UK Fluids Network Special Interest Groups: first call for proposals

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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 work together to produce researcher resources for the UKFN website, such as best practice documents, tutorials and graduate courses, hints and tips, and videos
- 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, as outlined in the relevant section of the proposal's
 Justification of Resources*. SIG members will be expected to pay some of their costs e.g. for travel.
- The amount of funding requested should reflect the size of the SIG, in line with the JoR*. The UKFN will fund no more than 40 members in a single SIG event.

^{* &}quot;We have based the budget on 40 SIGs, each meeting 6 times during the network, with the network contributing £2000 per meeting. This figure is based on meetings that last for 24 hours, starting at lunchtime on Day 1 and ending at lunchtime on Day 2, with the network paying for the venue, two buffet lunches, and accommodation for 10 non-local researchers. Attendees would pay for their own travel and evening meals. We realise, however, that SIGs will vary and that this model will need to be flexible. For example, some larger SIGs may require attendees to pay for their own accommodation or may wish to fund a plenary speaker from overseas. The general administrative guidelines will be that the network receives a single bill from the venue in order to minimize administration and that costs and contributions will be agreed before meetings."

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:
 - o initiate novel and creative fluid mechanics research, within and across discipline boundaries;
 - o provide a forum for the UK fluids community to speak collectively to research councils;
 - o 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. For SIGs with industrial involvement, we would suggest typically three participants from industry. 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
- e. Funding requested from the UKFN

Submission details

Applications should be sent to <u>sig@ukfluids.net</u> 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.