

Shaun McAnally

Curriculum Vitae

2018 – 2022, **Bachelor of Advanced Science (Physics, Honours First Class),
The University of Queensland**

2018 – 2022, **UQ Excellence Scholar** – Awarded by the Deputy Vice Chancellor (Academic) to new undergraduate students for academic excellence and community leadership throughout secondary school.

Extracurricular Experience & Awards

2016, **Minister for Community & Social Services**

Recipient of the Best Youth Parliamentarian Award

Queensland Youth Parliament

2017, **Create Change Achievement Award**

The University of Queensland

2017, **T.J. Ryan Award & Bursary and the Certificate of Academic Commendation**

Queensland Certificate of Education Achievement Awards

2017 – Current, **National Evaluator, Global Issues Problem Solving & Future Scenario Writing**

Recipient of the the E. Paul Torrance Award (2017) for outstanding contributions to the development of Future Problem Solving program within Australia

Future Problem Solving Program Australia Inc.

2018, **Student Representative, Teaching and Learning Committee**

Undergraduate Student Representative, Faculty of Science, The University of Queensland

2018 – 2019, **Volunteer Presenter, UQ Science Demo Troupe**

2019, **Volunteer Newsreader, Queensland Radio for the Print Handicapped**

2019, **President, UQ Physics Club**

2019, **Treasurer, UQ Refugee Tutoring Club**

2019, **Team Member for Team Australia, International Physicists' Tournament**

EPFL, Lausanne, Switzerland

2019 – 2020, **Student Mentor, UQ Science Mentor Program**

2019 – 2022, **Program Leader, Student Led Observations for Course Improvement (SLOCI)**

Faculty of Science, The University of Queensland

SLOCI is a student-run research unit in the Faculty of Science that partners with course coordinators to provide them with insights on the experience of students in their course to further the development of STEM learning design. As Program Leader, I coordinated the partnerships with course coordinators (~12 per semester), selected student team members and provided the team with training and ongoing support, developed the resources for our course partnership methodology and reviewed all reporting work before being shared with course coordinators.

2020 – 2022, **Student Representative, Board of Studies**

Undergraduate Student Representative, Faculty of Science, The University of Queensland

2022 – 2024, **Academic Advisor, International Baccalaureate Extended Essay in Chemistry**
Queensland Academy for Science, Mathematics and Technology & The University of Queensland

2023, **Lead Curator, TEDxUQ**

As Lead Curator, I led a team of five fellow curators to interview, select and mentor the speakers for TEDxUQ 2023. The Curatorial team was responsible for supporting our speakers in planning, rehearsing and delivering their talks to an audience of 600 guests. TEDxUQ 2023 had the highest attendance of the ten TEDx events held thus far at UQ.

2023 – *Current*, **Deputy Theme Leader, Nanotechnology & Materials Chemistry Theme**
School of Chemistry and Molecular Biosciences, The University of Queensland

2023, **Committee Member & MC, 19th Research Student Symposium Organising Committee**
School of Chemistry and Molecular Biosciences, The University of Queensland

Research Experience

PhD – *More from Less*: Enhancing the efficiency of organic solar cells with simple active layers
April 2022 – Current, Centre for Organic Photonics & Electronics, The University of Queensland
Supervisors: Prof. Paul Burn & Dr Paul Shaw

Research Assistant (Staff Role)

January 2022 – March 2022, Centre for Organic Photonics & Electronics,
The University of Queensland
Supervisors: Prof. Paul Burn & Dr Paul Shaw

Honours – *More from Less*: High performance low donor content organic photovoltaic devices
2021, Centre for Organic Photonics & Electronics, The University of Queensland
Supervisors: Prof. Paul Burn & Dr Paul Shaw

Advanced Physics Research Project – Extending the light harvesting of organic solar cells towards the infrared with a non-fullerene acceptor
2020, Centre for Organic Photonics & Electronics, The University of Queensland
Supervisors: Prof. Paul Burn & Dr Paul Shaw

Perspectives in Science Research Project – Redshift effects in entangled quantum particles
2019, School of Mathematics and Physics, The University of Queensland
Supervisor: Dr Magdalena Zych

UQ Summer Research Program (w. Scholarship) – Magic wavelength Faraday imaging
November 2018 – February 2019, School of Mathematics and Physics, The University of Queensland
Supervisor: Dr Mark Baker

Awards & Research Grants

Partnership & Collaboration Award

2021, Faculty of Science, The University of Queensland
Awarded for leading the Student Led Observations for Course Improvement (SLOCI) Team in over sixty partnerships with Faculty of Science academics.

ANFF-Q Student Award – \$1000 funding

2020, Awarded by the Queensland branch of the Australian National Fabrication Facility to Honours and PhD students who demonstrate academic excellence to cover the costs of equipment training and usage.

UQ Student-Staff Partnership Grant – \$3000 funding

Semester 2, 2018, Development of a resource suite for student members of academic committees

UQ Student-Staff Partnership Grant – \$3000 funding

Semester 1, 2019, Development of a recruitment framework for student members of academic committees

UQ Student-Staff Partnership Grant – \$3000 funding

Semester 2, 2019, Development of a guide for chairpeople for the inclusion of student committee members

Publications

The Carbon Almanac, Penguin Random House, **2022**, Developmental & Copy Editor

Mallo, N.; **McAnally, S.**; Chu, R.; Babazadeh, M.; Jin, H.; Burn, P. L.; Gentle, I. R.; Shaw, P. E. The Effect of Fluorination on the Low and High Frequency Dielectric Constants of Non-Polymeric Organic Semiconductors – towards Homojunction Solar Cells. *J. Mater. Chem. C* **2023**, *11*, 14382-14394.

Mallo, N.; **McAnally, S.**; Jin, H.; Babazadeh, M.; Packman, L.; Chu, R.; Burn, P. L.; Gentle, I. R.; Shaw, P. E. The Effect of Fluorinated Benzothiadiazole-dicyanovinyl Acceptors on the Dielectric Constants of Organic Photovoltaic Materials. *ACS Appl. Energy Mater.* **2024**, *7* (8), 3393–3405.

McAnally, S.; Jin, H.; Chu, R.; Mallo, N.; Wang, X.; Burn, P. L.; Gentle, I. R.; Shaw, P. E. Dilute donor organic solar cells based on non-fullerene acceptors. *ACS Appl. Mater. Interfaces.* **2024**, *16* (22), 28958–28968.

McAnally, S.; Buczynski, J.; Kavanagh, L. Student Led Observations for Course Improvement (SLOCI): closing the loop in course enhancement. *International Journal for Students as Partners* **2024**, *8* (2), 95–106.

Gao, M.; **McAnally, S.**; Jin, H.; Burn, P. L.; Pivrikas, A.; Shaw, P. E. Free Carrier Generation Efficiency in Organic Photovoltaic Films Determined Using Photo-MIS-CELIV. *Organic Electronics* **2024**, *135*, 107137

Mallo, N.; **McAnally, S.**; Jin, H.; Brooks, E.; Chu, R.; Babazadeh, M.; Smyth, J.; Huang, D. M.; Hight-Huf, N.; Reid, O. G.; Rumbles, G.; Burn, P. L.; Gentle, I. R.; Shaw, P. E. Free-charge carrier generation in homojunction non-polymeric organic semiconductor films – the role of the optical frequency dielectric constant. *Advanced Optical Materials* **2024**, *12* (36), 2401825.

Jin, H.; Mallo, N.; Zhang, G.; Lindsay, O.; Gao, M.; **McAnally, S.**; Etchells, I.; Burn, P. L.; Gentle, I. R.; Shaw, P. E. Switching from acceptor to FRET donor: How the organic solar cell architecture can change the role of a chromophore. *Advanced Functional Materials* **2025** In Press

Conferences & Seminars

12th Oct., 2019, Poster, Redshift effects in entangled quantum particles

Awarded Best Poster, Science Student Research Conference, The University of Queensland, Aus.

19th Nov., 2021, Seminar, More from less: High efficiency low donor content solar cells

Awarded Best Presenter, Chemistry Research Student Symposium, The University of Queensland, Aus.

30th Nov. – 2nd Dec., 2022, Poster, More from Less: High efficiency organic solar cells with simple active layers, Asia-Pacific Solar Research Conference (APSRC), Newcastle, Aus.

7th – 9th Dec., 2022, Poster, More from Less: High efficiency organic solar cells with simple active layers Australasian Community for Advanced Organic Semiconductors Symposium, Tweed Heads, Aus.

20th Oct., 2023, Seminar, Fostering effective student-led partnerships

Students as Partners Roundtable, Online, hosted by The University of Melbourne, Aus.

29th Nov. - 1st Dec., 2023, Seminar, Dilute donor organic solar cells based on non-fullerene acceptors Australasian Community for Advanced Organic Semiconductors Symposium, Tweed Heads, Aus.

20th Nov., 2024, Seminar, High-performance Y6 homojunction organic solar cells

Awarded Best Presenter, Chemistry Research Student Symposium, The University of Queensland, Aus.

27th – 29th Nov., 2024, Seminar, High-performance Y6 homojunction organic solar cells

Australasian Community for Advanced Organic Semiconductors Symposium, Tweed Heads, Aus.