October 27–30–Gear Dynamics and Gear Noise

**Course.** Ohio State University. The Gear Dynamics and Gear Noise Short Course has been offered for 35 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 four-day 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 (on Day 3) that invites attendees to discuss their specific gear and transmission noise concerns. The round table discussions on Day 4 are intended to foster interactive problem solving discussions on a variety of topics. Cost is \$1,950 per person. For more information, visit www.nvhgear.org.

**October 27–30–PTC Asia 2014.** Shanghai New International Expo Center, Shanghai. Sponsored by Deutsche Messe Worldwide, along with the China Hydraulics, Pneumatics & Seals Association and the China General Machine Components Industry Association, PTC Asia focuses on fluid power; mechanical components, including gears, bearings, chain & belt transmissions, couplings, brakes, and similar components. The AGMA Pavilion will feature AGMA member exhibitors. The 2013 event attracted 1,500 exhibitors and more than 77,000 attendees. The show is co-located with CeMAT Asia (material handling show), ComVac Asia (compressed air and vacuum technology) and Industrial Supply Asia (trade fair for industrial subcontracting and light construction). For more information, visit *www.ptc-asia.com/EN*/.

**October 28–30—The Assembly Show.** Donald E. Stephens Convention Center, Rosemont, IL. Focused exclusively on assembly technology, equipment and products, visitors will find the latest advances in custom automated assembly solu-

tions, robotics, screwdriving, adhesives, dispensing, plastics assembly, conveyors, fasteners, packaging, workstations, welding, vision systems and more. The target audience includes corporate management, manufacturing engineers, design engineers and purchasing personnel. For more information, visit *www. theassemblyshow.com.* 

**October 30–November 4–JIMTOF.** Tokyo Big Sight (Tokyo International Exhibition Center). The 27th Japan International Machine Tool Fair will feature approximately 5,000 booths covering 45,000 square meters of exhibit space. Exhibitor categories include machine tools (both metal cutting and metal forming); machine tool accessories; cutting tools; grinding wheels & abrasives; gears and gear devices; fluid power; inspection equipment; controls; and related tools and equipment. Among the gear machine tool manufacturers will be Affolter, Gleason, Hamai, Kashifuji, Klingelnberg, Luren Precision, Mitsubishi, Reishauer, and many others. For more information, visit *www.jimtof.org*.

November 5–7–Detailed Gear Design–Beyond Simple Service Factors. Hyatt Place, Las Vegas. This class, taught by Raymond Drago of Drive System Technology, will provide gear engineers, gear designers and application engineers with: a basic introduction to gear theory and standardization; practical considerations and limitations associated with the application of standard AGMA/ISO durability rating analyses; investigation of the differences in stress states among the various surface durability failure modes, including pitting, spalling, case crushing and subcase fatigue; extended load capacity analysis techniques; consideration of friction in the calculation of surface compressive stresses; and much more. The course is designed for gear engineers, gear designers, application engineers, and others who are responsible for interpreting gear design or who want to better understand all aspects of gear design. AGMA members: \$1,395 for first registrant from a company, \$1,195 for additional registrants. Non-members: \$1,895 for first registrant, \$1,695 for additional registrants. For more information, visit www.agma.org.

**November 11–13–FABTECH.** Georgia World Congress Center, Atlanta. FABTECH is North America's largest metal forming, fabricating, welding and finishing event, with 1,400 exhibitors and 27,000 attendees expected. Registration is free until November 7. After that, the cost is \$50. For more information, visit *www.fabtechexpo.com*.

## November 14-20-ASME 2014 IMECE. Montreal,

Quebec. The annual ASME International Mechanical Engineering Congress and Exposition (IMECE) is the premier global conference that focuses on today's technical challenges, research updates and breakthrough innovations that are shaping the future of engineering. The Congress convenes engineers, academics, scientists and technologists of all disciplines for the purposes of exploring solutions to global challenges and for the advancement of engineering excellence worldwide. Engineers have long contributed to human progress by solving complex challenges on a global scale. Many of these challenges are found in developing and emerging markets, particularly as they relate to critical infrastructures, such as access to energy, clean water, effective sanitation and healthcare. For more information, visit *www.asmeconfernces.org*.

## December 8-11-Gleason Cutting Tools Gear

**School.** Loves Park, IL. This comprehensive 3½ day program is a blend of shop time and classroom study. A coordinated series of lectures is presented by engineering, productions, inspection and sales staff members averaging 27 years' experience. It's an ideal course for those seeking to understand the fundamentals of involute gear geometry, nomenclature, manufacturing and inspection. Training groups are kept small so that individual concerns may be fully addressed. Students are welcome to bring sample gear prints and inspection charts for discussions about interpretation. Shop tours and demonstrations are conducted to visually enhance the understanding of classroom discussions. \$895 per person includes handbook and all materials, one group dinner and all lunches. For more information, visit *www.gleason.com*.