



2008 IEEE International Symposium on Electronics and the Environment



May 19-21, 2008

San Francisco, CA

The IEEE Computer Society's Technical Committee on Electronics and the Environment is pleased to announce the 2008 IEEE International Symposium on Electronics and the Environment. This is the premier event addressing the sustainability of electronics products, Information and Communication Technology (ICT) services, and ICT in complex engineered systems.

The program will include sessions covering the spectrum of issues for assessing and managing the lifecycle of electronics and technology: Design for Environment, materials selection, manufacturing processes and systems, energy management, end-of-life policy and reuse/recycling. The implications of ICTs for sustainability are addressed with session on how ICTs interface with manufacturing, distribution and urban systems. There are also sessions on how other emerging technologies converge with ICTs to affect sustainability and on systems approaches needed to assess industry and technology. Participants in the symposium are diverse, with representatives from industry, government and academia. All presented papers will be published in the *Proceedings of the 2008 IEEE International Symposium on Electronics and the Environment*, published by IEEE. In addition, select papers will be recommended for publication in a special issue of the *IEEE Transaction on Electronics Packaging and Manufacturing* as well as *The Journal of Industrial Ecology*.

CALL FOR PAPERS

The conference will feature keynote speakers, tutorials, panel discussions, and paper presentations. Authors from industry, academia, and consultants are invited to submit papers describing research, applications, tools, and case studies addressing the categories listed below. Approximately 30 minutes will be provided for each paper presentation including questions and responses.

TOPICS (with suggested subtopics):

ICT and Urban Infrastructure Systems

- Smart buildings
- Intelligent transport systems
- Decentralized and secure electricity grids

ICT in Business Systems and Efficiency

- Logistics, e-commerce and supply chain management
- Monitoring and control systems in manufacturing

Emerging Technologies

- Impact of emerging technologies (e.g., nanotechnology)
- Impacts of technological convergence (including nanotech, biotech, ICT systems, and cognitive science)
- New ICT Systems and Services

Materials and Product Design for Electronics

- Design for Environment (DFE)/Sustainability
- Materials assessment, selection and substitution
- Energy management/efficiency
- Data centers

Green Electronics Manufacturing

- Innovative processes
- Supply chain management
- Pollution Prevention

Sustainability Analysis Tools

- Industrial Ecology (IE)
- Life Cycle Assessment (LCA)
- Thermodynamics and energy/material analysis

Sustainable Engineering Education

- Education modules
- Case studies

End-of-life Technologies and Systems

- New disassembly and recycling technologies
- Asset management and logistic systems for electronic products
- International management of reused goods and e-waste
- RFID and other identification systems

Electronics Policy and Regulation

- Developments and evaluation of existing policies and regulations
- Proposals for new policies
- Compliance and metrics

Ethics/Societal Implications

- Impacts of informal recycling in developing countries
- Information and Communication Technology (ICT)
- Emerging technologies
- Design for the developing world

Sustainable Power Generation

- Optimization of generation portfolios
- Renewable energy
- Demand and efficiency
- Environmental impacts

Sustainable Energy Systems

- Production systems for emerging technologies
- End of service and deconstruction
- Nanomaterial use in energy systems
- Net energy payback measures

ABSTRACTS DUE NOVEMBER 10, 2007

SUBMISSION OF ABSTRACTS: Prospective authors should submit an extended abstract of 800-1000 words clearly explaining the subject, originality, and relevance to the symposium on or before **November 10, 2007**. The format of the abstract is flexible, but should include title of paper, author's name and affiliations, and contact information for at least one author. Figures and references may be included, but are not required. The file type should be MSWord or PDF. Extended abstracts will be peer reviewed. Abstracts must specifically address each of the following categories to be considered:

Problem addressed Knowledge of prior work Project undertaken Research methods Conclusions

Abstracts are to be submitted through the START Conference Manager System:

<https://www.softconf.com/starts/isee08/>

Please consider forwarding copies of this announcement to colleagues, suppliers, academic partners or others who may be contributors to the program

For all symposium information see the ISEE website:

<http://www.iseesummit.org>

Regular Sessions:

Authors whose papers are selected for oral presentation will be notified in mid-December. All authors whose work is accepted for the regular sessions are required to submit a written paper for publication as well as present orally at the Symposium. Authors will be entitled to register for the symposium at a reduced rate. One author per paper must register to attend the symposium before or at the time the final paper is submitted. Papers without a registered author will not be printed or scheduled for presentation. In order to be published, authors must follow the style template provided at <http://www.iseesummit.org> and limit the paper to six pages in length, including illustrations. Final papers are due February 22, 2008.

Poster Sessions

Authors who choose to present a poster rather than an oral presentation are required to submit an abstract for publication in the proceedings. The abstract may be up to one page in length and must follow the style template provided at <http://www.iseesummit.org>. One author per poster must register to attend the symposium before or at the time the final abstract is submitted. Final abstracts are due February 22, 2008.

Special Sessions

Authors invited to participate in the special sessions should submit a full paper up to 6 pages in length. The conference committee will give approval in some cases to accept a one page abstract in lieu of a full paper. Authors must follow the style template provided at <http://www.iseesummit.org>. Final papers and abstracts are due February 22, 2008

The venue for the symposium is the San Francisco Airport Marriot Hotel. Information on registration and hotel reservations will be available in January 2008 at <http://www.iseesummit.org>.

ATTENTION STUDENTS: ISEE offers both a paper and poster competition to recognize student contributions to the advancement of environmental practices in the electronics industry. To be eligible, the primary author must be a student on or after January 1, 2008 and present original work either in an accepted 2008 ISEE conference paper or poster. Contest eligibility forms and instructions for submission are available at <http://www.iseesummit.org>.

2008 CONFERENCE COMMITTEE:

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