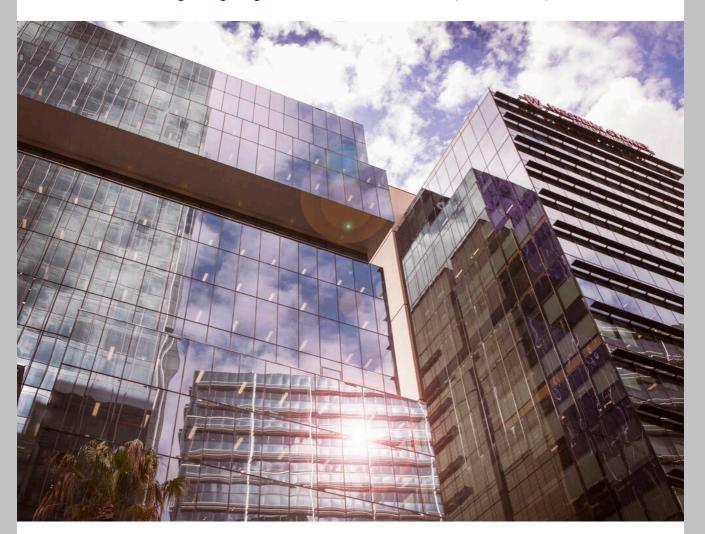






News from the School of Engineering, Design and Built Environment. eNewsletter | December 2022 | Issue 11



Message from the Dean

It has been quite an astonishing year!

Our Academic and Professional Services teams has done an outstanding job in moving all areas of the school forward. Our application for international students have reached almost 2019 levels, our new and developing program in Architecture is going from strength to strength and we are developing modern and contemporary provision for the next few years. Our partnership pedagogy, exemplified this year through the NPILF activity has seen already a significant number of our subjects developed with industry in a co-development mode, making a significant difference for future students, their readiness for the place of work and a better understanding from both industry and academic on how work better together.

We have made significant progress on developing new educational models and in particular through the government funded development in the creation of the Institutes for Applied Technology (IAT). The IAT in Construction has been established with WSU and the School of Engineering, Design and Built Environment being the core academic partner. Colleagues have done an amazing job in creating the initial set of micro-credentials in collaboration for industry in key signature disciplines. We have also produced our first micro-credentials in additive manufacturing and advanced manufacturing. It has also been the most successful year for the school in research funding, establishing ourselves as core members in two ARC hubs, moving towards the establishment of the National Fire Engineering Centre, significant funding in defence and through the Smartcrete CRC, an ARC fellowship and many more projects as well as hosting 5 international conferences and many significant workshops and roundtables – WSU is becoming the epicentre in our fields!

2022 also saw the opening of PEIH and the provision of world class infrastructure for our students and staff. I wanted to thank all academic and professional colleagues across the School and University as well our essential industrial and external collaborators for their generosity and commitment to our worK.

I wish everyone the very best for the festive season and the New Year!



Dean, Professor Mike Kagioglou

ENGAGEMENT



ASPIRE INDUSTRY NIGHT

Industry Partners celebrate ASPIRE Industry Night

In November, School of Engineering, Design and Built Environment celebrated ASPIRE Industry Night. We invited more than 50 industry partners to celebrate the successes of ASPIRE Program.

ASPIRE Program recognises the importance of education for Indigenous students. It connects with students and increases opportunities to participate in internships and placements to develop their careers and enhance their passion in the STEM field.

ASPIRE Program which started in 2020 aims to increase the number of Indigenous students in STEM Education and to support them in their academic and career progression while studying at Western. In 2022, ASPIRE expanded to STEM Cluster Schools which include School of Science and School of Computer, Data and Mathematical Sciences.



Meet Ms. Ashley Leslie - Scholarship recipient

We invited Ms. Ashley Leslie, one of our scholarship recipients, to share her experience with ASPIRE Program. We also acknowledged and thanked all the industry partners who are currently part of the ASPIRE Program. They include AW Edwards, Bechtel, Master Building Group, Multiplex, Trazblat, Ventia, WSP, John Holland, GHD, Triaxial Consulting, Shape, Waco Kwik and Prime Engineering.

ASPIRE believes that "Beauty is inclusion, every size, every colour and everyone. The human heart is too grand to be wasted in the gutter of cultural exclusivity."

INTERNATIONAL

School is actively pursuing summer intake to facilitate more international commencements. Summer intake is especially critical because of competition programs that are offered in trimester by other institutions. As of 18 November 2022, the School has 11 commencements and is chasing another 20 acceptances to commence in Summer. A big thank you goes to our Engineering DAPs for facilitating the Summer intake.

The School also supported in-country open days in India and Nepal between 8 and 22 November 2022. The Open Days provided commencing students as well as existing and potential applicants to develop a better understanding of the factors that distinguish WSU from similar providers. A range of questions were answered by the ADI Zekavat who attended the events. The Open Days were also a platform to educate agents about the attributes of EDBE, empowering them to more effectively promote our programs.

Finally, it is of great significance for the School to be aware of the potential to collaborate with Indonesian universities as part of University's TNE strategy. Dean Kagioglou and ADI Zekavat met with a delegation from University of Gadjah Mada (UGM) on Tuesday 29 November 2022. UGM's Engineering department is keen to collaborate with us in research, program delivery and more importantly they are ready to host our students as part of New Colombo mobility projects. River revitalisation and associated water treatment was discussed a subject of mutual interest.

RESEARCH

We are very pleased that Associate Professor Gaetano Gargiulo has been awarded a 12-month REDI Fellowship with Mobius Medical Pty Ltd, where he will expand his skills in clinical trial design and medical device regulatory affairs. This project is a collaboration between Mobius Medical, Medical Monitoring Solutions and a large global medtech company. Mobius Medical has been engaged to manage a multi-site clinical trial of a new sensor technology for the early detection of cardiovascular and pulmonary diseases.

On 11 November, we have successfully held the School's end of year HDR Conference at Crowne Plaza, Hawkesbury. Our HDR students celebrated together as a growing community, not only in size but also in more disciplines, more international and more gender equity. Dr Adnan Syed Muhammad introduced the latest HDR internships program. Dr Hoda Karimipour talked about her Breakthrough Alumni Award in 2022. De-Graft Joe Opoku, Masound Mohammadi, and Soheil Jahandari won this year's HDR awards. Many students also joined the painting session and discovered their artistry through the creation of some masterpieces.

TEACHING AND LEARNING

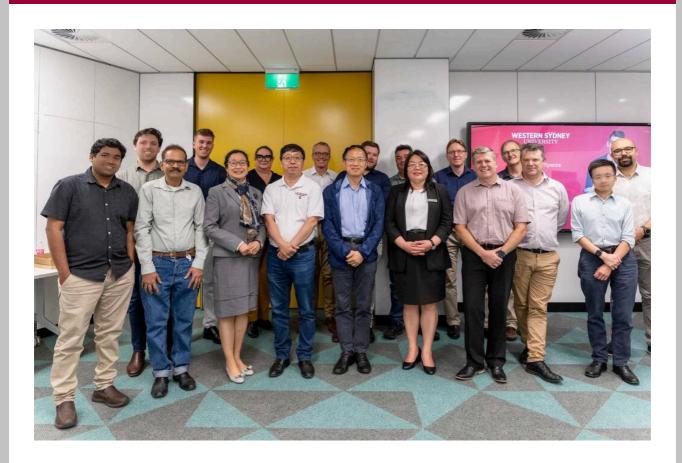
Final exams for Spring semester have come to an end. Students are taking the well-deserved break while the academic staff have been busy marking and finalising results. Everyone is getting used to the Results Processing System (RePS) – the processing time has reduced significantly, allowing academics to focus on more important academic matters.

Speaking of academic matters, 13 industry partners joined 20 School academics and 14 professional staff from across the university on Wednesday, 23 December 2022, to co-design Architecture and Engineering programs. The theme of the day was Employability Skills – the industry partners actively engaged with the academic and professional staff to discuss how four specific employability skills can be embedded and scaffolded into Architecture and Engineering curricula.

The School has also been busy with hosting multiple conferences this year – <u>AAEE</u> and <u>AUBEA</u> are the two prestigious learning and teaching conferences the School is hosting this year.



STAFF NEWS



School of Engineering, Design and Built Environment successfully hosted a whole-day workshop on Advanced Materials and Manufacturing Technology for the Future in the Kingswood campus of Western Sydney University on February 25 2022.

The Workshop Chair Prof. Sarah Zhang and Co-Chair Prof. Richard Yang brought the Research Team on their Next Generation Defence Project including the collaborators from DST Group and industries including Airbus, postdoctoral research fellows and PhD students together. Potential new collaborators from government agencies including Western Parkland City Authority, research leaders from CSIRO and DST Group, and Quickstep were also invited.

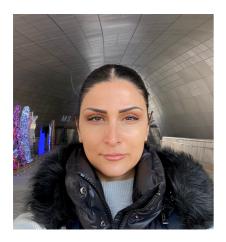
The workshop discussed the research capability, expertise, facilities and collaboration opportunities in the critical area of Advanced Materials and Manufacturing Technology for the future. The guests gave excellent presentations on the research capabilities and interest in their organizations in the relevant areas, and the researchers from Western including our PhD students gave excellent presentations showcased the capability, strength and excellence of our school in the niche area of composite materials, structures and additive manufacturing. Focused roundtable discussions

followed immediately after the lab tour to our state-of-the-art advanced manufacturing facilities led to strong potential for further and more research collaboration!



NEW STAFF

Please welcome our new Academic Staff!



Welcome to Western Sydney University. Please, tell us about yourself and your research background.

I am Aso Hajirasouli, Lecturer in Architecture, School of Engineering, Design and Built Environment.

My work and research trajectory are mainly focused on advancing the impact of state-of-the-art studies across the spectrum of architecture, design and built environment disciplines and industries to solve critical issues and challenge through innovative solutions by highlighting the fundamental theories as well as developing new methods and frameworks. Overall, I can say my research and teaching practices are

focused on digital and virtual design and built environment; digital and immersive pedagogies; and digital and immersive heritage.

Which events in your life were determinant to choose your career path?

During my childhood years my father and my belated uncle were quite influential in the way that I have perceived my life, my rights, my abilities and capabilities and myself overall, for the years to

come. I was always told that I am the one who is in charge of my life and responsible to shape it as I always dreamed about. They always emphasised that if one is honest, truthful, hardworking and poses high work ethics and dignity the path to success will eventually open. This was also the case for me, despite many years of very hard work, dealing with all types of challenges, fighting various battles (metaphorically of course), I persevered and managed to shape my career as I always imagined it would be.

As an Architect how do you find inspiration and creativity in a new project? (what features/concepts)

I always allow the context to inspire me. There are a number of tangible and intangible aspects involved in each individual project including environmental, social, cultural, economic and so on. And if one observes and looks closely enough, she/he will find all the answers and inspirations needed.

What recommendations would you give to female students who want to follow your steps?

Have a clear vision, take responsibility of your life, believe in your abilities, and understand that if you don't do it for yourself no one will do it for you. So, take the long road, put the hours, put the hard work and sculpt your life and future as you want it to be.

STUDENT NEWS

Students Visit a Richard Crookes Constructions Project

10 students visited the Monte Scienta Project at 128 Miller Street, North Sydney. This was a meaningful tour and discussion after more than two years of COVID-related restrictions.

Mr. David Ferguson - Senior Project Manager and Ms. Isabella Spinola - Senior Project Engineer, led the visit which was a very welcomed learning experience. One message was clear to the students: site experience is invaluable since it is where the 'product' is created and 100% of turnover is generated, meaning that home-office staff also need to fully support projects.

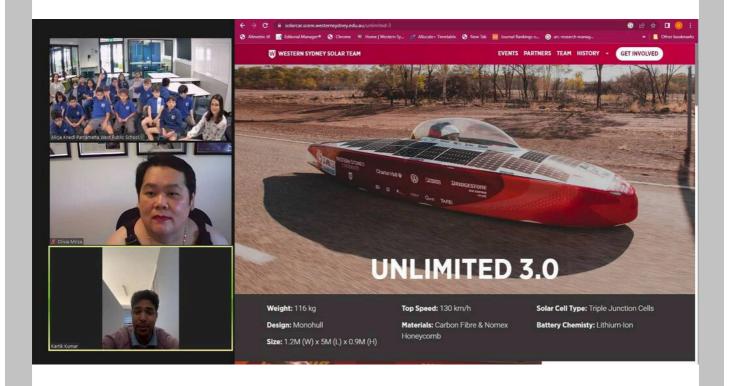




Parramatta West Public School - Solar Car Workshop

In order to increase participation in STEM in low socio-economic regions, schools are involved in CSIRO Education. One of our partners is Parramatta West Public School. The School has set up a STEM club to increase interest in STEM tertiary education. Solar Car Team member, Mr. Kartik Kumar ran a virtual Solar Car session with the students. The students were engaged and showed

genuine interest in the future sustainable energy and moving forward to zero carbon emissions future.



New PhD students under Research Training Program (RTP) Postgraduate Research Scholarship

Md Rayhan Hasnat has recently joined as a Doctoral Researcher in School of Engineering, Design and Built Environment in Western Sydney University. He has been awarded with Research Training Program (RTP) Postgraduate Research Scholarship and Fee Waiver. He is conducting research under the supervision of Dr Md Kamrul Hassan, on the fire-rated composite cladding panels for fire safe buildings.

Hasnat has served as a mechanical engineer in a cement sheet manufacturing company for three years in Bangladesh. As a material engineer, he worked in an Australian company for six months before joining as a PhD candidate at Western Sydney University. His research field includes Materials Properties, Polymer Science, High Entropy Alloys, Fire tests, Building Composite Cladding.



Prasad Perera is the latest Doctoral Researcher to join the Centre for Smart Modern Construction (c4SMC), School of Engineering, Design and Built Environment, Western Sydney University. He was awarded the "Commnia - Centre for Smart Modern Construction and Western Sydney University Postgraduate Research Scholarship" and his PhD research is focused on the use of Artificial Intelligence and Deep Learning for Construction Compliance.

Prasad has served the industry for 12+ years and his academic engagements include serving as a visiting lecturer for universities in Sri Lanka, UK, Australia, Thailand, and Malaysia. His research interests include Deep Learning, Visual Computing, Compliance, ERP, Enterprise Project Management and MIS.



Wishing you and your family a wonderful Festive Season and Happy New Year! We look forward to sharing more stories in 2023.

With love, EXCITE News team







