6th AUGEN Conference Program

Oral presentations are 15 mins long including questions except for the Plenary Lectures and the ANZIC contribution. All presentations are in the Eastern Avenue Auditorium & Lecture Theatre Complex (F19) Room 315.

Posters will be on display for the duration of the conference in the Foyer of Eastern Avenue Lecture Theatre 315 and presenters are requested to attend their posters at least during Program Item #13 (Sunday 6 August, 2:40 pm).

Wifi access. The University of Sydney has kindly made wifi available for all conference participants.

Guest Username: augen2017 Guest Password: 09953048

Saturday 5 August, 2017		
8:30 am	Registration and Coffee - Foyer of Eastern Avenue Lecture Theatre 315	
9:00 am	Welcome – Lecture Theatre	
	AUGEN 2017 Organising Committee	
	Phil McManus, Head of School, School of Geosciences	
	University of Sydney, Sydney NSW	
1. Plenary Lecture (Chair: K. Dadd		
9:10 am	Diamonds in the rough: discovery through work-integrated learning.	
	Anne-Louise Semple, Academic Director of PACE, Science and Engineering, Macquarie	
	University, Sydney, NSW.	
2. Creating opportunities for work-integrated learning (WIL) in earth sciences		
10:10 am	Opportunities in Geoscience Education using the AuScope National Virtual Core Library and geoscience information infrastructure	
	Robert Woodcock, CSIRO Canberra, Robert.Woodcock@csiro.au	
3. Improving quantitative approaches in earth science teaching and learning		
10:25 am	Data Visualisation & Integration: An Undergraduate Perspective On The Frank Arnott	
	Award	
	Graham Heinson, Mike Reiger, Larissa Collins, Ben Kay, Angus Nixon, Sarah Mcdonald,	
	Teagan Romyn, Kiryeong Lee, Melissa Stinear, Racheal Mahlknecht, Jianan Chen,	
	Jamieson Woolcock, Department of Earth Sciences, University of Adelaide, Adelaide SA	
10:40 am	AGC and Education Strategy <u>Bill Shaw</u> , President, Australian Geoscience Council	
10:50 am	Morning tea	
4. Works	shop – in ABS Interactive Learning Studio 1090 (Chair: M. Roach)	
11:00 am	AusGeol Virtual Geology Workshop	
	Michael Roach, Earth Sciences, School of Physical Sciences, University of Tasmania	
	This workshop will introduce participants to the functionality of the AusGeol library and	
	GeoVis3D software, and use these resources to showcase some of the outputs of the	
	AusGeol program including virtual tours and virtual mapping exercises.	
12:30 pm	Lunch	
5. Tour of the Nicholson Museum		
1:30 pm	Tour of the Nicholson Museum, Sydney University	
	ry Lecture (Chair: L. Moore)	
2:30 pm	Meeting tomorrow's needs: The national decadal plan for Earth Sciences, and	
	implementing it in the classroom.	
	<u>Craig O'Neill</u> , Dept. of Earth and Planetary Sciences, Macquarie University, Sydney, NSW.	
3:15 pm	Afternoon tea	
7. Tomorrow's global geoscience workforce		
3:30 pm	The National Exploration Undercover School (NExUS) <u>Grant Heinson</u> and R. Lilly, Department of Earth Sciences, University of Adelaide,	
	Adelaide SA	

Saturday 5 August, 2017		
3:45 pm	Geotourism - Opportunities for Global Employment <u>Angus M Robinson</u> FAusIMM (CP), Chairman, Geotourism Standing Committee Geological Society of Australia	
4:00 pm	Continuing Professional Development <u>Michael D. Leggo</u> , michael.leggo@madronresources.com	
4.15 pm	Implementing Cultural Change in the Earth Sciences Workplace at ANU Penny King, Eggins, S.M., Williams, I.S. and the RSES Equity and Diversity Committee, Research School of Earth Sciences, Australian National University (ANU), Acton ACT	
8. GSA NSW Division presentation (Chair Paul Harvey)		
4:45 pm	GSA NSW Division August meeting presentation and discussion	
	Eastern Australia's submarine landslides and their tsunamogenic potential <u>Samantha Clarke</u> , School of Geosciences, University of Sydney	
5:45 pm	AUGEN Meeting a. Reports b. AUGEN 2018 or 2019 c. Strategic planning for Australian geoscience education	
5:45 pm	GSA NSW Division August meeting (Chair: P.Harvey)	
6:30 pm – 8:30 pm	BBQ, School of Geosciences, University of Sydney	

Sunday 6 August, 2017		
8:30 am	Registration and Coffee	
9. Geoscience Education Outside University Walls		
	(Chair: N. Daczko)	
9:00 am	Core Skills at ANU and UoN	
	<u>D. Sims</u> ¹ , C. Simpson ² , D. Heslop ³ , A. Hack ⁴ , V. Shearer ⁵ , ¹ Dale Sims Consulting, ² Carol Simpson Consulting, ³ ANU Research School of Earth Sciences, ⁴ UoN Earth and	
	Environmental Sciences, ⁵ Heron Resources	
9:15 am	The Australian Earth and Environmental Science Olympiad: An Australian Science Innovations initiative engaging talented students with Earth Systems Science Leslie Almberg ¹ , McNamara, Greg ² , Carr, Ruth ³ , ¹ Australian Science Innovations, Earth and Environmental Science Olympiad Program Deputy Director, ² Australian Science Innovations, Earth and Environmental Science Olympiad Program Director, ³ Australian Science Innovations, Executive Director	
10. Geoscience Education Outside University Walls		
9:30 am	The JOIDES Resolution 371T - School of Rock 2017 <u>Suzy Urbaniak</u> , Kent Street Senior High School, East Victoria Park, Western Australia.	
10:15 am	CAPSTAN	
	<u>Leah Moore</u> , University of Canberra.	
10:30 am	Morning tea	
11. Plenary Lecture (Chair: P. F		
10:45 am	Your speed date with Citizen Science Paul Flemons, Manager Digital Collections and Citizen Science	
	Australian Museum Research Institute, Australian Museum, Sydney NSW.	
11:25 am	Tapping into regional New South Wales: a community science program investigating household drinking water contamination Paul Harvey, Department of Environmental Sciences, Macquarie University	

Sunday	Sunday 6 August, 2017		
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	egies for Supporting Success in Earth Sciences Education		
11:40 am	Adding to the educator's toolkit – a showcase of new and innovative educational technologies available to support effective student learning in Geosciences and Engineering. Samantha Clarke ¹ , G.Miao ² , T.Hubble ¹ , ¹ School of Geosciences, Faulty of Science, University of Sydney, ² School of Civil Engineering, Faulty of Engineering and Information Technology, University of Sydney		
11:55 am	Teaching engineering students geology – the value of short field trips <u>Chris Fergusson</u> ¹ , ¹ School of Earth and Environmental Sciences, University of Wollongong, New South Wales		
12:10 pm	Lunch		
	(Chair: L. Almberg)		
1:10 pm	Sweetening the first year experience: enabling active learning in Earth science lectures <u>Dominique Tanner</u> ¹ & Bonnie Amelia Dean ² , ¹ GeoQuEST Research Centre, School of Earth & Environmental Sciences, University of Wollongong, Wollongong, NSW, ² Learning, Teaching and Curriculum, University of Wollongong, Wollongong, NSW		
1:25 pm	Arabian Nights: Oman geological field studies.		
	Grant M. Cox, Allan, S. Collins, Juraj Farkas, Megan Williams, University of Adelaide		
1:40 pm	Embedding Cultural Competence and Indigenous Knowledge in an Introductory Geology Curriculum: A student and academic partnership Tom Hubble ¹ , Gulnaz Beg ¹ , Amani Bell ² , Geoffrey Clarke ¹ and Samantha Clarke ¹ School of Geosciences, University of Sydney, NSW, ² Institute for Teaching and Learning, University of Sydney, NSW, 2006, Australia		
1:55 pm	Wild and Wicked Witchelina: developing field-based geological and environmental		
	education, outreach and research. Pat James, School of Natural and Built Environments, University of South Australia, Adelaide, Honorary Research Fellow, Nature Foundation SA		
2:10 pm	Making It Real – A Case For Unscripted Field Experiences Michael Roach, Earth Sciences, School of Physical Sciences, University of Tasmania		
2:25 pm	Afternoon tea		
	Sciences Activity Hall		
2:40 pm	Posters accompanied by interactive demonstrations of field techniques, laboratory or classroom activities, and digital resources.		
	See list below.		
5:00 pm	Conference closes. Informal gathering at a pub in Newtown?		
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Earth Sciences Activity Hall and Posters

High-tech and low-cost community platforms for teaching and outreach in geosciences <u>Sabin Zahirovic</u>¹, L. S. Mondy^{1,2} and M. G. Tetley^{1,2}, ¹EarthByte Group, School of Geosciences, University of Sydney, NSW, ²Data61, CSIRO, NSW, Australia

Intricate Earth science problems puzzled out by useful and quantifiable analogies

Omer F. Bodur^{1,} EarthByte Group and Basin GENESIS Hub, School of Geosciences, The University of Sydney, NSW 2006, Australia

Using GIS-Modelling to estimate which the main hydrological factor can affect on a catchment area, practical experiment

Ali K. M. Al-Nasrawi, Sarah M. Hamylton, Brian G. Jones, Qassim Al-Aesawi School of Earth and Environmental Sciences, University of Wollongong, NSW.