



RAS strategy 2024-29

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Royal
Astronomical
Society

Our Vision

We will be a welcoming and inclusive forum, working in partnership with our members and the wider community to promote, encourage and share the study of astronomy and geophysics and to inspire the next generation of scientists.

Our Mission

The Royal Astronomical Society supports and connects astronomers and geophysicists, in the UK and globally, throughout their careers. We assist them to sustain and advance the rigorous scientific study of the origins and evolution of our own planet and the whole wider cosmos. We promote a better understanding of the relevance and value of our subjects throughout all society, from inspiration for young people to advice to government.

Our Values

How we will conduct our activities in achieving our mission and vision:

We are a supportive community

We are passionately curious about the universe, and recognise the importance of mutual support in its study. We are custodians of the past, learning from the history of our sciences but looking to apply our knowledge for the future. We promote the need for vital research support, for appropriate collaboration and scrutiny, and for the sharing of methods and results.

We share our expertise in astronomy and geophysics

We are a respected, independent, self-governing organisation, free to speak frankly on behalf of our members, the science, and the profession. For over 200 years, we have been a credible, independent source of the latest scientific discoveries in the field. Within our resource limitations, we willingly provide professional advice on all aspects of our subjects.

We are an inclusive and welcoming Society

We celebrate and encourage diversity, understanding that every individual is unique, and recognising and appreciating our individual differences. We will provide an inclusive environment where every member of the Society is welcome and supported, and acts with respect to all other members.

We will play our role in understanding and protecting our environment

We care about the future of humanity, the sustainability of our planet and the impact of our activities. We seek to understand our role in the wider universe and use our knowledge and expertise to the benefit of humankind.

AUTHORS

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DESIGN

Jim Hannah

Section 1: Core Strategy

The Royal Astronomical Society has been active for over 200 years. **A major part of our strategy must be to ensure the continuation of our current valuable activities.** We list them in this section. We have identified five areas for major development, discussed in Section 2: Membership, Publications, Education and Outreach, and Heritage, together with a cross-cutting initiative to develop partnerships.

We will continue:

1. Providing a learned and professional membership Society

for the benefit of its members pursuing the sciences of astronomy and geophysics. The Society has over 4000 members with a significant number based outside the UK; all receive our successful membership magazine *A&G* six times a year. *A&G* documents both RAS activities and research progress across RAS sciences, outreach activities and community initiatives; it includes authoritative review articles and historical material.

2. Holding regular scientific meetings

During the meeting season October to May on the second Friday of each month we organise at Burlington House: (a) two Specialist Discussion Meetings covering specific Geophysics and Astrophysics topics; and (b) an *A&G* Highlights Meeting including a range of RAS topics

The Society supports an annual week-long National Astronomy Meeting, generally hosted by a university, which is attended by over 600 astronomers. The venue moves around the UK.

The British Geophysical Association supports annual meetings for postgraduate students and scientific staff on the Society's behalf, focused on solid Earth geophysics

3. Publishing

The Society's journal portfolio includes three peer-reviewed, scholarly publications: *Monthly Notices of the Royal Astronomical Society (MNRAS)*, *Geophysical Journal International (GJI)* and *RAS Techniques and Instruments (RASTI)*.

MNRAS is one of the world's leading astronomy journals and publishes articles in positional and dynamical astronomy, astrophysics, radio astronomy, cosmology, space research and the design of astronomical instruments.

GJI is an international journal publishing articles on all aspects of theoretical, computational, experimental, applied and observational geophysics.

RASTI is broad in scope and encourages submission of papers that cover topics in both astronomy and geophysics, across instrumentation,



data science, machine learning, software, and numerical and statistical methods.

Publicity for important research results and other subject-related news is beneficial both for Fellows, educators and for the public in general. RAS publishes press notices, liaises with the press and broadcasters, and maintains news updates both on its website and on social media.

4. Giving policy advice to government

The RAS responds to government consultations by drafting policy inputs which are offered to our policy advisory group of fellows for comment before submission.

Senior Officers of the RAS hold meetings with Research Councils, Government and Parliamentary officials to discuss policy.

5. Awarding grants and Medals

The RAS grants (including for travel and attendance at conferences), support research, education and outreach activities.

The RAS awards a three-year Research Fellowship twice in every three years. These were established during a period of reduced government funding for research. They are prestigious posts, attracting many very strong applications, and undoubtedly enhance the RAS' profile as a supporter of the research community. Past Fellows include now-established experts.

The Society's medals and awards recognise outstanding achievements among early-career and established researchers as well as celebrating career-long excellence and service to our sciences. They are an important component of the RAS's public image.

6. Education and Outreach

The Society has a long tradition of educational and outreach activity. Many of its members undertake significant outreach activities, some as part of their employment but many because they wish to share the interest and excitement of their subject.

For its bicentenary the Society ran a very successful large and varied programme of outreach activities under the general banner of 'RAS200'. The lessons learned from that experience form part of the basis for the recommendations in Section 2.

The Society is a significant provider of subject-specific educational materials, and an organiser of specialist training for teachers.

7. Curating Heritage

The Society maintains one of the most significant specialist astronomical libraries in the world, including unique historic archives. The Society also possess a collection of historic instruments and artefacts, available for museum and exhibition loan.

The collections are managed to preserve the history of astronomy and geophysics, and to allow appropriate access.

Section 2: Developing the Strategy – Our Priority Areas

This section is intended as a guide for decision-making and actions over the next five years

1. Membership: Meet the needs of our members

1.1 Engage the Fellows and improve Fellow satisfaction at all stages of their careers.

- We will clearly define and articulate the RAS Member Value Proposition.
- We will review whether our membership magazine *A&G* should move completely online.
- We will **re-position the Society as “being the members”**. They should be (and feel that they are) front and centre of everything we do. We have identified enhanced communications and access as an essential component for improving satisfaction and engagement and will make this a priority.

The website and other communications methods of the Society will be the subject of a complete review, starting early in 2024, to optimise content, ease of navigation, impact and cost-effectiveness.

Some simple measures would considerably improve **the support that Fellows can access** at different stages of their careers.

We will:

- Explore the scope for community engagement with special interest groups e.g. a network for retired members, and/or serious amateurs.
- Assess the practicality and the measures required to retain Fellows who leave astronomy and geophysics to pursue other careers, but might well have a continuing interest in a subset of our activities.
- Enable non-research-active retired members to take part in research programmes, with a coordinating role for the RAS, for example, a web page giving contact details (with the appropriate level of quality assurance/monitoring).
- Explore ways of enhancing advice to members who wish to publish in our journals.
- Explore the possibility of a special rate for a ‘one-day’ attendance at NAM for retired members to keep them connected to the Society and Community.
- Ensure that at least one *A&G* Highlights meeting each year be held outside London, preferably collocated with one or more Specialist Discussion Meetings.
- Work with the British Astronomical Association, the Federation of Astronomical Societies, The British Geophysical Association and others, to identify areas where RAS membership or joint initiatives might be mutually beneficial.
- Explore setting up an e-newsletter for both members and non-members – to keep people informed via email and social media on everything from the latest news/headlines, to upcoming meetings, to diversity and inclusion events, policy submissions, etc.

- Improve contact with university departments and research laboratories/observatories.
- Review what we do for international members.

1.2. We will improve our support for early career scientists, the future of our sciences. The ‘Early Career Network’ will be further supported and we will:

- Investigate Slack/other software channels to facilitate informal networking, both sideways (with peers) and vertically (mentoring).
- Develop relations with UK Students for the Exploration and Development of Space (UKSEDS) – the UK’s national student space society.
- Facilitate greater engagement with the RAS among undergraduates in all relevant subjects.
- Assess whether the RAS should encourage and/or support greater provision of GCSE Astronomy. We will improve our Research Fellowships.
- Application for the Research Fellowships will be restricted to within three years of award of PhD, with allowance for career breaks. The applicants must complete their PhD before taking up the Fellowship
- To avoid competition with Fellowships awarded by other organisations, we will move the application deadline from mid-October to mid-November.
- We will ask those awarded Fellowships to act as Champions for the RAS.
- The possibility of awarding an extra Fellowship will be discussed at Council in the year before there is a break, allowing tensioning against other budget items.
- The Society will investigate the possibility of a sponsor for ongoing funding of an extra ‘named’ Fellowship
- We will devise and introduce a mentoring scheme for Fellows.
- To improve diversity of applicants, we will improve our online information, expand the reach of our advertising and organise a ‘how to apply’ webinar/workshop before the closing date for applications

1.3 We will ensure the RAS nurtures, supports and promotes diversity and inclusivity within its core community and wider academia, including support roles.

We will:

- Conduct a full review of best practice for tackling the issue raised by the bullying-survey results
- Develop a list of requirements for any meetings part-funded by the RAS e.g. hybrid, no single-gender panels, written application should include support for accessibility, and how Equality, Diversity & Inclusion best practice is embedded, how the meeting will help support ECRs both in funding terms and of presentation slots available, explicit acknowledgment of incorporating RAS meeting safeguarding and require adherence to the code of conduct
- Review membership subscriptions and improve ease of payment.

2. Education & outreach: Facilitate quality programmes to promote an interest in, and understanding of, astronomy and geophysics, making the most of their inspirational potential for enhancing career prospects, well-being, and quality of life

2.1 Develop partnerships to deliver high-impact Education and Outreach (E&O) programmes, inspired by our subjects, which reach the public and future scientists independent of their background.

Large-scale E&O projects e.g. RAS200 have shown the value of partnerships in greatly increasing the scope and reach of any work we could have supported on our own.

We will:

- Engage with potential new and existing partners, applying lessons learned from each other, to support (where possible) all ongoing work.
- Continue to support the excellent education and outreach activities such as astronomy and scientific societies, schools and public events, undertaken by many of our Fellows (experienced and novice). However, in order to increase the impact, reach and focus of our activities we will prioritise events targeted at specific under-served communities. This will involve identifying specific communities for focused efforts, and revisiting progress and priorities regularly on an agreed timescale. Coordination of work will be needed between the Education & Outreach Committee, the Early Career Network and our Committee for Diversity in Astronomy & Geophysics.

We will:

- Align E&O grants criteria with the strategic objectives of the society and prioritise applications that address them.
- Track, assess evaluate and document the impact of all RAS-related E&O activities (including those funded by RAS grants) by building formal evaluation into all activities and events from the planning stage.
- Extend our E&O programmes to address issues of global significance relevant to our subjects.
- Take the opportunity to develop major E&O programmes with the other Societies around the Courtyard, possibly including exhibition facilities, now that our future is certain in Burlington House.

2.2 Establish the RAS as an authoritative voice for E&O information, resources and documentary heritage relating to astronomy and geophysics.

We will:

- Empower members and collaborators (e.g. teachers, astronomical societies, RAS200 partners) to ensure that resources can be shared widely.
- Provide reliable and broad scientific resources to multiple audiences, both by accessing and expanding on our own material and by directing people to relevant external material.
- Where new production is needed, do so in effective partnerships where possible.
- Promote astronomy and geophysics education in schools and universities and facilitate networks and links between RAS Fellows and collaborating organisations.
- Ensure that the RAS website is easily navigable for those seeking educational resources and support through for example, grants.

2.3 Fully engage and support our Fellows in education and outreach programmes.

We will:

- Facilitate bespoke and relevant training and networking opportunities for RAS Fellows, in particular for Early Career Network members.
- Consider one-day RAS-subsidised/organised “mini-NAM” meetings around the country with appropriate talks from academics discussing latest ground-breaking developments. There would be scope for joint organisation with major local scientific or astronomical societies.
- Consider “mini-NGM” (similar to the mini-NAM above) in solid Earth geophysics, organised by the British Geophysical Association on behalf of the Society.



3. Library & heritage: Achieve maximum impact from the library, archive and object collections

3.1 Improve accessibility and discoverability, particularly online, to ensure that the RAS collections are a key resource in the promotion of astronomical and geophysical sciences, their history, and the work of the RAS.

We will increase the amount of online collections information through:

- Completing the cataloguing of archives e.g. 20th century records, and manuscripts received in the last 50 years.
- Publishing archive indexes online.
- Creating online catalogue records for early printed books.
- Facilitating the discoverability via better Search Engine Optimisation on the RAS website and uploading metadata to databases like Archives Hub and the National Bibliographic Knowledgebase.
- Appointing an editorial committee to prioritise collections for digitisation, starting with the Herschel archives.
- Selecting an appropriate digital platform on which to publish digitised materials.
- Digitising historical materials is a high-impact way of informing and inspiring diverse audiences, and will make the collections more accessible to researchers.

We will:

- Seek rights and permissions for digitisation of unpublished material.
- Seek funding, where appropriate from grant-giving

bodies to support digitisation work.

- Prepare a new policy on newly digitised images to facilitate open access availability
- Recruit new staff/train existing staff in digitisation project management skills.

3.2 We commit to **inclusive collection development** and to update the collection development policy to ensure that the RAS collections are relevant to diverse groups of users.

- We will identify gaps in the collection, especially A&G work by under-represented groups, and seek to understand why they have occurred and make provision in the collection development policy for filling these gaps.

As custodians of the past, we seek to preserve the history of astronomy and geophysics by managing our collections appropriately. We will improve the preservation standards of the RAS collections by:

- Commissioning a collection preservation condition survey from National Conservation Service and acting on the recommendations.
- Ensuring the RAS collections are housed in appropriate physical storage.

We share our expertise and inform our scientific communities by ensuring that the RAS collections are relevant to our users.

We will review our collection development policy and:

- Develop criteria for effective stock editing of library collections, in consultation with the library committee.
- Prioritise rationalisation work plans.
- Develop an ethical disposal policy and act upon it.

3.3 Community engagement

We will inspire exploration in astronomical and geophysical sciences for all through the documentary heritage of the RAS. We will do this by:

- Promoting the library as a benefit to members and raising awareness of our collections.
- Making the library more relevant to Fellows.
- Working with our outreach professionals to design interactive educational events featuring archives, drama, art, science and history.
- Creating partnerships with other institutions and networks to support the promotion of astronomy and geophysics.

4. Publishing: We are moving to full open-access publishing for our journals by January 2024. It is of highest priority that these journals retain their high quality and reputation.

4.1 We will **support, through its publications, the RAS** in its mission, by:

- Maintaining the success of the journals in order that the Society has the means (including financial) to achieve its objectives.
- Incentivising membership through preferential publishing rates.
- Preserving the reputation of the RAS and its journals by maintaining rigorous processes for research integrity and publishing ethics, and validating research through high editorial standards and thorough peer review.

4.2 We will publish only high-quality papers across the full breadth of astronomy, astrophysics and geophysics, maintaining the highest scientific standards.

We will:

- Ensure the publication of original, high-impact, peer-reviewed research that contributes significantly to the scientific record.
- Encourage and increase submissions of the most interesting research from scientists across the world, including through commissioning of review articles and special issue articles.
- Make research published in the RAS journals available to as many people as possible through open research initiatives, and to facilitate reproducibility through data archiving and access to code.

4.3 We will **promote diversity and inclusivity** in authorship, reviewers, and editorial boards by:

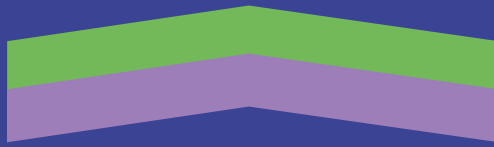
- Actively seeking and financially supporting submissions from under-represented regions and communities including through low-income and developing country initiatives.
- Monitoring the impact of Open Access publishing on the geographical distribution of submissions.
- Expanding and broadening the reviewer base encouraging those underrepresented by geographic location, ethnicity, gender and, career stage.
- Increase and promote diversity within our editorial boards.

5 Collaboration and influence: Explore and nurture partnerships for synergy and effectiveness

We will:

- Identify, nurture and exploit partnerships with organisations and experts that support our strategic aims, and seek and share resources to facilitate these collaborations.
- Strengthen links with astronomers and geophysicists who work in industry.





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