MINUTES OF THE 2026 IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY (NPSS) NUCLEAR MEDICAL AND IMAGING SCIENCES COUNCIL (NMISC) MID-YEAR TELE-CONFERENCE

DATE: THURSDAY, JUNE 25TH, 2026, 6AM – 8AM (AEST, GMT + 10)

LOCATION: ONLINE ZOOM MEETING

Zoom: https://weillcornell.zoom.us/j/94657506183
Meeting ID: 946 5750 6183
Passcode: NMISC2026

Voting Members (A = attending):

Officers

Mitra Safavi-Naeini (NMISC Chair, A)
Nikolas Karakatsanis (NMISC Vice Chair, A)
Youngho Seo (NMISC Past Chair, NMISC Awards-Fellows Sub-Committee Chair, A)

Suleman Surti (AdCom representative)
Jae Sung Lee (AdCom representative, A)

NMISC Term ending 2026:

Gerard Ariño Estrada (A)
Christoph Lerche (A)
Greta S. P. Mok
Magdalena Rafecas
Kuangyu Shi

NMISC Term ending 2027:

Junwei Du (A)
Antonio J. Gonzalez
Andrea González-Montoro
Akram Hamato (A)
(Nicolas A. Karakatsanis)

NMISC Term ending 2028:

Javier Caravaca (A)
Min Sun Lee
Giancarlo Sportelli (A)
Charalampos (Harry)
Tsoumpas (A)
Elena M. Zannoni (A)

Non-Voting Members:

Esther Ciarrocchi (NMISC Secretary, A)
Sara Pozzi (NPSS President)
Steve Meikle (JOS Chair, A)
Dimitra Darambara (NMISC JOS Representative, A)
Dimitris Visvikis (NMISC JOS Representative and 2027 GC)
Lorenzo Fabris & Merry Keyser (Valentin T. Jordanov and Trainee Award Committee co-Chairs)
Jinyi Qi & Kris Thielemans (AdCom Representative to TMI Journal)
Christer Fröjdh (RISC Chair, A)
Hiroyuki Takahashi (2025 GC)
Taiga Yamaya (2025 MIC Chair, A)
Stefan Ritt (2026 GC)
Vesna Sossi (2026 MIC Chair and TRPMS Senior Editor)
Roger Fulton (2026 MIC Co-chair, A)
Joyita Dutta (2027 MIC Chair, A)
Cinzia DaVià (2028 GC)

1. **Introduction - M. Safavi-Naeini**
   - Welcome all in-person and remote participants
   - Round of introductions and
   - Presentation of the meeting's agenda.

2. **NMISC Chair's report - M. Safavi-Naeini**
   - Approval of the agenda of the 2026 mid-year TCon
   - Review of the structure of NMISC and Related Committees within IEEE NPSS: RISC, NMISC, JES, JOS, other subcommittees (SC)
   - Brief mention of the roster of NMISC and conference plan for the next few years (2026-2030)
   - **Conference Statistics:** Ralph provided the current statistics dashboard and generated additional packs on request. The dashboard contains aggregate conference-level data including total registration and submission trends. The 2025 conference shows a strong recovery in submissions and registrations compared to the post-pandemic period. Regarding additional demographic and career-stage data: some fields are not collected, and others are difficult to define consistently. Adding new fields or standalone data collection would create practical and cost issues. The conclusion is to use the existing dashboard; any request for extra statistics should be accompanied by an explanation of how the data will be used and reported. The dashboard covers three areas: (1) overall submission and registration trends; (2) registration interest across NSS, MIC, RTSD and combinations, and IEEE membership participation over time; (3) registered title distribution (to be treated as self-selected, not validated demographic data) and continent-of-registration breakdown. Geographic location

of the conference strongly affects participation levels, which has implications for future site selection, travel barriers, and access. For NMISC, the dashboard should be used to ask practical questions: whether the MIC community is being adequately supported, whether students and early-career researchers are being engaged, whether joint and cross-disciplinary sessions are reflected in the programme, and whether there are outreach opportunities to pursue. Registered gender chart and continent registration chart were also produced upon request.

- **NPSS Projects:** They are replacing Initiatives and are intended as strategic, three-year activities providing clear benefit to NPSS members, the technical community, IEEE, or the public. The 2026 timeline is: draft proposals due September, final proposals due October, discussion at FinCom in November. If approved, projects start January 1st and funds must be spent before October 31st.
- Budget thresholds to consider: notable levels at $5,000, $25,000, and $100,000 USD. Support above $5,000 requires IEEE CWE involvement and may require IEEE institutional contracts — the timeline for larger amounts should not be underestimated. Any NMISC proposals must be reviewed quickly, scoped properly, and converted to the current project format before the September deadline.
- **Balanced Representation SC**
    - Announcement of N Karakatsanis as the new chair.
    - Call for participation to the SC.
    - Initiative submitted by previous chair to support travel of under-represented countries
- **IEEE NPSS School on Advanced Topics in Medical Imaging**
  The 2026 school is planned for Manila, Philippines, December 8–13. This is considered valuable for the NMISC education pipeline and for building the next generation of contributors to MIC and medical imaging.

2. Secretary's Report — E. Ciarrocchi

- **Non-Routine Motions Since the 2025 Annual Meeting**
    - *2028 Conference length reduction:* Motion to remove Saturday from the 2028 conference approved on February 17th. The structure and length of the remaining programme will be subject to further discussion.
    - *Amendment of Article 9 of the Bylaws:* Following ADCOM feedback that one article was not compliant with the IEEE TAB Operational Manual, Article 9 (removal of an officer) was amended and approved in May. The current version of the Constitution and Bylaws is available on the NMISC website.
- **Nominations for 2027–2029 NMISC Members**: 10 confirmed candidates submitted. Geographic breakdown: 4 North America, 3 Europe, 3 Asia. Gender: 3 female, 7 male. Career stage: 4 early-career, 4 mid-career, 1 full professor, 1 senior industry. Research environment: 8 academia, 2 industry. Members will receive an IEEE election email in August–September and are encouraged to ask NPSS peers to vote, as these are society-level elections open to all NPSS members with an interest in NMISC activities.
- **Terms Ending December 2026**
    - E. Ciarrocchi — Secretary (first term, renewable)
    - J.S. Lee — ADCOM Representative (two candidates submitted by M. Safavi-Naeini; election to follow)

- D. Visvikis — NMISC JOS Representative
- All three positions are appointed by the NMISC Chair.

- **Approval of 2025 AGM Minutes**: Motion to approve moved by Y. Seo, seconded by M. Safavi-Naeini. Minutes approved.

3. Balanced Representation (BR) Sub-Committee — N. Karakatsanis

- N. Karakatsanis was confirmed as the new Sub-Committee Chair, appointed by M. Safavi-Naeini. An open call for Sub-Committee volunteers was announced.
- **Vision**: Not simply monitoring but also decision-making to ensure BR in the conference. The Sub-Committee's mission is to foster equity, diversity, and inclusion within the NMISC community by ensuring BT across five domains: age, gender, career stage, geography, and institutional background.
- **Key Statistics from Previous Reports**: Registration spikes historically occur when the conference is held in Europe, but this pattern was not seen in 2026 despite the Granada location, due to a significant decline in North American participation, likely related to the current US funding environment. Gender distribution remains male-dominated. Younger investigators are well represented at entry level. A significant proportion of conference attendees are not IEEE members and do not perceive membership as career-relevant, a core issue to address, hopefully the intern project will help. Geographic representation is strongly skewed toward the United States, also when normalized by population by country. Factors most valued by members for continued attendance: site accessibility, registration fee waivers, travel support, tourism opportunities, and childcare (5%).
- **Proposed Approach**: Data-to-Action Flywheel, a repeating cycle of: measure → monitor → diagnose → mobilize resources → repeat. Key data sources: conference attendance, submissions, membership data, accessibility surveys, and leadership pipeline tracking.
- **2026 Short term goals:** reconstitute the SC, define the minimum metrics set, create a first annual report template, inventory active initiatives, recommend quick wins for the conference. Actions need to be coordinate with committees (NMISC, RISC, WIE, …)
- **Projects in Support of These Goals**
  1. *NPSS Internship Project (led by N. Karakatsanis):* Open call for applications issued, deadline July 20. Interns will be selected by August 15, with the programme starting on August 20. Interns receive $2,000/year travel reimbursement for two years to attend IEEE NSS/MIC.
  2. *Access Grants for Underrepresented Countries (initiated by G. Constantinou):* A draft of pilot project (not approved yet) proposing grants for researchers from historically underrepresented countries, with travel and registration support, direct payment options to reduce prepayment barriers, and outcome tracking. NK will see if this project can be submitted to NPSS by September.

4. NMISC/RISC Joint Oversight Sub-Committee (JOS) — S. Meikle

Current Conference Pipeline

- 2028, confirmed in Athens with C. DaVià as GC; organization underway.
- 2029
    - Five sites initially shortlisted; now reduced to two cities and three venues, all in North America. Site visits are being organized and expected to be completed within the next month. A ranked recommendation will be submitted to JES.
    - Nominations for the 2029 General Chair are open, NMISC is the lead organizer, and a recommendation is expected within the next couple of months.
    - Discussion highlighted the importance of appointing the General Chair early so that the Chair has ownership of the conference from the outset, including input into site selection. It was noted that the same individuals should not be appointed repeatedly, and that senior experience should be balanced with opportunities for younger members to grow into leadership roles.
    - *Action:* M. Safavi-Naeini and Y. Seo to convene a meeting of NMISC leadership to discuss General Chair candidates for 2029.
- 2030: JES input is being sought on geographic location. Normal rotation would indicate a return to the Southern Hemisphere or the Rest of the world. Strong interest has been expressed from two locations. It was noted that the 2030 location should not be geographically close to the 2029 location. One interested party has requested a presentation slot at the November 2026 conference.
- **Miscellaneous**
    - JOS Terms of Reference are under revision to reflect process changes since 2022.
    - JOS Vice Chair position is under election (RISC side); C. Fröjdh confirmed a good candidate is in place and the process is moving quickly.
    - Terms of P. Sellin (RISC) and D. Darambara (NMISC) extended by two years.
    - IEEE CEE is reviewing the JOS Request for Proposal document.

5. NMISC Awards and Fellows Sub-Committee — Y. Seo

- NMISC manages three NMISC-level awards. The past Chair serves automatically as Sub-Committee Chair. Award announcements for NMISC and RISC were sent in May; nominations close July 15th. A good pool of candidates already exists following a rule change allowing nominations to carry forward for three years.

6. NSS/MIC/RTSD Conference Structure Sub-Committee — C. Fröjdh

- The Sub-Committee has focused primarily on the 2028 conference, which will trial the five-day format. Key features being developed: close collaboration between programme chairs to reduce duplication and overlap; an extended social and networking programme.
- A formal document is being prepared to govern a three-year test period of the five-day concept, for approval by both RISC and NMISC. The outcomes will be discussed in RISC and NMISC every year. If after three years the format is not working, a return to the previous format will be implemented as soon as contracts allow.

- The Sub-Committee will meet every year and work to establish a mechanism for systematic knowledge handover from year to year, involving General Chairs and Treasurers.

7. NPSS AdCom Activities — J.S. Lee

- NPSS AdCom meeting held March 7th in Santa Fe.
- Treasurer's report: All conference treasurers must use the NPSS budget tool, all pass-through funds requested from NPSSS should be invoiced by the conference, conference accounts should be setup 3 years in advance
- Conference Technical Chairs were reminded to ensure their conference information is up to date in the shared Google Doc.
- Early-career grant fund for 2026 NPSS-sponsored and co-sponsored conferences ($200K).
- Translational Committee: a collaborative meeting was held at National Cheng Kung University, Taiwan in 2025.
- Young Professionals: new committee Chair is A. Gonzalez-Montoro (MIC community). Target membership of 6–7, currently 5
- Distinguished Lecturers committee: over 60 in 2025, 17 planned/given in 2026
- Nomination Committee: Chair is V. Sossi and eight TC chairs as members
- 13 Fellows nominations submitted for the class of 2026; 4 elected. Fellow Search committee exists since 2023, TC chairs should support finding candidates
- Education committee: seven school proposals for 2026

8. 2025 NSS/MIC/RTSD – Yokohama, Japan — T. Yamaya (on behalf of H. Takahashi)

- The conference was held in Yokohama. T. Yamaya and J.S. Lee served as MIC Co-Chairs; A. Hamato as Workshop Chair.
- Submissions: MIC ~700 abstracts, NSS ~600, RTSD ~120. Total registrations: ~1800. Main countries represented: Japan, USA, China, Korea, Italy, Germany, France. Gender balance remains an area requiring improvement.
- A key change was the reduction of oral presentation time from 18 to 15 minutes, introduced to accommodate the high volume of quality submissions within the available sessions. This was considered successful and has been retained for subsequent conferences.
- Social programme included a conference reception, the NSS dinner at a local temple, the RTSD lunch on a cruise boat, and MIC dinner in the hotel ballroom. Technical tours were organized the following week to KEK, the Fukushima Nuclear Power Plant, QST, and Hamamatsu Photonics.
- 61 exhibitors participated. Graduate students from the University of Tokyo contributed significantly to the organization.
- The team expressed interest in hosting a future NSS/MIC conference in Japan again.

9. 2026 NSS/MIC/RTSD – Granada, Spain — R. Fulton

- Conference dates: November 7–14, 2026.
- **MIC Programme:** 623 abstracts received (slightly down from Yokohama's ~700). Selected: 112 oral presentations and 60 mini-orals across 13 topics. Oral presentations allocated proportionally to submission volume per topic.
- Mini-orals (also called lightning talks) are a new format: high-scoring poster presenters are given 2 minutes to summarize their work in a dedicated session immediately before their poster session, helping attendees identify posters of interest. 20 mini-orals per day across two parallel sessions, totaling 60 over three days.
- **Daily Schedule**: Sessions run 9:00–19:00 in deference to Spanish customs. Structure: oral sessions 09:00–11:00 and 11:30–12:45; mini-oral sessions before lunch; oral and poster sessions in the afternoon. Two plenary sessions (Wednesday and Thursday mornings): Irene Buvat on multiscale imaging of cancer, and Axel Winter on nuclear fusion and AI. Two joint sessions (Tuesday and Thursday), with 2 and 4 MIC papers, respectively. 19 oral sessions in total, including a best student paper session and a closing session. Oral presentation duration retained at 15 minutes.
- **Student Awards**
  Chris Thompson Student Paper Awards: 8 candidates selected from both oral and poster categories. Chair: E. Roncalli. Winners will be announced in the Saturday closing session and will present a single slide. a change from the previous practice of name-only announcement.
- **Short Courses and Workshops**
  4 short courses and 2 workshops.
- **Conference Dinner**
  Friday evening at Carmen de los Chapiteles, Granada, near the Alhambra. Capacity: 250. Buffet dinner with dancing. Seating by raffle to encourage cross-community interaction. Shuttle buses available at extra cost. Early booking strongly advised given the capacity limit.

10. 2027 NSS/MIC/RTSD – Pasadena, CA, USA — J. Dutta

- Conference location: Pasadena Convention Center, Southern California. Approximately 40 minutes by car from LAX. The area is walkable with hotels (Hyatt, Hilton, AC Hotel) within walking distance of the venue.
- The Convention Center comprises three connected buildings: the main hall (primarily MIC and RTSD oral sessions), a central auditorium (not booked), and a third building with smaller rooms (planned for NSS parallel sessions). Exhibit space is adequate. A large hall is being considered for the reception.
- External venues visited for social events include City Hall, Castle Green (a semi-residential historic building), and the Caltech Athenaeum. Allocation of events to venues is still being decided.
- General Chair: D. Visvikis. Conference Coordinator: S. Surti. Treasurer: R. Miyoka. MIC Chair: J. Dutta. MIC Deputy Chair: K. Gong. Short Course Chair: N. Karakatsanis.
- Contracts signed with conference center and hotels. Hybrid mode confirmed. Workshops and short courses planning underway. Programme details and some contracts still being finalized.

11. 2028 NSS/MIC/RTSD – Athens, Greece — C. Fröjdh (on behalf of C. DaVià)

- Site visit conducted in January by C. Fröjdh, C. Cinzia, and D. Visvikis. The conference center is centrally located with good hotel and restaurant availability.The conference committee is being formed; names not yet disclosed publicly. Negotiations are ongoing to reduce costs by eliminating unused areas. Budget is expected to be reasonable, still under negotiation. Typical temperature in early November is ~20°C.
- Proposed programme structure: NSS Monday–Friday, MIC Tuesday–Friday, RTSD Monday–Thursday. Plenary and joint sessions will have no parallel programming. Oral paper selection will be more stringent. Mini-orals will be retained. Poster sessions will be promoted for works that are better presented as posters. Social and networking activities are being prepared.

12. NMISC Standardisation Activities — N. Karakatsanis

- N. Karakatsanis serves as IEEE Standards Association Liaison within the NPSS AdCom structure.
- **IEEE SA Process** Six stages for standard development: (1) project initiation, (2) working group mobilization, (3) drafting, (4) balloting, (5) final IEEE SA approval, (6) maintenance. Members interested in developing standards should contact N. Karakatsanis, who will connect them with IEEE SA representatives.
- The project starts with an idea, a gap to fill. Submission of a report follows
- PETSIRD and Lu177-PSMA Data Model are examples of IEEE standards. The fourth ETSI hackathon was in Chiba, Japan (hybrid), the 5th hackathon will be in Granada right after the conference, interested NMISC members can register to attend.
- C. Fröjdh noted significant common interest between RISC and NMISC in detector science standardisation. N. Karakatsanis and C. Fröjdh agreed to follow up and explore the possibility of establishing a joint standards committee.

13. Close

- No further business. Next meeting: November 2026, Granada, Spain.