

#### FLEET News: February 2023

It's been a busy February, with large FLEET representation at the AMN10 conference in Rotorua, NZ, and at Quantum Australia in Sydney. Congratulations to Patjaree for Best Student Talk at AMN10, and kudos to the FLEET outreach team for their monster effort visiting seven schools around Rotorua in four days!Read on for more about these events, with other news from around the Centre.



**Michael Fuhrer** Director, FLEET

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#### Patjaree best presentation

Congratulations to FLEET's Patjaree Aukarasereenont (RMIT), receiving best presentation award at the International Conference on Advanced Materials and Nanotechnology AMN10 in New Zealand for her talk on tellurium oxide printing from liquid metal.



#### Collaborative schools outreach in NZ

FLEET and MacDiarmid members teamed up at the recent AMN10 conference in Rotorua NZ to conduct science outreach workshops for 320 local school students. Over four days, 25 volunteers from FLEET and partner organisation the MacDiarmid Institute visited seven schools and presented a variety of hands-on science workshops to students ranging from year 4 to 9, in a program coordinated with Tūhura Otago Museum. Read more online.



## Ali Zavabeti nanoscience superstar

Congratulations to FLEET alumni Ali Zavabeti (ex RMIT, now at the University of Melbourne), named a 2023 "Rising Star of Nanoscience and Nanotechnology Research" by the journal Nanoscale. The journal collection gathers the best from researchers in the early stages of their independent career, and shines a spotlight on Ali (with student Xiangyang Guo) work on gas sensors based on liquid indium skin. **See the collection online**.

# Strong FLEET representation at Quantum Australia

A 14-strong FLEET crew (including two alums) at Quantum Australia last week, with representatives from the FLEET Ops Team, Swinburne, UNSW, Monash, RMIT and NTU. **Read FLEET PhD candidate Matt Gebert's report from the conference**.



# Famelab science-communication opportunity

Learn to tell the story of your research quickly and effectively with Famelab applicants eligible for free training to prepare a short pitch video, plus the chance to win further Masterclass comms training, and international fame and glory on stage. Famelab 2023 is open for nominations from PhD/HDR students until 31 March. **See details and application form online**.

And for inspiration, **see the FLEET blog archive** for past Famelab videos from FLEET alums Samuel Bladwell (finalist), Semonti Bhattacharyya and Antonija Grubišić-Čabo.



## **Australian Academy of Science awards**

Nominations are open for two awards aimed at Australian women: **Ruby Payne-Scott Medal and Lecture** (career medal) and **Nancy Millis Medal** (MCRs). See the nomination and eligibility guidelines at the AAS, and consider who you could nominate, and/or encourage to be nominated.



## Have an input into Australia's science priorities

Help refresh Australia's science priorities and National Science Statement. What challenges should the country address through science. What are Australia's future scientific opportunities. What strengths should we maintain and build upon. **Read the conversation starter and share with colleagues**. You can have your say until 31 March.

# **FLEET ECRs publishing in February**

Congratulations to our early-career researchers who were first, second or third authors on papers published this month: Daniel Sando, Cheng Tan, Grace Causer, Harley Scammell, Jinling Zhou, Lawrence Farrar, Meri Algarni, Oliver Paull, Sina Gholizadeh, Sultan Albarakati and Vivasha Govinden. See more in **FLEET publications**.



### Magnetics conference organisation opportunity

#### The IEEE Around-the-Clock Around-the-Globe Magnetics Conference (AtC-AtG) in

September 2023 will comprise invited talks from prestigious experts and contributed talks by postdocs and students across all fields of magnetism. ECRs interested in getting conference organisational experience, plus networking with other magnetism experts across the globe, should submit a short application by **3 March**.

#### Catch up on past talks

FLEET seminars and talks are available to catch up on YouTube:

- Peggy Zhang (UNSW) Stability of ferroelectric bubble domains
- Jennifer Cano (Stony Brook) Engineering topological phases with a superlattice potential
- Semonti Bhattacharyya (Leiden) Dirac fermions at interfaces

#### Grants and opportunities

**The US Army xTech International Competition in Advanced Manufacturing and Materials** invites concept white papers from eligible small-to-medium enterprises and international academic institutions, with winners receiving up to US\$150,000. White Papers are due **2 March**.

**Australian Science Policy Fellowship Program** provides a pathway for early-to-mid career scientists to become skilled policy practitioners, employing Fellows in Australian Government host departments for up to 12 months, including on-the-job training. Deadline **7 March**. **Apply online**.

**Australia's Economic Accelerator (AEA) Seed Grants** provide minimum \$50,000 per project, with the current round including priority for projects addressing renewables and low-emissions technologies. Applications for current round close **17 March**.

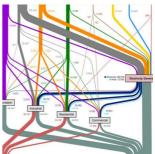
Main Sequence Ventures (CSIRO's investment arm) deep-tech newsletter features over 40 companies with 300+ jobs on offer. **Sign up for the newsletter** to stay informed.

**Nano Letters and ACS's new Seed Grants competition** will provide US\$2500 for high-risk, high-reward nano' research proposal ideas from later-stage graduate students (third year+).

For ongoing outreach/development opportunities see **In2science** mentoring, and **CSIRO STEM Professionals in Schools**.

# **Previous news**

Turning up the heat on thermoelectrics: FLEET translation **program** FLEET funding is supporting the next step in possible translation of thermoelectrics research towards commercialisation in future generators, electronics, vehicles, human-wearable and environmental sensors, and smart electronics, in a project led by David Cortie (ANSTO), Julie Karel (Monash) and Xiaolin Wang (UOW). Read more online.





Congratulations Oliver Paull FLEET / UNSW PhD graduate Oliver Paull (from Nagy's group) has been awarded a UNSW Dean's Award for Outstanding PhD Theses in recognition of his thesis *Physical* properties of epitaxial BFO thin film heterostructures on high-index oxide substrates. Congratulations Oliver!

FLEET alum Sam Bladwell, science editor From theoretical physicist at FLEET/UNSW, to science editor at Nature ... read Sam Bladwell's recounting of the novel experience of launching a new career in the midst of covid, and what it's like to edit scientific papers at Nature Communications. Story on FLEET.





Rethinking Australia's silicon future Australian Chief Scientist Cathy Foley shares her thoughts on a national semiconductor plan, and the nation's existing strengths in semiconductors and photonics. Read the article online

Or if you'd rather listen than read, check out this AU Manufacturing interview with Steve Duvall (ex Silanna).

# Participating organisations

FLEET is The Australian Research Council Centre of Excellence in Future Low-Energy Electronics Technologies. Read more about our participating nodes and partners online.













