

PIERS 2018 in Toyama

Progress in Electromagnetics Research Symposium

1 – 4 August, 2018

JAPAN

CALL FOR PAPERS

PIERS – Where Microwave and Lightwave Communities Meet

PIERS provides an international forum for reporting progress and recent advances in all aspects of electromagnetics. Spectra range from statics to RF, microwave, photonics, and beyond. Topics include radiation, propagation, diffraction, scattering, guidance, resonance, power, energy and force issues, and all applications and modern developments. Potential session organizers are welcome to propose specific technical topics by filling out the PIERS survey at <http://piers.org/>.

SUGGESTED TOPICS:

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| 1 Electromagnetic theory | 2 Computational electromagnetics, hybrid methods |
| 3 Spectra, time, and frequency domain techniques | 4 Fast iteration, large scale and parallel computation |
| 5 Transmission lines and waveguide discontinuities | 6 Resonators, filters, interconnects, packaging, MMIC |
| 7 Antenna theory and radiation | 8 Microstrip and printed antennas, phase array antennas |
| 9 RF and wireless communication, multipath | 10 Mobile antennas, conformal and smart antennas |
| 11 Power electronics, superconducting devices | 12 Systems and components, electromagnetic compatibility |
| 13 Nano scale electromagnetics, MEMS | 14 Magnetic levitation, transportation and collision avoidance |
| 15 Precision airport landing systems, GPS | 16 Radar sounding of atmosphere, ionospheric propagation |
| 17 Microwave remote sensing and polarimetry, SAR | 18 Subsurface imaging and detection technology, GPR |
| 19 Active and passive remote sensing systems | 20 Electromagnetic signal processing, wavelets, neural network |
| 21 Rough surface scattering and volume scattering | 22 Remote sensing of the earth, ocean, and atmosphere |
| 23 Scattering, diffraction, and inverse scattering | 24 Microwave and millimeter wave circuits and devices, CAD |
| 25 Wireless power transfer and harvesting | 26 Medical electromagnetics, biological effects, bioimaging |
| 27 Microwave photonics, THz technology | 28 Biophotonics, optical sensors and environmental monitoring |
| 29 Novel optical fibers and fiber-based devices | 30 Advanced photonic materials and nanophotonics |
| 31 Optoelectronic devices and integration | 32 Light emitting and lasing |
| 33 Coherent optics, ultrafast optics | 34 Light harvesting, photovoltaics, optoelectronics in energy |
| 35 Metamaterials and plasmonics | 36 Quantum electrodynamics, computing and information theory |
| 37 Biological media, composite and random media | 38 Plasmas, nonlinear media, fractal, chiral media |
| 39 Constitutive relations and bianisotropic media | 40 Moving media, relativity, field quantization, and others |

SUBCOMMITTEES FOR PIERS 2018 IN TOYAMA

The following five subcommittees have been formed for PIERS 2018 in Toyama (however, the topics of PIERS 2018 Toyama are not limited to these areas):

- SC 1. Computational Electromagnetics, Electromagnetic Compatibility, Scattering and Electromagnetic Theory
- SC 2. Metamaterials, Plasmonics and Complex Media
- SC 3. Optics and Photonics
- SC 4. Antennas and Microwave Technologies
- SC 5. Remote Sensing, Inverse Problems, Imaging, Radar and Sensing

FOCUS SESSIONS

In PIERS 2018 Toyama, a dozen of Focus Sessions will be planned. Each focus session should be focused on a specific hot topic that must be timely and reflect the future trends or the latest scientific advances in the area. The leadership of the conference will select the topics of focus sessions and the responsible organizers. The organizers may adjust the title of the focus session to make it e.g. more specific/focused and should make the best effort to ensure the high quality of the session by inviting high-profile keynote speakers (30 min for each; 0-2 keynote speakers for each focus session) and excellent invited speakers (20 min for each), etc. Some contributed oral talks (15 min each) are encouraged, however, quality must be very well controlled by the organizers with a typical acceptance ratio of less than 50%. Each focus session will last for a half-day (with a coffee break) or a full-day (with a lunch break and two coffee breaks).

YOUNG SCIENTIST PROGRAMS

To encourage more young scientists and students to take part in PIERS with presentations of good research results, two young scientist programs are organized at PIERS 2018 in Toyama.

Best Student Paper Award (BSPA): Any full-time university student, who is the first author as well as the presenting author of a paper submitted for oral presentation at PIERS 2018 Toyama, can apply for the Best Student Paper Award (BSPA). Three Prize Winners (First, Second, and Third Prizes) and two Honorable Mentions will be selected for each track (SC1 to SC5) by the Young Scientist Program Committee of PIERS 2018 Toyama.

Young Scientist Award (YSA): The Young Scientist Award (YSA) will be arranged for the first time at PIERS 2018 Toyama; it provides a more general young scientist program in comparison with the BSPA. To qualify applications for the YSA, the applicant must be under 35 years of age on August 4, 2018, and the first author as well as the presenting author of a paper submitted for oral presentation at PIERS 2018 Toyama. Awardees will be selected after peer-review of the applications by the Young Scientist Program Committee of PIERS 2018 Toyama.

PAPER SUBMISSION MUST BE RECEIVED BY 1 MARCH 2018

Abstract Guidelines: Authors are invited to submit a one-page abstract. The abstract limit is one page but must have at least 250 words in English. No full-length paper is required. The abstract should explain clearly the content and relevance of the proposed technical contribution. On a separate page list the following information: (1) Title of the paper, (2) Name, affiliation, and email of each author, (3) Telephone/Fax numbers, (4) Corresponding author and Presenting author, (5) Topic or Session Organizer, if applicable, (6) State if poster presentation is preferred. Your co-authors will be informed about the paper submission. Paper may not be displayed in the PIERS Publications until the emails of all the co-authors are submitted.

Please use On-Line-Submission (<http://piers.org>) to submit your contribution. In the case of online submission failure, you may email (office@piers.org) your contribution by attachments. Authors are recommended to use *.tex, *.doc, or *.pdf as the file format. The abstract submission deadline is **1 March 2018** and the author pre-registration deadline is **1 May 2018**.

Extended Papers - PIERS Proceedings for IEEE Xplore: Author of an accepted abstract is invited (but is not required) to submit an extended paper of 2–8 pages. Extended papers will be reviewed by reviewers including the session organizers. Only accepted and registered papers will be included in the final PIERS Proceedings, which may be published and archived in IEEE Xplore after the actual conference. Feedback from the physical conference presentation may affect the final decision. For registered and paid abstract, there is no additional publication charge for full-length papers within 8 pages. The overlength page charge will be USD 50 per page. Please visit PIERS website for the latest PIERS sample files. The deadline for the submission of extended papers is **5 May 2018**.

PIERS No-Show Policy: Please be reminded that if your paper is a no-show in oral presentation session, its full-length paper will not be included in the final PIERS proceedings.

PRESENTING AUTHORS MUST PRE-REGISTER BY 1 MAY 2018

Each presenting author is limited to presenting no more than three papers in oral and poster sessions, and must pre-register by paying a **non-refundable** fee of **US\$590** before **1 May 2018**. For students with valid identification, the non-refundable pre-registration fee is **US\$350**. Registration fee will be raised to **\$690** and **\$450** for students after **1 May 2018**. Only pre-registered articles will be scheduled in the final Technical Program. Inclusion of the article in the Technical Program and PIERS Proceedings is guaranteed only after the registration of the presenting author is completed. Registration fee includes admission to all technical sessions, break areas, and an e-copy of the PIERS abstracts. PIERS Proceedings will not be available onsite and will be published on IEEE Xplore after the conference. There is no mail service of conference materials for no-show PIERS participants.

Updated and detail information will be posted at <http://piers.org> and <http://emacademy.org>