

Final Report for SC0012442 - 32nd International Conference on the Physics of Semiconductors

We were awarded \$25,000 in support for the 32nd International Conference on the Physics of Semiconductors (ICPS) that was held in Austin, Texas from August 10-15, 2014. ICPS is the premier meeting for reporting all aspects of semiconductor physics including electronic, structural, optical, magnetic and transport properties.

The conference reflected the state of art in the semiconductor physics and served as a forum where scholars, researchers, and specialists can interact to discuss future research directions and technological advancements.

ICPS 2014 attracted over 700 attendees from over 50 countries. The conference featured 10 plenary speakers, 40 invited speakers and 200 contributed talks.

A list of topics presented at the Austin meeting are given below:

1. Material Structure
2. Wide Band Gap
3. Narrow-Gap Semiconductor
4. Carbon: Nanotubes and Graphene
5. Two dimensional systems beyond Graphene
6. Organic Semiconductors
7. Topological Insulators
8. Transport in Heterostructures
9. Quantum Hall Effects
10. Spintronics and Spin Phenomena
11. Electron Devices and Applications
12. Optical Properties of Heterostructures
13. Quantum Optics, Nanophotonics
14. Quantum Information
15. Ultrafast Channel Materials
16. Memory Materials
17. Complex Oxides
18. Computational Methods

Highlights of the meeting included opening plenary talks on semiconductor science. These talks discussed the history and future of semiconductors science applied to electronic devices, and the role semiconductors have played in pure, applied and computational science. Other plenary

talks focused on optical excitations in nanostructures, quantum transport, organic electronics, spintronics, and topological insulators.

Funds were used to provide travel support for 40 student and faculty presenters, primarily in the form of registration waivers.

Plenary and keynote contributions were published in the Journal of Applied Physics, 117 (11) (2015). DOI:10.1063/1.4913929.