Newsletter | October 2023

Editor’s Note

Welcome to the Oct 2023 issue of the Nanotechnology Council newsletter. This issue brings you the latest updates and activities in the IEEE-NTC community. We hope you enjoy it and do let us know if there is any topic you’d like to see covered in the future. All future content submissions to the newsletter should be sent to the new editors: Yijun Cui and Ke Chen.

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Contents:

BREAKING NEWS
AWARDS
CHAPTERS
TECHNICAL ACTIVITIES
WIN ACTIVITIES
YOUNG PROFESSIONALS
CONFERENCES
PUBLICATIONS

BREAKING NEWS

OJ-NANO: First IF Announcement

IEEE Open Journal of Nanotechnology (OJ-NANO) is proud to announce its first Journal Impact Factor of 1.7! Learn more about OJ-NANO and submit your article today: https://oj-nano.ieeenano.org/.
NTC Member Becomes AAIA Fellow

We proudly announce that Prof. Bing Sheu, EiC of the IEEE Nanotechnology Magazine, become a Fellow of the Asia-Pacific Artificial Intelligence Association. Congratulations to Prof. Sheu.

AWARDS

Call for 2024 NTC Awards Nominations

The Nanotechnology Council (NTC) is soliciting nominations for the following Publication & Technical Awards.

- Best PhD Thesis Award in Nanotechnology (publication)
- Test of Time Publication Award (e.g. over 10-25 years) (publication)
- Technical Achievement Award(s) (Technical Committees)
- Nanotechnology Magazine Best-Paper Award (publication)
- Best Paper Award for the IEEE Transactions on Nanotechnology (publication)

The IEEE Nanotechnology Council (NTC) is soliciting nominations for these Awards. See the Awards page for more information on all the NTC’s awards. To view the full detailed listing of each award please visit the Awards nominations page. Awards are presented at the IEEE-NANO conference.

Nominations for these awards are due on 1 March 2024 (Deadline for other NTC awards remains as 1 October.) Nominators should utilize the forms associated with each award description found on the website. Please make sure that nominators and references specifically address contributions, impact, and evidence related to the Basis for Judgment associated with each award.

Best PhD Thesis Award in Nanotechnology

Description: This annual award recognizes a PhD thesis in nanotechnology with remarkable technology innovation or excellence which should have led to publications in NTC venues including journals and conferences. Any member with no conflict of interest (i.e. advisor-advisee relationship) with any member of the NTC ExCom, NTC Education Committee, or NTC Technical Committees can submit a nomination to the Award Committee for this award. Self-nominations are not allowed. Requires three references.

Best Paper Award for the IEEE Nanotechnology Magazine

Description: This annual award recognizes a highly influential and impactful article of the highest quality published in the IEEE Nanotechnology Magazine (INM) in the preceding 2 calendar years. (For example, the 2023 award recognizes a paper published in 2021 or 2022.) Note: Nominations accepted from any current or past member of the INM Editorial Board within the last 3 years ONLY. No self-nominations. Requires three references.

Test of Time Publication Award

Description: This annual award recognizes a highly influential, widely visible, and impactful article of the highest quality which appeared in any Nanotechnology Council managed journal, magazine, or financially sponsored conference proceedings between 10 years and 25 years ago. Note: Nominations from any Editorial Board member of any NTC publication within the last 25 years ONLY. No self-nominations. Requires three reference letters.

Technical Achievement Award(s)

Description: This annual award recognizes individuals with outstanding and innovative contributions to the different areas of nanotechnology that are represented by technical committees (TCs) as organizational entities of the Nanotechnology Council (NTC), usually within the past 10 and not more than 15 years. Note: Nominations from any member of the NTC Technical Activities Committee within the last three years (including the nomination year) ONLY. No self-nominations. Up to 3 awards will be presented each year. Requires three reference letters.

Best Paper Award for the IEEE Transactions on Nanotechnology

Description: An annual best paper award to recognize a paper published in the IEEE Transactions on Nanotechnology (T-NANO) that is remarkable by its novelty,
scientific merit, and potential impact. This award will encourage submission of excellent papers to the journal, and reward outstanding submissions. **Note:** Nominations by members of the T-NANO Editorial Board ONLY.

For further information please see the [NTC Awards page](#) or contact the Award Chair for each award on its Nomination page.

### CHAPTERS

**Call for Applications â€“ NTC Chapterâ€™s Innovation Grant**

The IEEE NTC Chapters & Regional Activities Committee is calling for applications from NTC Chapters (student Chapters included) for NTC Chapterâ€™s Innovation Grant. The purpose is to support regional NTC Chapters to propose new innovative activities to be carried out in 2023/2024 and beyond. Up to US$2500 can be applied from each eligible Chapter.

**Eligibility:**
All active NTC Chapters, but priority will be given to chapters that have not received any funding support from the Chapterâ€™s committee in the last 3 years.

**The Application Pack should:**
- include a list of the past chapter activities carried out in 2021-2023 (that have been reported in Vtool).
- include a brief proposal (up to 2 pages) on the proposed activities, with a clear description on each activity, its action plan (such as for activity promotion, format/venue and duration) and relations to the topics of the current NTC Technical Committees ([https://ieeenano.org/technicalactivities/tech-cmtes](https://ieeenano.org/technicalactivities/tech-cmtes)) and the NTC Distinguished Lecturers (DL) program ([https://ieeenano.org/dl-program](https://ieeenano.org/dl-program)), as well as the main benefits (to IEEE NTC members and wide community).
- include a budget justification for each planned activity. Typical funding is US$1000. In special well-documented cases, funding can be increased but no more than US$2500.
- be sent by email to: Prof. Lan Fu: lan.fu@anu.edu.au by 31 October 2023.

**The selection committee:**
- Prof. James Morris (Chair, NTC Liaison & Transnational Committee)
- Prof. Malgorzata Chrzanowska-Jeske (NTC VP for Finance)
- Prof. Xiaoning Jiang (NTC VP for Technical Activities)
- Dr. Vasuda Bhatia (R1-7 Coordinator)
- A/Prof. Attila Bonyar (R8 Coordinator)
- Prof. Murilo Romero (R9 Coordinator)
- Prof. Brajesh Kumar Kaushik (R10-India Coordinator)
- Prof. Li Tao (R10-Other, Coordinator)
- Prof. Lan Fu (NTC Chapters â€“ Chair)

**Important dates:**
- Application open: 1 Sept. 2023
- Application close: 31 Oct. 2023
- Notification/Announcement of outcome: 15 Nov. 2023

### TECHNICAL ACTIVITIES

**Quantum Technologies: Pathways Beyond Classical Systems Workshop**

Location & Time: Utah Valley University, CS 404 (800 W University Pkwy, Orem, UT 84058 USA), 1 - 5 pm MST [UTC -7], 10 November 2023

This high-level workshop aims to provide an overview of the current efforts to organize quantum-related academic, industrial, and professional activities in:
- Computer science,
- Electrical and electronics engineering,
- Industrial standards development,
- Information science (including information technology management),
- Network architecture and infrastructure development, and
- Sustainability by design.
In person or virtual participation is open to all members of the public. Please register using this form: https://forms.gle/f4bmPRDie8g1BHAW9

Tentative agenda (official agenda to be mailed the week of the event):

13:00 - 13:50, Session 1 - Developing Technical Communities for Quantum Electrical Engineering (QEE) and Quantum Information Technology (QIT)
14:00 - 14:50, Session 2 - Roadmaps for QEE and QIT, and the Need for Ethically-Aligned Design (EAD)
15:00 - 15:50, Session 3 - Quantum Computer Architecture and Standardization
16:00 - 17:00 - Time allotted for networking and local community organizing

WIN ACTIVITIES

Effects Of Climate Change and the Remedy Through Nanotechnology

Keynote lecture by Kanika Singh, WIN Chair to the IEEE Student Chapter, college of engineering, Attingle, India.

The talk covered the latest trends on role of nanotechnology in remedies for climate change and also highlighted objectives of IEEE NTC, Women in nanotechnology and trynano aspects to the young professionals.

YOUNG PROFESSIONALS

NTC Young Professionals Update

Five Regional NTC YP LinkedIn pages have been established and are timely updated. The regional
coordinators established cooperation with the regional NTC conference organizers in order to support and ensure presence of young professionals.

NTC YP LinkedIn:

- Region 7 (Canada)
- Region 9 (Latin America)
- NTC YP India
- Region 8 (Africa, Europe, Middle East)
- Region 10 (Asia and Pacific)

CONFERENCES

IEEE NANOMED 2023: Call for Papers

IEEE-NANOMED is one of the premier annual events organized by the IEEE Nanotechnology Council (NTC) to bring together physicians, scientists, and engineers alike from all over the world and every sector of academy and industry, working at advancement of basic and clinical research in medical and biological sciences using nano/molecular medicine and engineering methods. IEEE-NANOMED is the conference where practitioners will see nano/molecular medicine and engineering at work in both their own and related fields, from essential and advanced scientific and engineering research and theory to translational and clinical research.

Conference Scope:

- Nano and molecular technologies in medical theranostics
- Nanotechnology in drug delivery
- Biomedical imaging
- Bio/Nano sensing
- Biochips and Bio-MEMS
- Biomechatronics
- Biological interface Cells at the nanoscale
- Frontiers in nanobiotechnology
- Translational medicine
- Biomicrofluidics and Bioprinting

Important Dates:

- Notification of Acceptance: 10 Sept. 2023
- Full-Paper submission Deadline: 20 Oct. 2023
- Early Bird Registration: 30 Sept. 2023

PUBLICATIONS

IEEE Transactions on Nanotechnology

View the full current issue of IEEE T-NANO

For additional information, visit the IEEE Xplore website.

To learn how to submit to T-NANO, click here.
IEEE Open Journal of Nanotechnology

View the full current issue of IEEE OJ-NANO

For additional information, visit the IEEE Xplore website.

To find how to submit to OJ-NANO, click here.

The IEEE Open Journal of Nanotechnology (OJ-NANO) is dedicated to publishing articles on timely topics in the field of nanotechnology by making them available immediately, freely, and permanently available to all. All articles published in OJ-NANO are exposed to 5 million unique monthly users of the IEEE Xplore® Digital Library. Among numerous articles published so far, we've selected a few review articles to highlight here.

IEEE Nanotechnology Magazine

View the full current issue of IEEE INM

For additional information, visit the IEEE Xplore website.

To find how to submit to INM, click here.

IEEE Transactions on NanoBioscience

View the full current issue of IEEE T-NB

For additional information, visit the IEEE Xplore website.

To find how to submit to T-NB, click here.

LIST OF NANOTECHNOLOGY COUNCIL OFFICERS (2023)

<table>
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