Preface

The report, *Technology for a Quieter America*, (TQA) was published by the National Academies Press in October 2010 and was the result of a five-year study by the National Academy of Engineering (NAE) of the environmental noise situation in the United States. The report includes findings and recommendations for government, industry, and public actions that may mitigate or eliminate those noise sources that pose a threat to public health and welfare.

In 2011 the Institute of Noise Control Engineering (INCE/USA), INCE Foundation, and the Noise Control Foundation established a TQA Follow-up Program to identify specific noise topics and to develop relevant recommendations aimed at improving the noise climate in the United States. The TQA Follow-up Program consists of a series of events involving experts in selected TQA topic areas to further assess specific noise issues and publish a series of recommended remediation measures.

Two reports have been published. The first, "Noisy Motorcycles: An Environmental Quality of Life Issue" is based on a roundtable hosted by the National Academy of Engineering on October 24, 2012. The second, "Cost-Benefit Analysis: Noise Barriers and Quieter Pavements" is based on a workshop hosted by the National Academy of Engineering on January 16, 2014. Both reports have been approved for publication by the Board of Directors of the Institute of Noise Control Engineering (INCE/USA) as public information documents, and are available on the INCE/USA web site,www.inceusa.org.

This report is based on a third workshop hosted by the National Academy of Engineering (NAE) on February 19-20, 2014 in Washington, DC. The workshop title was "Reducing Employee Noise Exposure in Manufacturing: Best Practices, Innovative Techniques, and the Workplace of the Future." The workshop was sponsored by the INCE Foundation and was organized by the TQA Follow-on committee in cooperation with the National Institute for Occupational Safety and Health. Twenty-eight papers were presented, all addressing the subjects in the workshop title. The "best practices" theme was addressed in two ways: reports from major manufacturers about successful hearing conservation programs, and reports from engineers in industry, consultants, and government workers, on what constitutes best practice for noise reduction. Examples of successful implementations were presented. The theme of "innovative techniques" was addressed through new methods for noise prediction in manufacturing spaces, identification and localization of noise sources, new processes and techniques, and noise prediction. The third theme "the manufacturing environment of the future" was addressed by a general presentation on the future of manufacturing as being studied by a NAE committee, and some general thoughts by representatives of the National Institute for Science and Technology, and by the National Center for Manufacturing Sciences.

George C. Maling, Jr.
Co-Chair

W. Gregory Lotz
Co-Chair

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a workshop sponsored by

The INCE Foundation, the Noise Control Foundation, and the National Institute for Occupational Safety and Health

organized by

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hosted by

The National Academy of Engineering, Washington, DC

Cori Vanchieri, Rapporteur

edited by

George C. Maling, Jr., Eric W. Wood, Gregory Lotz, and William W. Lang

Institute of Noise Control Engineering of the USA

This report has been approved by the Board of Directors of INCE/USA for publication as a public information document. The content, opinions, findings, conclusions, and recommendations expressed in the report do not purport to present the views of INCE/USA, its members, or its staff.

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