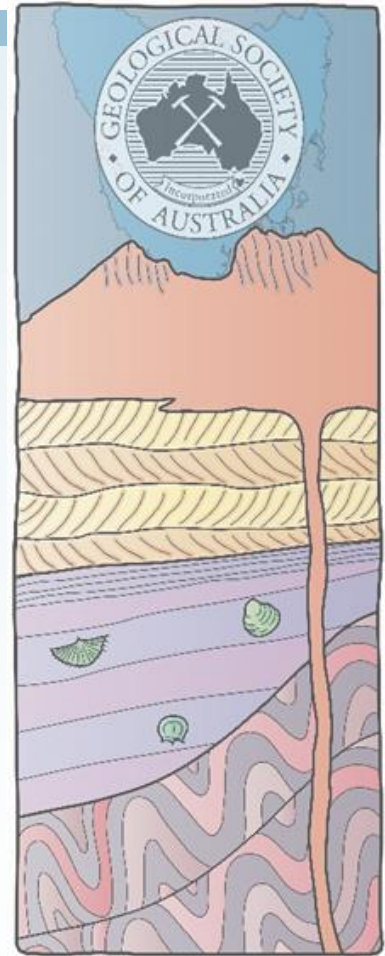


The Tasmanian Geologist

Next Meeting Katharina Hochmuth takes you *From rainforests to ice-sheets – a brief history of Antarctica and the Southern Ocean*



Image supplied by K. Hochmuth



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Future Meetings

22nd June AGM (see back) followed by a talk by Colin Jones on new dating of granitoids in Eastern Tasmania

26th July Film night

August Student night with AIG

8th September Saturday One-day field trip to north coast

9th September Sunday RST-NC Inveresk joint meeting Michael Roach

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Our Next Meeting 18th May 5:30 for 6:00PM Earth Sciences University of Tasmania

Katharina Hochmuth will take us to an Antarctica we can hardly imagine - mild with rainforest and track the changes on it and the the Southern Ocean to bring us up to the icy (becoming less icy) present.

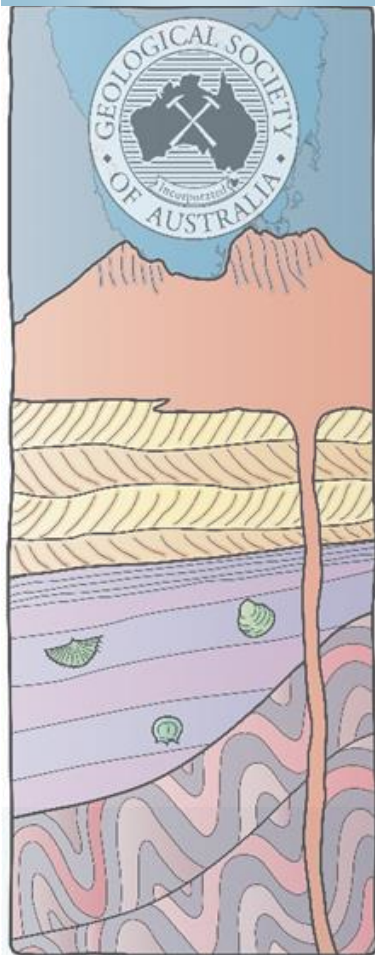
Past Meetings

Thanks to the four CODES postdoctoral fellows involved in helping Tasmania define new critical metal resources

Students Members

Endowment Fund recipient for Tasmania announced.

2023 Tasmanian Geoscience Forum The annual forum is heading back to Tullah again this year at the very end of November for it's 13th iteration.



From rainforests to icesheets – a brief history of Antarctica and the Southern Ocean

Katharina is a marine geophysicist with the Australian Centre of Excellence in Antarctic Science (ACEAS) at the University of Tasmania. In her research, Katharina uses geophysical methods and information from cores samples to reconstruct how the icesheet, oceans and solid earth interacted in the past and how this can inform the future of our neighbour to the south. Katharina has sailed on various multi-week voyages to the Southern Ocean and the Pacific. She is currently preparing to join the German research icebreaker RV Polarstern on her (and Polarstern's) first ever season at the Australian Antarctic margin next summer.

Antarctic Cretaceous

When Scott and his fellow explorers were discovered after their ill-fated expedition to the South Pole sleighs weighed down with rocks were found beside their bodies. The rocks contained fossils that indicted life was once abundant in the now icebound land. The fossils were subsequently identified and included *Glossopteris* a genus that were known from Australia, Southern Africa, India and South America. These fossils were a key that lead scientists to reconsider their understanding of Antarctica and lend weight to some radical thoughts on continents drifting.



Supplied by Katharina Hochmuth

Antarctica is the only continent on our planet, which is completely covered by ice. The Antarctic ice sheets are one of the most important tipping points in our climate system. Various time periods in the geological past can give us a general context about how the ice sheets and oceans in and around Antarctica might change with raising temperature and what mechanisms are most harmful to the Antarctic cryosphere. This talk will highlight how geophysical measurements

and sediment core data can grant us an insight on how ocean, ice sheets and solid earth interacted in the past and how this informs predictions for our planet's future. We will time travel to the lush temperate rain forests of the Cretaceous Period and visit the sudden establishment of the ice sheet and its dynamic development towards today's main threat of warm waters flowing deep below the ice sheet.

I want to zoom into the meeting

April 27th Four new CODES Postdocs



Left to right: Mohammed Fathi, Owen Missen, Yamila Cajal and Wei Hong

Last meeting we had a great introduction from the four new postdoctoral fellows at CODES to themselves and their past research. They are a diverse group. Mohammed is from Iran and has worked in mining and metal processing. Yamila is from Chile and completed her PhD at ANU on the fertility of magmas associated with giant porphyry Cu deposits in Chile. Wei originally from China, completed postdoctoral research at MinEX CRC (at Adelaide University) targeting Delamerian Orogen porphyry systems. Owen is a bit closer to home, originally from Melbourne and is a min-

VOLCANISM IN MAY

22 volcanoes were active across the Earth between the 3rd and 9th of May according to the [Smithsonian Global Volcanism Weekly report](#). Six are new reports and include intense ash, lava and pyroclastic eruptions of Fuego in Guatemala and increasing seismicity beneath Katla in Iceland. Activity continued on other 16 volcanoes with Etna producing a small amount of ash, three craters at Aira in Japan produced explosions resulting in ash, shock waves and bombs and Merapi in Indonesia continues to grow a lava dome that shed numerous lava avalanches and some pyroclastic flows.

SIGNIFICANT EARTHQUAKE IN MAY

On the 5th of May there was M 6.2 earthquake off the west coast of Honshu, Japan. It was a relatively shallow earthquake at 8.7 km depth. The closest large town to the epicentre is Anamizu some 50 km away with a population of around 18 000 people. Although the earthquake would have been felt in this region there was no major damage reported. Information from the [NASA website on significant earthquakes](#).

What is the GSA Endowment Fund?

The Geological Society of Australia (GSA) Endowment Fund was set up in 2007 to support students undertaking graduate studies in the Earth Sciences. The fund was set up as a separate entity to the GSA and the Australian Tax Office imposed elements that restricted this support to Australian students at Australian educational institutions. Financial assistance in the form of awards can be granted to Australian students by the GSA Endowment Fund Committee and the awards are not restricted to GSA members. Honours/Masters student from each state are eligible for a \$1000 grant and PhD students compete nationally for a \$5000 grant.

The Geological Society of Australia Endowment Fund is a charity and all donations are tax deductible. *(from GSA website)*

eralogist and biogeochemist. All are settling into life and research in Tasmania and we wish them well in the effort to identify hidden critical metals in our state.

Student Members

Hello student members. Great that some of you are managing to come along to our meetings and events and engaging with our wider GSA community. The semester is getting to the busy end but we encourage you to come to this month's meeting to learn more about Antarctica.

Honours, Masters and PhD students

The Tasmanian Honours recipient for the Endowment Fund for 2023 is Emily Conn who will be arriving soon to start her Honours project with Martin Jutzeler. Congratulations Emily!

One of our PhD students has gone into the mix for the big \$5000 grant. Good luck to them.



Membership

There are also special rates for graduate membership so no need to miss out once you have graduated. We would love to keep in touch!

Any queries about your membership contact our membership officer Rebecca Carey (Rebecca.Carey@utas.edu.au).

You can become a member right now

I want to become a Member

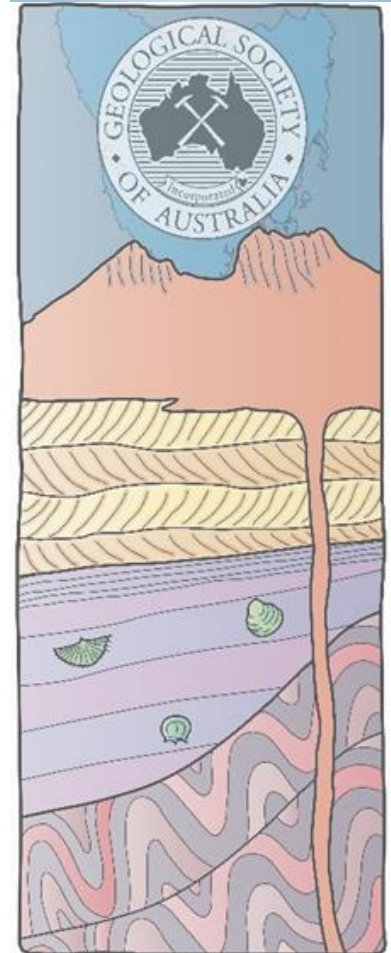
Meet a graduate

Olivia Wilson won the Honours Endowment Scholarship for Tasmania in her honours year in 2020. Despite the lockdowns of that year, she eventually managed to get into the field to spend her money. Olivia is now employed by Entura in Hobart. She was an undergraduate member of the GSA and here is her testament to how it can be helpful for your future.

“Being a student member of the Geological Society of Australia enriched my experience of studying geology.”



Supplied by Olivia Wilson



Olivia Wilson on being a GSA student member

‘Being a student member of the Geological Society of Australia enriched my experience of studying geology. Especially important to me were the opportunities to make connections and learn about the research of other society members. As a student, it is also invaluable to have an environment in which you can interact with geoscientists from all career stages – hearing their experiences allows you to develop your own career aspirations. GSA membership also demonstrates that you have a level of passion and commitment to your field beyond ‘

Other Events coming up

AESC2023 in Perth

27-30th of June 2023.

Registration Open Now

13th Tasmanian Geoscience

Forum Tullah

30th of November

The Geological Evolution of Tasmania

The flagship publication of the Tasmanian Division of the GSA, '[The Geological Evolution of Tasmania](#)' ([Special Publication 24 of the GSA](#)) is available for ordering.

I want to know more about the book

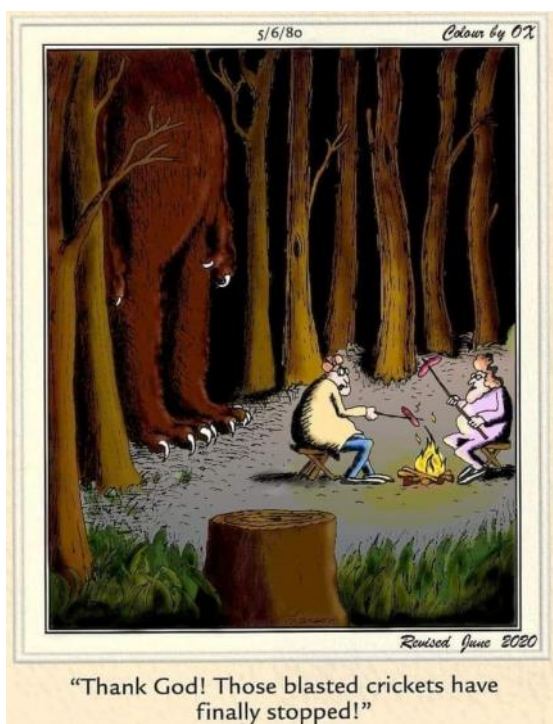
You can purchase them personally from Caroline Mor-dant (publications@CODES.utas.edu.au or phone on +61 3 6226 7537.

Members	\$99
Non Members	\$113.30
Students	\$75



edited by Keith D. Corbett, Patrick G. Quilty and Clive R. Calver

Last word from Noel



ANNUAL GENERAL MEETING

22nd of June 2023 University of
Tasmania Earth Science Lecture
Theatre

6 PM

See back page for details

Our details

Geological Society of
Australia website:

www.gsa.org

And our own website:

<http://>

www.gsatasmania.org

GSA Tasmania Division Committee 2022-2023

Chair: Karin Orth

Secretary: Sebastien Meffre

Sebastien.Meffre@utas.edu.au

Treasurer: Claire Kain

Committee Members:

Sheree Armistead

Jeremy Asimus

Rebecca Carey (Membership)

Acacia Clark (Student Rep)

Matt Ferguson

Jacqueline Halpin

Wei Xuen Heng

Claire Kain (Geotourism)

Peter McGoldrick

Sebastien Meffre

Phil Sansom (Education)

Olivia Wilson

ANY NEWS,
ANNOUNCEMENTS OR
INTERESTING
PHOTOGRAPHS OF
TASMANIAN
GEOLOGY YOU
WOULD LIKE TO
INCLUDE IN THE NEXT
NEWSLETTER, PLEASE
SEND IT THROUGH VIA
EMAIL TO

karin.orth@utas.edu.au

The Annual General Meeting Thursday 22nd of June 6:00 pm

Come along to congratulate student winners of the Carey and Banks Prizes and learn about our new student awards for 2023.

Nominations will be open at the AGM for committee members and office bearers. Nomination form below.

Geological Society of Australia, Tasmania Division 2023-2024

I hereby nominate.....for the position of.....

.....
(print name)

.....(nominator)
(signed)

.....
(print name)

.....(second)
(signed)

I accept nomination