

5. BEYOND THE ROCKS – GEOSCIENCE IN OUR SOCIETY: CURRENT APPLICATION AND FUTURE TRENDS		Dr Graham Carr Graham.Carr@csiro.au
SubTHEME	DESCRIPTION	CHAMPIONS
5.1 Geology in Society: geotourism and geoheritage	Geology has shaped our external environment and our history. Cavers, mountain bike riders, walkers or naturalists — geology is important to us all. Unique and sensitive ecosystems arise around geological features, and geological resources have determined where societies grow and the occupations they have had over time. This subtheme will explore the interplay between geology and contemporary societal activity such as tourism, nature conservation and stewardship of our natural and industrial heritage. It will consider the impact that digital transformation is having on the ability to understand and visualise our planet. In this way, the subtheme will explore the past, present and future relationships between people and the rocks beneath their feet.	Angus M. Robinson (Leisure Solutions) angus@leisuresolutions.com.au
5.2 Prediction, Process, Place: Geomorphology	Geomorphology (the landforms and processes that make and maintain landscapes) is the interface between people and planet. It is central to so much that we do: every habitat is hosted in a landform, and every human landscape is used with, or in spite of, the natural processes of the place. One of the oldest geosciences, geomorphology has evolved from the classification of shapes into a process-based understanding which provides predictive tools for strategic management, effective rehabilitation, and planning for sea-level rise and climate change. Geomorphology's traditional geological application – the provision of modern analogues for sedimentary environments – now includes providing analogues for other planets. It is a broad discipline, ranging from esoteric numerical geochronology to qualitative field-based spatial studies. It extends across sedimentology, karst, tectonics, human history, glaciology, vulcanology, oceanography, and regolith, and its philosophic influences include chaos theory and catastrophism. Historically spread across departments and faculties (geology/science and geography/arts), present-day integrated institutions and the discipline's polymath nature make it well fitted for future trends in interdisciplinary projects.	Gresley Wakelin-King (Wakelin Associates Pty Ltd) gresley@wakelinassociates.com.au
5.3 Geoscience, Education and Professional Development (AUGEN Symposium)	Geoscience underpins so much of modern society — from the production of raw minerals, to the quality of soils and the nature landscape, through to the stability of major infrastructure and the storage of water and energy resources. How are we developing the geoscientific skills needed to understand these relationships and enable society to use them appropriately, particularly in the face of reducing take up of science, technology, engineering and maths at high school levels and the gender inequity often faced in the biophysical sciences? Drawing on the outcomes of the 6th conference of the Australian Geoscience Educators Network (AUGEN), this subtheme will explore the development of a strong and lasting interest in the Geosciences.	Kelsie Dadd (AUGEN) kelsiedadd@gmail.com Leslie D'Almberg (AUGEN) Greg McNamara (Geoscience Education and Outreach Services)
5.4 Geoscience Advocacy: thought leadership from Geoscience	Geoscientists are involved in solving the major challenges of today — challenges for which there are no simple solutions, where scientific inquiry does not provide all the answers and where there are multiple perceptions of “good” and “bad” outcomes. Geoscience Advocacy will explore how geoscientists provide balanced and credible information on complex topics into public debate. This includes consideration of the fine line between expertise and value-based judgement. Ethical considerations in Geoscience practice, best practice professional approaches to work that affects the community and environment, and the role of corporate social responsibility will be considered. The UNCOVER initiative and the Decadal Geoscience Plan will be used as a case study in Geoscience driving long term strategy.	Anna Littleboy (CSIRO) annalittleboy1@gmail.com
5.5 Planning the Future of Geoscience	This session provides an opportunity for geoscientists and others to further develop the vision recently released in the decadal plan for geoscience, developed by the Academy of Science National Committee for Earth Science (NCES). This document “Our Planet, Australia’s Future: A decade of transition in geoscience” highlights the opportunities and challenges identified for the next decade and beyond. A Q&A session will be featured to debate relevant issues and facilitate discussion about implementation strategies.	Sue O'Reilly (Macquarie University) sue.oreilly@mq.edu.au
5.6 Diversity in the Geosciences	Similar to many science, technology, engineering, and mathematics (STEM) disciplines, the Geosciences suffer from a lack of racial, ethnic, gender and many other types of diversity, particularly at doctoral levels and within academia. Unfortunately, the Geosciences have the lowest diversity of all the STEM fields at all levels of higher education (National Center for Science and Engineering Statistics, 2015). The Australian Geoscience Council is committed to Diversity in Geoscience. We encourage all individuals and organisations to make change to increase diversity in their workplace. This session is for all things diversity – statistics on diversity within your organisation or sub-discipline, personal stories or biographies, and beyond!	Marina Costelloe (Geoscience Australia) Marina.Costelloe@ga.gov.au