



# 15th International Workshop on Computational Electronics

May 22-25, 2012

University of Wisconsin, Madison, USA

<http://iwce2012.engr.wisc.edu/>

## Final Call for Papers

### Conference Chair

I. Knezevic (USA)

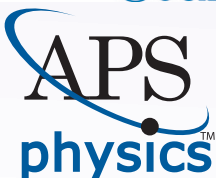
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M. Stettler (USA)  
A. Wacker (Sweden)  
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### Technical Sponsors



Division of Computational Physics (DCOMP)

The workshop covers all aspects of advanced simulation of electronic transport and optoelectronic processes in semiconductors and semiconductor devices based on both inorganic and organic materials. The scientific program consists of invited lectures, contributed talks, and poster presentations. The workshop is held in a single-session format. Active participation of graduate students, including student presentations, is strongly encouraged.

### TOPIC AREAS

- 1) Technology CAD
- 2) Semiclassical transport simulation techniques
- 3) Quantum transport simulation techniques
- 4) Ab-initio and atomistic simulations
- 5) Multiscale and multiphysics simulations
- 6) Low-dimensional nanostructures and novel semiconductor device architectures
- 7) Optical processes and optoelectronic devices; intersubband dynamics in nanostructures
- 8) Ultrafast optical and electronic phenomena
- 9) Molecular and organic electronics
- 10) Graphene and graphene-based nanostructures

### NEW FOCUS TOPICS AT IWCE 2012

- 11) Simulation of thermal, thermoelectric, and electrothermal phenomena in nanostructures
- 12) Spin transport
- 13) Materials simulation for energy applications (other than thermoelectrics)

### ABSTRACT SUBMISSION

A two-page abstract, consisting of one page text and one page figures, should be prepared as specified on the conference website and emailed to [iwce-abstract@engr.wisc.edu](mailto:iwce-abstract@engr.wisc.edu)

### \*NEW\* STUDENT TRAVEL AWARDS & BEST STUDENT PAPER COMPETITION!

## Phonon School

Companion Two-Day School on Phonon Dynamics, Heat Transfer, and Thermoelectric Phenomena in Nanostructures

May 21-22, 2012, University of Wisconsin, Madison  
<http://iwce2012.engr.wisc.edu/>

### PARTIAL LIST OF INVITED LECTURERS

Zlatan Aksamija (UW Madison, USA)  
David Cahill (UIUC, USA)  
Keivan Esfarjani (MIT, USA)  
Tim Fischer (Purdue, USA)  
Ken Goodson (Stanford, USA)  
Jennifer Lukes (U Penn, USA)  
Branislav Nikolic (U Delaware, USA)  
Toufik Sadi (Aalto U, Finland)  
Li Shi (UT Austin, USA)  
Gyaneshwar Srivastava (U Exeter, UK)  
Derek Stewart (Cornell, USA)  
Michael Strosio (U Illinois at Chicago, USA)  
Dragica Vasileska (Arizona State U, USA)

### PARTIAL LIST OF INVITED SPEAKERS

Urs Aeberhard (Forschungsztr Jülich, Germany)  
Mads Brandbyge (TU Denmark, Denmark)  
Guanhua Chen (U Hong Kong, Hong Kong)  
Andrea Droghetti (Trinity College, Ireland)  
Mark Eriksson (U Wisconsin Madison, USA)  
David Ferry (Arizona State U, USA)  
Avik Ghosh (U Virginia, USA)  
Hong Guo (McGill U, Canada)  
Alexie Kolpak (MIT, USA)  
Vincent Meunier (RPI, USA)  
Jenny Nelson (Imperial College London, UK)  
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Xavier Oriols (U Autònoma Barcelona, Spain)  
Enrico Rossi (College of William and Mary, USA)  
Anton Van der Ven (U Michigan, USA)  
Chris Wolverton (Northwestern, USA)  
Igor Zutic (SUNY Buffalo, USA)

### IMPORTANT DATES

Abstract submission: **January 27, 2012**  
Notification of acceptance: **March 1, 2012**  
Registration open: **March 1, 2012**  
Early registration deadline: **April 23, 2012**  
Conference: **May 22-25, 2012**  
Phonon School: **May 21-22, 2012**

