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Equality, Diversity and Inclusivity

Report of a survey of its members and others by the Mineralogical Society of the UK and Ireland



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The survey was assembled by a Council-appointed committee of individuals who are either members of Council or who represent the Special Interest Groups (SIGs). The committee includes: J. Lloyd (President), S. Gibson, M.-L. Bagard, E. Deady, J. Horák, H. Pendlowski, F. Cooper, L. Kelly, O. Lord, J. Scarlett and K. Murphy (Executive Director, Chair). Future versions of this committee will include EDI officers of the Special Interest Groups appointed since this process began. Drafts of the survey were made available to members of Council for comment. The survey also drew inspiration from a number of other such survey documents, including that published by EDIG (Equality, Diversity and Inclusivity in the Geosciences), a University College Dublin-based EDI group.

- Based on feedback, we resolved not to ask people from marginalized groups to be the bearers of a disproportionate load in terms of attempting to achieve diversity in committees.
- We have resolved to ensure that changes, e.g. in terms of funding, awards, publications, etc. do not remove emphasis from scientific endeavour, i.e. that those from marginalized groups will not value an award if they feel it is being given because they are from a marginalized group rather than on the basis of their abilities.

#### Actions

- We have appointed a Council-level EDI officer; all SIGs will have appointed an EDI officer by the end of 2022.
- We are reviewing activity in terms of meetings, publications, awards, grants, lectures, to ensure that all of our colleagues have the sense that they are welcome in our organization.
- We are now measuring our performance in terms of ensuring equality, diversity and inclusivity across all of what we do. (We are doing this by recording demographic information for all of our meetings and will conduct annual and 5-yearly reviews.)
- Guidelines are now circulated by every meeting organizer which asks delegates to prepare presentations which are 'accessible' by as many fellow delegates as possible (e.g. in terms of colour for those who have colour blindness, etc.)
- We are now opening all of our (hybrid) meetings to attendance by delegates from Research4Life countries.
- As we move into the future, the Society will work to influence EDI matters in a broader context, and not just in simple Society terms (e.g. who joins our subject and from where, and what will their experiences be in 2030 in comparison to 2020?).
- We will attempt to influence those around us. Can we provide a model which our members can use to bring to their places of work? To their research groups? To their classrooms? Our aim should be to lead by example (rather than acting as a watchdog with punitive powers).
- We will examine options for influencing those who have not yet considered our subject as a possible career. Some would say that the demographic breakdown in our science should reflect that in Society as a whole. At present it does not. There is an argument that cultural norms exist which mean that people from certain demographics choose not to enter science as a career. But there are groups of people that do not feature in many categories, geoscience among them. Our aim should be to achieve a level of exposure of our science such that anybody who would like to consider geoscience as an area of interest or as a career should feel that they are welcome to try it and feel that they have an equal chance of success.

The end of the EDI survey (analysis of the data, publication, etc.) should merely represent the beginning of a life-long process for the Society. We received much encouragement from respondents for the actions we proposed. We also received advice not to be "woke", and to avoid the trap of ticking cultural EDI boxes without actually seeking "real" change.

In all of the above, there is no short-cut to success. Individuals will still rely on merit to succeed. But it is the Society's job to provide an equal opportunity for all. Merit will be the deciding factor, but support, advocacy and mentorship will be provided equitably to those who want it to help their chances of succeeding with awards, bursaries and publishing success.

#### 1. Introduction and methodology

The Mineralogical Society survey was launched in the Spring of 2021 and was live until 19<sup>th</sup> July of that year. Data were collected anonymously; the list of 27 questions is shown in Appendix 1 (and graphs representing responses in Appendix 2). Respondents were also invited to express views about suggested courses of action and to propose additional/alternative courses of action. These responses are listed as Appendices 3 and 4, respectively.

The survey consisted, for the most part, of questions with multiple-choice responses. For open questions, the responses are presented in Appendices 3 and 4.

Advertising about the survey was extensive and included several announcements to our members, to the readers of *Elements* Magazine, to followers of the MSA-Talk list serv, to followers of several Twitter accounts (including @MinSoc\_UK, @GeochemGroup; @amg\_min; @MSG\_1981; @vmsg\_uk).

A total of 524 individuals (42% of whom are members of the Society) responded to the survey. This is <u>not</u> a survey of all (800) members. We do not know if the people who chose to spend valuable time completing our survey are representative of our community or of our membership. The anonymised comments provided suggest a reasonable balance but it is not possible to be more precise than that. We hope that the healthy number of respondents gives sufficient access to a broad church of opinion.

We accept that no survey is ever perfect. Individuals will sometimes respond in ways not anticipated when formulating the questions. We attempt, here, to interpret all responses for the benefit of the actions which will come in the future, though conscious of the fact that we could have done better in terms of building the survey.

The questions in the survey established criteria about the respondents and about their direct experiences of EDI matters. Thus, we can identify certain demographics, assess their EDI experiences, and compare those experiences with those of other cohorts, e.g. are the EDI experiences of young female respondents with caring responsibilities the same as those of male counterparts (with or without caring responsibilities)?

The language of EDI has introduced a new lexicon to many of us. Inaccuracies in some of the questions posed were pointed out by a number of respondents. Choice of words, though well-meaning, can be offensive and that is clearly not intended here. The Society will try to be better at that, but the EDI committee realises that this terminology is an ever-changing landscape. Corrections are welcome by all means; efforts to improve and to learn in terms of our actions are the priority here.

## 2. Results of the survey and discussion

The diversity in our respondents is not as broad as we would like it to have been. For example, only ~72 people (14%) with ethnicity other than white (including Irish, British, traveller, etc.) completed the survey. It is difficult to extrapolate and build policy on the basis of such small numbers.

Table 1. Experience of discriminatory behaviours amongst survey respondents

	Never	Experienced <3	Experienced	Experienced >10
	experienced	occasions of	3–10 occasions	occasions of
	discrimination	discrimination	of discrimination	discrimination
All respondents	36%	33%	19%	12%
Men	52%	28%	15%	5%
Women	7%	28%	29%	36%
Caring role	17%	31%	27%	25%
Women in a	4%	39%	32%	25%
caring role				
Ethnicities	28%	33%	28%	11%
other than				
white				

It is clear from Table 1 that women experience discrimination more than men and are more likely to have experienced repeated discriminatory behaviour. More than half of men who responded have never experienced discrimination.

A total of 173 respondents have a caring role (in one or more categories). Of these, 57 are women and a multiplier effect is clear here.

The detailed graphs shown in Figs 1–8 and in Appendix 2, represent data for all of the questions asked of our respondents. In few areas can we draw conclusions as clear as those given above, but there is certainly sufficient evidence, right across the spectrum of responses, that many people feel discriminated against to some degree.

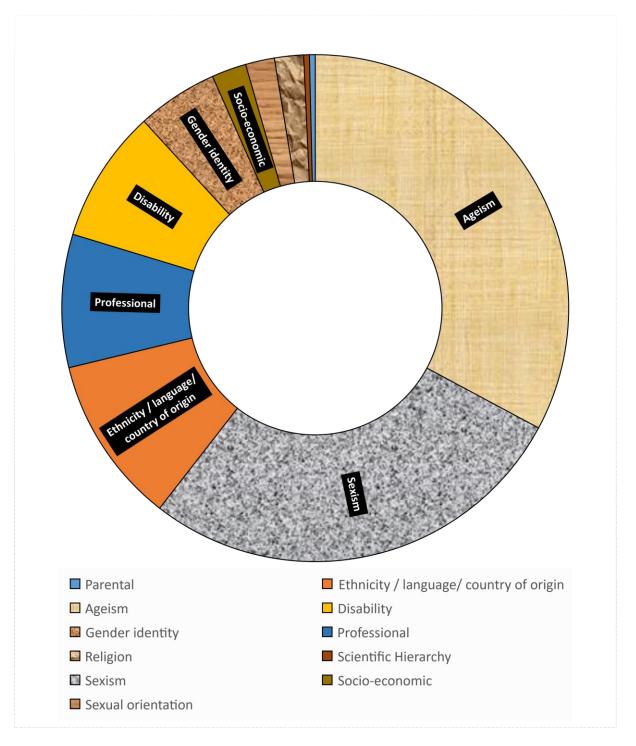
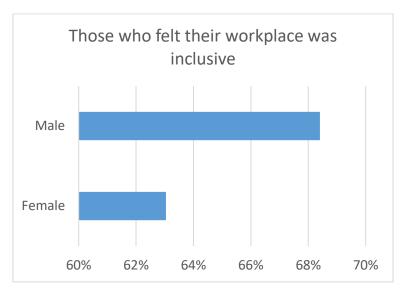
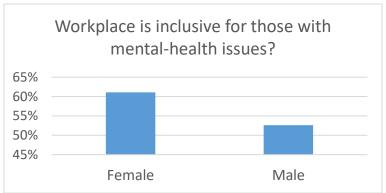


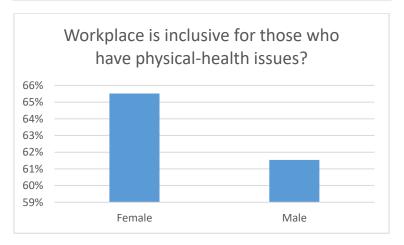
Figure 1. Kinds of discrimination experienced by respondents.

Though 89 respondents reported agism as the discrimination they experienced, only 28 of these people were in the 50+ age group. Forty seven (53%) people reporting having experienced ageism were in the 31–50 age category.

In response to the question: "is your current workplace inclusive", 326 (62%) answered yes or implied "mostly". 154 (29%) said it was not inclusive. The remainder were not sure or did not enter a response. In the graphs below (Fig. 2), more people with mental-health (in particular) and physical-health problems claimed that their workplaces were not inclusive.









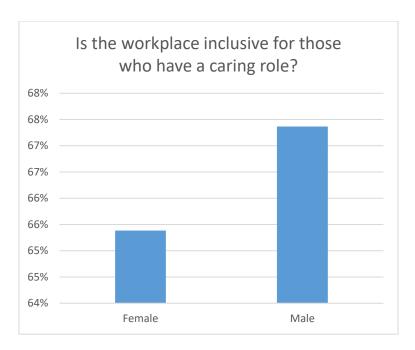


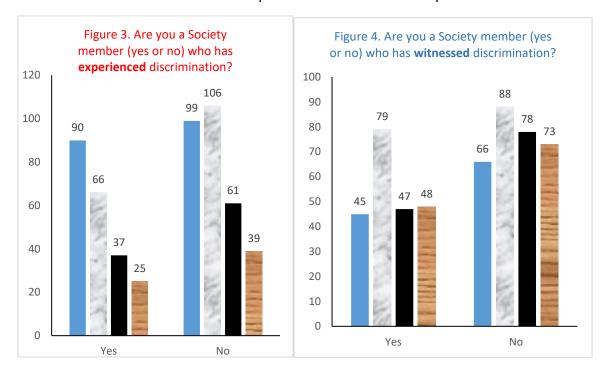
Figure 2. Inclusivity at work.

The following is a series of graphical representations of the data from the survey. In these graphs, the data are centred around cohorts who experienced discrimination or who witnessed it. We asked people to recall the number of instances though we recognize that it is difficult to compare one person's version of discrimination with another's. It has also been suggested that we could/should have asked people to indicate the levels of seriousness of the discrimination they experienced/witnessed. This is acknowledged as a shortcoming.

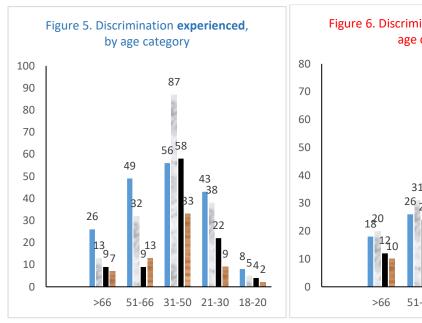
The colour code for Figs 3–6 below is as follows:

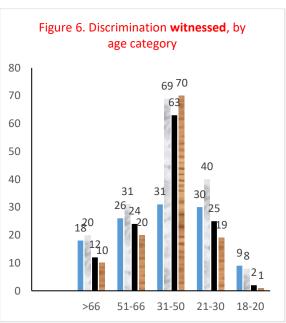
I have never experienced these issues
I have experienced few (<3) of these issues
I have experienced some (3–10) of these issues
I have experienced several (>10) of these issues

The numbers above each of the bars represent the numbers of respondents.

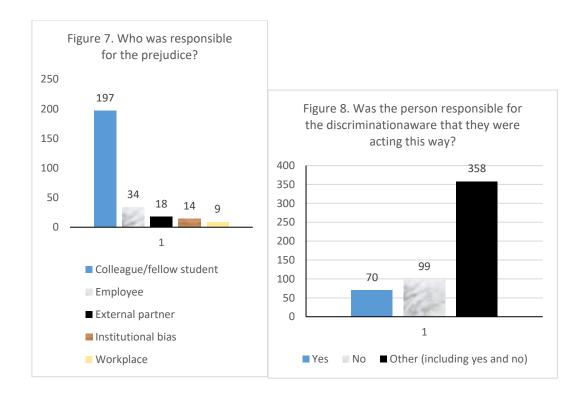


- We can see from Fig. 3 that a smaller proportion of Society members have experienced discrimination than from the non-member cohort.
- The same is true of those who witnessed discrimination (Fig. 4) though the margins are closer.





- It would appear (Fig. 5) that older respondents have experienced less discrimination than their younger counterparts.
- This is even more likely to be the case for those who witnessed discrimination.



- The prejudice in the survey cohort is more frequent between colleagues and fellow students (Fig. 7).
- The many answers which indicated that the witnesses could not be sure whether the discrimination was intentional or not strongly suggest the need for bystander intervention training.

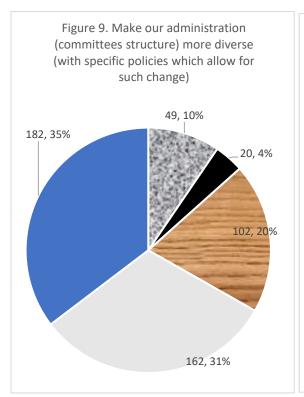
## 3. Discussion of proposals for Society actions

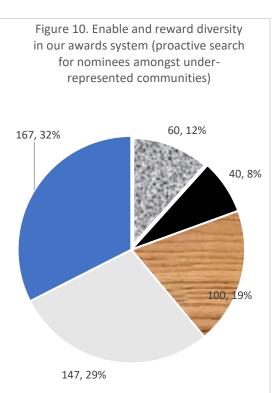
Our respondents were asked to consider a series of proposals for how the Society might act in terms of making changes in support of EDI, indicating support or otherwise. Figures 9–18 show that all suggestions proposed in the survey were supported convincingly.

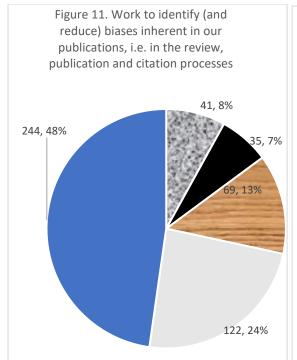
Appendices 3 and 4 consist of respondents' comments/suggestions and these will also be taken into account by the EDI committee and Council as we move forward.

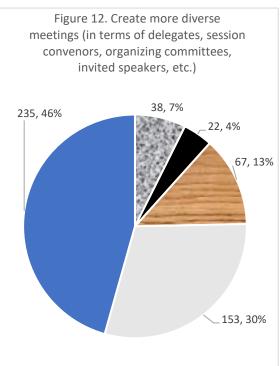
## The following colour code applies to Figs. 9–18.

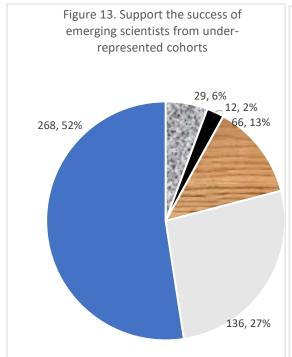
Strongly against
Do not support
No view
Support
Strongly support

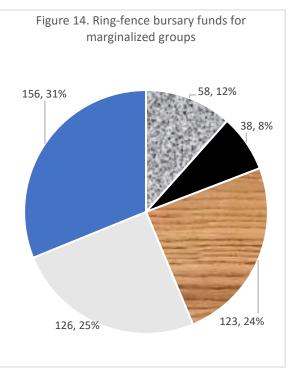


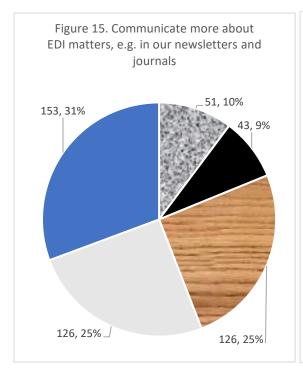


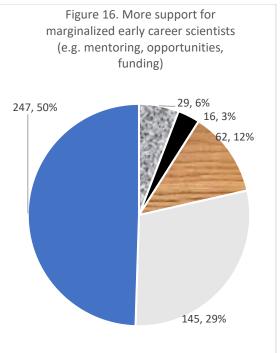


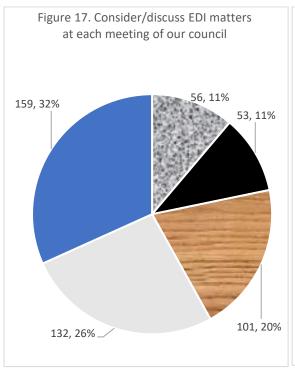


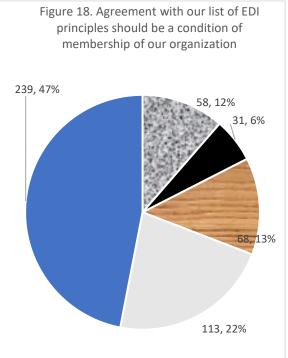












## Conclusions

What are we to conclude from this year of effort? What can we achieve as a relatively small Society in terms of treating people equally, being inclusive and ensuring diversity (in terms of people, place, views, approaches, science)?

Our respondents gave clear support for the courses of action suggested in the survey (see section 3). Note that numerous additional comments were made in answer to 'open answer' questions, and these responses (both positive and negative) are contained in appendices 3 (ways in which the Society could improve its approach to EDI) and 4 (how to make places of work more inclusive).

The Society now needs to decide how to proceed, i.e. to act on the recommendations of our respondents. In addition to the points listed as actions in the 'Executive Summary', we need to focus on our main areas of activity:

- Journal publishing
- Special interest groups
- Meetings
- Book publishing
- Membership
- Awards
- Online events

We will work very hard to ensure that our efforts focus on opening avenues of opportunity for more people (as opposed to restricting them for some groups in favour of others).

ACTION PLAN					
Immediate	3 months	6 months	1 year	2 years	5 years
Form EDI committee; elect EDI officer for Council	First meeting to oversee subcommittees below; set up 'unconscious bias' training; set up 'bystander intervention' training; influence on the world outside of the Society in terms of making the geosciences open and welcoming	Second meeting to assess activity of subcommittees; make recommendations to November Council meeting	Review first year of activity; establish timetable for meetings	Review of data gathered since 2022	Major review of data gathered since 2022; assess success
Sub- committee to review publications	Examine options for making book and journal publishing more open and more EDI-aware + code of conduct	Report to EDI committee	review /revise; training for new journal AEs	review /revise	review /revise
Sub- committee to review meetings and online events	Devise code/protocol for making meetings EDI-friendly, accessible, etc.	Report to EDI committee	review /revise; training for new committee members	review /revise	review /revise
Sub- committee to review awards and bursaries	Devise protocol to make awards more open and include those from marginalized groups	Report to EDI committee	review /revise; training for new committee members	review /revise	review /revise
Sub- committee to review <b>membership</b>	Our Society should attract members irrespective of location, socioeconomic background, ethnicity etc.	Report to EDI committee	review /revise; training for new committee members	review /revise	review /revise

In order to make our science open to all, we need to "reach out" to young people, especially in groups from which small numbers of people join our science, to offer that access. "This is our science and we would like you to try it out. We are open to all comers!" The Society already has a nascent 'Outreach' programme but it needs work and resources. We offer links to teaching resources and websites of interest for those with an amateur interest in our subject. In 2021 and 2022 we have published several 'outreach-style' videos on our Youtube Channel

(<a href="https://www.youtube.com/channel/UCJLEvvFJEAtt2SRHozqd7LQ/videos">https://www.youtube.com/channel/UCJLEvvFJEAtt2SRHozqd7LQ/videos</a>). We need much more.

All of the changes we make must continue to ensure that all of the new, extra people encouraged to join our activities will be able to do so on an equitable basis. Winners of prizes or funding must do so on the basis of merit; our job is to ensure that people of all groups, including those who might consider themselves to be marginalized, are considered equally for those opportunities and are encouraged to put themselves forward for those opportunities/are put forward for those opportunities by others.

We must all become allies, allies of those who do not benefit from the same opportunities as we do. And even if we, ourselves, have been discriminated against, we should still speak on behalf of others who may not be able to do so.

The EDI Committee
June 2022

# Appendix 1: Equality, Diversity, Inclusivity

This is a survey of those in the mineral/geo-sciences (in the broadest sense) on the subjects of Equality, Diversity, Inclusivity. It will take 15-20 min to complete. The results will be analysed by the Mineralogical Society and a report will be published, including proposed actions. No details of individual responses will be published.

The Mineralogical Society is resolved to ensure that in all its actions it is serving a community which is representative of wider society, in Great Britain & Ireland and elsewhere. We want to try to ensure that everyone who comes into contact with our organization is treated with respect, that their voice is heard and that they have fair access to all opportunities offered by the Society.

To help in this regard, we want to hear from as many people as possible: those who are members of the Society and those who are not. In particular, we want to hear from those who are not members (or who may have considered joining) because they feel that the Society does not welcome them or will not treat them fairly/equally. We will look in detail at each response, we will consider the responses as a whole, and we will compare our demographic with that of the wider community.

You are not being asked to submit your name as you complete this survey - we are not tracking the identity of those who kindly agree to respond. If you would like to make contact with the Society to discuss the survey or your response to it, please feel free to get in touch with the Executive Director, Kevin Murphy (<a href="mailto:kevin@minersoc.org">kevin@minersoc.org</a>) or the President, Prof. Jon Lloyd (<a href="mailto:jon.lloyd@manchester.ac.uk">jon.lloyd@manchester.ac.uk</a>), to arrange a discussion.

The Mineralogical Society (www.minersoc.org) kevin@minersoc.org

Required

I accept that the results of this survey will be used by the Mineralogical Society as part of an EDI report to be published by the Society. \*

Mark only one oval.

Yes

No

1 of 24 02/03/2021, 18:18

## Information about you

1. In what age group are you? *
Mark only one oval.
18-20 21-
30 31-50
51-66
>66
Prefer not to say
2. What is your religion or belief? * Check all that apply.
Buddhist
Christian
Hindu
Jewish
Muslim
Sikh
No religion
Prefer not to say  Prefer to self-describe below under "other"
Other:
3. How would you describe your ethnic origin (tick all that apply or add another at the end in necessary)? *

Check all that apply.		
White British		
White Irish		
White Northern Irish		
White Scottish		
White Welsh		
White Irish Traveller		
Any other white background		
Indian		
Pakistani		
Bangladeshi		
Sri Lankan		
Chinese		
Any other Asian background		
African		
Caribbean		
Other ethnic group		
Hispanic / Latino/a/x		
Indigenous background		
Arab		
Afghan		
Mixed: White and Black Caribbean		
Mixed: Asian/Asian British		
Mixed: White and Black African		
Mixed: White and Asian		
Any other ethnic origin		
Prefer not to say		
Prefer to self-describe below under "other"		
Other:		
4. In which country do you mainly study/work?		
T. III WINCH Country do you mainly study/ work:		
Mark only one oval.		

## **APPENDIX 1**

Afghanistan
Albania
Algeria
American Samoa
Andorra
Angola
Anguilla
Antarctica
Antigua and Barbuda
Argentina
Armenia
Aruba
Australia
Austria
Azerbaijan
Bahamas
Bahrain
Bangladesh
Barbados
Belarus
Belgium
Belize
Benin
Bermuda
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Brazil

Brunei Darussalam
Bulgaria
Burkina Faso
Burundi
Cambodia
Cameroon
Canada
Cape Verde
Cayman Islands
Central African Republic
Chad
Chile
China
Christmas Island
Cocos (Keeling) Islands
Colombia
Comoros
Democratic Republic of the Congo (Kinshasa)
Congo, Republic of (Brazzaville)
Cook Islands
Costa Rica
Côte D'ivoire (Ivory Coast)
Croatia
Cuba
Cyprus
Czech Republic
Denmark
Djibouti
Dominica
Dominican Republic
East Timor (Timor-Leste)

Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Estonia
Ethiopia
Falkland Islands
Faroe Islands
Fiji
Finland
France
French Guiana
French Polynesia
French Southern Territories
Gabon
The Gambia
Georgia
Germany
Ghana
Gibraltar
Greece
Greenland
Grenada
Guadeloupe
Guam
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti

Holy See
Honduras
Hong Kong
Hungary
Iceland
India
Indonesia
Iran (Islamic Republic of)
Iraq
Ireland
Israel
Italy
Ivory Coast
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kiribati
Korea, Democratic People's Rep. (North Korea)
Korea, Republic of (South Korea)
Kosovo
Kuwait
Kyrgyzstan
Lao, People's Democratic Republic
Latvia
Lebanon
Lesotho
Liberia
Libya
Liechtenstein

Lithuania
Luxembourg
Macau
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Marshall Islands
Martinique
Mauritania
Mauritius
Mayotte
Mexico
Micronesia, Federal States of
Moldova, Republic of
Monaco
Mongolia
Montenegro
Montserrat
Morocco
Mozambique
Myanmar, Burma
Namibia
Nauru
Nepal
Netherlands
Netherlands Antilles
New Caledonia
New Zealand

Nicaragua
Niger
Nigeria
Niue
North Macedonia
Northern Mariana Islands
Norway
Oman
Pakistan
Palau
Palestinian territories
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Pitcairn Island
Poland
Portugal
Puerto Rico
Qatar
Reunion Island
Romania
Russian Federation
Rwanda
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Samoa
San Marino
Sao Tome and Principe

Saudi Arabia
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Slovakia (Slovak Republic)
Slovenia
Solomon Islands
Somalia
South Africa
South Sudan
Spain
Sri Lanka
Sudan
Suriname
Swaziland (Eswatini)
Sweden
Switzerland
Syria, Syrian Arab Republic
Taiwan (Republic of China)
Tajikistan
Tanzania; officially the United Republic of Tanzania
Thailand
Tibet
Timor-Leste (East Timor)
Togo
Tokelau
Tonga
Trinidad and Tobago
Tunisia

Turkey
Turkmenistan
Turks and Caicos Islands
Tuvalu
Uganda
Ukraine

	United Arab Emirates	
	United Kingdom	
	United States	
	Uruguay	
	Uzbekistan	
	Vanuatu	
	Vatican City State (Holy See)	
	Venezuela	
	Vietnam	
	Virgin Islands (British)	
	Virgin Islands (U.S.)	
	Wallis and Futuna Islands	
	Western Sahara	
	Yemen	
	Zambia	
	Zimbabwe	
5. Is Eng	lish your native language?	
Mark or	lly one oval.	
	Yes	
	No	
6. If Eng	lish is not your native language, tell us what is.	

7. What is the highest level of qualification achieved by your primary carer(s) by the time you were 18? $^{\ast}$
Mark only one oval.
Degree level or Degree equivalent or above
Qualifications below degree level
No Qualifications
I don't know
Prefer not to say
More information about you
8. Do you consider yourself to have a disability or long-term health condition (physical health)? *
Mark only one oval.
No
Yes
Prefer not to say
9. Do you consider yourself to have a disability or long-term health condition (mental health)? *
Mark only one oval.
Yes
No
Prefer not to say

Mark only one oval.		
Female		
Male		
Other		
Prefer not to say		
11. What gender do you identify as? * Check all that apply.		
Male		
Female		
Transgender Male		
Transgender Female		
Non-binary		
Prefer not to say		
Prefer to self describe under "other" below		
Other:		
Mark only one oval.		
O No		
Yes, primary carer of a child or children (<18 years)		
Yes, primary carer of a disabled adult or adults (>18 years)		
Yes, primary carer of a disabled child or children (<18 years)		
Yes, primary carer of older person or persons		
Yes, primary carer of one of the above and secondary carer in another category		
Yes, primary carer in more than one of the categories above		
Yes, I share primary care in one of the categories above		
Yes, secondary carer in one of the categories above		
Yes, secondary carer in more than one of the categories above		
Prefer not to say Other:		
,		

10. What is your gender registered at birth?  $^{\star}$ 

Mark only one oval.
Asexual
Bisexual
Gay
Heterosexual
Lesbian
Pansexual
Prefer not to answer
Prefer to self-describe under "other" below Other:
14. Which type of school did you attend for the majority of your time between the ages of $^{\sim}11$ and $^{\sim}18$ (tick all that apply)?
Check all that apply.
A state-run or state-funded school/college
An independent/private or fee-paying school/college
Comprehensive (UK)
Grammar (UK)
I don't know  Prefer not to answer
Prefer not to answer
15. Are you a member of the Mineralogical Society of Great Britain & Ireland? *
Mark only one oval.
Yes
No

13. What sexual orientation do you most identify as?  $^{*}$ 

16. Please select all of the descriptors below which currently describe you. *
Check all that apply.
Pre-university student
Undergraduate student
Post-graduate (M-level) student
Post-graduate (PhD) student
Early career (up to 10 years' full-time equivalent experience since terminal degree)
Mid-career (10–25 years' full-time equivalent experience since terminal degree)
Advanced career (up to 10 years before expected retirement)
Retired
Self-employed
Working in academia
Working in industry
Working in government/state/local authority
Working in 2nd level education
Working in 3rd level education
No currently employed Other:
17. Do you study/work in the mineral/geosciences? If your answer is no, skip to question 19 below. *
Mark only one oval.
No Skip to question 20
Yes

18. In which area(s) of mineral/geoscience do you study/work? (Tick all that apply, but note that this question is optional)

Check all that apply.	
	Atmospheric Science
	Biogeoscience
	Clay Mineralogy/fine-particle science
	Computational geoscience
	Crystallography
	Economic geology
	Engineering geology/geotechnical engineering
	Environmental
	General
	Geochemistry
	Geodesy
	Geohazards
	Geomarine
	Geomicrobiology
	Geomorphology
	Geophysics
	Groundwater/hydrology/hydrogeology
	Hydrocarbons
	Interdisciplinary
	Meteoritics
	Mineral deposits
	Mineral Physics
	Mineralogy
	Oceanography
	Palaeontology
	Petrology
	Planetary and meteoritics
	Public engagement/geoscience communication/journalism
	Renewable energy
	Sedimentology
	Seismology
	Social science/policy
	Soil science
	Solar/space science

Stratigraphy	
Tectonics and Sti	ructural Geology
Volcanology	
Other:	
19. If you do not wor below.	k in the mineral/geosciences, describe your area of work in a few words
Witnessing marginalization	If/how/when/how often you feel you or others have been marginalized by prejudice, inequity, bias, exclusion, sexism, or any form of discrimination
form of discriminatio	ave you witnessed prejudice, inequity, bias, exclusion, sexism, or any n against others as part of your work/study? Please select the most below or add your own. *
Check all that apply.	
I have never wi	enessed any of these issues
I have witnesse	d few of these issues (<3 incidents)
I have witnessed some of these issues (>3 incidents)	
I have witnesse	d several of these issues (>10 incidents) Other:

## Experiencing marginalization

21. To what extent have you experienced prejudice, inequity, bias, exclusion, sexism, or any form of discrimination against you? Please select the most appropriate answer below or add your own. *										
Mark only one oval.										
I have never experienced any of these issues Skip to question 27										
have experienced few of these issues (<3)										
I have experienced some of these issues (3-10) I have										
experienced several of these issues (>10) Other:										
22. Which form(s) of prejudice did you experience (tick all that apply)? Check all that apply.										
Related to ageism										
Related to disability/ableism										
Related to sexism										
Related to gender identity										
Related to profession/job status										
Related to ethnicity										
Related to religion										
Related to sexual orientation										
Related to socio-economic status										
Other:										

23. And tell us where this incident/these incidents occurred. (Tick all options that apply.)
Check all that apply.
Conference/professional event/meeting
Current workplace
Previous workplace
Place of study
During fieldwork
During publication of my work in a book/journal
When applying for funding
Workplace social event
Other:
24. Which of the following best describes the person or institution who/which was responsible for the prejudice, inequity, bias, exclusion, sexism, or discrimination you
experienced. (Tick all options that apply.)
experienced. (Tick all options that apply.)
experienced. (Tick all options that apply.)  Check all that apply.
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)  External partner
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)  External partner  Employee or colleague
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)  External partner  Employee or colleague  Employer or supervisor or mentor
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)  External partner  Employee or colleague  Employer or supervisor or mentor  Institutional bias
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)  External partner  Employee or colleague  Employer or supervisor or mentor  Institutional bias  Workplace policy
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)  External partner  Employee or colleague  Employer or supervisor or mentor  Institutional bias  Workplace policy  Workplace practices
experienced. (Tick all options that apply.)  Check all that apply.  Colleague/fellow student (at the same institution or organization)  Colleague/fellow student (at a different institution or organization)  External partner  Employee or colleague  Employer or supervisor or mentor  Institutional bias  Workplace policy  Workplace practices  Socioeconomic exclusion from opportunities for career advancement

exclusion, sexism, or discrimination you experienced aware that they were acting this way? Select the most appropriate answers below (there may have been more than one occasion/person), or give more details under "other".
Mark only one oval.
Yes
O No
Maybe
Not applicable Other:
Current place of study/work
26. Is your current place of study/work usually inclusive? Select the most appropriate answer below, or give more details under "other".
Mark only one oval.
Yes Skip to question 29
No
Not always
Not applicable Skip to question 29 Other:
27. In your opinion: what, if anything, can your place of work/study do to be more inclusive Offer suggestions below.

25. In your opinion, was the person/persons responsible for the prejudice, inequity, bias,

Here are some initiatives that we at the Mineralogical Society think we could take to improve EDI at our organization. Please rate them, with 5 indicating those you support most, and 1 indicating those which have little or no merit in your view. And please add suggestions in the boxes at the end.

Make our administration (committees structure) more diverse (with specific policies which allow for such change) Mark only one oval.

2	3	4	5		

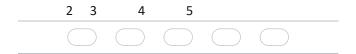
Enable and reward diversity in our awards system (proactive search for nominees amongst under-represented communities)

Mark only one oval.

Create more diverse meetings (in terms of delegates, session convenors; organizing committees, invited speakers, etc.) Mark only one oval.

Work to identify (and reduce) biases inherent in our publications, i.e. in the review, publication and citation processes.

Mark only one oval.



Support the success of emerging scientists from under-represented cohorts
Mark only one oval.
2 3 4 5
Ring-fence bursary funds for marginalized groups
Mark only one oval.
2 3 4 5
Communicate more about EDI matters, e.g. in our newsletters and journals
Mark only one oval.
2 3 4 5
More support for marginalized early career scientists (e.g. mentoring, opportunities,
funding) Mark only one oval.
2 3 4 5
Consider/discuss EDI matters at each meeting of our council
Mark only one oval.
2 3 4 5

Mark	only	one c	oval.						
	2	3	4	5					
Add a	notl	ner s	uggesti	on		_			

Agreement with our list of EDI principles should be a condition of membership of our

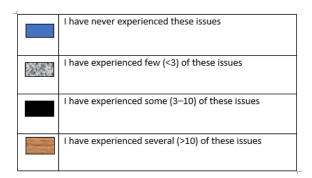
Add another suggestion

organization.

The Society is run by a number of hardworking committees, comprising in total <100 people. We have three paid staff. We have approximately 900 members and have several hundred others who take part in our activities regularly. In other words, ours is a relatively small group. The resolutions that we make as a result of consulting with you will be used in relation to our members. However, we plan also to ask those who are part of our organization to adopt personally the principles we adopt as an organization, so that the benefits can be felt more widely. Each member (existing and new) will be asked to acknowledge and agree to abide by the principles to be established. If you feel that you would like to become involved in the Mineralogical Society (but have not, because of discrimination or for any other reason), we encourage you to contact the Society now (kevin@minersoc.org) to express interest. Thank you for the time you have taken to complete our survey. We will take every step to ensure that we change/improve the behaviour of our organization based on all the comments received.

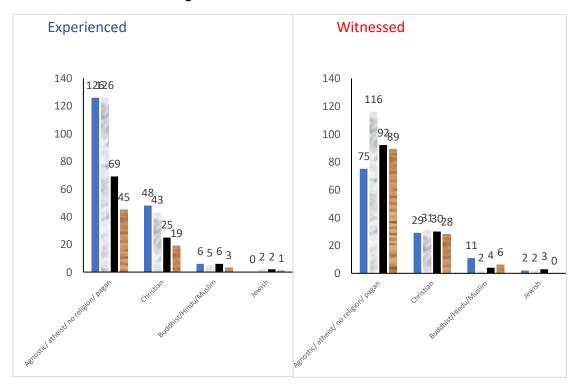
## **Appendix 2: Summary of Survey Data**

The following graphs were constructed from the data collected amongst respondents to the Mineralogical Society EDI Survey. This is the legend for each of the colours/textures used in the bar charts.



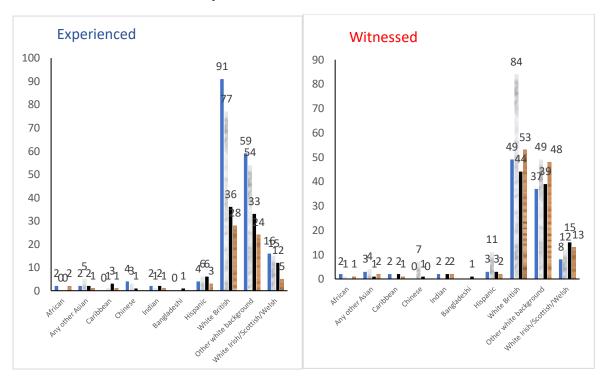
In Graph A2.1 below, for example, 126 people who were agnostic/atheistic/no religion/pagan had experienced no discrimination. Twenty eight people who are Christian had witnessed >10 instances of discrimination.

### A2.1: Discrimination and religion



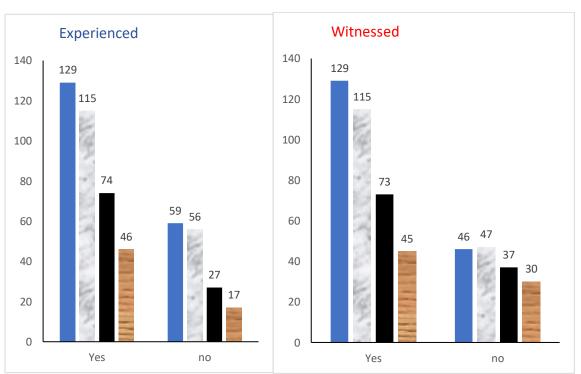
The patterns for those who profess faith vs those who profess none are similar. Approximately 70% of those questioned had experienced discrimination to some extent. 80% of those who are religious have witnessed discrimination to some degree.

A2.2: Discrimination and ethnicity



The vast majority of our respondents are "white" in terms of ethnicity.

A2.3: English as the native language of respondents (or not) and discrimination

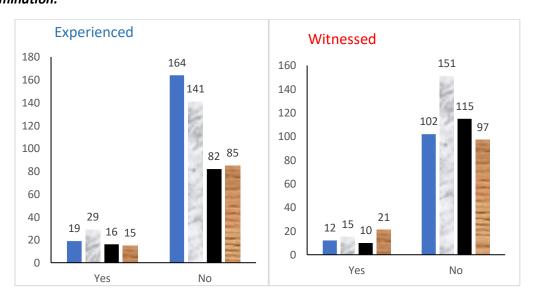


For native speakers of English vs those for whom English is not their first langauge, the levels of discrimination experienced and witnessed were similar, though slightly greater amongst those for whom Engish is not a first language.

Witnessed Experienced 90 120 103 80 100 70 61 60 60 80 6159 50 40 60 51 38 40 30 40 21<sup>23</sup> 18 20 20 10 3 3 3 4 0 0 Degree or Below degree No Prefer not to Degree or Below No qualification equivalent say/don't equivalent degree qualification to say/don't know know

A2.4: Highest level of academic qualification achieved by respondents' primary carers vs. discrimination

In a question about the educational background of respondents' parents, there appeared to have been little impact on discrimination experienced or witnessed.



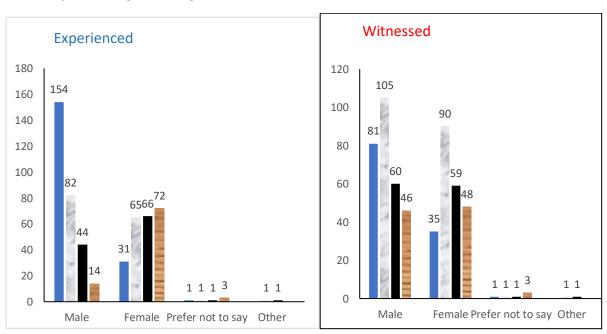
A2.5: Respondents with a disability or long-term health condition (physical health) vs. discrimination.

People who have physical disabilities appear to experience significant amounts of discrimination. Interestingly, this is even more marked when we discuss "witnessing" discrimination.

Experienced Witnessed 16 15 Yes No Yes No

A2.6: Respondents with a disability or long-term health condition (mental health) vs. discrimination.

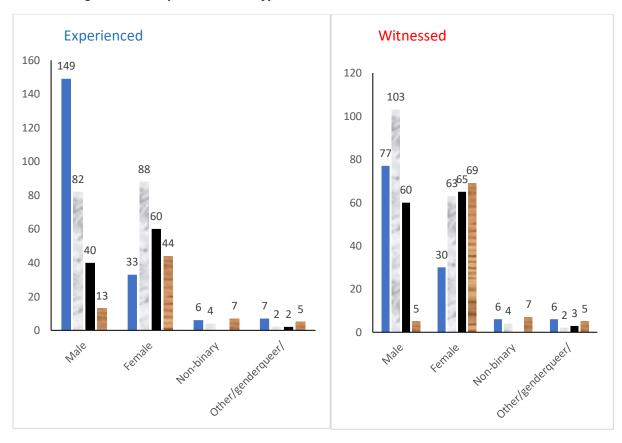
The pattern for those with mental health concerns is similar to those who are physically challenged. Approximately 80% of those who have a disability have experienced discrimination to some degree. Slightly more have witnessed such discrimination, 85%.



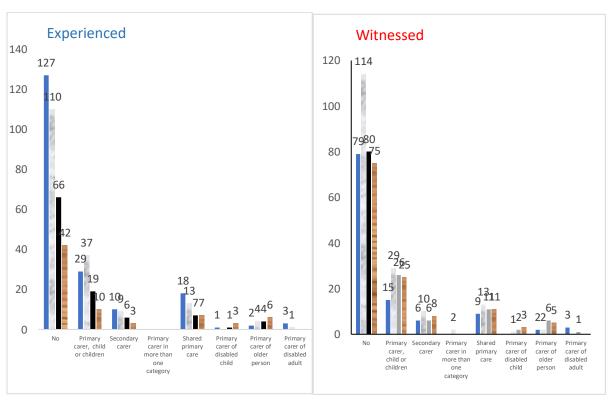
### A2.7: Respondents' gender (registered at birth) vs. discrimination.

Of all of the categories in our survey, discrimination experienced and witnessed by gender shows that women are **significantly** more likely to have experienced discrimination than men.

A2.8: What gender do respondents identify as vs. discrimination

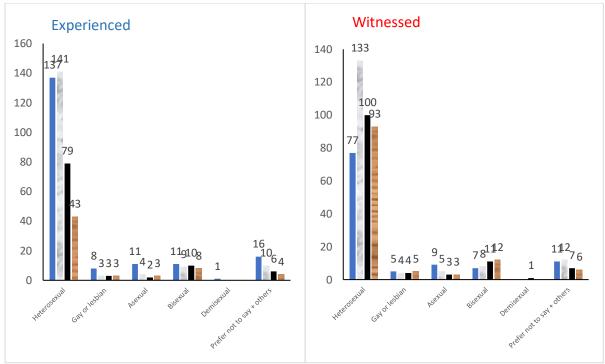


A2.9: Respondents' caring responsibilities vs. discrimination



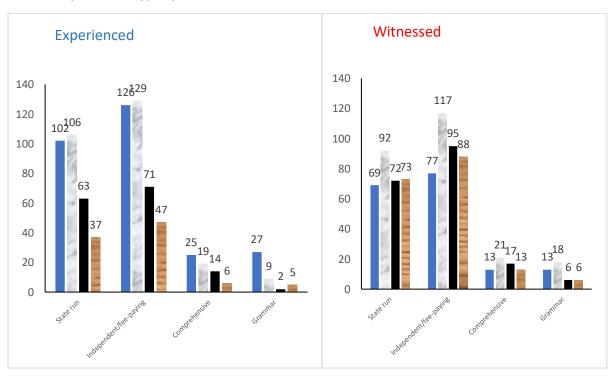
Though our numbers of respondents who have caring roles are small, there is clear evidence of that group having experienced and witnessed a disproportionate amount of discrimination.

A2.10: Respondents' sexual orientation vs. discrimination



Sexual preference (gay, lesbian or bisexual) shows an increased occurrence of discrimination.

A2.11: Respondents' type of school attended vs. discrimination



Type of school did not appear to influence the amount of discrimination experienced/witnessed.

Advanced

Post-graduate

Experienced Witnessed 21 

A2.12: Respondents' career stage vs discrimination.

Early career

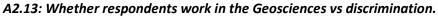
Mid-career

Advanced

career

Perhaps not unexpectedly, early-career people are more likely not to have witnessed or experienced discrimination than those who have had longer careers.

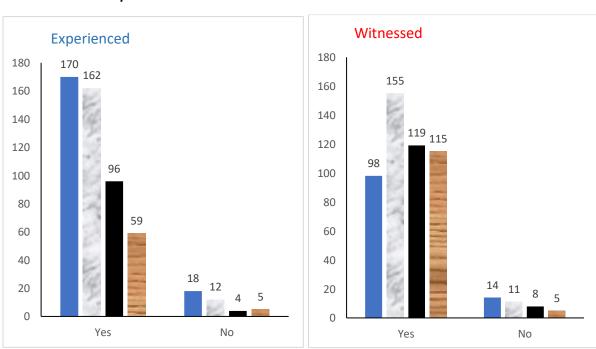
Early career



Post-graduate

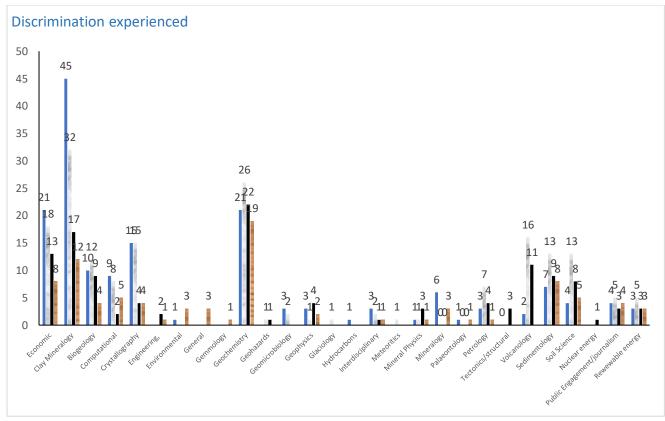
student

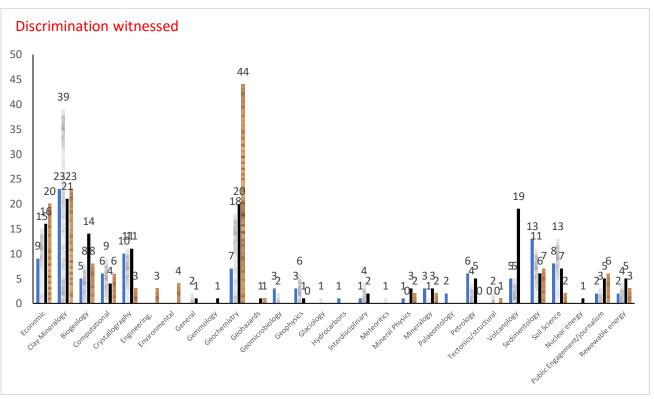
Other



## **APPENDIX 2 – GRAPHS OF DATA**

## A2.14: Area of geosciences in which the respondents work vs discrimination.





## **Appendix 3:**

In your opinion: what, if anything, can your place of work/study do to be more inclusive? Offer suggestions below.

- Diversifying senior management, educating HR personnel and focusing on retaining skilled labour
- become more family friendly
- Needs to seek opinions of staff who are not part of the "inner circle" close to the V-C
- Properly listen more to under-represented communities, and implement meaningful change.
- In general it is very good, there is just a need for more transparency sometimes on how decisions are taken
- Better facilities, our authorities need make educational campaigns to all people know about empathy
- Don't ever employ aggressively ambitious, self-promoting staff to any positions of authority, and especially not to senior management roles.
- Hear the voice of people with disabilities, I have heard them talking about feeling disadvantaged even when inclusivity measures are in place. However, I don't know further details
- Punish acts of discrimination with direct effects on career progress.
- hold events that draw no distinction between research groups, general staff etc
- Training for staff and students
- fight unconscious bias
- Select more people of colour
- provide mandatory annual EDI training to supervisors / lecturers
- Be open regarding any issues that occur such that workers are made aware it happens. Not knowing will make it seem everything is okay, when it is not
- At university, fees are obviously an aspect that disproportionately affects people from lower-income backgrounds negatively. So, more scholarships?
- As earth scientists, maybe departments could acquire field gear that students from such backgrounds can borrow, rather than having to kit themselves out.
- Maybe not relevant for the MinerSoc, but it would be good if there was some flexibility for accreditation criteria for students with disabilities (e.g. the GeolSoc requires x number of days of field work...)
- More female professors from different ethnic groups
- Stop discrimination and bullying of younger colleagues
- actually act on the values and principles instead of just having the documents
- if the people get some sort of personality training, so that they may consider humans as humans
- have more female scientists in permanent positions
- educate themselves on inclusivity. they are unaware
- Recognize that ageism is discrimination. Recognize that sexual discrimination against males is a major problem.
- Try to involve a more diverse audience in the conversations and activities around equality (e.g. more males in discussions on gender equality)
- Both university and government forms only offer he/she options (just on example)
- More state funding in order to be accessible for people of poor material conditions
- ignore these social classifications, resist any accusations of bias and just pick the best person for the job

- Have more female academic staff and professors (students need the role models). Educate staff on gender and other discriminatory biases. Learn to be less condescending with women. Respect people with health problems and not exclude them from fieldwork because of potential difficulties.
- set an example of implementation of best practice (including action and lack of tolerance for poor practice) at the top of the organisation
- more communication with everyone
- More diverse employee cross section would be good. Esp. with respect to ethnicity and gender
- Established procedures of gender balance should not only apply to and favor women.
- Stalking of male faculty members should not be seen as irrelevant.
- Nothing I can think of. It seems to form the basis of most current activity at this institution,
  often to the detriment of general scholarly activity, as much money is expended, offices are
  opened and people are hired to providing equity services. In principle, the provision of such
  services is a good and moral thing, but it seems to have squeezed everything else out at this
  institution.
- More awareness training; Clarity around dignity and respect; Better reporting processes;
- divide power
- Quit the politics of equality, and return to a merit based system
- Enhanced research funding to disadvantaged groups in academia. Not preferential employment of disadvantaged groups.
- Less overworked people
- provide part-time employment options
- High more women in high level positions, offer more women tenure
- Until the comfortable easy ugly road isn't the best for the abusers' careers, no improvement will occur
- sort out the apartheid in PhD accommodation, have a call out policy and adopt it properly, do not let the white male Professor's dominate decision making so changes in practice and policy.... there are so many....
- Recognising the way geoscience has been used in past to establish structural exclusion of minority groups. Be bolder in supporting and recruiting from such groups.
- Give more job opportunities / projects to the less qualified or in the beginning of their careers.
  - I feel that researchers from less developed countries suffer from a certain prejudice in magazines of greater impact.
- Be mindful giving equal opportunity to everyone not only on paper but acting in a more inclusive way.
- gathering stats on systemic biases to show up unconscious biases and acting upon those
- Remove Christian prayers from the beginning of meetings, treat all employees the same, regardless of national origin
- Promote inclusion of POC, disabled people and women; provide active and real support to stuff and student that are part of minorities against discrimination, for instance having an honest conversation about what form of discriminations they may face, and more importantly educate non-minority people on possible bias that they may have toward minorities, and how to avoid these discriminating behavior; avoid elitism;
- I think my current institution is doing a great job to work with a tough problem. However, I
  think funding councils need to do much more about perception of people's research and
  unconscious bias in the review process (I have only observed significant gender bias, but I'm
  sure bias must exist for race/ethnicity too, unfortunately)

- To be inclusive academics would need to establish a firm line between their professional and social lives. This would be a major change for academia.
- Yes, employ more female staff and people of colour
- Stop giving female staff members more administrative responsibilities. E.g. student-facing
  department roles. One example is I was asked to take on more tutees and apparently I was
  asked because a male member of staff was focussed on writing a grant proposal. We're all
  writing grant proposals. I said no to the tutees.
- More flexible working for researchers there are few part-time postdoc opportunities and coming back from leave part-time is not allowed on short term contracts unlike permanent contracts. Allowing paid PhD students access to staff support networks (Paid statutory maternity leave, HR support)
- Increase the diversity of the organizational staff
- Greater openness, more opportunities for minority groups/genders
- Just raise awareness
- Hiring and promotion of female researchers
- More open discussion. More diversity actually in the group of course most important
- Stop allowing senior to mid-career white males to dismiss concerns about DEI as "wokeness"
- Hire a more diverse range of staff?
- More assistance to students in their early years.
- We need to re-educate our behaviours. Some people are not aware of their cultural bias (for once) and it would be important to promote monthly sessions with sociologists that could tackle directly these behaviours (why they still exist and how, raise awareness) and stimulate better practices (vocabulary, expressions and body language, for example).
- Recruit and retain more diverse permanent staff. Collectively / culturally gain understanding and respect of other cultures, circumstances, and generational differences.
- Non-academic-based evaluation of persons.
- The university/department is trying. Providing fellowships to recruit diverse students, providing resources and training, forming groups of interested people as committees but also self organized groups to address inclusivity issues, striving to have a diversity in lecture series, involving students in faculty meetings for feedback/input, taking allegations seriously, having a code of conduct.
- gender parity
- stop giving free pass to bullies. It's not because someone is successful and brings massive project & money that he/they is/are allowed to do/say everything.
- Nothing more is needed beyond current activity
- Bystander training, unconscious bias training
- Ensure more familiar faces and voices in staff and student bodies. Actively promote opportunities for marginalised people. Accept there is a problem and vow to improve the situation. Take action on those vows.
- Increase faculty diversity, better funding for graduate students
- Invite PhD students to group research meetings.
- tackle unconscious bias
- more paid internships to provide experience opportunities
- Encourage awareness and speaking up
- Flatten the toxic power structures of higher education radically, and make them independently accountable. Must be enforceable. Must be safe for everyone.
- Be less corprorate and bureaucratic HR: it's not welcoming the aspects relating to employee control are too strong, and the empowerment and enabling of employees too weak.
- Lacking diversity (e.g. as role models); gender pay disparity.

- Consider setting up an apprenticeship scheme
- stop discriminating against people "not from here"
- Give everyone an opportunity to take part.
- defining success and quality during recruitment and promotion
- More role models
- It's hard to know where to start when it isn't recognised that there is a problem
- Visit colleges or schools which don't teach Geoscience related subjects to give children and idea of what it involves so they can decide if it's for them.
- Ensure there are bursaries for students from low incomes which cover the costs of any fieldtrip so their economic status doesn't prohibit them following their dreams.
- Do not follow affirmative action scholarships or bursaries targeted at specific groups based on race since this by definition is racist as it's discrimination of other groups based on racial features which may not be a disadvantage unlike social circumstances which usually are. For example a person of colour may be from a family of doctors and have access to decent schools or experiences which enrich their life and qualifications yet a white person from an uneducated family may be from a single parent unemployed household which will restrict access to decent education or experiences and opportunities. In this example the person at a disadvantage is the white person and it's due to social inequalities. Generally in this century race and gender do not put you at a disadvantage since all people can have access to education at a minimum level and usually social aspects are what make people at a disadvantage.
- The best way to be more inclusive is to ensure those who have social or economic disadvantages can be included and to reach out in areas which geosciences are not always considered as part of the curriculum.
- Disability. Though this depends on people declaring they have a disability including neurodiversity (mental health issues, autism, dyslexia etc). Many people do not declare their disabilities. Why is that?
- Government funding should favour inclusivity, by reserving part of the funding for the employment of external persons. Language barriers should be totally removed. I should be allowed to submit proposals for funding in my native language
- Increase its staff diversity. 95% of all staff come from the same socioeconomic and religious background. Improved awareness training on bias, EDI and self awareness. Clear written polices not 'rule of thumb' unwritten, "this is how we should behave" guidelines
- Allowing reporting and the person receiving the report keep the identity anonymous
- concentrate on professional ability and exclude everything else especially exclude positive discrimination which undermines professional standards
- My institution is represented predominantly by white males. Discussions of increasing EDI often become circular and do not honestly assess the role of institutionalized discrimination in our own department. I think this is the first step that needs to be taken, followed by an earnest attempt at recruiting a more diverse faculty and post-doctoral community.
   Presently, efforts have been aimed at recruiting diverse graduate students, who inevitably decline admissions and cite a lack of acceptance and diversity during recruitment as an issue.
- Normalize conversations like this one.
- hire more people of color
- Aside from one time in South Africa, and in my extensive travels & work, I have never seen invidious discrimination at work.
- to increase the awareness about these topics, one can start with making "leadership courses" for all the research group leaders it might not help for some of them, but hopefully through the rest, the awareness can spread faster to other employees, including technicians, admin stuff etc. this would be to start with.

- They are trying to make everyone aware with seminars, emails, etc. I have not personally
  witnessed any discrimination at my current job but I have found academia to be generally
  more aware and active in this than industry.
- Hire more women faculty and mentors. Allow a club of women geoscientists to form (we
  were shut down in the past). Offer trainings to men faculty on inclusion of women (not just
  hiring them).
- Educate and also put systems in place for people to be accountable of their actions
- Fire some of the worst offenders, hire some people who were FGLI students themselves once.
- more ethnic diversity in academic employees
- not so much inclusivity as who is best qualified to do the job
- Treat all faculty members as faculty members, regardless of where they were born.
- Reach out more to recruit students from minorities
- Actually care about education (pedagogy) would help significantly -- the reason I say this is because >90% of professors regardless institute, gender, etc., have "their way" to educate, and it is rare that professors are forced to "stretch" beyond 'their way' of teaching to learn about how to become more inclusive -- a priori, professors are "the most smart" people in society which means that the majority of them have no clue about "how/why" students struggle and therefore, how to meet them halfway to uplift historically underprivileged students, peers, and whomever else they act as mentor. This is not to say that they are not friendly or accessible but it is one thing to talk to someone and another thing to 'educate' them -- the latter takes time and investment to facilitate the learning of said person. This is where the structural bias enters, if you are not already "well-formed" and capable than you're screwed. At my former institution 40% of students were 1st generation in attendance, 40% had extra circular commitments, between 1/3 and 1/2 had side jobs of varying intensity, half looked after family in some capacity. The expectations and demands on the students' time are extreme in way that was unheard of a generation ago. The social support has crumbled. The mental disorders have sky rocketed due to the mass media and inter-connectivity that occurs today on a scale, again, unheard of a generation ago. The biases that exist are in no small part due to the change in scale of science, education and society (and all of the inter-relations). They are deeply structural and individual biases and prejudices are a part of this but can not be the focus of such a complex, big system problem. Earth sciences should be poised to deal with this best because we think on the systems scale rather than the minute scale (hopefully!) and so, reflect on this when drawing causal links between person prejudice and systematic barriers: what are we trying to solve? local or systematic issues? (Please do not read this as trying to minimize either 'side' but rather as a plea for a more holistic approach to the problem solving & and by this I mean that the questions posed in this survey refer to the local when they are founded on the larger systematic issues: both need be addressed in my view)
- Find ways to encourage retirement at, or preferably before, 65
- change of management more females that have an inclusive aptitude in positions of authority
- Somehow need to work on getting all faculty and staff to buy into inclusive behaviors. Some
  people stop paying attention whenever we have diversity training, some are obviously not
  willing to try. Also, non-academic staff in my institution are not trained.
- n/a, but keep working with professional societies and alumni situations to address discrimination
- Public sector higher level positions dominated by white men from high socioeconomic backgrounds. However, a range of people in different roles and many women in leadership positions. Could be more diverse and inclusive regarding different ethnicities.
- Anti-racism training and better awareness of microaggressions

- Stop being anti-white, heterophobic, misandrist, anti-working class. Stop cultural Marxism & Wokeness, they are causing serious issues with social cohesion.
- Examples as follow:
  - anonymous applications for positions
  - favoring the selection of an underrepresented person in terms of ethnicity/race in the final round of applications
  - a lot of outreach events in underrepresented institutions, high schools, middle schools etc, and public events
  - funding for underrepresented high school students for internships in various lab groups
- Respond equally and respectfully to all contributions to the "group" e.g. in committee
  meetings. To include, or at least inform all stakeholders/potentially interested parties of
  major decisions and not just provide fait accompli.
- listening to peoples needs rather than making assumptions
- remove incentives for short term (2yr) postdoctoral positions e.g. no redundancy pay or pension up to 2 years
- Accept everyone as equal no matter of race/gender etc. People look different, act different
  and are different from one another but this makes the world interesting! People need to
  stop assuming what others know and be better at listening to what someone has to offer
  and if it's what they're looking for in an employee, for example, then all other factors don't
  matter. If they fit the job, PhD position, research grant, teaching job, whatever it might be
  then they shouldn't be excluded.
- Better training for staff (especially academic staff), so people can understand the many types of prejudice that take place.
- By being aware, forward-looking, proactive, and giving everyone in our community a say in decision making
- Really inclusive yet so I don't know
- Promote outreach and external activities as equally important to journal submissions;
   reduce emphasis on publication only in top-tier journals; include all interested parties in networking events
- Firstly, fully recognise that it is not inclusive. Then act through recruitment and other policies to address that.
- Have a more diverse faculty. Provide a dedicated prayer room/multi-faith room. Provide better information about fieldwork, eg. toilet provision, alternative provision for those who cannot complete fieldwork.
- Offer concrete financial support to students and researchers of a minoritized background;
   Engage more frequently and consistently in disadvantaged schools in the surrounding area;
   Adopt formal rules and guidance on avoiding parachute science; More equitably engaging with our international partners particularly from developing countries; Open our records to archivisits/historians to better understand the colonial legacy still present in geoscience
- More transparency and a reduction is the expectation for women/minority ethnic groups to serve on every committee.
- Nothing
- Stop expecting unrealistically high standards of achievement
- Adhere to the essence of the problem, not just pretending to care.
- No special treatment is required. Treat all special people as ordinary people.
- Consider the "non-native speaker" characteristic as a real obstacle and provide solutions for the employees experiencing that difficulty
- Properly embed EDI training into job roles
- Take time to listen to and understand people's perceptions of a situation, and to take time to reflect on decisions and how they may impact historically marginalised groups.

- Following up with feedback (at multiple stages) on any actions taken place.
   Basing any actions or implementation on the specific needs of those within their institution, or whom are prospective.
  - Not being afraid to adapt or change solutions and practices put in place.
- Greater awareness and more thinking before acting or speaking.
- Challenge non-inclusive processes and attitudes in some art of the institute.
- Consider gender minorities in any way.
- Stop offering scholarships, events, seminars, and career advancement programs targeted
  exclusively or primarily at specific ethnic groups or sexes and instead devote time and
  resources to all of their students without regard to race or sex. When this happens, it is
  exclusively to the disadvantage of white people and/or men. I suspect that this is why it is
  allowed to continue.
- Do as much for promoting diversity and inclusivity as they spent talking about what they do. Have less internal hires.
- Flexible working, including working from home and flexible hours, offered by default
- Male colleagues should treat female colleagues in exactly the same way in which they treat men- e.g. should not make inappropriate/ sexist remarks towards female members of staff.
- Creating more opportunities for all opinions to be voiced/heard
- Open their mind and realize first that there is a problem and second that they are part of the problem
- We are far from perfect, we need to continually strive to be as inclusive as possible
- I think the PhD system in general is not very inclusive. I think a lot of people would be put off by not knowing what a PhD entails, and the only way to really know that is knowing someone who has done a PhD.
- Compulsory training on inclusivity and bullying at least once a year for everyone, specially managers. Include talks in all conferences about inclusivity and bullying to rise (sic) awareness and give tools to employees to how report bullying and other abusive behaviours.

## **Appendix 4**

Initiatives suggested by respondents for ways in which the Mineralogical Society could improve its approach to EDI

This section included many excellent suggestions and will certainly inform the discussions that the Society and any subcommittees formed will have about change. The comments are divided into key categories below.

A couple of key points that came through the comments:

- Don't try to 'force' diversity. Many people made this comment. Don't burden people from marginalized groups by asking them to serve on every committee for the sake of "diversity".
- 2. Several suggested the need to engage with Universities and other institutions to influence how our science is projected to the world beyond academia; how to invest endowment monies ethically.
- 3. Avoid tokenism.
- 4. Consider EDI more in the publishing realm. This is particularly relevant to the Society as journal publishing is one of the main areas of activity for us.
- 5. Advocacy should be available for all groups.
- 6. Many comments in the 'Rejection' section below are based on the notion that the Society's aim here is to tick some EDI boxes and move on. We do not aim to be "woke" or to "virtue signal". We have a genuine ambition to improve our role in making the mineralogical environment more equitable, diverse and inclusive. We hope that those respondents who might have questioned our motives will see value in the steps that we ultimately take.

#### **GENERAL**

- Support under-represented scientists at all stages of their careers. Provide more support
  than for equivalent well-represented scientists as there are hardships in other areas of their
  lives that you may not be tracking.
- Avoid use of black and white profile photos attempting to disguise lack of diversity
- Improve transparency of assessment processes, enhance nominations for awards thereby going beyond attending to award descriptions / equality of opportunity for existing award categories themselves.
- A formal societal ethics policy
- Be aware of not fall into positive discrimination.
- EDI shouldn't be an add-on theme by itself. It it should naturally take place as part of doing normal activities more inclusively: this needs to be worked on across the board.
- In my experience of the MinSoc committee, I find it to be already diverse (in terms of male/female and including early career researchers) and this is why I'm so happy to be a member of MinSoc!
- Initiatives to remove class and elitism from geosciences. Each speaker, writer bio focuses on place of study. This is elitist as the qualification and experience is the most important aspect, not where a person studied
- Create opportunities for members (and external partners) from underrepresented cohorts to interact/discuss/share

- Market should not dictate research. Human need should
- Ensure conference social events are truly inclusive. In geosciences the norm of the beerdrinker is firmly established.
- Lobby for change at higher levels
- To be more inclusive with Equality, Diversity and Inclusivity is stop treating groups differently (positively or negatively) and treat people the same. People shouldn't be awarded more or less than someone else for their achievements and everyone should be encouraged or helped regardless the community they are from.
- More financial support for all students (undergraduate and graduate) and post-docs regardless of skin colour or sexual preferences. More focus on promoting inclusivity and anti-discrimination of all individuals without reference to specific and arbitrary groups.
- Scholarships, funding and outreach to students entering university who belong to
  underrepresented groups and support to help them even if they aren't the "top of the top"
  performers would go a long way. There are many aspects to college that are very difficult for
  FGLI students that people don't realize that have nothing to do with outright discrimination
  and are systemic social issues instead.
- As another example I will use the statement, "More support for marginalized early career scientists (e.g. mentoring, opportunities, funding)". This creates so many problems that will lead to more inequity. How do you define the term marginalized? Early-career? And how is the intersection of marginalized and early-career defined? Instead, look to create programs that support early-career faculty members, as they are the group that is hardest to retain and have the most potential for changing the future demographics. Separately, create other programs to help get marginalized persons into positions. In this system, each goal is independent of the other and yet they work together to achieve the objective of the hiring and retention of marginalized persons.
- don't just tick boxes like "discuss EDI more" and "make a tick box on EDDI for membership" real actions like scholarships for under-represented groups do far more
- Track changes quantitatively. "What gets measured gets valued. Use an audit of all events annually, to measure progress.
- Give people a chance! We all have to start somewhere. Just because we might not have all of the skills you're looking for most people are happy to learn.
- Need to actively reach out to under-represented groups, especially "non-white" groups.
   Many have family roots in geologically fascinating parts of the world should be easy to
   emphasise the universality of geological perspectives to scientific, economic and human
   issues in our Earth System. But we need to be more open and welcoming in attracting
   people who aren't even aware we exist: we need to tell better stories more publicly and
   loudly for more to hear.
- Work with universities to limit drop-out rates after 1 or 2 years study
- favour meetings in areas with high diversity
- Ensure that voting rights are equal across the organisation, if they are not already
- Promote awareness on cultural diversity build a bridge of communication
- There are times where highlighting diversity is necessary to ensure an equal platform, there
  are also times where the highlighting and the rectification itself is problematic, by
  exacerbating matters and throwing a stark relief when people might just want to blend in.
  It's a fine line to walk and a difficult one, based on the nature of the EDI category and the
  individuals concerned.
- Get inspiration from gender working groups in other fields.
- Inclusion of pronouns
- I am not sure if allocating funds/awards that can only be accessed by minority groups is a good idea or not. Does this increase togetherness or is it more divisive?

- Follow the "be seen" policy. Give visibility to under represented groups and with time this will become standard.
- If possible, engage with social / behavioural scientists in EDI matters so as to bring in their
  perspectives and expertise. Maybe select people from these areas to invite to contribute
  helpful written works and communication, recorded or broadcast interviews / webinars.
- Review the awards themselves (as well as the nomination system) for historic biases in their criteria. What latitude does the Society have for modernising the criteria? At least ask the question of what responsibilities societies like ours have in this regard. How long into the future will biased systems be considered acceptable?
- Membership fees options for unemployed people to be members at no cost
- Intersex people or as they prefer to be called those with a Difference of Sexual Development (DSD) are not evidence of a third sex. How do you propose to monitor sexism if you do not understand who is male and female biologically, to how they identify? Gender is not a protected characteristic of the Equality Act 2010, sex and gender reassignment are. You should ask two questions 1) what is your sex (choice male or female) 2) what is your gender (100s of options, list the main ones and use other). If you want to get a feel for how many people are transgender ask are you transgender (yes, no)/ You have no questions on pregnancy and maternity which is a time of a woman's life when she is most impacted and vulnerable to discrimination. If you Many of your gender and sexual orientation questions seem to be sourced from Stonewall documents. Perhaps read around the subject about how Stonewall treats women (adult human females) and lesbians and how they are impacted by using their language. See Fair Play for Women, A Woman's Place, For Scot Women.
- Give much more importance to diversity of thought. We need balanced persons in the key
  positions. Today we tend to quantify diversity in terms of gender, country of origin, ethnics
  etc. What we really need is unbiased assessments and that can be attained by placing
  unbiased persons and persons diverse in thought (irrespective of gender, ethnics etc) in the
  key positions.
- Promote non-racists and discriminatory funding/investiment of the universities and their pension funds, etc. Whatever large pots of money the universities have, they should be invested equitably. For example, the University of Toronto holds huge investments in mining and petroleum. Whether we like it or not, many of the largest companies are responsible (e.g., Chevron in Ecuador) for massive discrimination and destruction in the areas where our EDI students and collegues come from. The fact they come from these regions means they have spent their time fighting (on the ground and in the courts and congresses globally) the destruction of their communities and cultures. As they have had to do this, they have had less time, money, energy to pursue the best of academic researcher and therefore by virtue of "not having the curriculum/CV" they have been excluded due to structural barriers. In other words, take the boot of their necks and I have no doubt they'll have no problem diversifying executives and academic circles, etc. Let them breath. Universities must stop facilitating these historic (and current) abuses that led to the structural barriers in the first place.
- A general suggestion, and equitable environment is what we should be seeking, not an equal environment.
- Encourage a positive atmosphere, a 'safe' space for conversation to help people open up rather than feeling 'attacked' and overwhelmed.
- EDI initiatives should focus on supporting people on the basis of their parents income, not
  on race or sex, since your parents income affects your life chances and opportunities far
  more than race or sex. Which POLAR area you come from could also be considered.

- "Hold workshops or embed talks (not parallel sessions that are easy to avoid) at conferences
  that make it easy for people to hear about aspects of EDI and see it in light of their normal
  activities.
- All of above are useful- but add help with caring facilities at meetings and conferences
- Act rather than virtue signal.
- Reduced membership fees for unemployed members
- Options for personal pronouns on all Society forms
- "Whilst I appreciate that all organisations must take EDI matters seriously, I do not feel that
  Min Soc should make a particular effort in this area. I adhere to the adage that 'If it's not
  broken, don't fix it!' Our Society can hold its head high in this respect. It remains a balanced,
  open and welcoming organistion with members from many backgrounds who are united in a
  common interest.
- unconscious bias training for MINSOC committee board members
- In my opinion priority should be given to effective actions. I see that everyone agrees that EDI is important, but I see little achievements so far.

#### REPRESENTATION

- Please be mindful that representation is not the same as EDI. Members of historically
  underrepresented groups carry enormous service burdens already. You might consider
  unconscious bias training for committees and groups that are less diverse than your
  community within a city or country. Thanks for creating this survey and asking for feedback
  from the broader mineralogy community!
- I think all of these sound like good ideas, but due to under-representation of certain groups throughout the entire career chain, it's really important that people who've managed to reach senior levels despite systemic bias don't get burdened with excess responsibilities just because we "want a diverse panel" (which is why I've given the first admin question a lower score).
- Be careful not to over-burden under-represented groups by encouraging participation in too many things just to be able to say the organization has good representation.
- Do consider the workload implication. It can be time-consuming to be a token \*whatever\*
  on every panel. Mentorship programs can be powerful but again, increase the workload of
  those in marginalised groups if they are always the mentors. My workplace EDI initiatives
  seem in general to increase workload disproportionately for those who are meant to
  benefit.
- my experience with making the committees more diverse does not help much. first it makes
  all the minorities sit in every committee (they are minorities, so there is not enough of them
  to be alternated). hence they have to sit in every single committee and cannot do other
  activities such as research- its actually very frustrating. if they had a compensation, i.e. less
  teaching or so, would help.

#### **TOKENISM**

- Stop assuming tokenism will solve the problem
- Finding ways of doing all of the above without being condescending, or educating the committees on different types of discrimination biases before taking these measures.
- Whatever you do, make sure people who win awards / funding etc don't feel like they are
  winning the awards because they fulfil some kind of EDI quota. This cheapens the award and
  is counterproductive. The best way to actually support and promote EDI objectives is to
  make sure that grant winners / award winners / etc know that they have won those

opportunities because they deserve them, and not because they've been handpicked from some kind of EDI shortlist.

eg - in my previous job, I was accused of being a 'diversity hire'. From there, it is a really short path to self doubt and anger. It would have been better if there could have been no doubt that I got my job because I was the best candidate.

#### **OUTREACH**

- Outreach to schools to encourage young people to consider a career in our science
- unconscious bias training for MINSOC committee board members
- Punish wrongdoing.
- Work with other geo-organisations to widen outreach, engagement and opportunities with groups we're not currently reaching
- Support the promotion of geoscience as a career to under represented groups within society
- Widen range of mineralogical and geo-news stories we plug, to inlcude more stories showcasing work by mineralgists/geologists from currently excluded groups.

#### **PUBLISHING**

- Correction of minor language deficiencies by your office when submitting an article (it will help authors with non-native English)
- Double blind review process
- Pls/departments that are doing a great job at recruiting, training, and publishing with diverse groups should be rewarded/recognised. This also calls out those who are not putting in much effort, especially publications when it's often difficult to assess diversity base on a list of names.
- Double-blind peer review. There is no need for a reviewer to see the author list or institutions. This should reduce prejudice against female names, black and asian names, institutions in non-western countries, early career scientists etc.
- to avoid annoying anonymous there could be an alternative: if reviewers want to remain anonymous they should review anonymous submission and alternatively if reviewers agree to give their name, they could review named submissions

#### **CONFERENCES**

- Keep the option of remote attendance, even after the end of the covid restrictions.
- Check the accessible access/ the space for wheelchairs in the room ahead of the meeting and provide clear information about it on the conference registration website.
- Have clearly identified people to report EDI issues to during meetings.
- Encourage subtitles in presentations? (Would help those who struggle to hear, but also non-native speakers).
- Build up a list of potential keynote speakers from under-represented groups.
- For large meetings: set up / support a childcare service.

### REPORTING MECHANISM

- Review (and strengthen if needed) your whistleblower policy to empower people who
  experience discrimination based on any immutable characteristic
- Recognition of exclusionary practices during meeting, active denouncement
- Add "safe reporting" information links to your website and meetings' documentation as a
  matter of routine, for regular, visible and explicit reminders of high standards of conduct
  expected of everybody. Perhaps also require all members to complete ~bi-annual, online
  diversity training. The point is that a fundamental change of culture is needed.
- Actually punish wrongdoing.

- Consider what sanctions are available if there is a complaint, say about behaviour of a mentor or a conference attendee."
- Find a way for us to submit stories/experiences anonymously so members can see how their actions may be affecting others.

## ADVOCACY (FOR ALL)

- Instead of mentoring, think about sponsorship/advocacy. Many marginalised individuals are already very talented and do not need mentoring-coaching. They need opportunity and for people to speak in their favour (advocacy). The BAME sponsor scheme is a good example.
- Lobby and advocate e.g. By asking Earth Science departments to make EDI issues part of the criteria for staff applications and annual appraisals, along with unconscious bias training.
- Don't restrict support to young upcoming individuals. Accept that grown-up careers can be destroyed by continuing damaging behaviours - and that that the results are nonrecoverable without active intervention.
- early career mentoring/funding/support is great, but what about mid-career science funding? research shows role models are important, so more diverse PIs would be able to support more diverse PhDs/PDRAs - however, they can only do if they have appropriate funding and right now there is very little of this for blue-skies research.
- Remember that white women are one of the many groups of marginalized people to consider in any diversity effort

#### **MERIT**

- Many of the above initiatives are very laudable and important. However, funding and awards should surely remain primarily merit-based rather than quota driven.
- Although it is essential to "Enable and reward diversity in our awards system", this must be done without lowering the overall standards!
- It is not self evident that the Earth Science's lack of proportional representation (in skin-tone and gender) to that of the general population is a serious problem. It may indeed be a problem, a problem rooted in racism or sexism, however, I have not yet seen any rigorous and compelling data to suggest the Earth Sciences are exceptionally exclusive. In order to improve our field and work passionately within an EDI framework, I firmly believe we need more and better dispassionate and rigorous analysis to address the underlaying problem, rather than to assume explicit or systemic discrimination is the driving force. One last comment. Although having special awards and funds available for under-represented groups is, on the surface, seems equitable and in line with EDI efforts, it also has the effect of devaluing the individual's agency and leaves open the question of their scientific merit. I suggest we subscribe more to the messaging of movement such as https://www.fairforall.org/ rather than the current unscientific social justice movement.
- Merit should be rewarded regardless of any other consideration. I think early educational
  outreach is needed if one wants to find talent among all groups. Identify areas were
  individuals at early ages are unaware or do not have opportuniteis to learn of the geologic
  sciences and introduce them. Then they can choose if they want to pursue as a career
  interest. If they then merit awards, promotion, etc. it will be based on their individual
  characteristics not group identities.

#### **FIELDWORK**

- require that collabrate with overseas actors where possible when supporting fieldwork overseas
- Find a way for us to submit stories/experiences anonymously so members can see how their actions may be affecting others.

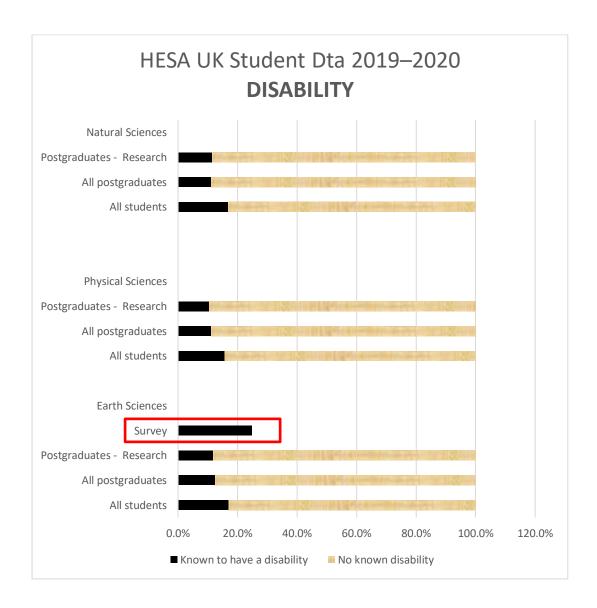
#### **REJECTION**

- Nobody cares about the political agenda of far left crazy people.
- I think it would be a very bad idea to cancel people with different opinions/make agreement with EDI principles a condition of membership how can we promote change by leaving those who need to change the most (from our point of view) out of the conversation?? By making the conversation louder whilst including those people you may meet some resistance, but they are the most important (and most difficult) conversations to have.
- Every time you prioritise one group it will be at the expense of another. Open and equal access to all for all. No boxes such as those you have in this survey.
- all of the above are examples of positive discrimination and these should be avoided at all
  costs. They are nothing but virtue signalling and lowering of standards to accommodate
  political correctness. Do not strive to become the woke National Trust.
- We're in the midst of a Cultural Revolution. Beware buying into it. You'll lose more than you'll ever gain.
- Geoscience is overwhelmingly white and Asian. So what? the only relevant question is
  whether anyone who wants to be a geoscientist can be a geoscientist. Black people don't
  seem to be interested in geosciences as they are in other disciplines such as sociology,
  education, history, social justice. Let people be free and stop wringing our hands over skin
  color in a free society
- crying about this does not change the fact that many find geology in school to be too difficult. Kids are not qualified if they cannot pass the tough required courses in calc, physics and chemistry. If you cannot cut it...go be a Journalism major.
- Stay in science and don't get involved with identity politics
- Just a general comment on the prior statements, using the first as an example. The first statement, "Make our administration (committees structure) more diverse (with specific policies which allow for such change)" does nothing to address the causes of a lack of diversity, and makes diversity just another metric to meet without regard to why the system was not equitable in the first place. Do not make it a goal to include more of "the other people" and instead make it a goal to assess why the society administration does not represent the demographics of its members. Use that to change policy, not arbitrary metrics such as "we are not diverse, rope some diverse people into our administration!"
- Recruit, select & promote, etc, based on merit and merit alone. Stop cultural Marxism.
   Promote equality of opportunity only. Treat EVERYONE the same, even working class, straight, white, males.
- Everyone who discriminates feels justified to do so look at your suggestions above
- The second initiative has a contradiction in it. Making an organisation more diverse and increasing the representation or under-represented groups are, as goals, at odds with one another, since white people and men are under-represented in higher education, If the goal is greater representation of under-represented groups, you need less diversity, not more.
- treat everyone on the content of the character (and work), and on no other basis.
- Making people \*say\* they accept something as a condition of membership is not the same as persuading them to accept it
- Don't promote and talk about EDI all the time, it likely makes people feel marginalised and different.
- People ought to treat each other with basic respect. But much of EDI is about "otherizing" people. It's a ticking bomb that will wreck entire swaths of the geology/mineralogy/etc field
- Just because someone wants to be a brain surgeon does not get them into Med school...you have to earn it.
- Wokeness is destroying social cohesion everywhere it is applied. Please stop it, for the sake of our future.

- You now appear to be proposing that new members need to sign-up to political EDI principals. I wasn't aware that the MinSoc was now a political pressure group.
- The fundamental question then becomes whether the MinSoc sees itself as an impartial society dedicated to advancing mineral sciences and rewarding people on the merit of their work, or is it going to turn into a politically biased organisation which embraces deeply divisive identity politics. If the latter then I certainly won't be joining.
- In all of the cases above it seems that you're setting out to judge people on the colour of their skin rather than the content of their character. Isn't that racist? What's wrong with just appointing people on merit? As a white man am I now going to be denied a place on a committee, not awarded a prize, not have my success or career supported, not be able to receive bursaries because of my immutable (and legally protected) characteristics? I'm happy to lose out to someone of whatever sex or race because they are objectively better than me at something, but what 'you're' proposing is just going to cause grievance and give actual racists a reason to hate others.
- As for communicating about EDI more, just look at the National Trust and where that's got them, or even in the latest Geoscientist. How many more famous geologists are we going to smear with out-of-context 'decolonisation' initiatives? How long before geology, along with gardening and the countryside, is announced to be racist? After all, first order interference colours are only black and white, surely quartz is not being an ally of the LGBT+ community and we should only study olivine instead? Even my gay friends are sick to death of having rainbows on everything. A lesbian friend of mine has recently been complaining about Mary Anning being portrayed as gay in 'Ammonite' and went on at length about how the film was a lost opportunity to focus on her outstanding scientific work and the real issues at hand; whereas it instead it focused on a tired lesbian trope based on a defamatory rumour aimed at devout Christian in order to add some 'sex appeal' to palaeontology. Yes, there are problems with discrimination in society, but please just stick to the minerals and science "you're not a workplace union and, no (unless you have someone in your membership department who shreds membership applications from people who aren't called John Smith) you're not 'institutionally racist'. As for Council spending time talking about EDI more, surely you've got more pressing matters like a massive recession and loss of event income to deal with?
- Fundamentally you can either be a meritocracy or a diversi-tocracy. With diversity quotas
  you will not be prioritising ability, instead you will be promoting people based on their EDI
  (i.e. committing acts of discrimination by judging people to not be 'diverse' enough) and
  opening yourself up to tokenism along the way. Meritocracy, however, will likely result in
  diversity anyway as hard work and intellectual effort is not defined by your physical
  characteristics as already shown by diverse workplaces up and down the length and
  breadth of this wonderful island.
- However, the 'problem' you may have noticed with meritocracy is that it is likely that you
  won't hit whatever target pressure groups want you to hit. This is because people are
  individual agents capable of making their own decisions, and perhaps certain people tend to
  migrate towards other science disciplines due to parental peer pressure, natural preference,
  or just luck."
- We're living in a free democratic society, whoever wants can study and has equal or at least similar career opportunities. Diversity should be accepted, but should not be a goal per se.

# **Appendix 5**

The following charts show Higher Education Statistics Agency (HESA) data for students of Earth Sciences, Physical Sciences and Natural Sciences for 2019–2020.



## **APPENDIX 5**

