CTI Symposium is a three day event providing 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. Speakers include representatives from Audi AG, Jatco Ltd., CH-Auto Technology and more. For more information, visit [drivetrain-symposium.world/cn/](http://drivetrain-symposium.world/cn/).

**September 18–22—AMB 2018** Stuttgart, Germany. AMB, International Exhibition for Metal Working, has become established as a top event in even years. It occupies a leading position among the exhibitions in the industry and ranks among the world's top five events. All the world market and technology leaders come together on a total exhibition area of more than 120,000

square meters to present technologies for future production. For more information, visit [www.messe-stuttgart.de/amb/en/](http://www.messe-stuttgart.de/amb/en/).

**September 20–21—AGMA Fundamentals of Worm & Crossed Axis Helical Gearing** Alexandria, Virginia. Provides an introduction and emphasize the differences between parallel (the experience base) axis and worm and crossed axis helical gears. Describe the basics of worm and crossed axis helical gears, their fundamental design principals, application guidelines and recommendations, lubrication requirement, a discussion of accuracy and quality and summarize with a brief review of common failure modes. The instructor is William "Mark" McVea. For more information, visit [www.agma.org](http://www.agma.org).

**September 25–26—PM Sintering Seminar** Penn Stater Conference Center Hotel, State College, Pennsylvania. Held only every two years, this two-day seminar is meant for industry professionals either new to sintering or with intermediate experience in the industry. Topics covered will include information from basic theory and practices to troubleshooting and how to drive down the costs of sintering. Learn from industry experts about: Sintering parts at normal or elevated sintering temperatures; increasing productivity by reducing rework and scrap; improving properties of PM parts with sintering; the latest equipment capabilities; troubleshooting sintering problems; efficiency in daily sintering operations. For more information, visit [www.mpif.org](http://www.mpif.org).

**September 27–29—AGMA Epicyclic Gears Systems: Application, Design and Analysis** Rosemont, Illinois. 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. For more information, visit [www.agma.org](http://www.agma.org).

**September 29–October 3—WEFTEC 2018** New Orleans, Louisiana. WEFTEC, the Water Environment Federation's Technical Exhibition and Conference, is the largest annual water quality event in the world. WEFTEC is the largest conference of its kind in North America and offers water quality professionals from around the world with the best water quality education and training available today. An increasing number of abstract submittals from experts in the water quality field results in a world-class technical program of technical sessions and workshops that addresses a diverse and comprehensive list of contemporary water and wastewater issues and solutions including: Energy management, plant operations, regulations, research, utility management, recycling and more. For more information, visit [www.weftec.org](http://www.weftec.org).