Meeting of UKFN Executive Committee

15:15 Friday 30 June 2017 Via Webex

AGENDA

- 1. Agree the **Minutes** of last EC meeting (23/3/17).
- 2. Review **outstanding actions** from last EC and AB meetings.
- 3. Discuss website:
 - a. development since last meeting
 - b. next stages
 - c. comments from Neil
- 4. Discuss SIGs:
 - a. report on progress of SIGs
 - b. monitoring activities and expenditure
 - c. feedback from discussions with SIG leaders
- 5. Discuss SRVs:
 - a. allocation of second batch
 - b. future batches
 - c. comments from Berend (via email)
- 6. Discuss use of supplementary fund from project partners
 - a. status of requests and fund
 - b. update on plans for using the supplementary fund
 - c. comments from Steve
- 7. Discuss UKFN engagement with other UK activities
 - a. ERCOFTAC
 - b. konfer
 - c. UK Fluids Conference

8. Discuss interactions with EPSRC

- a. growth of Continuum Mechanics research area in Mathematics
- b. input from SIGs
- 9. Discuss how to improve publicity and engagement with UKFN
 - a. how to improve participation from the UK fluids community, SIGs, etc
 - b. how to boost awareness of UKFN
 - c. using UKFN to promote fluids research
- 10. Any other business
- 11. Next meeting

Item 2: Outstanding actions from last EC and AB meetings

All actions noted in the Minutes of the EC meeting, 23/3/17, have been completed with the exception of the following, which are ongoing:

- Item 6(a), Supplementary funds: EC members to email in suggestions for fluids-related titles for Ladybird Expert series
- Item 7(a), Engagement with other UK activities: Explore closer integration between Osborne Reynolds Day, organised by ERCOFTAC, and the UK Fluids Conference. See also Item 7.
- Item 8, EPSRC: Continuum mechanics publicity Organising meeting with EPSRC to discuss input from SIGs

In addition, ongoing actions from previous EC meeting, 9/9/16, are:

- List more series of talks currently a quiet period, but will restart search in autumn 2017
- Jobs page more long-term, use Twitter and newsletter for now

All actions noted in the Minutes of the AB meeting, 29/3/17, have been completed with the exception of the following ongoing actions:

- Item 3, website
 - Ton van den Bremer made suggestions for modifications. Those still under consideration are
 - Show which SIGs a logged-in user belongs to
 - Make it easy for users to join a SIG mailing list
 - Add further interactivity on the SIG map

Development since last EC meeting

Domain name (<u>https://fluids.ac.uk</u>): we have successfully applied for the <u>fluids.ac.uk</u> domain name. We have switched service providers and our web developer is in the process of setting up the website on the VPS (virtual private server) we have purchased, with the aim of switching over by the end of June; however, ukfluids.net will continue to work and will be redirected to the new address (with initially a redirection page that will be phased out after 2 months)

Home page (<u>https://ukfluids.net</u>): @UKFluidsNetwork currently has 337 followers (up from 202). The feed is regularly used to advertise jobs, conferences, etc. Subscription to the mailing list now includes a Captcha to avoid recent spamming problems. There are around 600 on the mailing list.

Registration page (<u>https://ukfluids.net/register</u>): there are 406 registered users (up from 373).

About page (<u>https://ukfluids.net/about</u>): the Admin and Contact menus have been combined on one page. Links to the home pages of the EC members have been added. The UKFN logo is available for download in three different sizes. Issues 6, 7 and 8 of the UKFN newsletter have been circulated to the mailing list (on 4/4/17, 3/5/17 and 8/6/17, respectively).

SIG pages (<u>https://ukfluids.net/sig</u>): the main SIG (map) page has been reformatted. To simplify navigation, the list of SIGs appears on the left, and on clicking/tapping each one opens out ('accordion' format) to show the thumbnail and summary, while the list of institutions represented in the SIG are shown on the right. The SIGs are listed alphabetically. There is a link to the UKFN calendar, which lists all the SIG meetings as well as other related UKFN events.

SIG individual pages (<u>https://ukfluids.net/sig/Acoustofluidics</u>, etc): these have been redesigned to include (a) main image covering full width with arrows to navigate to next/previous SIGs and the main map page; (b) additional information is now arranged in blocks on the left-hand side, including a link to the SIG's own website, if available; (c) the SIG's own Twitter feed, if available, is shown on the right (otherwise the UKFN feed is shown)

SRV page (<u>https://ukfluids.net/srv</u>): two of the five SRVs from the first batch have been completed, and their reports are now on the page.

Talks page (<u>https://ukfluids.net/talks</u>): one additional feed was incorporated (Southampton Aerodynamics). The total number of recorded talks is now 15.

Researcher Resources (<u>https://ukfluids.net/researcher-resources</u>): this page is now live, with the following initial resources added: 'Control of fluid flows; Finite element methods in fluid mechanics'; 'Thermoacoustics'; 'Nonlinearity, bifurcations and chaos'; and 'Flow instability'. For each of these there is a range of material, in the form of videos, slides, notes, code or links. The Search facility will return top-level resources ("courses") that match the search terms.

Do EC members have suitable resources of their own (and/or from a colleague) that we could add?

Competition page (<u>https://ukfluids.net/competition</u>): the UKFN photo/video competition has been launched. The closing date for this inaugural competition is 31st July. The page currently sets out how to enter. There will be links to the results and voting page before this deadline (see below).

Next stages

SIG pages: On the individual SIG pages, SIG leaders will be able to add new blocks and edit content via an embedded HTML editor.

Search/Directory page: the next major section to be added will be a Search page. This will carry out a general search across the entire website, and the search results returned may by filtered by User, Research sub-discipline, etc. For registered users it will display a summary of the personal data they entered on registration.

Competition page: by the time the current competition closes, pages will have been added to display the entries and allow voting for the shortlists. There will be one page each for photos and videos, with the same overall format for both: the right-hand two columns will display the entries, while the left-hand column will list the entry titles and allow the user to select one. At the moment, it is proposed to allow each user to choose just one photo and one video. There will be verification by email address, to prevent multiple votes by the same person, and the voter will receive an acknowledgement email.

Google Analytics: there is a wealth of data on who is using the UKFN website and how available via Google Analytics. At a basic level, over the period since the last EC meeting there have been over 1,300 users accessing the website (40% of which were new), with 2,800 sessions and 13,000 page views. We will monitor on a regular basis to assess how usage varies in response to changes to the website (see also Item 9).

Item 4: Special Interest Groups

Status spreadsheet and Dropbox folder

Information on the SIGs is now centralised in a Dropbox folder, *UKFN_files*, which has been created and shared with the EC members. It currently contains folders as follows:

- *SIGs*, containing
 - sub-folders Acoustofluidics_27_Anne, etc, holding the organisational and technical documents for each SIG, e.g. programmes, meeting reports, presentations, as they become available
 - an Excel workbook SIG_status_170613.xlsx, regularly updated (date in filename modified accordingly) – more below
 - sub-folder *Proposals*, containing the proposals for all 41 successful SIGs, for reference
- *SRVs*, containing sub-folders for each batch of SRV applications proposals, letters of support and visit reports
- Institutional_LoS, containing all the letters of support received from UK institutions, which were uploaded to the EPSRC website during proposal submission, for reference

The main workbook *SIG_status_<date>.xlsx* contains sheets

- *Meetings*, updated with the status of SIG meetings
- *Contact details,* with a list of SIG leaders and co-leaders with their email/telephone details
- *Spending plans and expenses,* detailing spends on SIG meetings, either actual values where known or as given in SIG spending plans

Summary of SIG meetings to date

- 27 out of 41 SIGs have held their first meeting. Of the remaining 14 SIGs, 11 have fixed a specific date between now and the end of September, with the remaining 3 either set for September or to be decided
- Of the 27 SIG meetings, 2 SIGs did not wish to claim expenses, while 9 others have submitted expense claims (all approved)
- Of the 38 kick-off meetings with specific dates, 22 are 1-day and 16 are 2-day meetings
- At least 6 SIGs have decided on details of their second meeting, the earliest of which are on 23/24 June (Smart Surfaces, joint with conference, Northumbria) and 3/4 July (Cleaning & Decontamination, Manchester)

Monitoring SIG activities and expenditure

- Following the earlier allocation of SIGs to the EC, MJ has (i) started a 'best practice' document, based on attending some SIG meetings and talking to their leaders; and (ii) asked each EC member to telephone the leaders of the SIGs they are monitoring to gather information on their SIG meetings to add to the best practice document.
- SIG leaders were asked to cc their EC member on email. A few have adopted this practice; ND has been cc-ing the relevant EC members in correspondence with the SIG leaders.
- A request was sent to all SIG leaders to provide a spending plan as soon as possible and by 1/9/17 at the latest. To date, 10 SIGs have provided this information in the requested format.

Would the EC

- give feedback from their discussions with SIG leaders
- state which SIG meetings they are currently planning to attend

Item 5: Short Research Visits

The second round of successful applications, for the batch ending 31 May 2017, is listed below, in alphabetical order of title.

#	Visitor	Visit title	Visiting	Visit dates
1	Dr Denny Vitasari, Aberystwyth University	Effect of surfactant re- distribution on the flow and stability of foam films	Dr Paul Grassia & Mr Ruben Rosario, University of Strathclyde	17-23 September 2017
2	Dr Dongfang Liang, University of Cambridge	Modelling sediment transport in an integrated free-surface and subsurface water flow framework	Prof Simon Tait, University of Sheffield	10 days in September 2017
3	Dr Nathalie Vriend, University of Cambridge	Positron Emission Particle Tracking (PEPT) measurements of silo honking	Dr Kit Windows-Yule, University of Birmingham	1 week in autumn 2017
4	Dr Marco Placidi, City, University of London	The nature of secondary flows in turbulent boundary layers over rough beds	Prof Bharathram Ganapathisubramani & Dr Christina Vanderwel, University of Southampton	10 days in August/ September 2017
5	Mr Robert Miller, University of Leicester	The stability and transition of rotating flows as applied to Chemical Vapour Deposition	Dr Zahir Hussain, Manchester Metropolitan University; Prof Jitesh Gajjar, University of Manchester	2 days in w/b 3 July 2017
6	Mr Ruben Rosario, University of Strathclyde	Viscous froth and surfactant mass transfer	Dr Denny Vitasari, Ms Francesca Zaccagnino & Prof Simon Cox, Aberystwyth University	30 July 2017 - 5 August 2017

The deadline for the next batch will be 30 September 2017.

Item 6: Supplementary funds

Contacting institutions to request supplementary funds

The process of gathering the supplementary funds has started. We first reviewed the letters of support (as uploaded for the proposal – see Dropbox folder). The breakdown over 41 institutions was as follows:

- (i) 12 offered specific amounts per year, totalling £8,500 p.a.
- (ii) 8 offered 'up to' a specific amount or a range, totalling (max) £7,500 p.a.
- (iii) 1 offered £2,000 p.a. specifically to support PhD students attending network meetings
- (iv) 1 offered £1,000 p.a., but as continuation funding after EPSRC support has ended
- (v) 3 stated a contribution might be possible, but were not able to confirm this at the time
- (vi) 16 made no offer of a financial contribution

Requests to make their contribution, along with a 1-page summary of possible uses of the money, have been sent to those in (i). So far, three have responded, indicating there should not be a problem. For those in (ii), it is proposed requests are made to them for specific purposes, up to the value of the amount proposed.

Meetings/correspondence

After discussions on use of supplementary funds at the previous EC meeting, these follow-up activities took place.

- (a) Correspondence with Peter Jimack as chair of the Organizing Committee of the 2017 UK Fluids Conference
- (b) MJ/ND/PL meeting with CUP (Kathleen Too) and JFM (Grae Worster, Editor), 5/5/17
- (c) MJ/ND/PL meeting with CUP (Kathleen Too & David Tranah) and Naked Scientists (Tom Crawford), 23/5/17

Outcomes from the discussions are incorporated below and under other Item notes, as appropriate.

Photo/video competition

A photo/video competition run from the UKFN website has been launched (as described under Item 3, website). Prizes of £200 for the best photo and video are being offered. The closing date is 31/7/17. This was advertised in the latest newsletter, as well as via Twitter (posting will be repeated at weekly intervals). Hashtags #UKFN_photo and #UKFN_video will be used in Twitter publicity.

- The website will be used to select a top 10 shortlist for both photos and videos, with the winners selected by a judging panel. Who would be on the panel?
- JFM offered to help with promotion MJ/ND are initiating.

After the competition, possible follow-up activities, for discussion by the EC, include:

- Interview with winners (by Tom Crawford) featured on UKFN website, possibly also on Naked Scientists
- Promote the winners at the UK Fluids Conference
- Feature selection of best photos/videos submitted in the competition in a gallery on UKFN website
- Produce physical media (e.g. prints); promote use for illustration or as an educational resource

UK Fluids Conference prizes

There has been strong support by the 2017 UKFC Organizing Committee for the award of prizes for the best presentation and poster at the conference. However, they would leave the details and organisation, including judging, to UKFN.

- There would be one prize each for best presentation and best poster by a PhD student how much?
- Judging will be by EC members include the session chairs? Include JFM judge? How to organise?
- JFM/CUP are keen to contribute additional prizes, such as books, and even publicize as joint UKFN/JFM prizes. Does the EC think involvement of JFM/CUP worthwhile, and would this only be appropriate if JFM/CUP and UKFN contributions are of similar value?

Dissertation prize

The first winner of the dissertation prize would present at the 2018 UKFC, so what timetable would be required? For example

- Start promoting it soon
- Time limit for submissions of April 2018
- Judging over summer 2018

Who would judge? Invite CUP/JFM? Sort out before announcing the competition?

The UKFC Committee were in favour of inviting the dissertation prize winner to talk (and receive their prize) at future conferences. What else could we do with the winner?

- Interview (by Tom Crawford) featured on UKFN website, possibly also on Naked Scientists
- CUP suggested the prize could also include, say, a 5-year personal online subscription to JFM

Naked Scientists

Tom Crawford works for Naked Scientists, who broadcast stories across all science, so potentially also fluids. He interviews scientists and hence there is the potential for broadcasting fluids stories that have originated in UKFN. He also has a contract with JFM to write blog articles and tweet on their Twitter account about fluids, and to make some fluids-related films for a general audience.

Hence UKFN can provide him with potential material for stories for either NS or JFM. If so, UKFN could pay his travel expenses. There could also be potential for activities independent of NS and JFM.

See also Item 9.

Item 7: Other UK activities

ERCOFTAC

Following the meeting with David Standingford and Julian Hunt last February, to discuss handing over the responsibility of the ERCOFTAC UK Pilot Centre to UKFN:

- There has been an announcement on the transfer in the ERCOFTAC Quarterly Bulletin. DS is happy for UKFN to forward the QB to its mailing list, which we will include with the next newsletter (appearing shortly).
- MJ will attend the ERCOFTAC Autumn Festival at TU Delft, 5-6 October 2017.
- Regarding integration of the Osborne Reynolds Day with the UK Fluids Conference, there is still an impasse on timing. DS wishes to keep the close link between the OR Day and selection of that year's UK team for the da Vinci prize. DS suggested the UKFC might be persuaded to move if there were sufficient incentive, e.g. additional industrial sponsorship; MJ/ND have not suggested this to UKFC. This is perhaps best taken up with the organisers of the 2018 conference, who appear to be Manchester.

<u>konfer</u>

ND sent konfer a spreadsheet of all registered users with their data (29/3/17); konfer received it, but have not been in contact again since then.

We had intended to use konfer for the Researcher Directory, if it was in a suitable state of development, but since this does not appear to be the case we shall instead implement our own version via the general Search page (see Item 3, website, Next stages).

UK Fluids Conference 2017

Besides the presentation/poster prizes, what else could UKFN do at this conference (either alone or in conjunction with CUP/JFM)? For example,

- UKFN stand with posters
- Booklet of SIGs/pictures from competition/other
- Organise JFM reception/lecture

Item 8: EPSRC

This follows on from the previous EC meeting, in which Mike Ward of EPSRC participated.

Continuum mechanics

In the recent EPSRC Balancing Capability review, Continuum Mechanics was selected as a growth research area in Mathematics, and so UKFN should consider how it can help this area to grow.

- At the last EC meeting, Mike Ward highlighted not only solid mechanics but the interface between fluid and solid mechanics as important. There are several SIGs with significant relevance to this interface, so these can potentially play an important role here
- Create a UK Solids Network PL reported a suggestion made at the recent Euromech Council meeting to develop a Solid Mechanics network akin to UKFN. The two together would be a natural partner for Euromech (fluids and solids). How could UKFN encourage this?

SIG input

In the course of SIG meetings, new research ideas will be put forward, and it would be appropriate to present the best of these to EPSRC. They are keen on this idea. As part of the monitoring process by EC members, it would therefore be helpful to gather and collate this information, and to set up a meeting with EPSRC when it is judged there are sufficient good ideas to share with them.

MJ to comment.

Item 9: Publicity/engagement

Could the EC discuss how to continue to expand the engagement and awareness of UKFN, as well as how it can be used to promote fluids in the UK and beyond.

How to increase engagement within UKFN

There has been enthusiastic uptake of the idea of SIGs by the UK fluids community, with around 700 academics participating (based on the SIG proposals). Yet it seems 50% or less have registered and entered their research interests, etc. We would like this to be 100%. (Practically, we also need PIs registered before they can be added to the 'list of members' on the website SIG pages.)

- Points of contact within institutions, as well as SIG leaders, are launching-off points for encouraging registration. One way to proceed could be by asking them to promote the photo/video competition, which would provide a natural route for reminding people in their SIG/at their institution, including PhDs/ECRs, to register.
- How to increase industrial participation?

How to promote UKFN further and attract new members

What ways can we increase connectivity to UKFN?

- Increase website links pointing to the UKFN website the UKFN logo is available for download, and the last newsletter included a snippet of HTML to add a link. Encourage, individuals, especially PIs, to put a link on their home page, but could also be institutions, departments, companies. Google Analytics suggests that inclusion of links is worthwhile (MJ website had 140 referrals to UKFN website since last EC meeting).
- Add a 'Follow UKFN' button on the website, allowing users to follow UKFN's tweets with a single click while visiting the website
- Develop a range of publicity leaflets for distribution at conferences, etc. JFM/CUP have offered to help with distribution. These could include leaflets on
 - SIGs (photo plus brief description; map; leaders and members)
 - Resources (what's available on UKFN Resources page)
 - Photo gallery
- Provide JFM-related added value that could increase website traffic by
 - providing free access to JFM for industrial members of UKFN
 - o adding functionality to the website linking directly to JFM papers

How to use UKFN to promote fluids and in particular UK fluids

Finally, what else can UKFN do to increase exposure of fluids research? One immediate possibility is Naked Scientists (see Item 6), who could potentially reach a wide audience, and UKFN has the SIGs as a potential source of fluids stories.

- Propose asking each SIG to nominate a 'media champion', probably a PhD student or ECR, to
 - feed suitable news from their SIG to UKFN and then onto NS/JFM
 - o set up and run the SIG Twitter account
- To increase the chance of a news story being of interest to NS
 - It should be timely, e.g. linked to a current news topic or some launch or other announcement
 - It should have a 'hook' or reason why the public should care about the story, which means having an impact on people's lives and not purely for its scientific interest
 - \circ $\,$ TC has provided some words on these to brief the media champion
- This should all be put in the 'SIG Best Practice' document, and include step-by-step instructions for activities, e.g. Twitter