

PROCEEDINGS OF SPIE

International Symposium on Clusters and Nanomaterials

**Puru Jena
Anil K. Kandalam**
Editors

**26–29 October 2015
Richmond, Virginia, United States**

*Sponsored by
Virginia Commonwealth University (United States)*

*Endorsed by
Materials Research Society (MRS)
American Chemical Society (ACS)
American Physical Society (ACP)
American Vacuum Society (AVS)*

*Published by
SPIE*

Volume 10174

Proceedings of SPIE 0277-786X, V. 10174

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

International Symposium on Clusters and Nanomaterials, edited by Puru Jena,
Anil K. Kandalam, Proc. of SPIE Vol. 10174, 1017401 · © 2016 SPIE
CCC code: 0277-786X/16/\$18 · doi: 10.1117/12.2268674

Proc. of SPIE Vol. 10174 1017401-1

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Please use the following format to cite material from these proceedings:

Author(s), "Title of Paper," in *International Symposium on Clusters and Nanomaterials*, edited by Puru Jena, Anil K. Kandalam, Proceedings of SPIE Vol. 10174 (SPIE, Bellingham, WA, 2016) Seven-digit Article CID Number.

ISSN: 0277-786X
ISSN: 1996-756X (electronic)
ISBN: 9781510608412
ISBN: 9781510608429 (electronic)

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

This volume contains the proceedings from the International Symposium on Clusters and Nanomaterials (ISCAN) held in Richmond, Virginia, United States, 26–29 October 2015. This symposium was the ninth installment in the quadrennial Richmond Symposium series that began in 1982. The 2015 symposium dealt with the role of clusters and nanomaterials in addressing challenges in energy and life sciences, two of the areas that are of vital importance to society. The symposium focused on the role clusters and nanomaterials play in the development of novel materials for energy applications, such as solar, hydrogen, thermo-electric, and electrochemical storage. For life sciences, the focus was on bioactive, bio responsive, and biomimetic nanomaterials; nanotoxicity; bioengineering; and regenerative medicine. Interdisciplinary topics such as reactions; catalysis, electronic, optical and magnetic properties of nanoparticles and nanomaterials were also discussed.

This interdisciplinary symposium featured 39 invited speakers and 83 contributed presentations. Nearly 130 researchers and scientists from Physics, Chemistry, Biology, Materials Science, Medicine, and Engineering fields from 22 countries attended this symposium and shared their ideas and results, delineated outstanding problems, and discussed future research. This symposium was sponsored by Virginia Commonwealth University, and endorsed by American Physical Society, American Chemical Society, Materials Research Society, and American Vacuum Society. The proceedings are published by SPIE.

This symposium would not have been possible without the tireless efforts of the members of the Organizing Committee, the input from the International Advisory Board, and the financial support from Virginia Commonwealth University, the U.S. Department of Energy, National Science Foundation, and Toyota Laboratories. Our special thanks go to the undergraduate, graduate students, and postdoctoral fellows in the Physics, Chemistry, and Engineering Departments of Virginia Commonwealth University for volunteering their services during the organization of this symposium, and to the participants for the high quality of their presentations. Last, but not least, to Mrs. Barbara Martin for her assistance throughout the two-year period this symposium was in the making.

Puru Jena
Anil K. Kandalam

