



FACE

Update from the centre management

October 8, 2010

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1. HSE

We are happy to report that we have had no reports of HSE issues of any kind in 2010. HSE will be an area of increased focus in 2011 and plans are currently underway for an HSE awareness day to be held in early 2011.

2. New centre manager

As of 1 September, Kristian Sveen has taken over as Centre Manager after Erik Holm. We would like to take this moment to thank Erik for pulling the load for more than two years and bringing FACE to a point where we can focus on science and progress to improve the flow assurance standards and capabilities of the industry.

Taking the lead in FACE, Kristian and the centre management group will address the questions raised during the internal evaluation conducted earlier this year. We will conduct one-to-one talks with each of the industry partners to clarify expectations and goals. We will also focus on pointing out the significant achievements FACE has made to date and how these fit into the bigger picture and provide stepping stones for the future.

Kristian plans to be located in Trondheim for about 1 day a week throughout 2010 in order to improve our internal collaboration and communication. FACE is currently in a very important phase. The mid-term evaluation is coming up in just over two weeks and we need everybody to pull together and work as a team.

3. New chair of Reference Group

As many of you already know, Shell has kindly accepted to take on the responsibility of Chair of the Reference Group. On September 1, 2010, Gert van Spronsen assumed this position. We are pleased and fortunate to have him on-board.

Shell brings a different approach to the way the Reference Group works. Gert is currently focusing on ways to streamline the Reference Group workload and on optimizing the interaction with the Centre Management Group. We are for example identifying more efficient ways of approving scientific publications.

4. Preparations for the mid-term evaluation

On October 21, the research council and the evaluation panel will conduct a site visit at IFE as part of the centre evaluation. The agenda for the day is as follows:

0900-1000	Preparatory meeting for the Evaluation panel (panel and RCN representatives only)
1000-1200	Scientific Experts Evaluation session
1200-1300	Lunch meeting for the Evaluation panel (panel and RCN representatives only)
1300-1400	Meeting with PhD students (panel, RCN representatives and PhD students)
1400-1600	Generalists Evaluation session
1600-2000	Work session for MI Lab Evaluation panel (panel only)

The appointed scientific experts are Professors Andrea Prosperetti and Peter Currie of Johns Hopkins University and Twente University, respectively. Prosperetti is Chief Editor of the International Journal of Multiphase Flows and has significant experience with modeling of multiphase flows. Currie is a Professor Emeritus of Oil&Gas production systems at Delft University of Technology. He has roughly 20 years of industry experience at Shell.

The generalists are Dr. Silke Stahl-Rolf, VDI, Germany (panel leader) and Dr. Techn. Erich Fercher, BioEnergy2020+, Austria. They both have considerable experience with management of Networks of Innovation similar to FACE.

The evaluation will take place at Kjeller in Kunnskapsbyens hus. The management team will contact individual researchers who will be requested to take part.

The session devoted to PhD students will require participation from as many of our students as possible. The research council has indicated that the use of teleconference tools will be allowed, so for our students abroad this will be the preferred solution. Students located in Trondheim will be invited to travel to Kjeller on October 20 and

meet with other researchers in order to prepare for the evaluation. Details on the arrangement will follow.

5. FACE mobility program

We are currently working on establishing a “FACE Mobility Program”. We believe this will strengthen our collaboration and will bring out new synergies and opportunities that lie in the FACE program. We have a large number of collaborating partners, both in Norway and abroad, and we must take advantage of this. Travel funds will be allocated to the program, and the Centre Management Group will prioritize this according to the individual project needs. The primary function of the program is to promote exchange of researchers across institutes, locations and projects in order to exploit synergies. It will also promote the integration of PhD students and Postdoctoral researchers into the centre and with the industry partners. Naturally, the focus will be on exchanges that increase the scientific production in FACE.

6. FACE – Status

Apart from minor adjustments, FACE is currently running on plan and budget. Status on the individual work packages are as follows:

Suspensions (PM: G. Zarruk)

Asal Amiri defended her thesis, “*Rheology of silica-based dispersions and cross-sectional modeling of settling slurries*”, on October 7, 2010. The two suspension models are ready and undergoing testing against experimental data. FACE Suspensions presented 4 conference papers at the I. C. of Multiphase Flow, Tampa, USA, and 1 at the I. C. on Multiphase Technology, Banff, Canada. A total of 3 journal papers have been written to date (1 published, 1 accepted, and 1 under RG review) . Additionally, at least 3 papers are currently under preparation and will probably be submitted before the end of the year or early 2011. The PhDs in Newcastle and Twente (A. Bragg and D. van Eijkeren) are both working hard and will probably submit one paper each by the end of 2010.

Considering that this project has been down prioritized in FACE and the bulk of the work carried out at the institutes will finish this year, the management group is currently looking into ways of continuing the work. We are, for example, discussing the possibility of creating a JIP based on modeling particle induced erosion. Furthermore, an application for a grant will be submitted to the research council in early October. This will focus on creating connections in Latin America by extending the FACE suspension work and attracting new partners.

Separation (PM: V. Pauchard)

The separation project is currently working on preliminary experimental observations focused on the effect of shear on separation kinetics of Grane oil. The results indicate that the emulsions based on this oil are extremely sensitive to shear. We are also working on the design of an asphaltene based model fluid that qualitatively mimics

the Grane crude. Observation on the separation test rig helped determine the operational envelope for comparison between CFD and experiments. First CFD simulations focused on inlet flow and conditions for activation of convective settling. This may end up in useful design considerations. The activity on droplet size distribution measurements is well underway and a recommendation for equipment acquisition will probably be presented in mid October. The work at New York, Toulouse and Sintef is currently moving full speed ahead and the team is focusing on exploiting synergies between the different sub-projects.

Multiphase transport (PM: M. Foss)

The multiphase transport project is currently in an intensive planning and experimental screening phase. This project has been slightly delayed as a direct consequence of the delayed planning process in early 2010, but the team is working hard to catch up the lost time. Nevertheless, we expect that the majority of deliverables from this project will come in 2011 and onwards. The scheduled experiments will be on viscous oil and gas flow at low gas fractions and will investigate the effect of flow pattern, bubble volume fraction and bubble size distribution on the apparent viscosity and pressure drop of the system.

FACE academy (PM: J. Sjöblom)

Yesterday, October 7, Dr Asal Amiri became the first PhD educated through FACE. She will be starting a new job with Aker Solutions on October 14. We congratulate Asal and wish her all the best in her new job. The work in the academy has recently focused on the Rheology course which was held on Oct 4-6. Serkan Kelesoglu is currently finalizing his thesis and preparing for a PhD defense in early December. The academy is showing consistent scientific progress and will be aiming to publish 6-7 papers during 2011 as the result of the activities in 2010.

7. Rheology course

The first FACE rheology course was successfully held on October 4-6 2010 in Trondheim. The course was attended by FACE students, staff and industry partners. Our gratitude goes to the organizers led by Dr Iva Kralova at the Ugelstad Laboratory and to the course lecturer, Professor Tharwat Tadros whos excellence in science is only par with his excellence in teaching.

8. FACE – agenda for Q4 2010

The last quarter of 2010 holds a few very important milestones for FACE where probably the most important is the mid-term evaluation. The agenda is as follows:

Petromax deadline October 13

Evaluation October 21,

Coalescence Workshop, December 6-7, Trondheim

Serkan Kelesoglu dissertation December 8, Trondheim

Status meeting December 1-3

Reference Group meeting December 3
Board meeting December 14, Trondheim

October 8, 2010

Kristian, Martin, Vincent, Johan and Gustavo