

First Call for Papers

International Workshop on Nitride Semiconductors (IWN 2018)



November 11-16, 2018

**Ishikawa Ongakudo & ANA Crown
Plaza Kanazawa Hotel, Kanazawa, Japan**

Sponsored by

“Materials Science and Advanced Electronics Created by Singularity”, MEXT-KAKENHI on Innovative Areas, FY2016-2020 ♦ The Japanese Association for Crystal Growth

Co-Sponsored by

The Japan Society of Applied Physics ♦ The 161st Committee on Science and Technology of Crystal Growth, Japan Society for the Promotion of Science ♦ The 162nd Committee on Wide Bandgap Semiconductor Photonic and Electronic Devices, Japan Society for the Promotion of Science

Abstract Deadline: June 29, 2018

<http://www.iwn2018.jp>

Scope of the Workshop

The International Workshop on Nitride Semiconductors 2018 (IWN 2018) will be held in Kanazawa, Japan, from November 11 to 18, 2018. The nine previous workshops were held in Nagoya, Japan (IWN 2000); Aachen, Germany (IWN 2002); Pittsburgh, USA (IWN 2004); Kyoto, Japan (IWN 2006); Montreux, Switzerland (IWN 2008); Tampa, USA (IWN 2010); Sapporo, Japan (IWN 2012), Wrocław, Poland (IWN 2014); and Orland, USA (IWN 2016).

IWN 2018 will be organized as a combination of four independent workshops. In each workshop, in-depth discussions will be held on a focused aspect of the essential physics and chemistry underlying the critical issues associated with nitride materials. These scientific activities will contribute to breakthroughs in critical technological barriers that need to be overcome in order to improve the performance of nitride devices.

Format of the Workshop

IWN 2018 comprises three parts: plenary meetings, parallel topical workshops, and evening rump sessions. IWN 2018 will start with an introductory plenary session, wherein the current status and circumstance of nitride materials and devices are reviewed, providing a basis for the discussions in the workshops. The parallel topical workshops—focused on growth, characterization, optical devices, and electronic devices—will provide opportunities for in-depth discussions. The topical workshops also offer a strong program of invited/contributed talks and poster presentations covering the latest results on the various aspects of nitrides such as material processing, physics, devices, theory, and new concepts. Evening rump sessions will be held for the promotion of frank discussion on the most recent topic of our society in a relaxed atmosphere. IWN 2018 will end with a wrap-up plenary meeting wherein all the discussions held in IWN 2018 will be summarized and shared by the participants.

Workshop Language

The official language of the workshop will be English.

Submission of Abstracts

Abstract Deadline: June 29, 2018

Authors are asked to submit their abstracts via the submission form at <http://www.iwn2018.jp>. Please note that detailed information regarding abstract formatting can be found on the website.

Conference Topics

✓ **Growth:**

III-nitride crystal growth; III-nitride epitaxy; doping and point defects; nitride alloys and Ga related materials; and growth methods and related technologies
Session chair: Y. Mori (Osaka Univ., Japan)

✓ **Characterization:**

Optical and electrical properties; structural analysis; defect characterization; nanophotonics and nanoelectronics; and theory and simulation.
Session chair: Y. Yamada (Yamaguchi Univ., Japan)

✓ **Optical Devices:**

Visible, UV, and white LEDs; laser diodes; VCSELs; solar cells; photodetectors; intersubband devices; optical devices with nanostructures; and optical device processing and physics.
Session chair: T. Takeuchi (Meijo Univ., Japan)

✓ **Electronic Devices:**

Transistors, diodes, switches, and amplifiers; power and RF applications; device processing and fabrication; transport and switching properties; novel device concepts; contacts; and reliability.
Session chair: J. Suda (Nagoya Univ., Japan)

Proceedings

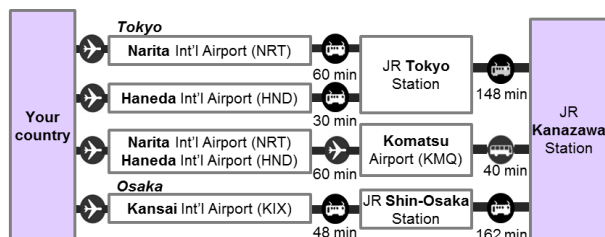
The proceedings will be published as a special issue of the Japanese Journal of Applied Physics. Open access option will be given to selected papers. Details will be announced in the Final Circular.

Exhibition and Sponsorship

The commercial exhibition will feature international exhibitors from all sectors of materials science and engineering communities. Official sponsors for various workshop events are also being solicited. For more information, please contact the IWN 2018 Exhibition and Sponsorship chairs at kifu@iwn2018.jp.

Venue

The Ishikawa Ongakudo ("Ongakudo" in Japanese means Music Hall) and the ANA Crown Plaza Kanazawa Hotel are located in Kanazawa. Kanazawa, the beautiful capital city of Ishikawa Prefecture, sits on the Sea of Japan and is bordered by the Japanese Alps, Hakusan National Park and Noto Peninsula National Park. There are several ways to reach Kanazawa via international airports. It is accessible from Tokyo by the "Hokuriku Shinkansen" super-express (approximately 148 min). The "Thunderbird" express is also available from Osaka to Kanazawa (approximately 160 min). A limousine bus is available from the Komatsu airport, which can be reached from other international airports in Japan as well as neighboring countries.



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Further Information

Please visit <http://www.iwn2018.jp> for details on registration, abstract submission, and other information. Please make contact with IWN 2018 secretariat (E-mail: secretary@iwn2018.jp).