

SYMPOSIUM N

MATERIALS BY THEORETICAL/COMPUTATIONAL DESIGN

This symposium is organized as part of the International Union of Materials Research Societies biennial conference - International Conference on Electronic Materials to be held from 4 to 8 July 2016 in Singapore. Theoretical and computational materials design is playing an increasingly important role in the discovery of new advanced materials. With the materials genome approach, the process of materials discovery will be significantly accelerated. This symposium aims to provide a platform for theoretical and computational materials scientists to share their latest discoveries, exchange ideas, and discuss collaborations. The symposium will cover all topics related to theoretical and computational design of advanced materials, and at the same with focused sessions on recent developments in materials genome.

Topics

- Computational design of advanced materials
- Methods for large systems and high accuracy
- Multiscale modeling & simulation
- High throughput density functional theory calculation
- Materials Genomic approach
- Data creation, validation and data mining
- Applications

Speakers

Confirmed keynote/invited speakers include

- **Jerzy Bernholc**, North Carolina State University, USA
- **Gerbrand Ceder**, University of California, Berkeley, USA (*Plenary*)
- **Stefano Curtarolo**, Duke University, USA (*Keynote*)
- **Giulia Galli**, University of Chicago, USA
- **Guang-Yu Guo**, National Taiwan University, Taiwan
- **Seungwu Han**, Seoul National University, Korea
- **Zi-Kun Liu**, The Pennsylvania State University, USA
- **Nicola Marzari**, Ecole Polytechnique Fédérale de Lausanne, Switzerland
- **Marco B. Nardelli**, University of North Texas, USA
- **Duc M Nguyen**, Culham Centre for Fusion Energy, UK
- **Gregory B. Olson**, Northwestern University, USA
- **Shyue Ping Ong**, University of California, San Diego, USA
- **Kristin Persson**, Lawrence Berkeley National Lab, USA (*Keynote*)
- **Krishna Rajan**, Iowa State University, USA
- **Matthias Scheffler**, Fritz-Haber Institute der Max-Planck Gesellschaft, Germany (*Keynote*)
- **Abhishek Singh**, Indian Institute of Science, India
- **Kristian S. Thygesen**, Technical University of Denmark, Denmark
- **Priya Vashishta**, University of Southern California, USA
- **Xiaolin Wang**, University of Wollongong, Australia
- **Chris Wolverton**, Northwestern University, USA
- **Yong Xiang**, University of Electronic Science and Technology, China
- **Yibin Xu**, National Institute for Materials Science (NIMS), Japan

Organizers

Yuan Ping Feng, National University of Singapore; **Gerbrand Ceder**, Massachusetts Institute of Technology; **Vijay Kumar**, Vijay Kumar Foundation and Shiv Nadar University; **Giovanni Vignale**, University of Missouri; **Haiqing Yin**, University of Science and Technology Beijing.

Important Dates

Abstract Submission

28 Jan 2016

Abstract Acceptance

25 Feb 2016

Early Bird Registration

28 Apr 2016

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