

**July-September 2024**



**MACQUARIE**  
University  
SYDNEY · AUSTRALIA

**SMART GREEN CITIES  
RESEARCH CENTRE**



## **NEWSLETTER**

### **Executive Update**

The past few months have been busy as we have continued to work on the Centre's strategic priorities of *developing and deepening strong industry and research partnerships, building diverse funding streams to enable our impact, and growing a sense of belonging and cohesion across our membership*. We have had several successful events, with more planned! Most recently we held a very popular industry event on 'Building Big Better' (see details below) and have plans for the next industry event for Healthy & Inclusive Cities to be held in October. See diary dates below.

Centre members have also had quite a lot of media attention over the last few months. You may also have seen the Centre featured on the banners along Wally's Walk and in cinemas and on buses and shelters as part of MQ's marketing campaign. The theme is 'You could design a greener future with us'. Keep an eye out for them!

### **Diary Dates – Upcoming SGC activities**

**3 October 2024, 12-1pm 25 WW 1.21 Healthy & Inclusive Cities – Placemaking – Professor Donna Houston**, Chair of Geography & Planning, Macquarie University. At our September Lunchtime Thought Leadership Event we are delighted to have the opportunity to hear more about Donna's research which focuses on environmentally and socially just cities and regions in a time of environmental change. BYO lunch, we will supply some treats with tea & coffee. Register: [here](#)

**31 October 2024, 9.30am -12.30pm, City Campus, Level 24, 123 Pitt Street Sydney**  
**Healthy & Inclusive Cities – mental health and wellbeing from nature connection in cities**  
**An Industry Workshop – Professor Maria Kangas & A/Prof. Peter Davies**. Register: [here](#)

**9-13 December 2024 Ecological Society of Australia Annual conference.**

Smart Green Cities will host two symposia: 'Bringing nature back into our cities' and 'Artificial habitat for recovery, restoration and rewilding.' Details: [here](#)

**17 December 2024, 3-5pm, UBar. Smart Green Cities End of Year Members' Pizza Party.**  
Join us on the UBar verandah to celebrate our 2024 achievements! Register for catering: [here](#)

# Centre News

## MQRC Mid-Career Researcher Summit

The DVCR's 22 October Summit aims to support the next generation of leaders within each of the Macquarie University research centres. Smart Green Cities was allocated 4 places and has nominated: Dr [Caragh Threlfall](#) (Nature-Rich Cities), Dr [Josephine Chau](#) (Healthy & Inclusive Cities), Dr [Adnan Mahmood](#) (Connected Cities) & Dr [Esther Erlings](#) (Sustainable Cities).

**Congratulations!** We hope that you enjoy this opportunity.



**Professor Cathy Sherry** was invited to give evidence to the NSW Parliamentary Inquiry into **Transit Orientated Development** held at Parliament House on 24 July 2024.

Cathy was also invited to give the opening address at the inaugural **2024 Strata Impact Conference** on housing affordability and functional strata title on the Gold Coast in early August. <https://www.instagram.com/p/C-HeHwkykFv/>

**Dr Caragh Threlfall** made a submission in response to the Green Building Council's draft **Nature Roadmap** which will shape future environmental management and nature regeneration in and around our buildings and communities. Due for release in early 2025, the Roadmap will set ambitious environmental benchmarks aligning with broader community conservation efforts.

**Dr Anthony Waddle** has Costa Georgiadis, **Gardening Australia** coming to film a segment on his frog saunas. Dr Harry, **Better Homes & Gardens** will be visiting in October. Bunnings will be busy with people building their own frog sauna in the suburbs!

The **Which Plant Where** project farewelled Samiya Tabassum and welcome David Coleman & Laura Fernandez to the team.

**Smart Green Cities** joined the [Australasian Green Infrastructure Network](#) which provides the following benefits

- Essential green infrastructure online library (coming 2024).
- Newsletters & Networking Opportunities
- Advocacy and collaboration.
- Member rates for workshops, events and conferences for registered employees.
- Brand association and recognition as AGIN members on the website.
- Discounted rates for additional individual registrations.
- Opportunity for registered employees to become Accredited Professionals (future initiative).



### Smart Green Cities Member Funding – Ad Hoc Request Scheme 2024

Requests for funding up to \$1500 will be considered to support research development and opportunities where the funds will have a positive impact for the centre i.e. grow profile, partners or collaborative funding opportunities, e.g. grant editorial support, co-funding visitors that can provide a talk for SGC in return. We will NOT fund publication costs, conferences attendance/travel or equipment. Email the Centre for an application form. The completed form will be considered at the next Executive meeting or out of session if the answer is required before the next meeting – a quorum of 6 votes is required. Funds must be spent by 30 November 2024.

### 24 September 11am-12pm IEEE Event on campus

Subhas Mukhopadhyay is hosting Sonali Banerjee, Indian Statistical Institute, discussing Vetiver Grass and AMF for Remediation of Chromite-Asbestos Mining Wastes. Details [here](#)

# Events

## Global Engineering Research Workshop in collaboration with Sungkyunkwan University, South Korea (SKKU)

Smart Green Cities Research Centre was invited to present when Macquarie University Engineering hosted a **Global Engineering Research Workshop** in collaboration with Sungkyunkwan University (SKKU), Korea on 12 July 2024.

This was a fantastic opportunity to share knowledge and explore future collaborative research. A day filled with insightful discussions and innovative ideas, helping to build valuable connections between the universities.



## Sustainable Cities Event: Building big better: overcoming the legal, social and economic challenges of high-density cities for strata residents

With thanks to guest presenters:

- [Philip Thalys](#), Hill Thalys Architecture & Urban Projects Pty Ltd
- [Elly Ashley](#), Holding Redlich, Property Planning & Development
- [Amanda Farmer](#), Strata Lawyer, Women in Strata
- [Shari Driver](#), CEO Owners Corporation Network (OCN)
- [John Minns](#), Strata and Property Services Commissioner at NSW Department of Customer Service

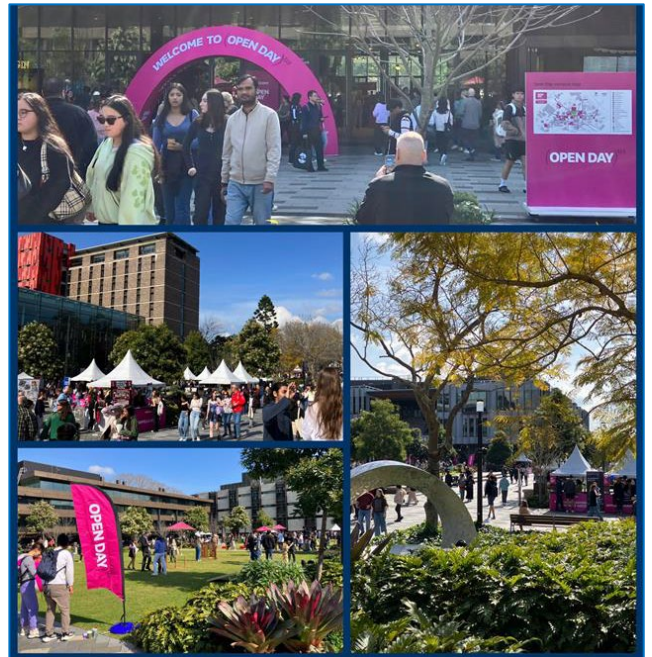
One hundred and sixteen attendees registered for the Building Big Better event on 24 July, which focused on mapping out ways we can better connect the planning of high-density housing with its long-term use.



Discussing the legal, social and financial realities of high density for strata title residents posed many challenges and left us all with plenty of food for thought.

## Open Day Sustainability Stall

Smart Green Cities was invited to exhibit at The FSE Sustainability stall at the 10 August Open Day Event. (Right)



## 2024 Engineering Showcase Event

Smart Green Cities was invited to exhibit at the Engineering Energy Expo on the 15 August, with several of our members presenting. (Below)



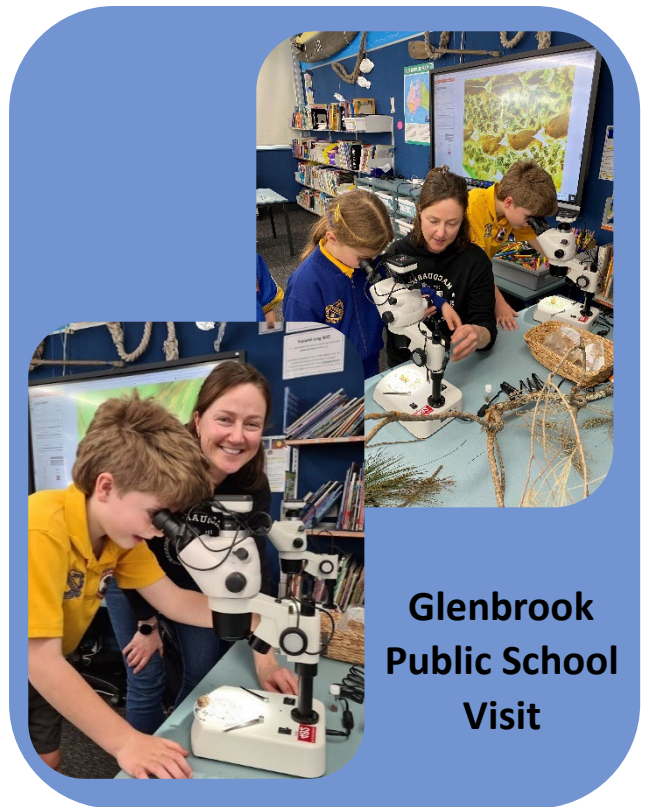
## 2024 Science Week

Dr Caragh Threlfall worked with [Glenbrook Public School](#) looking at ecology and conservation of the glossy black cockatoo, which is a threatened bird that uses the urban landscape near the school. The program was created in partnership with BirdLife Australia and the NSW Department of Climate Change, Energy, the Environment and Water.

Living Seawalls members ran Science in the Swamp at Centennial Park on 18 August.

## School of Natural Sciences Industry Event – Nature-rich cities Showcase

Dr Caragh Threlfall and Elahe Mirabi represented Smart Green Cities at the School of Natural Sciences Industry Showcase for Nature Rich Cities on 3 September. Following presentations with snapshots of some of the research being conducted guests had the opportunity to mingle with researchers and research groups.



**Glenbrook  
Public School  
Visit**



# Members in the News

Professor [Donna Houston](#), Macquarie School of Social Sciences, talks about our cultural response - how we discuss and narrate environmental challenges - in [Living in a “mass extinction”](#)

Industry Professor [Rob Stokes](#), Macquarie Law School, discussed community input in urban planning and [Why YIMBYs, NIMBYs, BIMBYs and YIGBYs all matter for democracy and our future cities](#) in Architecture & Design. Rob also contributed to discussion in [The Conversation](#) about the conversion of burial spaces into urban parkland.

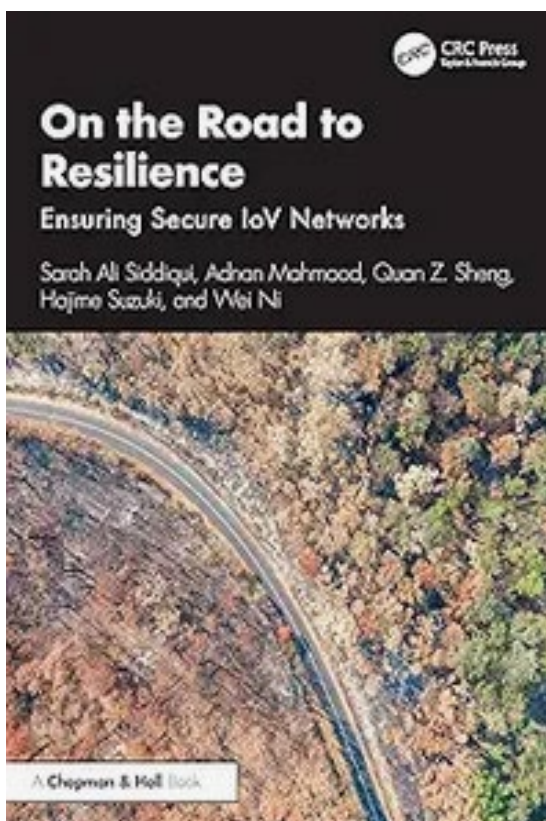
Professor [Cathy Sherry](#), Macquarie Law School, was interviewed about Government interventions to address excess vacant properties:

- ABC News: [Vacant houses test the limits of private property rights](#)
- ABC News: [Are derelict homes part of the answer to Australia's housing crisis?](#)
- ABC News–YouTube: [Why there are thousands of empty homes in Australia's prime locations?](#)
- ABC Listen: [Should owners of vacant homes pay more tax?](#)

And makes a case for the moral need for fairer distribution of housing ownership

- Sydney Morning Herald: [Remember when only men could own property? No? There's a reason for that.](#)

# Member Publications



**'On the Road to Resilience: Ensuring Secure IoV Networks' will be released on 24 September 2024.**

**Congratulations to Phd Student [Sarah Ali Siddiqui](#) (Author), [Adnan Mahmood](#) (Author), [Quan Z. \(Michael\) Sheng](#) (Author), [Hajime Suzuki](#) (Author), [Wei Ni](#) (Author)**

An essential guide for industry professionals and researchers working in the areas of automotive systems and transportation networks. Exploring the complexities arising from dynamicity and malicious actors, this book focuses primarily on modern trust management models designed to pinpoint and eradicate threats. This includes tackling the challenges regarding the quantification of trust attributes, corresponding weights of these attributes, and misbehaviour detection threshold definition within the dynamic and distributed IoV environment.

Jeff Huang, [Xiaohu Chen](#), [Shujuan Huang](#), [Noushin Nasiri](#) (2024) Vapor-Tailored Nanojunctions in Ultraporous ZnO Nanoparticle Networks for Superior UV Photodetection. **Small**. <https://doi.org/10.1002/smll.202402558>. The team were excited to be told one of their photos will be the cover when this volume goes to press. We will feature this in due course!

[Luo, L. \(Laura\)](#) & Zhang, J. (2024) A global study of climate uncertainty and Carbon Assurance. **The British Accounting Review**, 101425. <https://doi.org/10.1016/j.bar.2024.101425>

Laurence, M.H., Mertin, A.A., Scarlett, K., Pang, C., Tabassum, S., [Leishman, M.R.](#), Burgess, T.I., Guest, D.I. and Summerell, B.A., 2024. Phytophthora in urban tree planting stock: Are we managing the risk to the urban forest and natural ecosystems?. *Plant Pathology*.

Tabassum, S., [Manea, A.](#), & [Leishman, M. R.](#) (2024). Limiting the impact of insect pests on urban trees under climate change. *Urban Forestry & Urban Greening*, 94, 128246.

## Funding Success

**Korean Energy Technology Evaluation and Planning Grant:** “Development of 2kW-O<sub>2</sub> Assisted AEM Electrolyzer Systems for Economical Hydrogen Production - (Lead CI) [Jincheol Kim](#)

**Korean Ministry of Science and ICT Grant:** “Development of multi-scale artificial intelligence-based hetero multi-junction high-efficiency photovoltaic devices” (Lead CI: [Shujuan Huang](#); CIs: [Sara Deilami](#), [Jincheol Kim](#))

**NSW Environmental Trust** has funded two new installations funded two new installations and accompanying ecological assessment for the Living Seawalls Program. (Lead CI: [Melanie Bishop](#)).

[Dr Alex Carthey](#) won a **Ku-ring-gai Council Environmental Levy Grant** for her re-habitat pods trials in local bushland.

[A/Prof Peter Davies](#) has been contracted to draft a **Hornsby Shire Council Nature Positive Policy** advocating for nature outcomes across public & private land in the local government area.

## Useful Resources

Several new green infrastructure resources are now available: (1) the NSW Government Architect's publication 'Biodiversity in Place', and (2) a University of Tasmania report "[Inclusive Urban Greening](#)" that highlights how by integrating inclusive principles, cities can improve biodiversity, provide equitable green infrastructure, and enhance community well-being.

**Smart technology solutions:** Discover the NSW Government's commitment to maximising the benefits of smart places for everyone in NSW. More Information [here](#)

More good news on the environment having a positive impact on mental health.

<https://www.theguardian.com/environment/article/2024/sep/04/better-than-medication-prescribing-nature-works-project-shows>

**Upcoming training sessions for MQ researchers & research staff** on research platforms: <https://myrdc.mq.edu.au/> To enquire about workshops: [research.data.management@mq.edu.au](mailto:research.data.management@mq.edu.au)

## Other external opportunities

**23-26 Sep 2024, ONLINE 7pm-1am Sydney time, Future Green City | World Congress 2024**

The congress connects construction, greenery, infra and water. By showing different solutions and by connecting networks in these domains, we are building a city with a future together. More Information: [here](#)

**8-10 Oct 2024 – Australia will host the first Global Nature Positive Summit** at Sydney International Convention Centre. Department of Climate Change, Energy, the Environment & Water. More Information: [here](#).

**9-17 Nov 2024 My Liveable City's Academy** - a 2-day conclave 'The Slow City' & Designing Cities For All, an expert Program in collaboration with Institute of Housing & Urban Development Studies (IHS), Netherland will be held in Bengaluru, India. More information: [here](#)

**20-22 Nov 2024 – Australasian Universities Power Engineering Conference (AUPEC)**. More information: [here](#). **Smart Green Cities is proud to be a bronze sponsor for this event.**

**9-13 Dec 2024 – Ecological Society of Australia Symposia** 'Bringing nature back into our cities' and 'Artificial habitat for recovery, restoration and rewilding.' More information: [here](#)

## Graduate Students

### SGC Graduate Student Contact: Ms Elahe Mirabi

Please [email](#) Elahe **feedback** or complete our [survey](#) to **let us know** what kinds of support and activities our students would like the Centre to provide.



**Welcome** to new postgraduate students (being supervised by members): Md Harun Or Rashid (Nasiri/Leishman); Rueben Stone (Schrader/Leishman) and Jessie Lewis (Waddle).

**University of Groningen: The Netherlands Asia Pacific Student Short-Video Competition for Climate and Sustainable Development in Cities – all disciplines.**

**The Netherlands - Asia Pacific Student Short-Video Competition for Climate and Sustainable Development in Cities**

**Format:**  
Short videos of 2.0-2.5 minutes

**Prizes:**

- 1st place - 2000 euros
- 2nd place - 1000 euros
- 3 runners up - 500 euros each

**Deadline:**  
20 January 2025 including biography and short overview scientific research

Eligibility: Students from the UG and students from our partner universities across the region, including enrolled students and those up to three years following graduation. Students may also have additional persons involved as co-authors of the work.

Osaka University, Japan, University of Tokyo, Japan, Gadjah Mada University (UGM), Indonesia, NTU, Singapore, Macquarie University, Australia, Institute for Technology, Bandung (ITS), Indonesia, Thammasat University, Thailand, University of the Philippines, Diliman Campus, Philippines, University of Malaya, Malaysia, Fudan University, China, Tsinghua University, China, Seoul National University, S. Korea, Pusan National University, S. Korea

**Deadline: Upload by 20 January 2025** to the [University of Groningen competition website](#), including a 250-word student/filmmaker biography and short overview of the scientific research

**Eligibility:** Students from the University of Groningen and partner universities (e.g. MQ Uni) includes enrolled students up to 3 years post-graduation. The student short video competition encourages students to build on the research and writing they conducted for their BA, Master or PhD dissertation and consider ways to communicate their ideas to a wider public audience.

## Smart Green Cities Website & Social Media

We are refreshing/adding our local research staff and project profiles, as well as adding short stories about 'our research' on our new Instagram site:

[in](#) **Follow SGC on LinkedIn**     [Instagram](#) **Follow SGC on Instagram**

Please send updated high-resolution headshots, a descriptive paragraph of current news, photographs taken doing your research etc. through to: [smartgreencities@mq.edu.au](mailto:smartgreencities@mq.edu.au)

Note: contributors are responsible for ensuring the appropriate approval to use images/stories.