

Invitation for submissions: Frontiers symposium scoping research

Deadline for submissions: 5 June

Interviews held: w/c 10 June

Period of engagement: 4 weeks over June and July 2024

Indicative budget: £1,000-£3,000

**All queries and submissions to be sent to Binasa Ukaj, Programme
Manager for the Frontiers programmes binasa.ukaj@raeng.org.uk**

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Overview

The Frontiers programme seeks to engage an early-career researcher to assist with a scoping activity for the upcoming Frontiers symposium, that will be held in collaboration with the Australian Academy for Technological Sciences and Engineering (ATSE) in Australia in October 2024. The successful candidate will undertake scoping research and be invited to the event (with expenses covered) to present findings.

Ideal candidates are most likely to be at the post-doctoral stage, although we are open to submissions from others at a similar career stage (including those outside of Academia). Submissions are welcome from all geographies, nationalities, disciplines, and sectors.

The selected researcher will gather evidence to frame themes and discussions at a Frontiers symposium, as well as mapping out the landscape of both the theme and the key stakeholder groups and organisations. This will inform the development of the symposium, identify potential sub-themes and speakers, and provide a broad evidence base for the current status of the theme.

Objectives

To identify the current landscape of challenges in the **Pacific and South-East Asia regions**, prioritising themes related to **engineering solutions for climate change adaptation and net zero goals**, with a broad focus on *Sustainable Societies*.

To generate a map of stakeholders and actors involved in the theme and system, with recommendations shared with the Frontiers team of who they should engage in the symposium.

To horizon scan emerging key challenges within and around the theme and generate potential questions for discussion within or beyond the symposium.

We acknowledge the theme is very broad: since the aim of this work is to scope and map out key priorities within this broad theme, this is deliberate. However, we anticipate that the research may encompass some of the following elements (as well as others):

- **Climate-Resilient Infrastructure**
 - Sustainable practices that enhance resilience and promote appropriate techniques at different scales.
 - Climate resilient infrastructure that is adaptable and can withstand extreme weather, while delivering on net zero goals.
- **Climate adaptation strategies**
 - Regionally-focussed modelling, impact assessment tools and techniques to understand and deploy locally adapted interventions for local ecosystems and communities.
 - Community led adaptation initiatives and grassroots engagement.
- **Policy engagement and equitable Net-Zero approaches**

- Policy frameworks that incorporate traditional and indigenous knowledge, and engagement strategies for inclusive policy development.
- Equitable approaches to net zero policy making and transition.
- **Sustainable urban development**
 - Building resilient, climate adapted urban spaces within net zero targets and community ambitions.
 - Innovation in green building technologies, including sustainable construction and energy efficient design and retrofitting.
- **Oceans and climate**
 - Engineering solutions for coastal protection and sustainable use.

Expected outcomes

- A better perspective on the climate change adaptation challenges facing communities in the Pacific and Southeast Asia region, with a focus on engineering solutions that are well aligned with net-zero goals.
- Improved view of the key relevant stakeholders and activities in the region and globally.
- A robust framework for the symposium discussions, based on emerging research and innovation that incorporates local community and indigenous peoples perspectives.

Outputs and timeline

The researcher will be engaged between June-July 2024, with an expectation of approximately 15-25 hours of work over 4 weeks. Within that timeline, we expect the following outputs to be generated:

- 5-10 page report summarising both foundational and emerging ideas related to the theme and context, with recommendations for the most pressing themes that the symposium should prioritise. Within key priority themes, the report should recommend sub-themes that will allow the symposium to explore the overall topic.
- A map of stakeholders and actors in the sector, regionally and globally.
- Weekly catch ups with the Frontiers team to share ideas as they emerge.

Activity	1	2	3	4
Work begins / kick off meeting				
Literature review				
Stakeholder map				
Write up				
Final report				

Inputs

- Estimated budget: £1000 - £3000 (excluding VAT) to cover hourly rate of consultancy and any resources required. Please include a detailed description of costs in your proposal.
- Access to the Frontiers team and introductions to members of our community if required.

Your experience

We are looking for a researcher with:

- Demonstrated experience in conducting evidence-based literature reviews, with expertise in a relevant engineering or related field.
- Demonstrated experience in the appropriate geographical context (i.e. Australia, Pacific islands, or Southeast Asia). This may include a combination of living, working, or collaborating with communities/stakeholders in the region.
- Rigorous experience in evidence / data collection and analysis skills and the ability to synthesise, analyse and present evidence into a compelling narrative.
- Alignment with our values, [including our diversity and inclusion policy](#).
- Desirable: examples of similar projects completed within budget and time.

Submitting a proposal

Format

Submissions should be concise, and must be submitted **by midnight on 5 June** including the following information, against the following headings:

- **Personal statement:** a description of your relevant experience and why you would be interested to undertake this piece of work (guide: 250 words)
- **Proposed approach:** a description of the proposed conceptual framework or methodology to undertake the research and mapping activities (guide: 250 words)
- **Value fit:** A description of how your approach aligns with Academy values (Guide: 100 words)
- **Budget:** An account of the total cost of delivering this contract, including VAT.
- **Attached CV:** Maximum three pages detailing your experience to date.
- **Optional: letters of recommendation or testimonials:** to support your application, you may include up to three references with written statements, and links to any available work undertaken (published reports etc).

Selection criteria

Shortlisted submissions will be reviewed by the team between 5 – 12 June. The selection criteria used by the Academy to select a supplier, including indicative weightings, are as follows:

- **Track record and competency:** experience and competency of the researcher as relevant to the theme and context (40%)

- **Proposed project plan and delivery of the project:** Creativity, quality, and appropriateness of the proposed plan to achieve the objectives and outcomes stated (30%)
- **Budget:** Overall value for money and appropriateness of budget for a charity (20%)
- **Value alignment:** Value fit including evidence of diversity and inclusion considerations (10%)

We may hold brief interviews to clarify questions in w/c 10 June, depending on volume of applications. We anticipate choosing the researcher to conduct the research by the end of the same week.

General provisions

We reserve the right to change any aspect of this Invitation, including amending substantive, or procedural provisions, extending any timescale, not making any awards, or suspending, or discontinuing the process (subject to treating all bidders equally).

If needed, the interview process is a second stage assessment and only applicants that meet the essential criteria will be invited to interview.

Any non-compliance with the procedural rules, including any late submission, for whatever reason, can lead to disqualification, subject to exceptional circumstances, which are consistent with all bidders being treated equally.

We reserve the right to reverse a contract award and/or terminate a contract, on the basis of any material inaccuracy in a proposal revealed after the contract is awarded, including after formalisation of the contract. All costs relating to bids are the exclusive responsibility of bidders.

Background information

The Royal Academy of Engineering

[The Royal Academy of Engineering](#) is harnessing the power of engineering to build a sustainable society and an inclusive economy that works for everyone. In collaboration with our Fellows and partners, we're growing talent and developing skills for the future, driving innovation and building global partnerships, and influencing policy and engaging the public. Together we're working to tackle the greatest challenges of our age. Our 2020-2025 strategy is **Engineering for a sustainable society and inclusive economy**.

Our values

Diversity and inclusion is a critical thread that runs through the Royal Academy of Engineering's Strategy 2020–2025 as we strive to build a sustainable society and an inclusive economy that works for everyone.

The Frontiers programme works with diversity and inclusion front of mind. We work globally and strive to amplify unheard voices and stories within our programmes as we develop diverse communities around global challenges. We work across different disciplines and sectors and our communications must be clear, accessible and inclusive.

It is important to us that any service provider shares these values.

The Frontiers programme

The Frontiers programme tackles complex global challenges by fostering collaboration and interdisciplinary thinking among researchers, innovators, and practitioners from around the world. It brings together a diverse community of individuals with a shared commitment to solving global issues and creating positive change.

The programme catalyses new ideas and equips researchers and innovators around the world with the tools and resources they need to turn their ideas into real-world solutions. Frontiers creates fertile ground for collaboration, starting with themed interdisciplinary symposia to encourage new discussions and connect different groups around a shared objective.

Frontiers comprises:

- **Themed symposia** convene academics, industry professionals, NGO staff and policymakers around a single topic in a welcoming and inspiring format. Attendees build networks and diverse and collaborative partnerships via these interactive events.
- **Seed funding** is awarded to successful collaboration bids from the symposia to strengthen collaborations, led by the needs of the community and adaptive to the nuances of the challenge at hand.
- **Other staged funding and opportunities** are then offered, as appropriate to the needs of the community, including funding and networking opportunities like our Frontiers Champions grants.

The Frontiers programme was launched in 2016. Since then, we have run more than **21 symposia** in 12 countries and online, connecting more than **1000+ participants** from **63 countries** around the world. **145 projects** have been funded in more than 30 countries, making impact on **all 17 of the SDGs**.

Further information

If you are interested in submitting a proposal and would find a discussion useful, please contact Alice Marks, Senior Manager for the Frontiers programme:

Alice.Marks@raeng.org.uk