

THE G(e)OSSIP

The official newsletter of the Geology Department

24 February 2022 | Issue 11

WELCOME

We hope you are all keeping warm and dry after storms Dudley, Eunice and Franklin blew through last week. Let's hope March brings some sunnier (and calmer) weather for those heading out into the field in the next few weeks!

The news that most remaining Covid measures will be lifted at the end of the month takes us a further step out of the pandemic, and hopefully brings with it chances for more departmental social events and activities in the near future. We will keep you updated with exciting things to come!

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

GEOLOGY IN THE NEWS

Perseverance's year on Mars: what has it achieved?

February 18th marked a year since NASA's Perseverance rover touched down just north of the Martian equator. Launched in July 2020, it travelled ~305 million km to Mars and landed six months later in the Jezero crater. Its mission is to seek signs of ancient life, as well as collect samples of rock for potential return to Earth, with researchers intending the rover to visit an ancient delta to look for the signs of ancient life. However, it hasn't yet reached the delta, and has been roaming the crater floor since landing. So, what has it achieved in its first year on Mars?



Photo taken by Perseverance rover. Source: NASA/JPL-Caltech/ASU/MSSS

The rover has travelled more than 3km across the crater, and collected six rock samples from drilling cores. Researchers expected these rock formations to be sedimentary, but Perseverance's sampling revealed they were igneous, and much of Jezero's floor is composed of igneous rocks which shows signs of interacting with water. Some samples have visible layers, which were initially thought to be sedimentary features, but chemical analysis performed by the rover showed they are the result of a layered igneous intrusion forming in cooling magma. Salt-rimmed holes suggest water flowed through the rock in the past, indicating a life-friendly environment has existed on Mars. In total, the rover is aiming to collect 30 samples of rocks, soil and atmosphere, which will be collected by another rover and brought to Earth, probably not arriving until 2031. You can follow the Perseverance rover's progress on Twitter on both its [official](#) and [unofficial](#) accounts.

Source: [Nature](#); [NASA](#)

MUSEUM BUILDING HISTORY

In 1856 James Robinson a photographer of Grafton Street was commissioned to photograph the Museum Building then being erected in Trinity College Dublin. His photograph (top) captures a number of people on site including one of the celebrated O'Shea brothers who is carving a metope high up just beneath the cornice. Around the building blocks of Caen Stone from France are being worked for use for the internal walls of the central hallway. Stone was brought to the site in cars pulled by horses. The 1856 scaffolding looks quite flimsy being made of timber when compared with the modern day variety that surrounded the building when it was reroofed recently (bottom). Another major difference is the large crane which is being used today to lift Welsh slate being fitted to the roof. This material is replacing similar stone that has come to the end of its natural life after 165 years. When the building was being built stone was probably winched into place using ropes, chains and pulleys rather than with a large crane. Today all personnel on site wear appropriate safety gear including hard hats; note the headgear of the gentleman in the right foreground of Robinson's view!



Images: Top, Christine Casey and Patrick Wyse Jackson *The Museum Building of Trinity College Dublin* (Four Courts Press, 2019, fig. 10.7); Bottom, Patrick Wyse Jackson. Written by Patrick Wyse Jackson.

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!

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](#).

COVID-19 UPDATE

Face coverings will no longer be compulsory as of Monday, 28 February. However, it is still recommended to wear face coverings in lecture theatres, libraries, tutorials and labs. To continue staying safe, please do not come to college if you are displaying any signs or symptoms of COVID-19. Continue to be mindful, wash your hands and stay up-to-date on all TCD statements [here](#).

CONFERENCES

The **2022 Irish Geological Research Meeting** is being held virtually on Friday, February 25. Check the [website](#) for more information and register [here](#).

The 'Geochemistry Group' is pleased to announce that the next **Geochemistry Group Research in Progress (GGRiP) Meeting** will take place at Cardiff University on 5-6 May 2022. Registration and abstract submission will open in March 2022. Check the [website](#) for upcoming information.

The **Irish Geosciences Early Career Research Symposium (iGEO2022)** will be held at University College Cork on 9-10 June 2022, and registration will be opening soon. Check their website [here](#) for updates and follow them on [Twitter](#).

The **International Council for the Exploration of the Sea (ICES) Annual Science Conference** will be held in Dublin this September! Abstract submission is now open until 10 March 2022. You can submit your abstract [here](#), find general information on the conference [here](#), and follow them on [Twitter](#) for up-to-date details.

WEBINARS

[Geological Society of UCD](#)

24 February at 6:00 PM - UCD Alumni, *Life after college: what are ye at?* Click [here](#) for the Zoom link.

[Royal Irish Academy Sustainability Series](#)

24 February at 6:30 PM - Iain Stewart, *Selling Planet Earth: re-purposing geoscience for sustainable human wellbeing*. Click [here](#) to register.

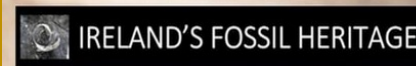
DEPARTMENT NEWS

Ask a Palaeontologist



Dr Patrick Wyse Jackson

Associate Professor of Geology and Curator of the Geological Museum at Trinity College Dublin



Our department's Dr. Patrick Wyse Jackson was recently featured on Ireland's Fossil Heritage "Ask a Palaeontologist". Click [here](#) to read the full article, and check out their [website](#), [Instagram](#) + [Twitter](#) for info.

ATHENA SWAN

Updates

The Athena SWAN/Equality Diversity and Inclusion (EDI) committee is in the process of working towards silver accreditation. We are currently collating information and working through the application process. This is a sizable project and will span the next few months onwards. During this time we will provide updates and insight into the current work being done within the School to promote equality and inclusion, through newsletter contributions.

News

The 11th of February was International Day of Women and Girls in Science. Designated by the UN, the day serves to spotlight females in STEM. Although it is a day to celebrate their successes, it is also an opportunity to draw attention to the gender inequality that still exists within science and what we can do to improve it. If you missed it there were some great highlights over on twitter using #womeninscience, including on the TCD [Twitter](#) account.

Resources

Speak Out was launched in November 2021, a tool to anonymously report bullying, violence, and harassment. You can find the Speak Out tool and relevant supports on the new webpage [here](#). If you would like more information, please view our [website](#). You can contact the Athena SWAN/EDI committee at fraser.mitchell@tcd.ie.

