

August 11–14—Gleason Cutting Tools Gear School.

Rockford, Illinois. This comprehensive 3½ day program is a blend of shoptime and classroom study. A coordinated series of lectures is presented by engineering, production, inspection and sales staff members averaging 27 years experience. It's an ideal course for those individuals who are 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 discussion and interpretation. The fee is \$895 per person (group rates available) which includes handbook and all materials, one group dinner and all lunches. Hotel room is not included. The curriculum includes fundamentals, high speed steels and coatings, cutting the gear, gear inspection, a plant tour as well as individual instruction and specific problems. For more information, visit www.gleason.com.

August 26–28—International Gear Conference 2014.

Lyon-Villeurbanne, France. Mechanical transmission components (gears, bearings, CVTs, belts, chains, etc.) are present in every industrial sector and range from nano-gears to large gearboxes. Over recent years, increasing competitive pressure and environmental concerns have provided an impetus for cleaner, more efficient and quieter units. Moreover, the emergence of relatively new applications in wind turbines, hybrid transmissions and jet engines has led to even more severe constraints. The main objective of this conference is to provide a forum for the most recent advances, addressing the challenges in modern mechanical transmissions. Topics include gear noise, gear design, gear materials, gear failure, lubrication, gearbox efficiency and more. For more information, visit <http://int-gear-conf14.sciencesconf.org>.

September 8–10—Gear Failure Analysis Seminar.

Big Sky Resort, Big Sky, Montana. In AGMA's Gear Failure Analysis Seminar, attendees will examine the various types of gear failure, such as macropitting, micropitting, scuffing, tooth wear and breakage. Possible causes of these failures will be presented, along with some suggested ways to avoid them. A gear failure analysis expert will use a variety of tools and methods—lectures, slide presentations, hands-on workshops with failed gears and Q&A sessions—to give a comprehensive understanding of the reasons for gear failure. Participants are encouraged to bring their own failed gears or photographs and discuss them during the Q&A sessions. The seminar brings together a vast amount of knowledge and will help you solve everyday problems whether you are a gear engineer, user, researcher, maintenance technician, lubricant expert or manager. The course manual offers more than 100 color photos, dozens of illustrations, a textbook and failure atlas that will become a permanent reference source. For more information, visit www.agma.org.

September 8–13—IMTS 2014. The International Manufacturing Technology Show (IMTS) is the largest manufacturing technology show in the Western Hemisphere. IMTS 2012 drew more than 100,000 industry decision-makers in areas like metal cutting, tooling, metal forming, abrasives, controls, CAD-CAM, EDM, gear generation, industrial automation and more. The IMTS conference brings the industry together to discuss new opportunities and network with the manufacturing community. Other highlights include the Smartforce Student Summit, Exhibitor Workshops, the Emerging Technology Center and IMTSTV. IMTS is co-located with Industrial Automation North America and Motion, Drive & Automation North America. For more information, visit www.imts.com.

September 16–20—AMB 2014. Stuttgart, Germany. AMB, the international exhibition for metalworking, has increased the number of exhibitors in 2006, 2008, 2010 and 2012. All global market and technology leaders will be represented in Stuttgart. Exhibitors from over 30 nations present their new products and services in the area of machines and tools for metalworking. The trade show features more than 105,000 square meters of exhibition space, clear, structured hall divisions, and optimal accessibility. Special programs during AMB include Art Meets Technology, Metalworking Innovation Tour, WorldSkills Germany, Career Walk and more. The topics will extend from solving economic problems to searching for production or sales partners. For more information, visit www.messe-stuttgart.de.

October 8–10—RMGFS 2014. Boulder, CO. The Rocky Mountain Gear Finishing School (RMGFS), presented by Kapp-Niles, is a multi-layered program designed to optimize learning and strengthen your understanding of gear finishing processes, no matter your experience level. The curriculum features sessions which are interconnected and lead from one step to the next. Participants study the underlying principles and mechanics of different gear finishing processes, apply them through practical sessions on a Kapp-Niles machine, and take part in group workshops for more in-depth discussions. Kapp encourages attendees to bring applications to the school for small group or one-on-one discussions. Presenters include Jim Buschy, Bill Miller, Dwight Smith, Paul Brazda, Michael Ruppert, Sascha Ungewiss, Thomas Schenk, Nidam Meharzi, Eric Dixon and Hans-Helmut Rauth. For more information, visit www.kapp-usa.com.

October 27–30—Gear Dynamics and Gear Noise Course. Ohio State University Campus. 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 roundtable 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.