



24 November 2022 | Issue 16

Hello and welcome to the November edition of the G(e)ossip! There's been lots going on in the department in the last few months, so read on to find out more. There's also lots to look out for in the next few months including conferences and of course the department Christmas party.

We'll be back in January with all the news from over the holidays, but until then we hope you have a great rest of the year!

Our newsletters are archived and uploaded on the Geology website. You can access them [here](#).

The G(e)ossip will be released on the last Thursday of each month. If you have feedback or anything to be added to upcoming newsletter issues, please send us an email at geossip.tcd@gmail.com.

-The G(e)ossip Team

Christmas Party

You may have seen the invitations around the Museum Building already, but here it is. Following the great success of the ChirstMa(y)s Party last May, we will be holding our **departmental Christmas Party on the 8th of December**.

We will be starting in the Common Room with some mulled wine, beers, games and overall merriment, then relocate to Brannigan's, off O'Connell Street.

Tickets are available at Sarah's office (Museum Building, first floor, Geology Office) for 10 euros (cash only, please).

Hope to see many of you there!

Please direct any queries you may have to the organisers, Lydia (whittakl@tcd.ie) and Blanka (kovacse@tcd.ie)!

8th December 2022

*Geology
Christmas
Party*

5 pm: Geology Common Room,
Museum Building

7.30 pm: Brannigans Bar,
9 Cathedral St, Dublin 1

SNS EQUALITY, DIVERSITY AND INCLUSION (EDI) COMMITTEE

The committee invites every SNS postgraduate student to fill out [this survey](#) to share their thoughts about their respective department and the school as a whole, in terms of EDI (Equality, Diversity, and Inclusion). The survey is completely anonymous and is a really good opportunity to make your opinions known. You have **until 3/12/22** to complete the survey.

To encourage your engagement we will be offering a **free donut** for people who complete the survey on a first come first served basis, please just screenshot the final completion message and bring it along to NERD club Monday 28th November, following the meeting any leftovers will be moved to the Geology Common Room (Friday beers room).

DEPARTMENT NEWS



At the end of September, GSI hosted the launch of the new book, *Geology of South Mayo - A Field Guide* by **John Graham** at the NUIG Earth & Ocean Sciences Department.

The **2022 Joly Memorial Lecture** was well attended by staff and students alike. We would like to again thank **Clive Oppenheimer** for giving us a fascinating look into volcanoes.



PUBLICATIONS

Coggon, R.M., Sylvan, J.B., Teagle, D.A.H., Reece, J., Christeson, G.L., Estes, E.R., Williams, T.J., and the Expedition 390 Scientists (including **Elliot Carter**), 2022. Expedition 390 Preliminary Report: South Atlantic Transect 1. International Ocean Discovery Program. <https://doi.org/10.14379/iodp.pr.390.2022>

Andrej Ernst, Anna Lene Claussen, Barbara Seuss and **Patrick N. Wyse Jackson** (2022) Stenolaemate bryozoans from the Graham Formation, Pennsylvanian (Virgilian) at Lost Creek Lake, Texas, USA. *Palaeontologica Electronica* **25**(2), 1–56.

Patrick N. Wyse Jackson and Markus Aretz (2022) George Demetrius Sevastopulo (1941–2021), stratigrapher and palaeontologist: an appreciation. *PalZ* **96**, 409–413. (<https://doi.org/10.1007/s12542-022-00630-w>)

Patrick N. Wyse Jackson (2021) *Geology and Setting*, pp. 63–69. In Connolly, Michael Stone, *Bone & Belonging: Killaclohane Portal Tombs, near Milltown, Co. Kerry*. Tralee: Kerry County Council.

Patrick N. Wyse Jackson, Louise Caulfield, Eoin McGrath and Des Johnston (2021). Data on fifty Irish stone types. *Eurolithos ornamental stone types database* (<https://geoera.eu/projects/eurolithos1/>)

Marcus M. Key, Jr., **Patrick N. Wyse Jackson** and Catherine M. Reid (2022). Trepustome bryozoans buck the trend and ignore calcite-aragonite seas. *Palaeobiodiversity and Palaeoenvironments* **102**, 253–263 (<https://doi.org/10.1007/s12549-021-00507-x>)

NERD CLUB

The NERD (**Networks in Ecology/Evolution Research Discussion**) club is a gathering of Postgrads, Post Docs, PIs, and other staff from the School of Natural Sciences who meet once a week to discuss all manner of science, bounce exciting ideas off each other, plan experiments or work as a group, get feedback on our work and pick up some transferable/career skills.

NERD Club usually meets weekly during the academic semesters, in the Auk Room in Zoology. The next meeting will be on Monday, 28th of November and there will be donuts!

To sign up all you need to do is to email us at head.nerd.tcd@gmail.com and express your interest in being added to the mailing list!

Quentin Crowley organised a **Climate Hackathon (Climathon)** on October 27th. This was held as a collaborative event between the Trinity Center for the Environment, Dublin City Council, and Smart Docklands. Participants worked on ideas to help Dublin city reach its EU Cities Mission ambition to be a climate-neutral and smart city by 2030. Further details are available at: <https://climathon.climate-kic.org/dublin>



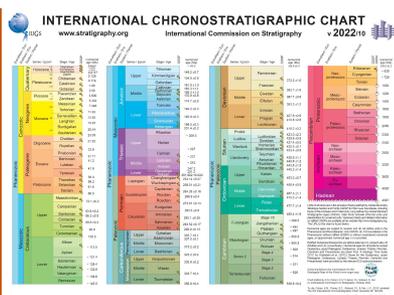
We would like to congratulate **Dave Chew** who is the new iCRAG Deputy Director. Read more [here](#).

ADVANCES IN GEOLOGY

Connemara Marble, a designated Heritage Stone

Louise Caulfield and **Patrick Wyse Jackson**, as part of their project *Stonebuilt Ireland*, together with colleagues from the University of Galway and National Museum of Ireland proposed Connemara Marble for designation of an International Union of Geological Sciences Heritage Stone. This designation was ratified at a meeting in Zumaia, northern Spain in October, and Connemara Marble is now one of only 32 such Heritage Stones worldwide. A video on the stone can be found at <https://iugs60.org/geodiversity/> while a Raidio na Gealteachta broadcast can be listened to (33:00) here ([Iris Aniar Dé Luain 14 Samhain 2022](#)). The original paper on the heritage importance of Connemara Marble is available on request [here](#). Known across the globe for its wonderful greenish-white-brown colouration and complex textures, the designation of Connemara Marble as a Heritage Stone will enhance its standing, afford greater visibility, and lead to greater usage in architectural and decorative applications.

The **International Chronostratigraphic Chart** has been updated. Changes have been made to the Hadean, Jurassic and Cretaceous. Read more at: <https://stratigraphy.org/news/143>



DEPARTMENT NEWS

Quentin Crowley is the Director of a postgraduate certificate course in Climate Entrepreneurship, as a collaboration between the School of Natural Sciences and TCD Tangent. The class presented their systems innovation project ideas in Tangent, as a culmination of module 1 Systems Innovation for Climate Action. The course will run again in 2023 and 2024 and is fully funded through Springboard+. Further information is available at: <https://www.tcd.ie/tangent/education/postgraduate/climate-entrepreneurship/>



As part of the COP27, **Quentin Crowley** participated in an online panel discussion on October 31st hosted by Climate-KIC from Alexandria library, Egypt on the subject of embedding systems innovation within organisations. The event was attended by over 100 participants from all over the world.



On the 4th of November, **Lydia Whittaker** (MSc, left) and **Eoghan Corbett** (PhD, right) received their diplomas at the Graduation Ceremonies. We would like to congratulate both of them.



COMMUNITY

Crafternoon

If you would like to spend a chill afternoon making decorations for the Christmas Party, join us next Wednesday, on the 30th November, in the common room. Ask Eshbal for details at geifmane@tcd.ie!

ENVIRONMENT

Turn off the light!



Please make sure when you're leaving your office for the day to close the door properly, turn off all the lights and appliances. This includes the hallway lights as well.

No trees were harmed during the production of this newsletter, because there is no paper version of this newsletter!

FIELDTRIP - SVALBARD

In late October travels to the land of ice and snow (and for Norwegians, the home of Santa!) commenced: Svalbard! After stopovers in Amsterdam, Oslo and Tromso (I agree, not the most environmentally friendly trip) we landed on a cold runway outside the town of Longyearbyen, the capital (and only town) on the Svalbard archipelago (with the town based on the main island of Spitsbergen; ~80°N). Why travel to this cold and windy part of the planet, at this uncompromising time of the year you may wonder... Although beautiful sceneries and amazing northern lights are to be seen on Svalbard, the purpose of this trip was *science!*



Scientists at UNIS, the University Research Centre of the Norwegian Polar Institute, had invited colleagues for a discussion and planning workshop for possible future drilling of the Svalbard subsurface, through the International Continental Drilling Programme (ICDP). Why drilling there? The island has slowly drifted to higher northern latitudes over the past ~300 million years, passing 60° northern latitude at ~210 million years ago, and remaining at around 80°N over the past 100 million years. Much of the sedimentary archive of that entire time-interval have been preserved in different basins across Svalbard, and so have the records of some of Earth's past largest climatic and environmental upheavals, such as the Permo-Triassic and Triassic-Jurassic mass extinctions, and the Paleocene-Eocene Thermal Maximum. The study of these time-intervals, as recorded in the Svalbard sedimentary successions provides a window into how the climate and environment changed at mid to high-northern latitudes during past super-greenhouse warming and global ecosystem disturbance.

The provisional drilling plan is to drill shallow, 200–300m cores at different sites across the archipelago, with possibly a deeper borehole close to Longyearbyen. Drilling in such a remote locality is complicated by the lack of infrastructure. For example, whilst Svalbard is roughly the size of the Rep of Ireland, there are no roads anywhere outside of Longyearbyen; thus, drill-rigs need to be transported by helicopter.

To organize such a drilling programme through ICDP, especially in such extreme environments, typically takes 5–10 years. Thus, one needs a bit of patience..., but this October we took the first steps to (hopefully) make this a reality.



STAFF IN SPOTLIGHT

We would like to introduce **Dr Eyad Abushandi**, the newest professor in our department.

Dr Eyad Abushandi holds a postgraduate certificate in higher education from Edge Hill University/ England in 2020, and a PhD degree in Hydrology from the Faculty of Geo-Engineering, Technical University Bergakademie Freiberg/ Germany in 2011. Dr. Abushandi has an intensive experience in environmental engineering education and accreditation bodies, namely: ABET and Engineers Australia.

Dr. Abushandi has taught Civil Engineering courses such as Hydrology, Water Resources Engineering, Environmental Engineering, Fluid Mechanics, Hydraulics, Applied Mechanics, and many others. He has 25 international peer-reviewed publications including research papers and book chapters. His research interests are:

1. Assessment of Hydrological Extremes for Arid Catchments
2. Shoreline Erosion Assessment and Mitigation
3. Flash Flood Inundation Modelling



We would like to welcome our new School Administrative Manager, **Mr James Higgins**, to the School. He can be contacted by email at SCHNATSC@tcd.ie. We would also like to thank **Ms Mary Foody** for her hard work and wish her all the best in her retirement.

MEET THE POSTGRADS

Eimear Prendergast

My name is Eimear and I am a new(ish) member of the department, I'm in the first year of my PhD with my supervisor Dr Carlos Rocha.

I am working on the GRADS & SMARTS project which stands for **groundwater age distributions** for the **sustainable management of groundwater resources** in Ireland. This project aims to use a suite of environmental tracers to quantify groundwater ages and residence times in Ireland. My project focuses on using stable isotopes of oxygen 18 and deuterium in water as well as other environmental tracers to date water in Irish catchments.

I was born and raised mostly in Dublin and graduated in 2021 with a BA in Earth Science from the department of Trinity College. I can be found in the geology postgrad office or the Watts lab down at the other end of college (or in Dunnes stocking up for Friday beers!)



MEET THE POSTGRADS

Eshbal Geifman

I joined Trinity in September 2022 as a new PhD student, working with Mike Stock. My project aims to investigate the processes that control the evolution of magma in Paleogene intrusions in Northern Ireland and the north of Ireland through a combination of fieldwork and geochemical and petrological analyses.

I was born in Israel but lived most of my life in Manchester before going on to do a BSc in Geoscience and a Masters in Volcanology at Durham in the UK. During my Masters, I used experimental petrology techniques to study the growth and development of plagioclase crystals from basaltic melt. I look forward to the next 4 years here at Trinity.



Jack Beckwith

I'm Jack, a first-year PhD student working under Mike Stock. I joined TCD after completing an MSc at Royal Holloway, University of London, just around the corner from where I grew up.

I've long had a fascination for igneous systems; a passion that has only grown with age. Hence, moving over to Dublin to study exactly that was a no-brainer. My research forms part of the SFI *Critical Ireland Project*, which focuses on understanding the fundamental magmatic processes involved in sulphide and platinum-group element (PGE) mineralisations. Specifically, my project sees me studying the Carlingford Igneous Complex (Co. Louth). Here, the exposed Palaeogene intrusions provide a natural laboratory to study the dynamics of country rock assimilation and magma mixing and its effect on intrusion-type PGE mineralisations.



COMMUNITY

Thanks to the bounty of apples available in Dave's garden, an **impromptu bake-off** was announced in the common room. The first entry, from **Sarah Guerin**, disappeared within minutes and received rave reviews.

We are still waiting for Sean's Apple crisp. Also, new entries are always welcome.

We promise to keep you, our faithful readers, updated about this fierce competition.





The University of Dublin Choral Society gave two wonderful performances of Handel's Messiah on the 16-17th of November, conducted by David Leigh. **Sarah Guerin** (5th row, 2nd from the left), **Blanka Kovács** (4th row, 2nd from the right) and **Dave Chew** (last row, 4th from the left) from our department are part of the choir and would like to thank all who attended the concert.

SCIENCE COMMUNICATION

The 2022 National Ploughing Championships was recently held in Co. Laois with more than 250,000 people in attendance over the three-day event! Department members **Jerry Dickens**, **Erica Krueger**, **Hilde Koch** and **Paul Guyett** participated with iCrag and Ireland's Fossil Heritage to chat about geoscience and fossils with children and adults alike!



Department member **Vincent Monchal** is participating in the "I'm a Scientist get me out of here!" program this month in the Aluminium zone. This program is supported by SFI and aims to promote science and science studies to students ranging from 8 to 18 years old. For more info watch this introduction video: [I'm a Scientist - An Introduction in 60 seconds on Vimeo](#)



CONFERENCES



Recently the International Bryozoology Association met in the Museum Building for its 19th triennial conference where research on fossil and living bryozoans was presented. This was the second time the group met in Dublin; the first time back in 2001. Both meetings were organised by **Patrick Wyse Jackson**.

Attended by 40 delegates in-person and 20 online from 24 countries, the highlights of the meeting included unraveling the 3D structure of fossil bryozoans using micro-CT imaging, understanding the phylogenetics of freshwater bryozoans thanks to DNA studies, and the

conference dinner held in a restaurant on George's Street. The main value of the meeting was to be back in-person meeting friends and fellow bryozoan researchers and discussing and learning about recent research findings.

Patrick contributed to three talks and a poster that included a report of a rare bryozoan from the Mississippian of Co. Kerry, and an assessment of the taxonomic value of the Bryozoan Skeletal Index, a measure he devised with colleagues in 2019 that measures the proportion of skeleton in fossil bryozoan colonies.



POSTGRAD SUPPORT

GRAD CHATS

FOR ALL POSTGRADUATE STUDENTS

To equip students with the skills to manage stress, work-life balance, increase self-care practices, communication and assertiveness skills, and look at how best to negotiate the supervisory relationship

Mondays from 2pm – 3.10pm in-person at the Student Counselling Service offices (3rd floor, 7-9 Leinster Street South, Dublin 2)

With: Tom Adams (SCS) and Martin McAndrew (Postgraduate Advisory Service)

Scan me to sign up

Learn more on the PG Grad Chats [webpage](#) and pre-register for sessions [here](#).

CONTRIBUTIONS

Got anything exciting coming up over Christmas and the New Year? Any conferences, field work, publications, talks, pictures of your pets in Christmas costumes?

Let us know at gossip.tcd@gmail.com to be featured in the next newsletter.

UPCOMING CONFERENCES

- **iCrag2022** Research showcase (1st December, Croke Park) <https://www.icrag-centre.org/icrag2022/>
- **SCI:COM 2022** (7th December, Aviva Stadium) <https://www.scicom.ie/>
 - Our very own **Niamh Faulkner** is a panel member
 - They're also looking for [volunteers](#)
- **VMSG2023** conference (4th-6th January, London)
 - Several members of department will be presenting their research (<https://vmsg-2023.org/>).
 - Some of us will be doing community outreach at the Natural History Museum (<https://vmsg-2023.org/home/outreach/>) after the conference to talk about our work on volcanoes and run activities.

MENTAL HEALTH MATTERS

TCD's Student Counselling Services is open and available to all registered students.

Check out their website [here](#) to read about the services they provide, email them at student-counselling@tcd.ie to request an appointment, and follow them on Instagram at [@tcd_headspace](#) for mindfulness and mental health awareness tips. They now offer [PhD research support groups](#) to keep you on track!

MEET THE NEW EDITORS

Fay (left): I'm in my second year of my PhD with Mike Stock. My project is looking at Campi Flegrei in Italy, in particular the magmatic evolution of the volcano in the last 15,000 years.

Blanka (right): I'm a third year PhD student, working with Micha Ruhl. My main field of interest is Large Igneous Provinces and their temporal correlation to environmental change events.

We would like to thank the previous editorial team for their hard work in building this newsletter from the ground!

