

August 26–28 – International Gear Conference

2014. Lyon-Villeurbanne, France. Mechanical transmission components are present in every industrial sector and range from nano-gears to large gearboxes. 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 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 6–8 – Furnaces North America 2014.

Nashville Renaissance & Convention Center, Nashville, TN. Heat treating specialists from around the world will gather to discuss the latest emerging technologies in heat treating and furnace equipment. FNA will feature 170 suppliers representing every major area of heat treating. The conference includes five technical tracks with 40 learning sessions. Visitors and exhibitors will have the chance to meet and discuss opportunities in three networking sessions. For more information, visit www.furnacesnorthamerica.org.

October 8–10 – RMGFS 2014. Boulder, CO. The Rocky Mountain Gear Finishing School (RMGFS) is the premier gear finishing school in the western United States. Kapp-Niles presents this multi-layered program designed to optimize learning and strengthen your understanding of gear finishing processes no matter your experience level. 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 encourage 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 22–23 – WZL Gear Conference USA.

Gleason Corporation, Rochester, New York. For more than 50 years the annual WZL Gear Conference in Aachen, Germany, has been fostering technical collaboration and communication among the members of the WZL Gear Research Circle. The two-day conference is devoted exclusively to the presentation of the latest research in gear design, manufacturing and testing. Additionally, the software resources of the WZL Gear Research Circle are available for examination, including solutions for gear design and manufacturing process development. With up to 300 participants from Europe and overseas, the WZL Gear Conference is one of the largest annual events dedicated to gear technology in Europe. Nine years ago exclusive contents of the Aachen gear conference were first presented in the United States. The Fifth WZL Gear Conference - USA is being hosted by Gleason Corporation and will provide the opportunity for North American companies to connect with WZL and learn about current research activities. The conference fee is \$260 per attendee. For more information, visit www.wzl.rwth-aachen.de.

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 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.