

## Proceedings of the IEEE Kicks Off 2nd Century with Launch of Editorial Themes

*Highly Cited Journal to Feature Comprehensive Updates on Energy, Power and Data Processing Needs for Emerging Technologies*

Piscataway, NJ – Feb. 7, 2013 –Readers of [Proceedings of the IEEE](#), the most highly cited general interest journal in electrical engineering and computer science, are certain to be inspired by the diverse subjects to be examined during this first year of the journal's second century.

Among the key subjects to be reviewed in the 12 issues of 2013 are Energy and Power Coverage, Data Handling and Processing Challenges, Electronic devices, the Smart Home and Informatics and Nanoscience.

[Proceedings of the IEEE](#) is a journal for today's important issues but with an eye always focused on the future. Journal readers can obtain a preview of special issue topics for 2013 at [www.ieee.org/proceedings](http://www.ieee.org/proceedings). Also, the winners of the journal's Centennial Future Technology Predictions competition have been announced and some of these breakthrough predictions will be published in upcoming Point of View articles in the journal.

This year begins with a timely special issue in January entitled "Beyond HDTV" that considers technical areas and addresses demands of today and tomorrow. The issue investigates systems currently being developed that surpass high-definition television (HDTV) and are coming closer to being able to display large-screen video. Because cinemas have almost completed their transition from traditional film to electronic media, and movies have been restructured as fully digital entities, UHDTV and the digital cinema have a close relationship.

A special issue in February focuses on Electromagnetic Computation (CEM) and provides an overview and description of some potential applications areas, including computer chip design and circuit analysis, lasers and optoelectronics, microelectromechanical systems (MEMS) and microwave engineering.

Three special issues in 2013 will be devoted to the challenges of handling increasingly large amounts of data and processing this data so that it is useful to the tasks at hand. In March, the focus will be on resolution remote sensing information processing challenges. Two additional issues will cover speech information processing and perception-based media.

Energy and power will continue to be an important focus of *Proceedings of the IEEE* in 2013. The April issue will consider the promises offered by marine energy technology as well as the innovations on the horizon as wireless power technology continues to develop in the future. Another issue will cover in detail the subject of state-of-the-art status and the future outlook of wireless power technology.

Two special issues during 2013 will focus on the important topic of electronic devices. The first will examine possibilities of new electronic devices based on Graphene and describe recent developments and advances likely to have a revolutionary impact on modern communications and information technologies. The second special issue focusing on electronic devices celebrates the 50th anniversary of the light-emitting diode (LED) by providing a historical perspective as well as current and future trends in LEDs and the associated enabling technologies that impact the realization of the LED as "an ultimate lamp."

Recent research and development in both industry and academia are driving the smart home story from vision to reality. A special issue scheduled for 2013 takes a comprehensive look at the technology required for a Smart Home to provide consumers with the freedom to enjoy advanced whole-home content and services when and where they want it while providing home services like energy management, home automation, security control and health monitoring, and all at the same time being ecologically friendly. The Smart Home potential for elderly living alone could also make an extraordinary difference in their lives.

Throughout 2013, there will be a continued emphasis on invited papers for this journal. The ultimate goal is to publish a wide selection of informative tutorial and survey papers in regular paper issues, which will provide insight into other technologies, both inside as well as outside readers' specialties. Each regular paper will continue to be highlighted by an introductory prolog to provide added informational value to *Proceedings of the IEEE* readers.

During 2012, 13 issues of *Proceedings* were published instead of the usual 12. A special Centennial Retrospective Issue was published May 15, 2012, which reviewed the past and present and examined the future of technology over the next 20, 50 and even 100 years. IEEE's Future Technology Predictions Competition winners have been announced and will provide readers with exciting innovations in the future Point of View articles (see [http://www.ieee.org/publications\\_standards/publications/proceedings/predictions\\_competition.html](http://www.ieee.org/publications_standards/publications/proceedings/predictions_competition.html) for list of winners).

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