## EEES Project Proposal Form – 2023 entry

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Evaluating diversity and inclusion across (geochemistry) academic ladder</th>
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<tbody>
<tr>
<td><strong>Key words</strong></td>
<td>Academic career ladder; Equality, Diversity, Inclusion (EDI); Environmental Sciences; Geochemistry</td>
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<tr>
<th>Supervisory team (including email address)</th>
<th>Lead supervisor: Shonil Bhagwat - <a href="mailto:shonil.bhagwat@open.ac.uk">shonil.bhagwat@open.ac.uk</a> (School of Social Sciences and Global Studies, Faculty of Arts and Social Sciences)</th>
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<td>Co-supervisor: Pallavi Anand (OU) - <a href="mailto:pallavi.anand@open.ac.uk">pallavi.anand@open.ac.uk</a> (EEES, STEM)</td>
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<td>Potential external supervisor: Jessica Gagnon (Manchester)</td>
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**Note:**

Although the supervisory team will work in close collaboration with each other and with the student appointed, the project’s predominant focus is on social science data arising from E-DIAL (see details below). This is the reason why the nominated lead supervisor is from FASS and the named potential external supervisor will bring additional expertise in qualitative analysis of social science data.

Nevertheless, the findings of this PhD project will have direct relevance to geochemistry sector as well as the wider environmental sciences academic community. There is no similar funding pot in FASS and therefore funding is requested from STEM.

If this supervisory arrangement does not help fulfil the eligibility criteria for STEM PhD funding, Dr Anand will be willing to act as the Lead Supervisor even though she has submitted another application to this call as the Lead Supervisor.

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<th>Is the PhD suitable for part time study?</th>
<th>Yes ☒</th>
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<tr>
<td></td>
<td>No ☐</td>
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**Project Highlights:**

- Training in interdisciplinary research techniques and data analyses
- Ethically informed research exploring diversity, inclusion and barriers in academia
- Engaged research to inform policies at institutional, funder, government levels

**Overview:**

This project aims to dive deeper into data collected through a NERC funded Equality, Diversity and Inclusion enrichment project called ‘Evaluating diversity and inclusion across (geochemistry) academic ladder’ (E-DIAL)

Some of the key findings of this project, based on 156 respondents, were as follows:
• Most UK geochemists identify as white (74%), straight (73%) and consider themselves able (65%).
• Among those who reported a disability, a mental health condition is most common (~10% overall and ~26% for respondents with temporary contracts) while other forms of disability are present (long standing illness, learning difficulties and physical, visual, hearing, social or communication impairment.)
• Among those under the age of 50, 23% reported physical/mental disability and 52% reported no disability whereas only 4% reported disability over the age of 50.
• There is an attrition of some minority groups (those who identify as women, LGBTQ+ and gender diverse/non-binary) at higher academic positions.
• All PhD student respondents that identify as gender diverse (9.5%, e.g. non-binary, gender-queer, agender etc.) have reported experience of prejudice.
• National diversity awards do not seem to reflect gender (e.g. Stonewall Champion) or ethnic (e.g. Race Equality Charter) diversities within corresponding institutions.

These findings lay the foundation for EDI state-of-the-art in geochemistry academic community and identify the data gaps and direction for future research in the wider field of environmental sciences.

The PhD project will explore data collected for environmental scientists across academic ladder (from PhD student to professors) and analyse intersectional data on protected characteristics to identify barriers for progression for minoritized group.

While initial data analyses have identified diversity of disciplines geochemists contribute to, yet the diversity of different protected characteristics across the academic ladder is limited. Some minoritized groups are unrepresented at the top of the academic ladder and this project will dig further into the qualitative data to identify barriers.

This project will also involve synthesising recently published reports on diversity and inclusion and recommendations proposed for greater representation in geosciences and STEM. These insights will help in further exploring reasons for lack of implementation of recommendations at funder and institutional levels.

**Methodology:** The project will utilise development of algorithm and codes for analysing vast array of survey data. A synthesis of codebook will be developed to analyse free text and interview data. The data analyses will be synthesised as digestible and accessible output materials for the UK higher education institutions, funder and the government.

**Training and skills:**

The student will receive specific training on quantitative and qualitative research from supervisory team. The successful candidate will gain experience in policy development skills to utilise research findings for wider use.

The student will also receive skills training. OU offers a diverse set of training courses throughout their PhD.

Specific skills that will be acquired during this project include:

• Data handling and interpretation from a wide variety of sources
• Communication through writing, poster and oral presentations to academic and non-academic audiences
Co-supervision on your own devised OU’s master’s project and teaching research methods to A level Nuffield funded summer students.

**Partners and collaboration:** This project will benefit from a wider collaboration with E-DIAL project members working across UK higher education institutions (https://geochemdei.ac.uk/team/).

**Possible timeline:**

Year 1: Synthesise E-DIAL quantitative data and carry out a literature review on EDI reports and recommendations. Develop a code book for analysing qualitative data. Plan additional data collection.

Year 2: Present data at Geochemistry Group Research in progress meeting and write a manuscript. Receive training on policy development. Collect additional data and analyse qualitative data. Synthesise data and outputs.

Year 3: Finish remaining data analyses, and present results at an international conference and write up thesis and manuscripts.

**Further reading:**

E-DIAL blogs: https://geochemdei.ac.uk/blog/

Some other geochemistry related diversity outputs:


**Further details:**

Please contact Supervisor (shonil.bhagwat@open.ac.uk or pallavi.anand@open.ac.uk) for further information and informal discussion about this project.

Applications should include:

- A covering letter that includes:
  - Your motivation to study for a PhD in general
  - Your interest in this project in particular
  - The project-specific skills, aptitude and experience you bring to the project
- an academic CV containing contact details of three references, one of whom should be able to comment on your academic abilities.
- and an Open University application form.
• If you are living in the UK and have residency rights then use the Home form
• If you are living abroad then use the International form

Applications should be sent to STEM-EEES-PHD@open.ac.uk by the end of the day on Wednesday 11th January 2023.