

February 15–17—Gear Materials: Selection, Metallurgy, Heat Treatment and Quality Control.

Clearwater, FL. Discover how both the gear design engineer and the gear metallurgist can better grasp their related, critical roles in the world of gear processing, heat treatment and inspection. The gear design engineer is responsible for the initial selection of material and heat treatment, but the finalization of both material and thermal processing must be a joint effort. This seminar shows how the gear design engineer first approaches the problem of material selection and heat treatment technology, as influenced by the performance and life requirements of the gear set. It also shows how the gear metallurgist can participate in and thereby optimize the finalized gear manufacturing process. Interspersed in the course are examples of gear-related problems, failures and improved processing procedures. Analyses and comments on a number of relevant failures are given. For more information, contact Jan Alfieri at alfieri@agma.org.

March 1–3—Expo Manufactura.

Cintermex, Monterrey, Mexico. The largest event in Mexico for the processing and manufacturing industries boasts 350 companies representing more than 600 national and international brands. Expo Manufactura brings professionals together with technological solutions in aerospace, medical devices, automotive, metallurgical, aeronautics and electrical appliances. More than 9,000 industry professionals will visit the show looking for industry insights, new technologies and networking

opportunities. For more information, visit www.expomanufactura.com.mx.

March 1–6—TIMTOS.

Taipei, Taiwan. The 15th Taiwan International Machine Tool Show will be held at the TWTC Taipei World Trade Center (TWTC) Exhibitions Hall 1, 2, 3 and the Nangang Exhibition Center. Taiwan is currently the world's fourth largest manufacturer of machine tools. This year's exhibition is centered on the procurement of top-quality "Made in Taiwan" machine tools and total solutions for the machine industry. The event is estimated to provide spaces and opportunities for more than 910 exhibitors and 44,500 visitors. For more information, visit www.timtos.com.

March 8–11—TECMA 2011.

Mexico City. Since 1991, TECMA specializes in machine tool technology, related equipment and peripherals. The event is organized by the Mexican Association of Machinery Distributors (AMDM), founded in 1943, to bring together those dedicated to machinery distribution and increase the effectiveness and quality of machine tool services. For more information, visit www.tecma.org.mx.

March 15–18—Gear Dynamics and Gear Noise Course.

The Ohio State University. The Gear Dynamics and Gear Noise Short Course has been offered for more than 30 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 exci-

tations 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. The roundtable discussions are intended to foster interactive problem solving on a variety of topics. Cost is \$1,950. For more information, contact Jonny Harianto at harianto.1@osu.edu.

March 21–24—ProMAT 2011.

McCormick Place, Chicago. Find all the material handling and logistics solutions you need to make your supply chain work more profitably. Highlights include: more than 700 exhibits showcasing the latest equipment and technology solutions to help you streamline your operations and improve visibility, maximize efficiency and flexibility, cut costs, speed time to market and reduce your carbon footprint. Registration for ProMAT will also give attendees admittance into Automate 2011. For more information, visit www.promatshow.com.