

AUSTRALIAN REGOLITH GEOSCIENTISTS ALLIANCE



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ABOUT US

The Australian Regolith Geoscientists Alliance (ARGA) is a not-for-profit learned body of regolith practitioners from throughout Australia, and became a specialist group of the Geological Society of Australia in 2019. ARGA was set up to provide a mechanism through which people interested in regolith geoscience can keep in touch and share their experiences via newsletters, email, the internet, field workshops, a biennial field-based conference and the GSA national conference. ARGA welcomes members from all disciplines that have involvement in regolith biology, hydrology, meteorology, etc.



Mottled regolith in a weathering profile in the Clinton sand quarry Yorke Peninsula. Tectonically-uplifted Miocene marine limestone has undergone deep weathering containing silcrete nodules, calcrete and ferruginous mottles. Image by Ian Roach

WELCOME TO OUR FIRST NEWSLETTER!

We want to start our new Geological Society of Australia Specialist Group with a bang – as well as keep our ‘Friends of ARGA’ up to date with happenings from around the regolith world, whether local or international.

First off, we express our sympathy for all those affected by the bushfires across Australia. The media, and most Australian’s attention has really shifted to trying to understand the future impact of these fires and adverse weather on wildlife and vegetation, but it is also going to have an impact within the Critical Zone. The regolith record will show significant mineral alteration, charcoal records and so many other markers of these extensive bushfires. Now, more than ever, it is so important for organisations such as ARGA to bring scientists together and produce effective and future-oriented cross-disciplinary research to evaluate and mitigate the effects of bushfire and other natural disasters.

The ARGA committee aims to release a newsletter twice a year...

We want to introduce our committee, highlight events and also share stories and research from within our ranks.

How can you contribute?

We welcome all submissions to the newsletter! Please email (or get in touch) with the newsletter editor (annaepetts@gmail.com) or one of the committee members, it’d be great to have news and views from our Members and Friends of ARGA.

Isn’t there meant to be a conference this year?

Correct! At the last ARGA conference in 2018 in Wallaroo, a conference was aimed for in 2020. However, once the Specialist Group merger with GSA began to gain momentum it seemed a good idea to host a Symposium or special as part of the [2021 Australian Earth Sciences Convention](#) in Hobart. The committee has submitted an extensive proposal to the conference organisers and we’ll keep you update about its progress.

“Land is not merely soil, it is a fountain of energy flowing through a circuit of soils, plants and animals” Aldo Leopold



Sabine Pernreiter (former CSIRO), Richard Greene (ANU), and Carmen Krapf and John Keeling (both GSSA) enjoying the products of the Clare Valley Terroir, Seven Hills Vineyard, during the pre-conference fieldtrip at the ARGA conference 2018 in Wallaroo. Image by Ian Roach.

Contact Us

President

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Past President

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Secretary and webmaster

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Non-Executive Committee Members

Nadir de Souza Kovacs (Geological Survey of WA)

Dr Anna Petts (Geological Survey of SA)

Dr Ignacio Gonzalez-Alvarez (Nacho) (CSIRO)

Savannah McGuirk (University of Sydney)

ARGA ON THE WEB:

<http://regolith.org.au/ARGA> ON FACEBOOK:

<http://www.facebook.com/#!/groups/10150125426600193/>

ARGA at GSA:

https://www.gsa.org.au/Public/Specialist/Australian-Regolith-Geoscientists-Alliance-ARGA/Public/Specialist_Groups/Australian%20Regolith%20Geoscientists%20AllianceARGA.aspx?hkey=808af0fd-2960-473d-9d60-e87722dfe534

INTRODUCING THE ARGA COMMITTEE

President: Dr Carmen Krapf



Carmen is a Senior Geologist with the Geological Survey of South Australia focusing on characterising SA's cover. After completing her PhD at the University of Würzburg, Germany, she moved to Australia in 2004 and joined the Australian School of Petroleum at the University of Adelaide to investigate modern and ancient dryland petroleum reservoir analogues in Australia and around the globe. In 2008 she joined the Geological Survey of Western Australia where her journey with Australian regolith geoscience began. With a great passion for passing on regolith geoscience to future generations, she regularly contributes to the National Exploration School Under Cover School (NeXus), the SA Geoscience Summer School and other short courses. Carmen became the president of ARGA in 2018 and is excited to see ARGA continuing its great work and contribution to Australian regolith and into the Critical Zone. With a great committee team on her side she is confident that ARGA braces the challenges ahead!

Past-President: Dr Leah Moore



Leah has been working as an Associate Professor in Land Management at UC for 25 years. Her specialty is science education and she is a director of the Australasian Science Education Research Association (ASERA). Leah supports ForestLearning by developing resources for both primary and secondary levels on behalf of the Australian Forest Education Alliance.

When Leah is not spending time with family and friends she is at her organic farm (which she doesn't get enough time to enjoy) in Canowindra in NSW.

Secretary and webmaster: Dr Ian Roach



Ian is a senior geoscientist in the Minerals, Energy and Groundwater Division at Geoscience Australia. Ian's career has been varied, including gold mining with WMC, marine geology and geophysics with the BMR, a PhD in volcanology, teaching regolith geology and mineral exploration for CRC LEME at the University of Canberra and ANU and project research at Geoscience Australia on geology-from-geophysics and mineral exploration topics. Ian is a keen supporter of applied regolith geoscience for landscape evolution and mineral exploration research, a GSA member since 1991 and is a founding member of ARGA.

Treasurer: John Keeling



John recently retired from the Geological Survey of South Australia where he was senior principal geologist and program coordinator of the Mineral Systems Team. His more than 40 years of work, mainly in industrial minerals research, included a 10 year secondment with CSIRO and 8 years as Assistant Director of the Adelaide node of CRC LEME. Together with Lisa Worrall and Steve Hill, John incorporated ARGA at the close of CRC LEME and has been an active participant at all past ARGA conferences.

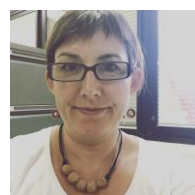
Non-executive Committee Members

Nadir de Souza Kovacs



Nadir is a Senior Geologist at the Geological Survey of Western Australia, within the Department of Mines and Petroleum Western Australia.

Dr Anna Petts



Anna completed her PhD in 2009, on the use of termite mounds to explore for minerals in northern Australia and also Tanzania. She is the team leader for the 'Characterising the cover team' at the Geological Survey of SA. Anna's enthusiasm for mineral exploration within regolith cover has taken her all over Australia, for research and professional experience in the minerals industry. She now enjoys working with the state government and liaising with federal groups, researchers and stakeholders in order to advance understanding of the state's geology and how it has shaped the landscape and regolith terrain. Anna is also ARGAs newsletter editor.

Dr Ignacio Gonzalez-Alvarez (Nacho)



Originally from Spain, Nacho is currently Principal Geochemist at CSIRO in Perth. He completed his Ph.D. at the University of Saskatchewan, Canada, focusing on sedimentary geochemistry. Nacho has worked in Industry, Academia, and Government organizations. He has conducted research and mineral exploration projects on five continents, including countries such as Canada, USA, Papua New Guinea, Australia, China, India, Spain, Poland, Norway, South Africa, Congo, and Brazil. At present, his primary research is on various aspects of trace element mobility in the continental crust, weathering processes, landscape evolution, mineral exploration undercover and geoarchaeology.

Savannah McGuirk



Savannah has just begun her PhD research at the University of Sydney - her research will help farmers manage and increase Soil Organic Carbon (SOC) stocks by improving the practicality of SOC measurement and reducing uncertainty in quantification of farm-scale SOC stocks. This will be achieved using hyperspectral, multi-spectral and thermal data, remotely sensed from Unmanned Aerial Vehicles (UAV's). UAV and CubeSat data will be analysed with machine learning techniques to identify surface and sub-surface soil characteristics indicating the quality of SOC stocks.

ARGA - GSA'S NEWEST SPECIALIST GROUP

The Australian Regolith Geoscientists Association (ARGA) has merged with GSA to become the Society's newest Specialist Group, the Australian Regolith Geoscientists Alliance (keeping the same, well-recognised acronym of ARGA).

WHAT'S NEW?

ARGA has submitted an application for a symposium including fieldtrips and a social event at the AESC2021 in Hobart. This is why ARGA does not have a conference planned in 2020, to ensure we can be part of AESC 2021 in a big way.

This is also a call out for members and friends who are involved with researchers in the Critical Zone from around the globe – Can you share contacts with us? We are still on the lookout for a keynote speaker for the symposium...Perhaps you can help?

CONFERENCES AND EVENTS COMING UP

2-8 March – 36th International Geological Congress, Delhi

Unfortunately, the IGC has been postponed due to the pandemic outbreak of novel Corona virus (COVID-19). Several ARGA members were supposed to present various regolith-related talks and workshops. The new date has not yet been announced.

21-26 June – Goldschmidt, Hawaii 2020

Regolith-related session 08a: Metal Mobility in the Critical Zone and its Implications to Geochemical Exploration in Weathered Terrains. Website: [Click here](#). Program themes: [Click here](#)

24-26 June - Australian Young Coastal Scientists and Engineers Conference, Newcastle

This conference aims to bring together students, early career researchers, and young professionals working in the coastal geoscience and engineering disciplines. The conference also welcomes senior researchers and private/public professionals. <https://auscoastalresearch.wordpress.com/ausycsec/>

28 Sep to 2 Oct – 19th 2020 ANZGG, Alice Springs

Planning for the next ANZGG conference is underway. The conference will be held from 28 Sept to 2 Oct at the Alice Springs Convention Centre, with field trips to the Quartzite Ranges, Fink River and possibly into the dune fields. Details will be posted soon, keep checking: <https://www.anzgg.org/conferences.html>.

29th Nov to 4th Dec 2020 – Soils: Investing in our Future, Cairns

Joint conference of Soil Science Australia and the New Zealand Society of Soil Science in Cairns, Queensland. Jam-packed program of Australian and New Zealand soils professionals, now seeking special sessions. Website: <https://www.soilscienceaustralia.org.au/2020-joint-conference/>.

15 to 20 Nov 2020 – 9th International Acid Sulfate Soils Conference, Adelaide

The 9th International Acid Sulfate Soils Conference (9th IASSC) is the premier interdisciplinary forum for the presentation of new advances and research results in the fields of acid sulfate soil research, policy and management practices. Website: <https://biological.adelaide.edu.au/acid-sulfate-soil/iassc/>.

KEEPING UP TO DATE WITH ARGA

ARGA maintains the ARGA website (<http://regolith.org.au>) and the ARGA Facebook page (follow the link from the ARGA website). The ARGA Facebook page is used to keep members and friends up to date with people, happenings in the regolith world, conferences and events. **Email the Secretary to be added to the Friends of ARGA mailing list: secretary@regolith.org.au**