Future & Emerging Technologies (FET) Newsletter — Issue Fri 20 Dec 2013

FET through the keyhole
Future & Emerging Technologies in Europe

In this issue - December 2013

"*... all our science, measured against reality, is primitive and childlike and yet it is the most precious thing we have.*" Albert Einstein

Welcome

After the adoption of the EU's new framework programme for Research and Innovation, Horizon 2020, and the approval of the Work Programme for 2014-2015, everything is in place now to start writing a new chapter of the successful FET programme. All the information relevant to Horizon 2020 is now on the new H2020 website.
The FET Advisory Group has been set up to offer advice on objectives and scientific, technological and innovation priorities; its first meeting will take place in February in Brussels.

The FET team would like to wish you a Merry Christmas and send you its very best wishes for a happy, healthy and prosperous new year. Many thanks for your interest and contributions over the years; we hope you enjoy the festive season and we look forward to collaborating with you in 2014.
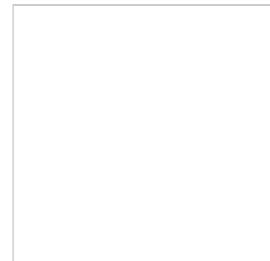
Top News

FET Information Day: 20 January in Brussels

FET is organising this Information Day to present the three FET-Proactive initiatives of Call1 in Horizon 2020, and the two FET Flagships calls. The event is also an opportunity to learn about other initiatives, which are not part of the first call, like FET-Open, Coordination and Support Actions (CSA), and High Performance Computing (HPC). It is the opportunity for attendees to learn from successful past and on-going FET projects, to share their ideas, as well as to participate in a networking session.
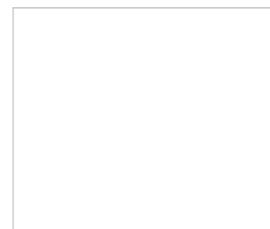
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Could you be one of the new Horizon 2020 independent experts?

Ahead of the start of Horizon 2020 the European Commission has launched a new call for independent experts. Experts are needed to evaluate proposals for EU funding and for other activities such as monitoring, programme evaluation and policy development.
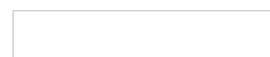
Interested candidates are invited to file their application online as soon as possible in preparation for the first project proposal evaluations, which will start in 2014.

FET2020 Conference

The COFET project is organising its second FET2020 conference "FET and the City: from project dissemination to engaging society" in the Scuola Superiore Sant'Anna in Pisa (Italy) on 30 and 31 January 2014.

Read more...

Portfolio of FP7 FET research projects

Over the 7 years of FP7 (2007-2013), FET has spent **more than 880M€, funding more than 300 projects** (including nearly 2300 participations from 50 countries)! The **portfolio of FET projects** covers different areas, ranging from Artificial Intelligence to Computer science through unconventional devices for example.

Read more...

The ERA-NET FLAG-ERA just kicked-off!

The FET Flagships ERA-NET FLAG-ERA, coordinating the Member States support to the FET Flagships, just started on 1st October 2013, on the same day as the Human Brain Project and GRAPHENE. The third key element of the FET Flagships programme is now in place and will act as a platform to coordinate national and EU funding. The kick-off meeting and first workshop of FLAG-ERA took place in Amsterdam and lasted over three days (12-14 Nov.) More than 60 attendees from research ministries, funding agencies, the European Commission and Flagships participated to presentations and round table discussions in a very open and constructive atmosphere.

Read more...

It's time to say good-bye to FET

Dear colleagues, Dear researchers in FET,

I'd like to express my sincere appreciation and gratitude to the excellent collaboration I enjoyed over the past years when working together with the FET community. It was thanks to your outstanding work and contributions to FET that the programme has established such excellent reputation. As a result of this the FET Programme has been extended with the new FET Flagship scheme and was promoted to a new role in Horizon 2020: becoming the Pathfinder for any new technology. It has been a great pleasure working together however on 1 Feb. 2014 it will be time for me to move on to some new exciting endeavours.

Best regards,
Wolfgang Boch, Head of Unit Flagships

FET Funding Opportunities

FET Proactive funding opportunities

In the **Work Programme 2014-2015**, **FET Proactive** calls for three initiatives under the "Emerging themes and communities" call, and for a fourth one, under the dedicated "Towards exascale high-performance computing" call, implementing part of the HPC strategy elaborated in the context of the HPC Public-Private Partnership by ETP4HPC.

Read more...

FET Open funding opportunities

Under Horizon 2020, **FET Open** will continue its mission to support early-stage joint science and technology research around new ideas for radically new future technologies. FET Open, which will represent 40% of the overall FET budget in H2020, covers now **ALL technological areas**. Another novelty for FET Open in Horizon 2020, is the single step submission!

Read more...

FET Flagships funding opportunities

The Work Programme 2014-2015 calls for the support and continuation of the two **FET Flagship** initiatives "Graphene" and "Human Brain Project (HBP)". Under Horizon 2020 the two initiatives will be organised under a **Framework Partnership Agreement** which is to be set up in 2014. At the same time **coordination and support actions** are called for to address issues and measures cutting across the two FET Flagships'.

Read more...
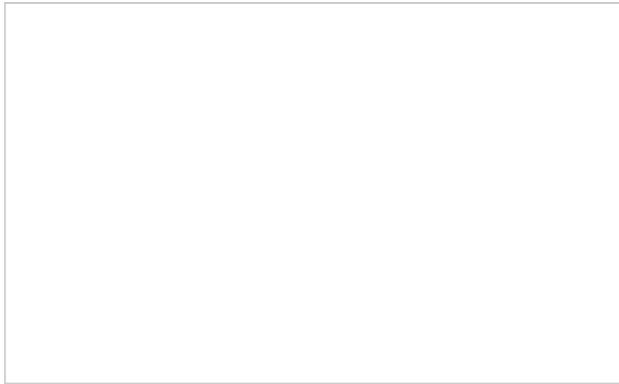
Other Funding Opportunities

Since 25 November 2013, the GRAPHENE Flagship competitive call for consortium extension is open. The consortium will be extended with another 20-30 research groups. The total volume of the call is around 9M€ of EC funding. **The call deadline is 5 February 2014**.

Read more...

Each year, the ERA-NET project CHIST-ERA launches a call for research proposals in two new topics of emergent scientific importance. The Call 2013 is open until 21 January 2014. It addresses two separate topics: 'Adaptive Machines in Complex Environments' and 'Heterogeneous Distributed Computing'. All information is available on the project website.

News video

News & video: GRAPHENE Flagship kick-off meeting in Goteborg 10-11 October 2013

On 1st October 2013, the FET Flagship project GRAPHENE: 'Graphene-Based Revolutions in ICT and Beyond' started its work. The kick-off meeting and first General Assembly of the 75 partners were held on the 10 and 11 October, on the campus of the coordinator, Chalmers University, in Goteborg, SE.
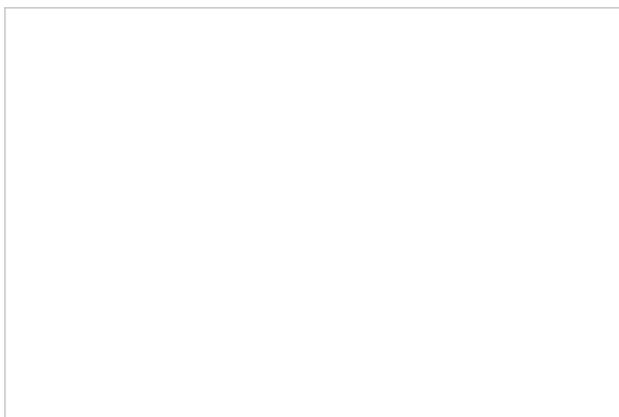
Read more...

▶ Watch video

(From left) C-C.Buhr (Member Cabinet of EC Vice-President N. Kroes) and J. Kinaret Project Leader Graphene project at launch event OCt2013

News & video: Human Brain Project (HBP) Flagship kick-off meeting, Lausanne, 6-10 October 2013

From 7th to 11th October more than 250 scientists, from 135 research groups distributed across 81 research organizations in 22 countries, gathered in Lausanne, Switzerland for the Human Brain Project kick-off meeting. The programme included the first meeting of the HBP General Assembly, an international media event, an open-doors poster session for students, researchers, journalists and members of the general public, and a special dinner to celebrate the start of the HBP's 10-year enterprise.

Read more...

▶ Watch video

(From left) R.Frackowiak, H.Markram, K.Meier, Project Leaders of the Human Brain Project at the launch event Oct2013
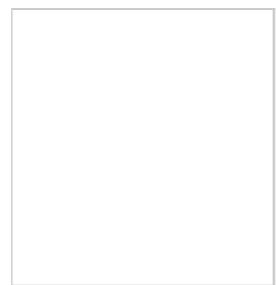
FET at Conferences & Workshops

Neelie Kroes at the Quantum technology day in Paris

Commissioner Neelie Kroes was invited by Prof Albert Fert (Physics Nobel Prize 2007), Prof Serge Haroche (Physics Nobel Prize 2012), and Prof Alain Aspect (Wolf Prize 2010) to a "Quantum Science and Technologies Day" that took place on 28 October in Paris. They personally welcomed Neelie Kroes, presented some of their breakthrough achievements, highlighted promising activities ongoing in their labs ranging from basic to more applied research, including early stage exploitation by some high-tech SMEs. The French Research Minister, Mrs Fioraso, joined Neelie Kroes for part of the visit.
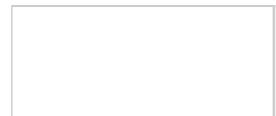
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FET at ICT2013 event in Vilnius

The ICT2013 conference that took place in Vilnius on 6-8 November was the opportunity to "Create, Connect and Grow". The event has been very successful, with more than 4700 people attending it, sharing ideas and visions at the conference sessions, networking, exhibiting their concepts, products or ideas, and much more!

Read more...

The Human Brain Project FET Flagship at Neuroscience 2013

More than 30,000 neuroscientists travelled to San Diego in mid-November to take part in Neuroscience 2013, the world's largest scientific meeting focusing on scientific discovery related to the brain and nervous system.

[Read more...](#)

ICT&ART CONNECT

Art stirs emotions. Art can inspire people, stimulate thoughts, question the given. Mostly however, art is still seen as that which people engage with in their leisure time. ICT ART CONNECT, as a DG CONNECT initiative, proposes to make art part of the R&D&I process in H2020. The purpose is enhancing creativity, stimulating innovation, and bringing technology closer to human practice: to develop artistic practice as a method for shaping technologies that people can relate to at a deeper human level.

[Read more...](#)

Human Brain Project (HBP): Europe/USA workshop on neuromorphic computing

In the context of **HBP** and of new US programmes (e.g. Defense Advanced Research Projects Agency (DARPA), Office of Naval Research (ONR), an **informal EU–US workshop** took place in Heidelberg on 15-16 October regarding the future of cortical processors (also known as neuromorphic computing technologies). It is clear that several fields need such solutions, from security systems and robots to personal assistants. Computational neuroscience is another potential user of the technology where neuromorphic hardware will be used as accelerated simulators to validate brain theories. Clear technological progress has been achieved in recent years but the actual take-off of such hardware platforms remains to be seen. The aim of the workshop was to exchange ideas among active research groups in Europe and the US, with a special emphasis put on scalability, usability and use cases for such implementations. A strategy report for future neuromorphic computing is now being elaborated.

FET Surveys & Consultations

TRUCE Project: Roadmap Survey for Unconventional Computing

The TRUCE project is developing a roadmap document for Unconventional Computing (UCOMP) research and development in Europe and beyond. This survey provides an opportunity for you to contribute with your experience and opinions, and to shape the future of UCOMP research funding.

[Read more...](#)

La vie des projets

VERE - Virtual Embodiment and Robotic Re-Embodiment

An innovative approach to physical and virtual embodiment is successfully creating new connections with avatars and robots that give people the illusion of being in, acting through and thinking as if these bodies were their own. In other words, a kind of 'transfer of consciousness' from people to an avatar or robot.

[Read more...](#)

GRAPHENE FET Flagship: Call for expression of interest for experts

In the context of the GRAPHENE Flagship competitive call, the partner "Europe Science Foundation" will implement the peer review process and is opening a registration facility for experts who are interested in joining one of the six Review Panels.

[Read more...](#)

FET funded projects in artificial intelligence & advanced human machine interaction

In FP7, there have been two main lines of research activities in FET in the area of artificial intelligence which may in the long term even lead to entities with an intelligence superior to that of humans. The first one refers to autonomous systems like robots or information processing systems; the second one comprises systems augmenting human capabilities, i.e. very advanced human-machine interactive systems or hybrid systems including invasive technologies such as neural implants.

News from past projects

"Emergent Connectors for Eternal Software Intensive Networked Systems": The FET Proactive Integrated Project CONNECT (Feb. 2009 - Nov. 2012) got awarded one of the 12 "Etoile de l'Europe" by the French Ministry of Research. You may find all the information here.

Forthcoming Events

To celebrate the New Year, 2 important FET events take place in January!

FET Information Day
Brussels, Belgium
20 January

FET2020 Conference: "FET and the City: From project dissemination to engaging society: doing outreach in FET research" (organised by COFET project)
Pisa, Italy
30-31 January

Have a look at other conferences and workshops!

Visit our websites:
http://cordis.europa.eu/fet &
https://ec.europa.eu/digital-agenda/en/future-emerging-technologies-fet

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