

StudentShapers Recruitment: Calling *Year 2 and Year 3 ESE* students

Developing and Improving the ESE Virtual Microscope

Bursary: 4 weeks full time in July/August 2023 - £365 per week x 4 weeks = £1220 in total – preferably start on Monday 10^{th} July, finish by Friday 4^{th} August (the start date is flexible – either one week earlier or one week later).

Who should apply: Year 2 and Year 3 ESE students – must have previously completed the Optical Mineralogy and Igneous & Metamorphic Geology module. Two positions available.

Campus/Location: ESE Department, RSM Buildings, South Kensington Campus. Some parts of the project will need to be done in-person on campus (e.g., digitalizing samples) and other parts (e.g., implementing digital materials on ESERC) can be done remotely.

Project details:

The key aims of this project are to engage collaboratively with student partners to:

- 1. Develop and improve the ESE Virtual Microscope (e.g., possibility to see the entire thin section and digitalize thin sections at high-resolution)
- 2. Create a library of digitalized thin sections of rocks to be implemented into ESERC.
- 3. Make a description of what can be observed on every digitalized thin sections.

This project cannot be undertaken without a collaborative effort between Valentin Laurent, Matt Genge, Alan Spencer and the student partners. Valentin and Matt were involved in the development of the first version of the ESE Virtual Microscope and teach the Igneous and Metamorphic Geology course while Alan has expertise on how to implement the digitalized material in ESERC. The students are absolutely the best-placed people to bring their experience on how a Virtual Microscope can improve the delivery of specific modules and more generally the degree, having experienced it first-hand.

The collaboration will start by establishing a list of modules that would benefit from using the Virtual Microscope and then a list of the samples and thin sections to be digitalized for each module.

After undertaking some practical training on how to digitalize thin sections with Matt and Valentin and on how to implement the digitalized materials in ESERC with Alan, the students will take the lead in digitalizing the thin sections themselves and create a library of digitalized thin sections of rock in ESERC. The team will then work in partnerships to select the specific areas of a thin section that can be digitalized at high-resolution and on how to describe these thin sections. This approach has several benefits for the students who will have full input into the content, shaped by their recent experience of the course and what they found most difficult. They will also gain important practical and transferable skills in petrology and digital teaching.

Imperial College London STUDENTSHAPERS

How to apply:



Applications (300-500 words) should be made via the 'Student Expression of Interest' form on the StudentShapers website (here) or accessed using the above QR code. This will then be distributed directly to the staff partners.

Deadline: Application must be submitted by 17h on Friday 31st March.

Contact details (+ for informal correspondence/questions on the project): v.laurent@imperial.ac.uk