

Newsletter | April 2023

Editor's Note

Welcome to the April 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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BREAKING NEWS

Call for 2023 Nominations IEEE Nanotechnology Council Elections

The IEEE Nanotechnology Council (NTC) is seeking nominations for the following elected positions. **Note the 2021 Governing documents update altered the election procedures for VPs by adding VP-elects and Members-at Large which we are phasing in starting 2022.**

- (1) Election: **VP-elect for Conferences** (3-years: elect in 2024; VP 2025-2026)
- (2) Election: **VP-elect for Finances** (3-years: elect in 2024; VP 2025-2026)
[incumbent is eligible]

NOTE: NEW positions as of 2021 Bylaws Update:

(3) Election: **Member-at-Large** (MAL) (up to 3) (2024-2025)
Unless otherwise noted, all positions are two-year terms and start 1 Jan. 2024. Nominations should include a statement from the candidate and a bio in IEEE format.

The deadline for nominations is **15 May 2023**.

A position description and nomination form are in the attached NTC Nomination Package, which can also be downloaded [here](#).

Duties for the positions are described in the Nomination package and also in

the NTC Constitution which can be downloaded here, and other details in the NTC Bylaws which can be found [here](#).

Eligibility: Officer candidates are nominated from **current** AdCom members or from those **past members** who have served as Member **Society-appointed** or **ex-officio** AdCom members **within the previous five years**. Review the AdCom roster at <https://ieeenano.org/adcom/>.

MAL candidates serve as members of the AdCom and are to provide the Council with independent insights and positions that are in support of the global nanotechnology community, especially those involved in independent research, development and commercialization, to represent the Council positions and statements as needed to these global constituencies and to complete the specific tasks identified in their candidacy documents. **MAL are NOT required to be members of Member Societies.**

NOTE 1: Nominations may be made only by AdCom members (Society representatives and ex-officio; see website AdCom roster).

NOTE 2: An individual may not serve concurrently as both a Council officer and a Council Member Society representative.

Please email the nominations to **Jim Morris** NTC Nominations Committee Chair at j.e.morris@ieee.org by midnight (PT) **15 May 2022**.

The election will be held at the NTC AdCom in Jeju, Korea on 2 July 2023.

Candidates are required to appear before the AdCom for the election, either in person or virtually.

IEEE-NANO 2023: Call for Papers & Submission Deadline Further Extended



23rd IEEE International Conference on Nanotechnology (IEEE-NANO 2023)

2-5 July 2023, Jeju Island, Korea

Website: <http://2023.ieeenano.org>

IEEE-NANO is the flagship conference series of the IEEE Nanotechnology Council (NTC) since 2001, focusing on the promotion of advanced research in the fields of nanoscience and nanotechnology. Recent conferences were held in Palma de Mallorca (Spain, 2022), Montreal (Canada, 2021), Virtual (2020), Macau (China, 2019), Cork (Ireland, 2018), Pittsburgh (USA, 2017), Sendai (Japan, 2016), Rome (Italy, 2015), Toronto (Canada, 2014), etc.

IEEE-NANO 2023 accepts THREE types of papers/abstracts: (1) **Regular & Full papers**; (2) **Presentation & ONLY abstracts**; and (3) **Special Invited Session proposals and abstracts**.

Key Dates:

Notification of Acceptance: **10 May 2023**

Final Full Paper Submissions: **30 May 2023**

Deadline for Presentation & ONLY One-Page Abstracts: **30 April 2023**

Notification of Acceptance: 10 May 2023

Final Abstract Submissions: 30 May 2023

Special Invited Session Proposal Deadline: 31 March 2023

Special Invited Session Abstract/Paper Submission Deadline: 30 April 2023

ATTENTION: The government of Korea recently announced the exemption of K-ETA for people from 22 countries/nationals. It is posted on the conference webpage (<https://2023.ieeenano.org/visa-information/>).

ACTIVITIES

2022 IEEE NTC Forum on Nanotechnology Focus & Nanotechnology for Soft Electronics

The 2022 NTC Forum on Nanotechnology Focus was held on 7-8 Dec. 2022 in StateView Hotel, Raleigh, NC, with Dr. Yong Zhu at NC State and Dr. Cunjiang Yu

at Penn State as Co-Chairs. The 2022 NTC Forum topic was identified as “Nanotechnology for Soft Electronics”, considering that soft electronics has been emerging rapidly as one of the future directions for electronic devices while nanotechnology has been playing a critical role in this emerging field.

Total 13 invited speakers presented their recent findings and future perspectives of soft electronics during the 1.5-day 2022 NTC Forum. One plenary talk and 12 invited presentations were given at three sessions. The Plenary presentation title and speaker are:

Semiconductor Nanomaterials for Bioelectronic Medicines, by John Rogers, Northwestern University



Front row: Aaron Franklin, Cunjiang Yu, Xiaoyu Ni, John Rogers, Tse Nga (Tina) Ng, Sungwoo Nam, Wenzhuo Wu. Back row: Xiaoning Jiang, Wynn Legon, Wubin Bai, Yong Zhu (L to R).

The invited presentation titles and speakers are:

- 3D curvy electronics based on conformal additive stamp printing, by Cunjiang Yu, Penn State University
- High-Speed Fabrication of Organometallic Halide Perovskite Optoelectronic Devices on Ubiquitous Substrates Using Printing or Handwriting, by Chuan Wang, Washington University at St. Louis
- Carbon nanomaterials-based wearable and implantable sensors and energy devices for broad healthcare applications, by Amay Bandodkar, NC State University
- Hybrid nanomanufacturing of self-powered human-integrated sensors, by Wenzhuo Wu, Purdue University
- Metal Nanowire based Soft Electronics: Material, Mechanical Design and Manufacturing, by Yong Zhu, NC State University
- Emerging Designs for Organic Infrared Photodetectors and Energy Storage, by Tse Nga (Tina) Ng, UC San Diego
- Deformable electronics based on strain-engineered van der Waals materials, by Sungwoo Nam, UC Irvine
- Opportunities for nanotechnology in therapeutic ultrasound?, by Wynn Legon, Virginia Tech
- Nanotechnology enabled flexible ultrasound transducers, by Xiaoning Jiang, NC State University
- A dynamically reprogrammable surface with self-evolving shape morphing, by Xiaoyue Ni, Duke University
- Print-in-place and Recyclable Electronics from Nanomaterials, by Aaron Franklin, Duke University
- Morphable Electronic Systems via Deterministic Microfolding, by Wubin Bai, UNC Chapel Hill



Professor John Rogers is delivering the plenary presentation.



During a panel discussion.

Three panel discussions were centered on the role of nanotechnology in soft electronics, history, current status and future perspectives of soft electronics. The 2022 NTC Forum participants decided to organize a special symposium at IEEE NANO 2023, and to consider establishing a new NTC TC on nanotechnology for soft electronics.

WIN EVENTS

Research pe charcha: Nanotechnology

Date : April 10, 2023 Time: 15:30 Hrs (IST)	 Dr. Veda Sandeep Nagaraja Senior Scientist II Tyndall National Institute UCC, Ireland
Date : April 13, 2023 Time: 11:30 Hrs (IST)	 Prof. Yating Wan Assistant Professor KAUST Saudi Arabia
Date : April 19, 2023 Time: 11:30 Hrs (IST)	 Dr. Kavya Dashora Associate Professor IIT Delhi, India
Date : April 24, 2023 Time: 15:30 Hrs (IST)	 Dr. Prabha Sundaravadivel Assistant Professor University of Texas, Tyler, USA

WebEx Link



Host






Dr. Kanika Singh Prof. Shalbal Mukherjee Dr. Pawan Kumar Dr. Sanjay Kumar

Volunteer: Mayank, Sumit, Chanadarbhan, Shruti, Brahmadrutta.

ieeentc@iiti.ac.in

[Event Link](#)

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-NMDC 2023: Call for Papers



18th IEEE Nanotechnology Materials and Devices Conference

22-25 October 2023, Paestum, Italy

Website: <https://ieeenmdc.org/nmdc-2023>

IEEE NMDC is a flagship conference series of the IEEE Nanotechnology Council (NTC), focusing on research advances in the fields of nanoscience and nanotechnology.

The IEEE NMDC 2023 will be held in the pleasant environment of the ancient city of Paestum, one of the most important archeological sites of south Italy, UNESCO heritage since 1997.

Important Dates:

Paper Submission Deadline: 1 May 2023
Acceptance Notification: 15 May 2023
Full Paper Submissions Opening: 20 May 2023
Full Paper Submission Deadline: 15 July 2023
Early Registration Opens: 30 May 2023

IEEE-NEMS 2023 Call for Papers



18th IEEE International Conference on Nano/Micro Engineered and Molecular Systems

14-17 May 2023, Jeju Island, South Korea

Website: <https://www.ieee-nems2023.org/>

The 18th IEEE International Conference on Nano/Micro Engineered & Molecular Systems (IEEE-NEMS 2023) will be held from 14-17 May 2023 at the Ramada Plaza Hotel Jeju, Jeju Island, South Korea.

IEEE-NEMS is a premier conference series sponsored by the IEEE Nanotechnology Council focusing on the promotion of advanced research areas related to MEMS, nanotechnology, and molecular technology. The IEEE-NEMS Conference typically attracts over 600 attendees with participants from more than 20 countries and Regions worldwide.

IEEE NAP 2023: Call for Papers



IEEE International Conference on Nanomaterials: Applications & Properties

10-15 September 2023, Bratislava, SLOVAKIA

Website: <https://ieeenap.org/>

The prime focus of the IEEE NAP-2023 is on nanoscale materials with emphasis on interdisciplinary research exploring and exploiting their unique physical and chemical properties for practical applications. Although nanoscience and nanotechnology are still in their infancy, this rapidly evolving field of research is quickly transforming almost all aspects of our everyday life. From the low power electronics and supercomputers to advanced drugs and personalized medicine, from new industrial applications and renewable energy to advanced transportation and clean air technologies, nanoscience is the foundation of many transformational discoveries in the decades to come.

Important Dates:

Abstract submission ends: 1 May 2023
Manuscript submission ends: 1 June 2023
Acceptance/rejection notification: 1 July 2023
Early registration fees deadline: 15 July 2023
Conference Program available: 15 August 2023

3M-NANO 2023: Call for Papers



IEEE International Conference on Manipulation, Manufacturing and Measurement on the Nanoscale

31 July – 4 August 2023, Chengdu, China

Website: <http://www.3m-nano.org/2023/>

3M-NANO is the annual International Conference on Manipulation, Manufacturing and Measurement on the Nanoscale. It will be held on 31 July - 4 August 2023 in Chengdu, China. The ultimate ambition of this conference series is to bridge the gap between nanosciences and engineering sciences, aiming at technology opportunities and new markets. The advanced technologies for manipulation, manufacturing and measurement at nanoscale promise novel revolutionary products and methods in numerous areas of application. Scientists working in research fields related to 3M-NANO topics are invited to submit papers. All accepted full papers (presented at the conference and following IEEE format) will be submitted in IEEE Xplore database and Ei Compendex. Selected papers will be recommended for publication in the *IEEE Trans. on Automation Science & Engineering*, *Int. J of Nanomanufacturing*, *IFAC Mechatronics*, *Int. J of Optomechatronics*, *J of Micro-Bio Robotics*, *Journal of Bionic Engineering*, *Light (Science & Applications)*, *Optics and Precision Engineering* and other SCI/Ei journals.

Important Dates:

Full paper submission: 1 May 2023

Proposals for special sessions (5-6 papers): 1 May 2023

Notification of acceptance: 15 June 2023

Final paper submission: 15 July 2023

Advanced registration: 15 July 2023

MARSS 2023: Call for Papers

MARSS

International Conference on Manipulation,
Automation and Robotics at Small Scales



Abu Dhabi, UAE
Oct. 09–13, 2023

6th International Conference on Manipulation, Automation and Robotics at Small Scales

9-13 October, 2023, Abu Dhabi, UAE

Website: <https://marss-conference.org>

MARSS, the annual International Conference on Manipulation, Automation and Robotics at Small Scales, is a non-profit conference run by the microrobotic community and technically supported by IEEE-RAS and IEEE-NTC. MARSS2023 will be held in-person on 9-13 October 2023, in Abu Dhabi, UAE. The conference is the flagship forum to discuss cross-disciplinary activities on 1) manipulation, automation, measurement, and characterization at micro/nano scales, and 2) all kinds of small-scale robots and their applications.

Important Dates:

Full paper submission (5-6 pages): 10 July 2023

Short paper Submission (1-3 pages): 10 July 2023

Notification of full paper status: within 2 weeks after the submission

Notification of Short paper status: 2-3 days after the submission

Submission of camera-ready full papers: 10 August 2023

Registration for speakers of full papers: 10 August 2023

Special session proposals: 10 July 2023 (preliminary proposal, OPTIONAL)

Final Special Session proposal: 10 August 2023

Early Bird registration: 10 August 2023

SENNANO 2023: Call for Papers



IEEE International Conference on Sensors and Nanotechnology

26-27 September, 2023, Putrajaya, Malaysia

Website: <https://sensors-nano.ieeemy.org/conference/>

Click [here](#) for CFP

The IEEE International Conference on Sensors and Nanotechnology (SENNANO) is an annual conference that brings together researchers, academics, and industry professionals from around the world to share the latest advancements and research findings in the fields of sensors and nanotechnology. The conference provides a platform for experts in these fields to exchange ideas, present their latest research, and discuss the challenges and opportunities in the development and application of sensors and nanotechnology.

Important Dates:

Final paper submission: 15 August 2023

Notification of Acceptance: 31 August 2023

Early Bird registration: 7 September 2023

IEEE NANOMED 2023: Call for Papers



The 16th IEEE International Conference on Nano/Molecular Medicine & Engineering

5-8 December 2023, Okinawa, Japan

Website: <https://ieee-nanomed.org/2023/>

Click [here](#) for CFP

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.

Important Dates:

Two-Page Abstract Deadline: 15 July 2023

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](#).



T-NANO, VOLUME 22

IEEE Open Journal of Nanotechnology

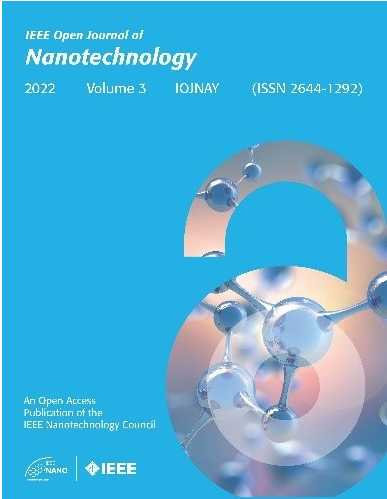
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The *IEEE Open Journal of Nanotechnology* (OJ-NANO) is dedicated to publishing articles on timely topics in the field of nanotechnology by making them available immediately, freely, and permanently available to all. All articles published in OJ-NANO 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](#).

OJNANO, VOLUME 4



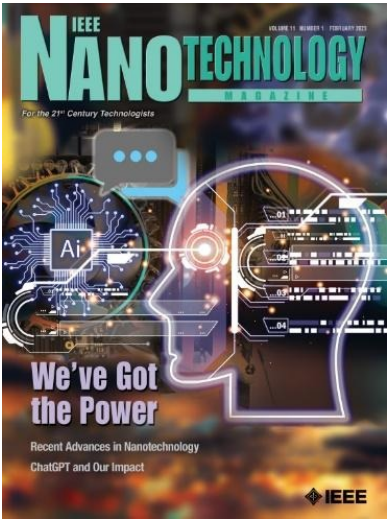
IEEE Nanotechnology Magazine

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INM, Volume 16, Number 6



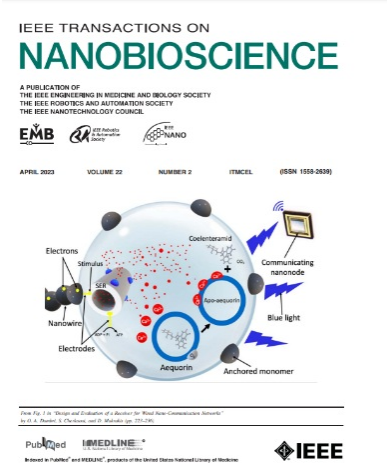
IEEE Transactions on NanoBioscience

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For additional information, visit the [IEEE Xplore website](#).

To find how to submit to T-NB, [click here](#).

T-NB, Volume 22, Number 2



LIST OF NANOTECHNOLOGY COUNCIL OFFICERS (2023)

Position	Name	Position	Name

President	 Fabrizio Lombardi	Past-President	 James Morris
President-Elect	 Jin-Woo Kim	Vice President for Conferences	 Kremena Makasheva
Vice President for Educational Activities	 Lixin Dong	Vice President-Elect for Educational Activities	 Luca Pierantoni
Vice President for Finances	 Malgorzata Chrzanowska-Jeske	Vice President for Publications	 Supriyo Bandyopadhyay
Vice President-Elect for Publications	 Georgios Sirakoulis	Vice President for Technical Activities	 Xiaoning Jiang
Vice President-Elect for Technical Activities	 Weiqiang Liu	Secretary	 Edward G. Perkins

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