March 5–6–The 2nd International VDI Conference: Maintenance of Wind Turbines.

Hamburg, Germany. Wind turbines have an expected service life of some 20 years. However, manufacturers' liability mostly cov-

ers only the initial two to five years of operation. But systems will age, so operators must be prepared to ensure technical support for maintenance needed in their wind turbines. A foresighted service and maintenance concept is one of the major success factors governing system availability of a high level in any machinery and plant. The conference will focus on issues like which promising maintenance concepts are available and what are their associated costs and risks. Experts will highlight major mechanisms causing structural



damage or difficulties in the operation of wind power plants. Expert presenters will come from various renowned companies to report on the maintenance of electrical components and systems in wind turbines, present a comparative study on concepts for offshore maintenance, and demonstrate asset integrity management. For more information, www.vdi.de/maintenance.

March 5-8-The MFG Meeting (Manufacturing for

Growth). Hilton Waikoloa Village, Waikoloa, Hawaii. The MFG Meeting (Manufacturing For Growth) brings together a broad spectrum of manufacturing business owners and top industry executives for a 4-day forum on how we can work together to restore manufacturing to its rightful place as an engine that drives the U.S. economy. Jointly produced by three major industry trade groups, this groundbreaking event tackles the issues that affect the entire realm of manufacturing and provides a forum for a conversation that can't be found at any event presented from a single sector's perspective. For more information, visit *www.themfgmeeting.com*.

March 12–14–Gearbox CSI:Forensic Analysis of

Gear and Braking Failures. Hyatt Regency Baltimore, on the Inner Harbor, Baltimore, Maryland. Determining the cause of a failure in a gearbox is like a "whodunnit" mystery. What caused the failure: The bearings, a gear, the lubrication or a shaft problem? Where do you start, and how can you tell? Instructors Raymond Drago and Joseph Lenski, Jr., from Drive Systems Technology, Inc., will help gear designers gain a better understanding of various types of gears and bearings. Learn about the limitation and capabilities of rolling element bearings and the gears that they support so you can properly apply the best gearbearing combination to any gearbox, whether simple or complex. A certificate will be awarded upon completion of the seminar. For more information, visit *www.agma.org*.

March 20–21–Gear Forum International 2013.

Parma Exhibition Center, Parma, Italy. Opinion leaders, international buyers of gears and gear suppliers will meet in order to speak about issues regarding the future of gears including expectations and solutions. The event is coordinated by an international steering committee chaired by Prof. Carlo Gorla of Mechanical Department of Politecnico di Milano, technical director of the magazine Organi di Trasmissione, and composed by leading experts of the gear sector, that will discuss topics including research trends, standards, present and future trends in the United States, worm gear performance, software and simulation for gears and automotive power transmission efficiency. Speakers include Prof. Dr. Ing. Karsten Stahl, director of Technische Universität Munchen; Charlie Fischer, vice president-technical division of the American Gear Manufacturers Association (AGMA); Michael Goldstein, publisher and editor-inchief of Gear Technology magazine; Michel Octrue, president of CETIM Centre Technique des Industries Mécaniques; Dr. Ulrich Kissling, technical director – purchase manager of Kisssoft; and Andrea Piazza, transmission and hybrid design and testing department manager, Fiat Power Train. The event will be held within MECSPE, the international fair on technologies in the mechanical and subcontracting sectors. For more information, visit www.senaf.it/MECSPE/home/117.

April 8–12–Hannover Messe 2013. Hannover

Fairgrounds, Hannover, Germany. The world's leading trade show for industrial technology returns in 2013 with a full lineup of trade shows under the banner "Integrated Industry." The 11 co-located shows include Industrial Automation; Motion, Drive and Automation; Energy; Wind; MobiliTec; Digital Factory; ComVac; Industrial Supply; Surface Technology; IndustrialGreen Tec and Research and Technology. Russia is the official partner country in 2013. Discover new perspectives on energy, automation and industrial supply and engineering topics as well as a broad range of events and displays affecting the global industrial market today. Other Hannover highlights include Metropolitan Solutions, TectoYou, Job and Career Market and Energy Efficiency in Industrial Processes. For more information, visit *www.hannovermesse.de*.

April 29-May 2-Gear Dynamics and Gear Noise

Short Course. Gear Dynamics and Gear Noise Research Laboratory. The Ohio State University, Columbus, Ohio. For more than 33 years, this course has been offered as a tool to engineers and technicians involved in the analysis, manufacture, design, specification or utilization of simple and complex gear systems. Industries that find this course helpful include the automotive, transportation, wind-energy, process machinery, aircraft, appliance, general manufacturing and all gear manufacturers. The course material is covered in such a way that the fundamentals of gearing, gear dynamics, noise analysis and measurements are covered. This makes the course appropriate to the gear designer with little knowledge of noise analysis as well as to the noise specialist with little prior knowledge of gears. Course attendees are asked to present a brief synopsis of problems they have encountered or of a procedure they have used for gear noise analysis and reduction. Possible approaches to solve each problem are discussed. For more information, visit www.gearlab.org.