

UK Fluids Network Special Interest Groups: first call for proposals

DRAFT – 27 July 2016

The UK Fluids Network (UKFN) is a 3-year EPSRC-funded network of academic and industrial research groups, focused on innovative developments and applications in fluid mechanics. Activities start in September 2016 and will include funding Special Interest Groups (SIGs) and Short Research Visits, developing and maintaining a website, providing online technical resources and engaging with the public.

The UKFN is pleased to invite proposals for the first round of Special Interest Groups. This note gives the context of the call and sets out the information you should provide in your proposal.

What is a Special Interest Group?

- A SIG is a group of around 10 to 20 UK-based researchers with a shared interest in a specific aspect of fluid mechanics.
- The special interest could be based around, for example, an industrial or societal challenge, an interdisciplinary problem, an application, a method, or a facility.
- In each case, its core members will be academics, but there can also be members from industry and other interested parties where appropriate to the topic.
- For SIGs with an industrial focus, a particular aim is to expose academic researchers to industry's most pressing needs and to expose industry to rapidly-advancing areas that may lead to new business opportunities.

What could Special Interest Groups do?

- SIGs will typically meet twice a year to present current research, refine ideas, propagate them within the research community, critically review joint research possibilities, and then propose carefully-targeted research projects to funding bodies and, where appropriate, to industry.
- SIGs will think strategically about their research area, compiling a reasoned list of capital facilities, equipment, and infrastructure that is required for long term sustainability.
- SIGs should, if appropriate, develop a list of grand challenges in their area to stimulate funding bodies, the public and industry.
- SIGs should encourage PDRAs and PhDs to play an active role, and could aim to expand into ERCOFTAC SIGs by including European partners.
- SIGs with industrial involvement should aim to scale up collaborations between academic and industrial researchers so that they evolve into a critical mass of activity, with multiple points of contact, a clear framework and a longer-term horizon.

What will the UK Fluids Network fund?

- The UKFN will typically fund 6 meetings of approximately 40 SIGs over a 3-year period.

- The UKFN will typically contribute £2k per SIG meeting for the venue, lunch during meetings, and overnight accommodation if required. SIG members will be expected to pay some of their costs - e.g. for travel.
- This funding is flexible. For example, some larger SIGs may ask attendees to pay for their own accommodation or may wish to fund a plenary speaker from overseas.

How will the SIGs be chosen?

- The first round of SIGs will be proposed by the community in Autumn 2016.
- The Executive Committee, overseen by the Advisory Board, will build consortia where there are overlaps, identify SIGs that best complement existing networks, and prioritize SIGs that have the highest potential to achieve the aims of the network. These aims are to:
 - initiate novel and creative fluid mechanics research, within and across discipline boundaries;
 - provide a forum for the UK fluids community to speak collectively to research councils;
 - maximize the impact of EPSRC's recent investment in fluid mechanics;
 - maximize the utility and value of applied projects by engaging as a group with UK industry;
 - keep the UK an international focal point for creative, innovative, and relevant fluids research;
- For SIGs with industrial involvement, we particularly encourage applications involving SMEs that have not engaged with university research before.

Proposal format

A proposal should contain the following items.

1. *Title*
2. *Overview of SIG (50 words)*
Please give a brief description of the subject/scope of the SIG.
3. *Proposed members*
Please list the researchers who will participate, their affiliation, and their broad area of expertise. At least three academic institutions should take part. Please nominate a SIG leader, who will be the point of contact with the UKFN, and a co-leader from a different organization.
4. *Description of SIG (500 words)*
Please describe the following aspects of the SIG:
 - a. Subject and scope
 - b. Proposed activities
 - c. Industry involvement, if appropriate
 - d. Existing groups in the area and how the SIG would relate to them

Submission details

Applications should be sent to Nick Daish (ncd1@cam.ac.uk) by 31 October 2016. The results will be announced by 30 November 2016, and the SIGs chosen for this round will formally start on 1 December 2016.