

PROCEEDINGS OF SPIE

Sensors for Extreme Harsh Environments

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Sachin Dekate
Editors

7–8 May 2014
Baltimore, Maryland, United States

Sponsored and Published by
SPIE

Volume 9113

Proceedings of SPIE 0277-786X, V. 9113

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

Sensors for Extreme Harsh Environments, edited by Debbie G. Senesky, Sachin Dekate, Proc. of SPIE
Vol. 9113, 911301 · © 2014 SPIE · CCC code: 0277-786X/14/\$18 · doi: 10.1117/12.2073999

Proc. of SPIE Vol. 9113 911301-1

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Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *Sensors for Extreme Harsh Environments*, edited by Debbie G. Senesky, Sachin Dekate, Proceedings of SPIE Vol. 9113 (SPIE, Bellingham, WA, 2014) Article CID Number.

ISSN: 0277-786X

ISBN: 9781628410501

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445

SPIE.org

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Printed in the United States of America.

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Introduction

The inaugural conference on Sensors for Extreme Harsh Environments showcased recent results from members of this unique and emerging community. During this conference, insights on the performance and design considerations of sensor materials, devices and systems within harsh radiation, temperature and chemical environments were presented. In addition, the requirements for implementing these new technologies on actual commercial (automotive and geothermal power) and space/defense platforms (space rovers and hypersonic structures) were highlighted. A roadmap for addressing the challenges of integrating and manufacturing reliable micro- and nano-scale devices for harsh environment sensing applications was discussed. Representation from academia, industry and government agencies provided a comprehensive audience. Also, participants from overseas—Belgium, Austria, Germany and Taiwan—aided in obtaining a global view of the challenges of this field.

We would like to thank our esteemed colleagues for making it an insightful and productive conference. We are thrilled to share your hard work and exciting results through this proceedings volume. We look forward to building upon our initial success at DSS 2015!

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