

IEEE ELECTRON DEVICES SOCIETY

*Promoting excellence in the field
of electron devices for the
benefit of humanity*



Electron Devices Society

Mission Statement

To foster professional growth of its members by satisfying their needs for easy access to and exchange of technical information, publishing, education, and technical recognition and enhancing public visibility in the field of Electron Devices



EDS Field of Interest

- The field of interest for EDS is all aspects of engineering, physics, theory, experiment and simulation of electron and ion devices involving insulators, metals, organic materials, plasmas, semiconductors, quantum-effect materials, vacuum, and emerging materials.
- Specific applications of these devices include bioelectronics, biomedical, computation, communications, displays, electro and micro mechanics, imaging, micro actuators, optical, photovoltaics, power, sensors and signal processing.

What We Do

Conferences

- IEEE International Electron Devices Meeting (IEDM)
- IEEE Photovoltaic Specialists Conference (PVSC)
- **Distinguished Lecturer Workshops and Mini Colloquia**
This event was partially funded by EDS !
- 150 other conferences worldwide each year

Publications

- *Transactions on Electron Devices*
- *Electron Device Letters*
- *Transactions on Devices and Materials Reliability*

Networking

- EDS supports over 140 chapters worldwide
- Chapters: 59 in the Americas; 43 in Europe, Africa, & the Middle East; and 38 in Asia and the Pacific.

Awards and Recognition



EDS distributes over \$40,000 annually in awards and fellowships to both professionals and students.



Why Join?

- **Free on-line access to the following EDS publications**
 - *IEEE Electron Device Letters* (1980 - present)
 - *IEEE Trans. on Electron Devices* (1954 - present)
 - *IEEE International Electron Devices Meeting* (1955 - present)
 - *IEEE/OSA Journal of Lightwave Technology*
- **QuestEDS**
 - Submit questions online consistent with the EDS filed of interest and can view online the answers provided by experts in the field. <http://www.ieee.org/go/questeds>
- **Discounts on IEEE and EDS conferences and publications**
- **Additional benefits included with EDS membership**
 - IEEE EDS Member Roster (on-line at www.ieee.org/eds/roster)
 - IEEE EDS Newsletter (on-line at www.ieee.org/eds/newsletter)



Why Join?

BE PART OF THE COMMUNITY!

- Join the 11,000 EDS Members with 144 chapters worldwide
- Network with peers from across industries and sectors
- Share in the stewardship of EDS



EDS Membership Info

Membership Fee: \$12 per year

To Learn more:

- Visit www.ieee.org/eds
- Contact the EDS Executive office:

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Piscataway, NJ 08854, USA
Email: eds@ieee.org

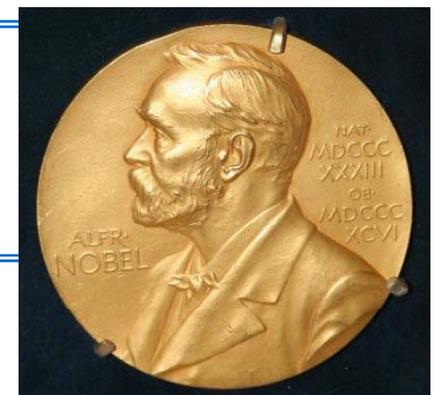


Three IEEE Fellows Win 2009 Nobel Prize in Physics

“...for breakthroughs involving the transmission of light in fiber optics and inventing an imaging semiconductor circuit, the three scientists created the technology behind digital photography and helped link the world through fiber - optic networks.”



(l-r)
Dr. Charles K. Kao
Dr. Willard S. Boyle
Dr. George E. Smith



Nobel Prizes in Electron Devices

- **1956 – The Transistor**
William Shockley, John Bardeen, and Walter Brattain
- **2000 – Integrated Circuit**
Jack Kilby
 - **Semiconductor Heterojunction Devices**
Zhores Alferov and Herbert Kroemer
- **2007 – Giant Magnetoresistive Effect (GMR)**
Albert Fert and Peter Grunberg
- **2009 – Charge Coupled Devices**
George Smith and Willard Boyle
 - **Fiber Optic Technology**
Charles Kao

