Dear Colleagues,

On 11 December, 2014 the European Commission launched the first calls under Horizon 2020, the European Union's research and innovation programme. Worth more than €15 billion over the first two years, the funding is intended to help boost Europe's knowledge-driven economy and tackles issues that will make a difference in people's lives. Horizon 2020 is the EU's biggest ever research and innovation framework programme with a seven year budget worth nearly €80 billion. The funding opportunities under Horizon 2020 are set out in work programmes published on the EU's digital portal for research funding, which has been redesigned for quicker, paperless procedures. Participants will also find simpler programme architecture and funding, a single set of rules, and a reduced burden from financial controls and audits.

EURAXESS Links ASEAN would like to invite you to two events in early January 2014. The first ASEAN-EU Science, Technology and Innovation Days will be held in Bangkok, Thailand during 21-23 January 2014, and are designed to be the first in an annual series of events. The event is intended for researchers and scientists seeking to expand their research networks, and to identify funding and mobility opportunities. Participants can look forward to the official launch of Horizon 2020, scientific workshops, an Innovation Showcase Exhibition as well as a workshop (22 January) led by EURAXESS Links ASEAN introducing funding opportunities for SEA researchers offered by leading European funding and research agencies. A similar workshop will be held on 24 January 2014 at Fusionopolis in Singapore. Please check the EURAXESS Links ASEAN website regularly for information on how to register for this free event.

We would like to thank you for your support and wish you a merry Christmas and a very happy New Year!

Your EURAXESS Links ASEAN team
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EURAXESS Links ASEAN Newsletter is a monthly electronic newsletter, edited by EURAXESS Links ASEAN, which provides information of specific interest to European researchers in ASEAN and international researchers who are interested in the European research landscape and conducting research in Europe or with European partners.

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Please email to asean@euraxess.net for any comments on this newsletter, contributions you would like to make, if you think any other colleagues would be interested in receiving this newsletter, or if you wish to unsubscribe.

Editor: Dr Susanne RENTZOW-VASU, EURAXESS Links ASEAN, Regional Representative

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1 EU Insight - Council conclusions on the global dimension of European higher education

On November 26th, 2013, the education ministers of the European Union Council of Ministers adopted two sets of Council conclusions on effective leadership in education and on the global dimension of European higher education.

“The EU has a joint vision on the importance of these two issues and will work together towards the same goals. During its Presidency, Lithuania hosted high-level events dedicated to effective leadership and the globalization of European higher education, during which the matters were considerably furthered”, the Lithuanian Minister said.

In this article, we shall focus on the conclusions drawn in the policy declaration regarding the global dimension of European higher education.

The policy declaration was developed over the course of several earlier meetings and contains suggestions made by the Council to the Member States on cooperating with higher education institutions to:

1. Pursue comprehensive strategic approaches towards internationalisation, in cooperation with the relevant stakeholders, which cover three main areas:
   (a) student and staff mobility
   (b) the internationalization of curricula and digital learning
   (c) strategic cooperation, partnerships and capacity-building

2. Promote two-way international degree and credit mobility for students, as well as provide opportunities for staff mobility between Europe and third countries […]

The Council welcomes the Commission’s efforts to exploit the opportunities for international higher education cooperation within the Erasmus+ and Horizon 2020 programmes. This could, for example, happen through increased financial support through Erasmus+ for the mobility of learners and staff, but also through the Marie Skłodowska-Curie Actions under Horizon 2020 for the mobility of researchers to and from third countries.

The declaration also states that EU governments should support “the recognition of credits, degrees, qualifications and competences gained abroad by internationally mobile students, researchers and staff …”, as well as create guidance and counseling services helping academics work abroad.

Furthermore, the systems of ‘European Credit Transfer and Accumulation’, the ‘Diploma Supplement’ and the ‘European Qualifications Framework’...
should be supported, while backing reforms to EU directives helping non-EU nationals enter Member States for research and studies.

The ministers stressed the need to encourage a “coordinated action and strategic partnerships” among European universities – including through the new Erasmus+ programme – in order to ensure the competitiveness of European higher education institutions in the digital race.

Sources:

[1] University World News
[3] Draft Council conclusions on the global dimension of European higher education
2 Feature: Interview with SIgN researcher Dr Florent Ginhoux

In our November edition EURAXESS Links ASEAN introduced the European Molecular Biology Organization (EMBO), an organization of more than 1500 leading researchers in Europe and worldwide that promotes excellence in the life sciences. With the signing of the Singapore-EMBO agreement in 2011, scientists based in Singapore can benefit from a plethora of EMBO activities including, amongst others, EMBO short-term and long-term fellowships, funding for EMBO workshops, or participation in the EMBO Young Investigator Network.

Last month, Singapore-based scientist Dr Florent Ginhoux became one of 23 researchers, and the only scientist from Asia this year, who was picked for the EMBO Young Investigator programme in 2013. The programme recognises outstanding researchers under 40 years old who are leading their first laboratories, both in Europe and in EMBO cooperation partner countries. Dr Ginhoux is a principal investigator at A*STAR’s Singapore Immunology Network. He is also an adjunct Assistant Professor at the National University of Singapore, Nanyang Technological University and the Duke-NUS Graduate Medical School. Susanne Rentzow-Vasu caught up with Dr Ginhoux via email.

Dr Ginhoux, you have just been awarded the EMBO Young Investigator Award. Congratulations! Could you tell us a little bit about the research you are planning to conduct with this grant?

My laboratory focuses on the biology of dendritic cells, which are very unique and special cells of the immune system. They are crucial pathogen sensing and antigen presenting cells that basically control the initiation of our body immune responses to any invading microbes or vaccines that we receive. We are trying to understand where do these cells come from in both mice and humans, how do they work and how they are made in order to better manipulate them in vitro and in vivo. This award will allow me to continue my research in this direction.

Can you tell us a little bit about the anticipated outcome of this research project? How will the general public benefit from it?

On the one hand, understanding the biology of dendritic cells will help the scientific community to design better vaccines. If you understand how these cells take the decision at the molecular level to initiate immune responses, then you can devise new vaccinal strategies based on this knowledge. On the other hand, dendritic cells also regulate immune responses and tolerance to self-antigens. When their functions are dysregulated, dendritic cells can be harmful and initiate immune responses against our own body. This leads to autoimmune diseases such as rheumatoid arthritis, psoriasis, lupus to name a few. Again, the better understanding of DC biology in this context and how they initiate...
Detrimental auto-reactive immune responses could lead to more effective strategies for the treatment of such diseases.

You have studied in France and are currently working in Singapore. Could you tell us a little more about the stops in your research career so far?

After completing my studies at the University Pierre et Marie CURIE (Paris VI) in 2000, I started my PhD in the Immunology Team of GENETHON and obtained it in 2004 from the University Pierre et Marie CURIE (Paris VI) doctoral school. Then, for my postdoc, I spent 4 years from 2004 to 2009 in New York at the Mount Sinai School of Medicine. This was a very exciting time for research and I was planning to set up my laboratory there when I was promoted Assistant Professor in the Department of Gene and Cell Medicine and became member of the Immunology Institute of MSSM in 2008. However, because of the financial crisis at the time, it was very difficult for young investigators like me to find enough resources to support their research. I looked then into different opportunities in the USA and in Europe but was not satisfied as I wanted to find an institution that will actively help me to start my laboratory and also strongly support innovative and cutting edge research. Then I heard about Singapore and its new Immunology Institute called the Singapore Immunology Network (SIgN), an academic non-profit organization launched by the Agency for Science, Technology and Research (A*STAR) in January 2008. I visited SIgN in late 2008 and joined in May 2009 as a Principal Investigator. I am now leading a laboratory of 10 very motivated young scientists/students and I have no intention to leave!

Having conducted research both in Asia and in Europe, what are the best aspects of either research community?

First, Asia is a vast and immense continent with enormous diversities. I feel that I can only speak about the Singaporean research community. Nevertheless, what is defining research in Asia including Singapore at the moment is a massive investment in biomedical research, plenty of excitement and incredible new opportunities for research. Research in Singapore is also fast paced and strongly supported by funding initiatives that allow us to really move forward on our projects and to design ambitious cutting edge scientific program. Also, research institutes are quite young and are fully supported by state-of-the-art facilities and core services. Finally, the proximity with industry and the incentives to develop collaborative projects with industrial partners allow us also to be in contact with emerging technologies long before other scientists outside Singapore.

How important is the scientific cooperation between these two regions?

I believe that the scientific cooperation between these two regions is crucial but yet at its early beginning and I would like to see more ambitious programs and exchanges arising from the scientific cooperation between these two regions. Singaporean researchers should be able to apply in collaboration with EU researchers to EU funding.
In your opinion, what could be done to further enhance international scientific cooperation and, most importantly, the mobility of international researchers?

Increasing student exchange programs and simplifying access to travel funds for scientists without enormous administrative burden will most likely improve international scientific cooperation. Setting up an international adjunct professorship with university partners that is easy to administer would also help. Finally, researchers also have to consider the needs of their families, and easy access to resources that support the integration of their dependents in a new location is crucial.

How did you find out about the EMBO award and can you share any tips with our readers for a successful application to the next round of applications for an EMBO Young Investigator award?

I learned about the possibility for Singaporean researchers to apply to the EMBO young investigator award through the press when Singapore’s government announced a cooperation agreement with EMBO, which started in October 2011. I think that the key thing for a successful application is to propose innovative research and to show signs of independence!

What motivates you as a researcher? Which goals are you still hoping to achieve?

Curiosity and resolving unanswered questions is highly motivational and exciting. What is also great in our job is that every day is different and unpredictable! Hopefully, I will continue to contribute to my fields of interests and the scientific community, adding new knowledge that may be ultimately used in medicine. I also hope to provide good training to students that come to my lab in order for them to embrace a similar scientific career than mine.

Thank you very much for the interview!

Please click for further information on EMBO and the Singapore-EMBO Agreement.
3 Spotlight: The new Marie Curie Actions – the EU's leading research grants programme

As of January 2014, and under Horizon 2020, the Marie Curie Actions will become Marie Skłodowska-Curie Actions (MSCAs) to recognise the Polish origin of the iconic female scientists of the 20th century.

The new framework programme is going to be centred around three key objectives or so-called pillars: Excellent Science, Industrial Leadership and Societal Challenges. The future MSCAs are placed under the Excellent Science pillar.

The MSCAs will continue to offer excellent career development opportunities in both the academic and non-academic sectors with a view of attracting high-level potential individuals to, and retaining them in, Europe. The focus now will be on emerging talent, building skills for long-term careers, and offering attractive working and employment conditions. Particular attention will be paid to industry-academia secondments and doctoral training that provides adequate competences for the evolving needs of both public and private employers. In this respect, industrial doctorates, whereby research enterprises and universities jointly structure a doctoral programme in which a large part of the PhD is undertaken in the non-academic sector, will be particularly fostered.

Marie Curie researchers come from all over the world (130 nationalities, and host organisations in more than 80 countries). A third of Marie Curie researchers are from outside the EU whilst 38% of FP7 MCA researchers are women; more than 10,000 PhDs have been supported by MCA in FP7.

Bodo Richter
Directorate General for Education and Culture
European Commission

Further information:
http://ec.europa.eu/research/mariecurieactions/index_en.htm
EURAXESS LINKS ASEAN continues its series meeting up with researchers in ASEAN who are benefiting from a Marie Curie Fellowship in Europe. Marie Curie Fellowships are European research grants available to researchers regardless of their nationality or field of research. In addition to generous research funding, scientists have the possibility to gain experience abroad and in the private sector, and to complete their training with competences or disciplines useful for their careers.

This month Susanne Rentzow-Vasu interviewed Myanmar national Ms. Zar Chi Aye and Indonesian doctoral candidate Wildan Abdussalam about their mobility experiences as Marie Curie Fellows. Zar Chi Aye is currently a PhD candidate at the University of Lausanne, Switzerland whilst Wildan is pursuing a PhD at the Max Planck Institute for Physics and Complex Systems in Dresden, Germany.

Ms. Zar Chi Aye and Wildan, please tell us a little about you.

Zar Chi Aye: I was born and brought up in Yangon, Myanmar. In 2009 February, I finished my Master’s studies at the University of Computer Studies, Yangon, Myanmar in 2009 and obtained a second Master’s degree in Geo-informatics with distinction from the University of Twente, The Netherlands in 2010.

Wildan: I was born and raised in Bandung, the capital of the West-Java province in Indonesia. Early on I had a great interest in natural sciences, which motivated me to study physics and in 2007 I received a bachelor degree in Physics from the University of Padjadjaran. During my social service I decided that the best way to broaden my scientific and personal scope would be to go abroad, and Europe has been a very attractive option in both respects. Here I received support from the European Commission that allowed me to enroll in a Master’s program at Wroclaw University of Technology in Poland, financed under a European regional development fund. Because this time has been a very positive experience, I wanted to extend my stay in Europe, and was fortunate to become a Marie-Curie Fellow for my PhD studies.
What are your respective research backgrounds?

**Zar Chi Aye:** My main research background is in Computer Sciences and Geo-informatics, recognition and production of voice output of handwritten Myanmar words using image and voice processing techniques; development of plugins in Quantum GIS; open source geospatial technologies and application of decision support systems in risk management.

**Wildan:** Quite early it was clear to me that I wanted to do theoretical physics. I was particularly fascinated by quantum mechanics, statistical and many-body physics, and further to understand macroscopic phenomena emerging in ensembles of interacting quantum systems. For my master thesis I focused on the dynamics of so-called quantum dots, which can be produced experimentally from nano-scale semiconductors. Investigating coupled dots already gave me a glimpse of the interesting effects that can occur in quantum many-body physics, which drove my decision to pursue the project I am currently working on with the Marie Curie ITN.

Please tell us briefly about the research projects you are doing as Marie Curie (MC) Fellows?

**Zar Chi Aye:** It is a project named “CHANGES” with 12 fellow PhD researchers hosted at different partner institutions in Europe. This project intends to develop an advanced understanding of how global changes (environmental, climate change and socio-economical change) affect temporal and spatial patterns of hydro-meteorological hazards and associated risks in Europe. My research is mainly focused on the development of a web-based decision support system in the selection of different risk reduction options using available risk information and scenarios.

**Wildan:** In my project I am investigating ultracold gases. These are very dilute collections of atoms that are trapped and cooled by lasers to extremely low temperatures near absolute zero. When such atoms are now excited to high-lying - so-called Rydberg - states they acquire very strong interactions, which altogether yields a unique platform for studying complex many-body phenomena in the “quantum world”. Currently, I am investigating regular lattices of such Rydberg atoms, where I am looking for the self-induced crystallization of atomic excitations and trying to understand the mechanisms behind this effect. In the long term, we want to understand how such collective phenomena could be exploited to manipulate light by sending it through a cold Rydberg gas. Beside fundamental interest, we hope that such insights will pave the way for new information technologies where photons are used to store, process and communicate information on the quantum level.
Why did you choose to apply for these particular projects?

**Zar Chi Aye:** During my studies in ITC, I developed a growing interest to further my studies in the field of Geo-information Sciences, remote sensing and geospatial project, I was attracted to the positions related to emergency planning and risk management which involve the application of early warning and decision support systems. I believed that this suited me well in terms of my research interests and background though I did have little expertise in the field of disaster risk management.

**Wildan:** When I visited my future advisor in Dresden for my job interview I very much liked the group and the Max Planck Institute with its lively and very international atmosphere. Generally, I got the impression that cold Rydberg atom research is a newly emerging field with growing activities all over the world. I envisioned that this would provide many opportunities for exploring new physics, which I found ideal for a PhD project. I also liked very much that my predictions could potentially be tested directly in ongoing experiments. Here, the MC-network turned out to be valuable in fostering active exchange with the experimental participants.

So far, what are the most significant benefits each of you derive as a MC Fellow?

**Zar Chi Aye:** It is unbelievable indeed how many benefits I have obtained from being a MC fellow! To be honest, I was not really aware about the MC Fellowship program before I applied for the project, also because of the fact that it is not so well-known in my country compared to other funding programs. I feel so blessed to having been selected as an MC Fellow and it is an invaluable opportunity, especially for someone who is coming from a developing country. If I would have to point out the most significant benefits, the Fellowship has allowed me to expand my research career path, improve my networking capabilities and interpersonal skills, not to mention having the chance to learn a useful language like French. Marie-Curie not only fostered my research career but also supported my capacity building.

**Wildan:** Being part of the ITN network has so far been a very positive experience and instrumental for the progress of my research project. Half way through my PhD I could already attend several schools and workshops organized within the COHERENCE-ITN. There I am getting a flavour of the exciting developments in my field and receive specialized training on a broad range of topics at an intensity that, I think, is rather uncommon for a typical PhD program. At these network events, I had plenty of opportunities for first-hand interactions with leading experts in my field from all over Europe, which has been very exciting and provided extra motivation for pushing my own research project. I also enjoy the regular meetings with all other MC Fellows and I feel that we are starting...
to form a pleasant community of PhD students in our field. As we progressed together scientifically, we are learning from each other and some promising ideas for my project have already emerged from discussions with other students in the ITN. In addition, I am gaining experience beyond a pure scientific context. For example, together with other MC-Fellows, I have been organizing a workshop for PhD students (which we call YEA, Young-Excited-Atomix meetings) in Dresden, where I got acquainted with many aspects of organizing a conference. I think that these are all valuable opportunities that I would normally not have this early in my career and they are providing extra preparation for making the next steps.

What are your plans for the future?

Zar Chi Aye: After successfully completing my MC Fellowship and PhD in Lausanne, I would like to contribute what I have learned and apply my expertise back in my home country and other developing countries in need. By working together with UN, INGOs, NGOs and universities across the world, I have a burning desire to explore the opportunities of the projects and regional programs in this field of natural hazards and management. I really want to help and assist people who are suffering from the consequences of natural disaster and global climate change.

Wildan: Following my PhD studies in Dresden, I plan on pursuing a postdoc position, which I hope to do still outside of Indonesia. But ultimately, I would very much like to return to my home country to establish my own research group and become a teacher at a University in Indonesia.

How did you experience your move to Europe? Did you encounter any difficulties? What would be your advice for your peers?

Zar Chi Aye: The first thing that came to my mind is the language problem for my second time here in Europe. The working environment in Lausanne is completely different from being just a normal student in Enschede. Back there, everything could be accomplished in English and I did not really need to learn Dutch. Although it would have been of course a great opportunity to learn another language. In contrast, Lausanne is part of the French-speaking part of Switzerland and prior knowledge of French would have been helpful. Though it is not a necessity to write my thesis in French, almost everybody at the university communicates in French as part of the group activities like weekly meetings, lunch, and break times. That really encouraged me to learn French with the support of my professors, colleagues, and friends. Most obstacles I encountered after arriving in Lausanne could have been solved much quicker had I been able to speak the local language. Thus, I would like to suggest my peers to learn the official language of the country/region before going there if ever possible.
Wildan: The first few months after my move to Europe have been equally interesting and challenging due to the apparent differences in culture and lifestyle. However, I would not say that this has posed difficulties since people have been very welcoming which made it easy for me to settle in and connect to local students. However, I had to realize that the level of education was considerably higher than in my home country, such that I had to make quite some extra effort in order to keep up to the higher competition among students. I think that the same is true to some extent for my PhD work at the Max Planck Institute in Dresden. But I am glad to be in this situation and happy to put in the extra effort, since I think that this challenge gives me the right preparation for my future goals. In retrospect, I would say that it is important to keep approaching those new situations with an open mind and not get frustrated if things turn out to be much harder than anticipated, since I feel that these challenges aid my growth, both scientifically and personally.

In retrospect, which elements do you think were decisive in you being successful in your application?

Zar Chi Aye: I believe that my studies in Geo-informatics have contributed a great part towards the success of my application. In addition, my solid background in programming and Computer Sciences has also been highly suited for the application position. Last but not least, the great efforts I put into preparing the interview for the relevant topics in the field of risk analysis and management have been reflected.

Wildan: This is difficult to answer, but I think putting a substantial effort into preparing a well-structured application package is essential. Perhaps more importantly, I was very much interested and genuinely excited about the ongoing research of the group. So I believe, that, besides demonstrating a solid background on your current research project, being enthusiastic about breaking into new topics has been an essential point for the interview.

Do you have any advice for other young researchers who are considering applying for a Marie Curie Fellowship?

Zar Chi Aye: I really would like to encourage young researchers to apply for a Marie Curie Fellowship. It is truly a training network for young researchers. You have to experience it yourself to know how it benefits you and your society. Have confidence in yourself and prepare the interview in advance to show that you have thoroughly studied about the project and position you are applying for. Not only your proven expertise, interest and motivation in the respective research topic but also your personal attitude and social competencies would make you a successful candidate for the application.

Wildan: I think it is most important to find a group and a topic that you really like, rather than just applying for a position because it is in the frame of a Marie-Curie program. Inform yourself well about the current research topics of your
future host and about what it means to be part of an ITN before your potential interview. However, after all I think that there is always a good portion of luck involved, so one should never get frustrated if things don’t work out as planned.

Thank you both very much!

More information on the Marie Curie Actions can be found here

5 News & Developments

5.1 European Union

5.1.1 Horizon 2020 launched with €15 billion over first two years

On 11 December, 2014 the European Commission launched the first calls under Horizon 2020, the European Union's research and innovation programme. Worth more than €15 billion over the first two years, the funding is intended to help boost Europe's knowledge-driven economy, and tackle issues that will make a difference in people's lives.

Horizon 2020 is the EU's biggest ever research and innovation framework programme with a seven year budget worth nearly €80 billion. The funding opportunities under Horizon 2020 are set out in work programmes published on the EU's digital portal for research funding, which has been redesigned for quicker, paperless procedures. Participants will also find simpler programme architecture and funding, a single set of rules, and a reduced burden from financial controls and audits.

Most EU research funding is allocated on the basis of competitive calls. For the first time, the Commission has indicated funding priorities over two years, providing researchers and businesses with more certainty than ever before on the direction of EU research policy. Most calls from the 2014 budget are already open for submissions as of 11 December, with more to follow over the course of the year.

Calls in the 2014 budget alone are worth around €7.8 billion, with funding focused on the three key pillars of Horizon 2020:

- **Excellent Science**: Around €3 billion, including €1.7 billion for grants from the European Research Council for top scientists, and €800 million for Marie Skłodowska-Curie fellowships for younger researchers.
- **Industrial Leadership**: €1.8 billion to support Europe's industrial leadership in areas like ICT, nanotechnologies, advanced manufacturing, robotics, biotechnologies and space.
- **Societal challenges**: €2.8 billion for innovative projects addressing Horizon 2020's seven societal challenges, broadly: health; agriculture,
maritime and bioeconomy; energy; transport; climate action, environment, resource efficiency and raw materials; reflective societies; and security.

For general information on Horizon 2020, please visit: http://ec.europa.eu/programmes/horizon2020/en

Research topics open for international cooperation can be found here: http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/tags/international_cooperation.html#c.topics=flags/s/IntlCoop/1/1

5.1.2 800 million EUR to support training and mobility

The European Commission has published the first tranche of funding for research grants totalling €800m in 2014 under the new Marie Skłodowska-Curie Actions (MSCA). The first calls are targeted at research organisations, universities, companies and NGOs. Overall, the MSCAs will receive more than €6bn during Horizon 2020.

The MSCA are under the responsibility of Androulla Vassiliou, the European Commissioner for Education, Culture, Multilingualism and Youth. She said: “We are building on a great success story since the launch of the MSCA scheme in 1996. In the next seven years we will be able to fund a total of 65,000 researchers, who will make a vital contribution to science and innovation in Europe.”

Research institutes, universities, companies and NGOs involved in research can apply for funding through the MSCA’s Innovative Training Networks, which are aimed at early-stage researchers without a PhD. The training provides experience outside academia to develop transversal skills to encourage innovation, entrepreneurship and employability. Non-European organisations can also take part in the Innovative Training Networks (ITNs), enabling doctoral-level candidates to gain experience outside Europe.

ITNs have the largest share of the MSCA budget, awarding more than €400 million under this call. Of this amount, €25.5 million will be allocated to European Industrial Doctorates and €30 million to European Joint Doctorates.

Source: H2020

5.1.3 ERC work programme announced for 2014

The publication dates, deadlines, and budgets for the 2014 ERC draft work programmes have been finalised. The ERC Starting Grants’ publication date was 11 December 2013, with the deadline on 25 March 2014. The budget will be €485m. The ERC Consolidator Grants’ was also published on 11 December 2013 with a deadline of 20 May 2014. The budget is set at €713m.

The ERC Advanced Grants’ finalised publication date will be 17 June 2014, with the deadline on 21 October 2014. The finalised budget is €450m. Finally, the ERC Proof of Concept call’s publication was also on 11 December 2013. Two
deadlines will be given of 1 April and 1 October 2014. A budget of €15m has been agreed.

Source: ERC

5.1.4 EU project transforming sea waves into energy is looking for partners

Started in September 2009, Snapper was a two-year project under the EU’s Seventh Research Framework Programme (FP7) that developed a rare-earth magnet based wave energy capture and conversion device for deployment in off-shore environments. Collectively, the project consortium represented the key stages of a viable SME-centric supply chain for the proposed system, capable of taking the project concept forward to market.

"Snapper prototype is designed to amplify velocity and effectively increases the relative velocity within the machine. This enables the generator to be downsized as a whole, while keeping the same power output as similar wave machines, thus making it a more efficient device," explains Narec’s Research and Development Manager, Paul McKeever.

The potential commercial impact of Snapper is high. In 2011, the Snapper concept was awarded The Engineer magazine’s Technology & Innovation Award in the Marine category, which was a timely recognition of the success of the recently completed two-year project.

The consortium is currently seeking partners to enable the launch of a commercially-viable wave energy device. Further investment is needed within the next 12 months to build a full scale prototype device and to test it in a representative off-shore environment. The consortium expects the funding to come from a mixture of public and private sources. This will provide a welcome opportunity to optimise key elements of the device and re-assess its position in the market place. "That is the next big hurdle to clear as part of our route-map towards commercialisation," concludes McKeever.

Snapper was coordinated by the National Renewable Energy Centre (Narec) in the United Kingdom and had seven industrial and research partners in several countries across Europe including Italy, Lithuania, Norway and the United Kingdom.

Source: European Commission

5.1.5 New research project hopes to tame big data explosion

A European Commission-funded project is looking to develop an innovative analysis tool that will help SME marketing agencies and their customers, particularly large brands, improve the efficiency of their social media actions.

Marketing and corporate communications have experienced a paradigm shift in the past several years which are contributing to the emergence of the Big Data Era, with millions of social media posts being generated per day, around the
clock. However, what user activity actually translates into value-generating actions for a company or a brand remains a mystery, resulting in ineffective measurement of campaign impact and return on investment. Given the increase in social media as a part of the marketing arsenal, new tools for analysing, measuring and visualizing social media content are in high demand.

The OPTIMIZR project will combine information technology, marketing data and modeling capabilities that enable the system to provide predicted outcomes from various scenarios and social media marketing strategies. The project’s scientific objective is to understand social network structure and its impact on information diffusion, in order to develop analytical tools for campaign optimization. OPTIMIZR is funded by the European Commission’s Seventh Framework Programme, concretely under the “Research for the Benefit of SMEs” (Capacities) programme. The project began in September 2013 and will last for 24 months. The 1.138.994€ contribution from Brussels brings together 8 European organisations from 5 different countries: Belgium, Hungary, Italy, Malta and Spain.

Source: European Commission

5.1.6 Jean-Pierre Bourguignon appointed next President of the European Research Council

The European Commission has appointed Professor Jean-Pierre Bourguignon as the next President of the European Research Council (ERC), the EU’s premier funding body for investigator-driven frontier research. Professor Bourguignon, a mathematician and French national, will take over in his new role as of 1 January 2014, replacing Professor Helga Nowotny. He will be the first ERC President to be based in Brussels, in a new reinforced role where he will devote most of his time to the job. He joins the ERC at a vital moment for its further development, with a strongly increased seven-year budget of over €13 billion under Horizon 2020, the new EU programme for research and innovation.

European Research, Innovation and Science Commissioner Máire Geoghegan-Quinn said: "Just six years since its launch, the ERC has won a global reputation for funding the best curiosity-driven research. It now needs continued strong leadership and imagination to elevate its standing further. Professor Bourguignon is the right choice for this task, given his distinguished academic career, international renown, and proven record of leadership. I am confident that he will defend the ERC principles of excellence and independence. I also pay tribute to outgoing President Professor Helga Nowotny, who has led the ERC from strength to strength.”

Professor Bourguignon is appointed by the Commission for a term of office limited to four years, renewable once. The ERC was led by Greek biologist Professor Fotis Kafatos from 2007 to 2010, and then by Austrian social scientist Professor Helga Nowotny from 2010 to 2013.

Source: European Commission
5.2 ASEAN

5.2.1 Singapore, Finland to develop factories of the future

The A*STAR Singapore Institute of Manufacturing Technology (SIMTech) and the VTT Technical Research Center of Finland (VTT) have signed a Memorandum of Understanding to build Factories of the Future (FoF).

The initiative aims to help manufacturing enterprises in Singapore and Finland to advance their technological competencies and address manufacturing challenges of the future.

R&D projects in four research areas have been identified: Sustainability, Internet of Things (IoT), Additive Manufacturing and Virtual Instruction Tools in Manufacturing.

“The collaboration provides a synergistic pathway to strengthen the technology base of the local manufacturing industry to sustain its future relevance and global competitiveness so as to anchor high-value complex manufacturing in Singapore,” said Dr Lim Ser Yong, executive director of SIMTech.

“This collaboration is significant as SIMTech has wide expertise in the fields of production and manufacturing engineering. The Nordic model of production combined with Singapore’s provides good possibilities for totally new solutions to our common customers. We expect that this collaboration will create for both partners Intellectual Property Rights, which can be utilized directly in industry,” said Dr Risto Kuivanen, vice president of R&D in VTT.

Source: A*STAR

5.2.2 NTU Scientists discover potential vaccine for malaria

Scientists from Singapore’s Nanyang Technological University (NTU) have discovered a key process during the invasion of the blood cell by the Malaria parasite, and more importantly, found a way to block this invasion. With this new knowledge, NTU is looking to collaborate with the industry on a vaccine against Malaria which can be developed within the next five years if accelerated by vaccine development companies, says lead scientist Professor Peter Preiser.

Prof. Preiser, Chair of NTU’s School of Biological Sciences, said his team’s scientific breakthrough, which was published last month in the top scientific journal Nature Communications, will be instrumental in paving the way towards eradicating Malaria in the long run.

If there can be a low-cost vaccine which is effective in rendering the parasite harmless, then millions of lives can be saved and this will also benefit the economy by millions of dollars each year, says Prof. Preiser. “What we have identified is a region of the Malaria parasite which it uses to attach to a healthy blood cell then pushes itself into the cell,” says the parasitic diseases expert.

“To prevent this invasion, we developed antibodies which can interfere with this
invasion process. So imagine the parasite has the key to unlock a door to the red blood cell, but we muck the key up, so no matter how hard the parasite tries, the door just refuses to open.”

The patented discovery also opens the doors to new drug targets, which will allow scientists to develop more methods to interfere and disrupt the parasite’s act of invasion.

Source: NTU

5.2.3 Asian countries top latest PISA survey

Asian countries outperform the rest of the world in the latest Program for International Student Assessment (PISA) survey, which evaluates the knowledge and skills of the world’s 15-year-olds.

The PISA 2012 survey, conducted by the Organization for Economic Co-operation and Development (OECD), tested more than 510,000 students in 65 countries and economies on maths, reading and science.

The main focus of the survey was on maths as math proficiency is a strong predictor of positive outcomes for young adults. It influences their ability to participate in post-secondary education and their expected future earnings.

Shanghai and Singapore were top in maths, with students in Shanghai scoring the equivalent of nearly three years of schooling above most OECD countries. Hong Kong, Taiwan, Korea, Macau, and Japan were also in the group of top-performing countries together with Liechtenstein, Switzerland and the Netherlands.

Giving every child the chance to succeed is essential, says the OECD. 23% of students in OECD countries, and 32% overall, failed to master the simplest maths problems. Without these basic skills, they are most likely to leave school early and face a difficult future.

The survey also found that boys perform better than girls in maths, scoring higher in 37 out of the 65 countries and economies. However, girls perform better in reading performance and there was no difference in the performance of boys and girls in science.

Across OECD countries, 8.4% of students are top performers in reading. Shanghai has the largest proportion of top performers – 25.1%. More than 15% of students in Hong Kong, Japan and Singapore are top performers in reading, as are more than 10% of students in Australia, Korea, New Zealand and Taiwan.

The top five performers in science are Shanghai, Hong Kong, Singapore, Japan and Finland while Korea, Vietnam, Taiwan, Australia, Macau and New Zealand score above the OECD average in science. Across OECD countries, 8.4% of students are top performers in science and score at the highest levels. This compares to more than 15% of students in Shanghai (27.2%), Singapore (22.7%), Japan (18.2%) and Hong Kong (16.7%).
The survey reveals several features of the best education systems. Top performers, notably in Asia, place great emphasis on selecting and training teachers, encourage them to work together and prioritise investment in teacher quality, not classroom sizes. They also set clear targets and give teachers autonomy in the classroom to achieve them.

Children whose parents have high expectations also perform better: they tend to try harder, have more confidence in their own ability and are more motivated to learn.

The survey also show that high-performing school systems tend to allocate resources more equitably across socio economically advantaged and disadvantaged schools.

The OECD’s PISA results reveal what is possible in education by showing what students in the highest-performing and most rapidly improving education systems can do.

The findings allow policy makers around the world to gauge the knowledge and skills of students in their own countries in comparison with those in other countries, set policy targets against measurable goals achieved by other education systems, and learn from policies and practices applied elsewhere.

Source: Asian Scientist

6 Grants & Fellowships

6.1 H2020

The European Commission has launched the first calls under Horizon 2020. Calls in the 2014 budget focus on the three key pillars of Horizon 2020:

- **Excellent Science**: Around €3 billion, including €1.7 billion for grants from the European Research Council for top scientists, and €800 million for Marie Skłodowska-Curie fellowships for younger researchers.

- **Industrial Leadership**: €1.8 billion to support Europe's industrial leadership in areas like ICT, nanotechnologies, advanced manufacturing, robotics, biotechnologies and space.

- **Societal challenges**: €2.8 billion for innovative projects addressing Horizon 2020's seven societal challenges, broadly: health; agriculture, maritime and bioeconomy; energy; transport; climate action, environment, resource efficiency and raw materials; reflective societies; and security.

Research topics open for international cooperation can be found [here](#)
6.2 International Cooperation Opportunities in FP7 for ASEAN Countries

DG Research and Innovation has published tailored presentations for various world regions, highlighting the key areas of FP7 with a focus on international cooperation and specific opportunities for ASEAN countries.

Further information can be found here:

DG Research & Innovation: International Cooperation ASEAN

6.3 Open Calls in the 7th Framework Programme (FP7)

Below is a list of all currently open calls in each strand of FP7. The work programmes for 2013 can be found here: CORDIS

You can also find a good overview of upcoming calls at EURESEARCH, the platform on European research by the Swiss National Science Foundation (SNSF).

6.3.1 COOPERATION

Two open calls remain in the Cooperation strand of FP7:

<table>
<thead>
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<th>Call Identifier</th>
<th>Call Title</th>
<th>Deadline</th>
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<td>1</td>
<td>IMI-JU-10-2013</td>
<td>IMI 10th Call 2013</td>
<td>2014-01-28</td>
</tr>
</tbody>
</table>

Currently no forthcoming calls remain in the Cooperation strand of FP7:

Further information: Cooperation

6.3.2 IDEAS

No open call remains in the Ideas strand of FP7.

Further information: IDEAS

For more general information for non-European researchers in the ERC’s grants: http://erc.europa.eu/non-european-researchers
6.3.3 PEOPLE

No open calls remain in the People strand of FP7.

Further information: PEOPLE

6.3.4 CAPACITIES

1 open call remains in the Capacities strand of FP7.

<table>
<thead>
<tr>
<th>Call Identifier</th>
<th>Call Title</th>
<th>Publication Date</th>
<th>Deadline</th>
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Further information: CAPACITIES

6.4 Sweden: Swedish Research Council: 2014 Call Openings Announced

During 2014 a number of grants will be announced, for example Project Research Grants and International Postdoc Grants. All details about the terms and conditions of the grants are not ready yet. They will be available when the call for proposals opens, the dates are shown below.

There may be further announcements during the year, as a result of special subject-specific efforts, or through government mandates.

Further information: SRC

6.5 Luxembourg: ATTRACT 2014: Call for Proposals

The ATTRACT programme by the National Research Fund (FNR) aims to support the Luxembourgish research institutions to expand their competences in strategic research areas by attracting outstanding young researchers with high potential to Luxembourg.

Projects submitted should be innovative and of high scientific quality. Candidates must be able to show that they have gained a minimum of two and a maximum of eight years’ professional experience since successful completion of doctoral studies. Proposals selected under the ATTRACT programme have a lifespan of five years and the financial contribution by FNR can be up to EUR 1,750,000 or 2,500,000 € for ‘Starting Investigators’ or ‘Consolidating Investigators’ respectively. Following a successful final evaluation, the applicant can transition to the next career stage and obtain tenure (if not already the case) and promotion.
**Application deadline:** 3 February 2014 (14:00 CET): Joint submission by the candidate and the Luxembourg host research institution of a pre-proposal form with a brief project description.

**Further information:** FNR

### 6.6 Austria: IIASA Postdoctoral Program

IIASA (international Institute for Applied Systems Analysis) provides full funding for 4 postdoctoral researchers each year. Scholars are expected to conduct their own research within one of IIASA's research programs or special projects on topics closely related to IIASA's agenda (Energy and Climate Change, Food and Water, Poverty and Equity). The application process for a post-doctoral scholarship at IIASA is outlined below:

The goals of the IIASA Postdoctoral Program are:

- to encourage and promote the development of young researchers and offer them the opportunity to further their careers by gaining hands-on professional research experience in a highly international scientific environment; and
- to enrich IIASA’s intellectual environment and help achieve research program goals.

As well as the special prestige attached to a postdoctoral award at IIASA, recipients enjoy a substantial number of professional benefits as well as a competitive remuneration package.

**Application deadlines:** 1 December 2013, 1 October 2014

**Further information:** IIASA

### 6.7 UK: Global Alliance for Chronic Diseases (GACD) - Call for Research Proposals: Prevention and Treatment of Type 2 Diabetes

In the past twenty years the global death rate from diabetes has doubled and the World Health Organization (WHO) is predicting that this will increase by two thirds by 2030. It is currently estimated that 347 million people worldwide suffer from diabetes, with more than 80% living in low-and middle-income countries. Of those suffering from diabetes, type 2 comprises 90% of this population around the world. Halting the rise in prevalence of diabetes has been identified as one of the 9 WHO NCD global voluntary targets to be met by Member States by 2025.

With the burden of this chronic non-communicable disease ever-increasing the Global Alliance for Chronic Diseases (GACD) partnership has agreed to launch a call for proposals on the prevention and treatment of type 2 diabetes, with a
focus on implementation and intervention research in low- and middle-income countries. The emphasis of this initiative is on existing approaches to prevention and control of type 2 diabetes rather than development of new treatments.

The aim of this call is to fund projects that will generate new knowledge on interventions and their implementation for the prevention and treatment of type 2 diabetes in low- and middle-income countries (LMIC), as defined by The World Bank.

The GACD partnership is therefore looking for projects that focus on the guiding principles of:

- Reducing health inequalities and inequities in the prevention and treatment of type 2 diabetes in both a local and global context.
- Pursuing knowledge translation and exchange approaches that are designed to maximize the public health benefits of research findings within different health contexts.
- Providing evidence to inform local health service providers, policy and decision makers on the effective scaling up of the interventions at the local, national and regional level.

Through the launch of a global call the GACD aims to develop a global network of researchers that can enhance the cumulative learning across the individual projects, and work towards understanding how socio-economic, cultural, geopolitical and policy contexts have influenced results and how findings might be adapted and applied in different settings.

The funded researchers will form part of a Joint Technical Steering Committee which will meet annually to discuss their research and share information in order to develop approaches to standardise data collection, and wherever feasible to use these standardised approaches in their respective projects.

This GACD call funds partnership working between UK researchers and researchers based in low and/or middle income countries. The Principal Investigators applying for this call must be hosted by a UK institution which is eligible for UK Medical Research Council funding. All projects submitted must include co-investigators from the from the low or middle income country (ies) where the work will take place.

**Deadline for submissions:** 11 February 2014

**Further information:** [MRC](http://ec.europa.eu/euraxess)

### 6.8 UK: Health Systems Research Initiative

**Call 1: Providing Evidence to Strengthen Health Systems and Improve Health Outcomes**

Health systems in low- and middle-income countries (LMICs) face the challenges of substantial socioeconomic and health inequalities, rapid
globalisation and evolving disease burdens. A robust evidence base is required to underpin health systems strengthening and delivery of health interventions in the context of those challenges.

The current debate on strengthening social and health systems highlights the urgent need to foster genuine interdisciplinary and multidisciplinary research, suggesting that the greatest potential impact on efforts to improve health in LMICs, can be achieved through context-sensitive, integrated programmes that include a wide range of social science (e.g. economics, anthropology, health policy research) and biomedical disciplines.

Aims: To fund rigorous, high quality research that will:

- Generate evidence on how to strengthen health systems and improve health outcomes in low- and middle-income countries.
- Inform the delivery of evidence-based interventions or structural changes.
- Provide evidence that is of direct relevance to decision makers and users in the field.

Application deadline: 14 January 2014

Further information: MRC

6.9 Germany: Humboldt Fellowships

The German Humboldt Foundation offers a number of fellowships and awards for researchers at different stages in their careers. Applications for the following programmes can be made at any time.

6.9.1 Humboldt Research Fellowship for Postdoctoral Researchers

The fellowship is open to researchers from abroad with above average qualifications who are at the beginning of their academic career and who have completed their doctorate in the last four years. A Humboldt Research Fellowship for postdoctoral researchers allows for carrying out a long-term research project (6-24 months) that is selected by the fellows in cooperation with an academic host at a research institution in Germany.

Further information: Humboldt Fellowships for Postdocs

6.9.2 Humboldt Research Fellowship for Experienced Researchers

For researchers from abroad with above average qualifications who completed their doctorate less than twelve years ago and work at least at the level of Assistant Professor or Junior Research Group Leader or have a record of several years of independent academic work. A Humboldt Research Fellowship
for experienced researchers allows for carrying out a long-term research project (6-18 months) that is selected by the fellow in cooperation with an academic host at a research institution in Germany.

Further information: Humboldt Fellowship for Experienced Researchers

6.9.3 Georg Forster Research Fellowship for Postdoctoral Researchers

Open to researchers from developing countries with above average qualifications who are at the beginning of their academic career and who have completed their doctorate in the last four years. A Georg Forster Research Fellowship for postdoctoral researchers allows for carrying out a long-term research project (6–24 months) selected by the fellow in cooperation with an academic host at a research institution in Germany.

Further information: Georg Forster Research Fellowship for Postdoctoral Researchers

6.10 Austria: Institute of Science and Technology, ISTFELLOW

IST Austria in Vienna has set up a programme for exceptional postdoctoral researchers partially funded by the European Union, ISTFELLOW. The programme will fund 40 fellows for a period of two years each. ISTFELLOW is open to qualified applicants from all over the world who are interested in spending the postdoctoral stage of their scientific research career at IST Austria. As the research portfolio of the Institute continues to branch out into other areas in the coming years, including physics, chemistry, and mathematics, so will the ISTFELLOW programme. ISTFELLOW will give preference to scientists who have a strong interest in cross-disciplinary approaches. Applications will be accepted at any time, but fellows will be selected twice a year in October and April. The deadlines for each selection are the 15th of September and March. Applicants must have the support of one or more members of the IST Austria faculty who will host them in their research group.

Application deadline: 15 March 2014, 15 September 2014

Further information: ISTFELLOW

6.11 EMBO Funding for Courses & Workshops

Biannual selection by a committee of members of the European Molecular Biology Organization (EMBO) ensures the consistent high quality and novelty of EMBO-funded courses, workshops and conferences. The commitment of the scientific organizers guarantees the long-term success of the programme to inform and train researchers at all career stages. With over 80 meetings attracting more than 8,000 participants every year, EMBO offers the largest
number of scientific training events in Europe. Funding is available for conference series, workshops, practical courses and symposia as well as plenary lectures. EMBO assists organizers with websites, posters and registration.

Further information: EMBO Courses & Workshops

6.12 Switzerland: PostDoc Scholarships by the University of Fribourg

For researchers at the PostDoc level. The scholarships are granted to foreign students (living abroad) who would like to undertake research at the PostDoc level.

Deadline for applications: 28 February 2014, 30 September 2014

More information: University of Fribourg

6.13 Switzerland: ETH Zurich Postdoctoral Fellowship Program

ETH Zurich is a science and technology university with an outstanding research record and is regularly ranked among the top universities in Europe. It provides a highly stimulating work environment and a state-of-the-art scientific infrastructure. The ETH Zurich Postdoctoral Fellowship Program offers an excellent opportunity for young researchers to acquire new skills and competencies, boosting their careers and helping to attain an independent senior position.

The ETH Zurich Postdoctoral Fellowship Program supports incoming fellowships for postdoctoral researchers at the ETH Zurich. The program is intended to foster high-potential, young researchers, who have already demonstrated excellence in terms of internationally competitive achievements in the early stages of their professional careers. Applications have to be made jointly by the candidate and their host who must be an ETH Zurich Professor and who will act as a mentor to the fellow. The duration of an ETH Fellowship is between one year and a maximum of two years.

Eligible are young postdoctoral scientists worldwide, who have been awarded their doctoral degree within two years of the relevant submission deadline. The applicants need to have at least one scientific publication in a peer-reviewed journal or have been awarded a prize for their PhD thesis.

Application deadline: 1 March 2014, 1 September 2014

Further information: ETH
6.14 France: Agropolis Fondation

Agropolis Fondation is a French scientific foundation established in 2007 to promote and support high-level research and higher education (training-through-research) as well as to broaden international research partnerships in agricultural sciences and sustainable development research.

6.14.1 Visiting Fellowship

Agropolis Fondation Visiting Fellows are outstanding scholars with significant track record in research, teaching and publication. They will be involved, either as team leaders or members of a team, in key research activities of one or two research units of the Foundation. This Programme is meant to foster scientific exchange between their home and host research unit.

Candidates from or having worked in developing or emerging, Southern or Mediterranean countries are encouraged to apply under this Programme.

Further Information: agropolis fondation

6.14.2 Doctoral and Post-doctoral Fellowship

Promising and qualified doctoral or post-doc scientists with noteworthy research and publication record may qualify for this Fellowship Award. Successful candidates will be hosted in and work jointly with any of the Foundation’s research units in developing and launching new research projects on the Foundation’s thematic focus. Open to candidates from or having worked in developing or emerging, Southern or Mediterranean countries, this research award also aims to contribute to developing international scientific partnership.

Candidates from or having worked in developing or emerging, Southern or Mediterranean countries are encouraged to apply under this Programme.

Further information: agropolis fondation

6.15 Ireland: President of Ireland Young Researcher Award (PIYRA)

The President of Ireland Young Researcher Award (PIYRA) is Science Foundation Ireland's most prestigious award to recruit and retain early career researchers to carry out their research in Ireland. This programme emphasises the importance that Science Foundation Ireland places on the early development of academic careers. The award recognises outstanding engineers and scientists who, early in their careers, have already demonstrated or shown exceptional potential for leadership at the frontiers of knowledge. Awardees will be selected on the basis of exceptional accomplishments in science and engineering in all areas covered by SFI’s legal remit and on the basis of creative research plans that are built on work that has attracted international attention. For the PIYRA programme, scientific excellence is both
necessary and paramount but is not sufficient; applications must also demonstrate potential impact.

Applicants for the PIYRA competition must meet all of the following requirements.

- Awarded Ph.D. or M.D. within the last eight years and have completed a minimum of 36 months active post-doctoral research (with extensions for documented eligible leave).

- Has not previously received an SFI investigator-type award, such as Principal Investigator, Investigator Award (IA), Stokes Professorship or Lectureship, Research Professorship, or SFI PIYRA nor should they have received a SFI Research Centre as a lead or co-PI. Applicants holding or having held smaller awards such as Starting Investigator Research Grant (SIRG), Research Frontiers Programme (RFP), Investigators Projects (IP), Waltons, Young Women in Engineering Scholarship, TIDA, Industry Fellowship and UREKA supplement MAY apply to SFI PIYRA. Please note that SIRG award holders may only apply to SFI PIYRA in the last 12 months of their active award.

- Will be recognised by the research body upon receipt of the SFI grant as an independent investigator who will have an independent office and research space at the host research body for which he/she will be fully responsible for at least the duration of the SFI grant.

- Has an exceptional record of internationally recognised independent research accomplishments for their career stage (as measured by publications in top quality international journals and conferences, invited talks at international conferences, or other academic metrics appropriate to the applicant's field).

- Has demonstrated research independence (or be in the process of establishing independence) and shown exceptional potential to become a research leader of the future.

- The applicant is expected to have the capability and authority to mentor and supervise postgraduate students and team members.

Application Deadline: Rolling call

Further information: sfi

6.16 International Climate Protection Fellowships

For young climate experts from developing countries interested in conducting a project in Germany and developing long-term collaborations

The fellowship allows future leaders to spend a year in Germany working on a research-based project of their own choice in the field of climate protection. Fellows are free to choose their own collaborative partners. Submit an
application if you come from a non-European transition or developing country
and are involved with issues relating to the scientific, engineering, legal,
economic or social aspects of climate change.

During a three-week introductory phase, you will have the opportunity to make
contact with other climate protection fellows and visit companies, research
institutions and cultural events in Germany. An intensive German-language
course before you begin the fellowship will smooth your way into everyday life in
Germany whilst a continuing education event lasting several days in the course
of the fellowship will enable you to acquire not only practical knowledge of
climate protection but also expertise in management.

Subject to final agreement to provide funding, 20 fellowships can be granted.

**Deadline for applications: 15 March 2014**

**Further information:** Humboldt-Foundation

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**6.17 cea Fellowships**

**6.17.1 15 Postdoctoral Fellowships for Energy and Information Technologies in Grenoble and Paris-Saclay**

The Division of Technological Research and the Division of Physical Science of
CEA (French Alternative Energies and Atomic Energy Commission) are
preeminent players in the European Research Area for renewable energies and
information technologies.

In order to sustain its new FlagShip Program in these areas, CEA invites
applications for 15 two-year postdoctoral fellowships on Nano Electronics and
Photonics, Renewable Energies and Advanced functional materials. This
program will provide interdisciplinary training with renowned supporting staff
and research opportunities in state of the art facilities for excellent young
scientists strongly motivated by working at the forefront research in any of the
following topics:

- Ultimate microelectronics. Project leaders: Dr. S. Deleonibus and Dr.
  M. Sanquer
- Photonics on Silicon. Project leaders: Dr. V. Calvo and Dr. V. Reboud
- DNA Self Assembly of Nano-Objects. Project leaders: Dr. D. Gasparutto
  and Dr. X. Baillin
- New organic batteries. Project leaders: Dr. Th. Gutel and Dr. L. Dubois
- Alternative catalysts for fuel cells. Project leaders: Dr. P. Maldivi and Dr.
  P.A. Jacques
- In operando characterization of devices and systems. Project leaders:
  Dr. G. Gebel, Dr. F. Rieutord and Dr. P. Gergaud

The applicants should hold a PhD in physics, chemistry or engineering,
admitted in first class universities or research institutes with experience related
to the different topics of the program. The working language is English and knowledge of French language is not necessary.

**Further information:** [cea](#)

### 6.17.2 Six Excellence Research Fellowships for Energy and Information Technologies, Grenoble and Paris-Saclay, France

The Division of Technological Research and the Division of Physical Science of CEA (French Alternative Energies and Atomic Energy Commission) are preeminent players in the European Research Area for renewable energies and information technologies.

In order to sustain its new FlagShip Program in these areas, CEA invites applications for 6 Excellence Research Fellowships on Nano Electronics and Photonics, Renewable Energies and Advanced functional materials. This program will provide collaborative working with renowned staff and research opportunities in state of the art facilities for senior scientists strongly motivated by working at the forefront research in any of the following topics:

- Ultimate microelectronics. Project leaders: Dr. S. Deleonibus and Dr. M. Sanquer
- Photonics on silicon. Project leaders: Dr. V. Calvo and Dr. V. Reboud
- DNA Self Assembly of Nano-Objects. Project leaders: Dr. D. Gasparutto and Dr. X. Baillin
- New organic batteries. Project leaders: Dr. Th. Gutel and Dr. L. Dubois
- Alternative catalysts for fuel cells. Project leaders: Dr. P. Maldivi and Dr. P.A. Jacques
- In operando characterization of devices and systems. Project leaders: Dr. G. Gebel, Dr. F. Rieutord and Dr. P. Gergaud

The applicants should hold a PhD in physics, chemistry or engineering, acquired in first class universities or research institutes with experience related to the different topics of the program. The working language is English and knowledge of French language is not necessary.

**Further information:** [cea](#)

### 7 Jobs

There are currently **6460** research jobs and fellowship programmes (all over Europe and partner countries and in all disciplines) accessible via the [EURAXESS Jobs database](#)
GERMANY (Frankfurt): Research Fellow (cardiovascular epidemiology), Center for Neurology and Neurosurgery of the University Hospital of Goethe University Frankfurt am Main
Details

SWEDEN (Stockholm): Associate Professor in Gene technology with focus on evolutionary genetics, KTH Royal Institute of Technology
Details

NORWAY (Bergen): PhD Research Scholarship in Marketing, Norwegian School of Economics (NHH), Department of Strategy and Management
Details

ISRAEL (Jerusalem): Postdoc in Biological Sciences, Hebrew University of Jerusalem
Details

SWITZERLAND (Sankt Gallen): Professor of Business Economics and Public Policy, University of St. Gallen
Details

8 Events

8.1 Thailand, Bangkok: ASEAN-EU STI Days, 21 – 23 January 2014

The first ASEAN-EU Science, Technology and Innovation Days will be held in Bangkok, Thailand during 21-23 January 2014, and are designed to be the first in an annual series of events (www.stidays.net). The event is intended for researchers and scientists seeking to expand their research networks and to identify funding and mobility opportunities. More than 300 participants from across Europe and Southeast Asia including researchers, policy makers, research managers, and companies are expected to attend.

The draft programme is now online and registration has started.
As part of the STI Days, EURAXESS Links ASEAN is organising a one-day event called "Advancing Your Research Career in Europe: Funding and Fellowship Opportunities for Southeast Asian Researchers". European research organizations will present their mobility opportunities to Southeast Asian researchers. One-on-one interaction will also be part of the programme. The EURAXESS Links ASEAN event takes place on 22 January 2014.

8.2 Singapore: EU-Singapore Research Mobility Event, 24 January 2014

EURAXESS Links ASEAN together with the Nanyang Technological University (member of SEA-EU Net), the EU Centre Singapore and the Delegation of the EU to Singapore are organising a one-day event introducing funding and fellowship Opportunities for international researchers offered by leading European research organizations. The event will also see an introduction of Horizon2020 by Ms Christina Russo, Director for International Cooperation, Directorate- General, Research and Innovation, European Commission.

The programme and registration details will be published shortly on the EURAXESS Links ASEAN website.

8.3 Singapore: Café des Sciences "How to turn research into innovation", 27 January 2014

Interesting things are afoot with a unique laboratory, the Franco-Singaporean joint laboratory called IPAL (Image & Pervasive Access Lab). Not only will IPAL be evaluated in January by a prestigious scientific committee, it will also co-host its very first Café des Sciences!

Co-organised by the French Embassy in Singapore, the Café des Sciences will gather the scientific committee which will share their knowledge with the young generation about how to elaborate the strategy to turn research successfully into innovation. This committee, composed by Université Joseph Fourier, Université Pierre et Marie Curie, Institut Mines-Télécom and the French National Centre for Scientific Research, will be joined by A*STAR, NUS and a Singaporean startup in order to form a panel discussion and confront their experiences.

Join the event to:

- Network with renowned institutions in areas of research and innovation from both countries,
- Unleash your critical spirit, and ask their burning questions concerning these areas,
- ...drink a good cup of coffee and eat delectable French pastries.
Café des Sciences will be held at the National University of Singapore University Hall on 27 January 2014 from 2pm to 5pm. The event is FREE.

Registration details on: http://www.cafesciences.com/

8.4 Singapore: International Conference on Flavor Physics and Mass Generation, 10-14 February 2014

The start of the Large Hadron Collider (LHC) at CERN is bringing particle physics to an unprecedented TeV energy frontier, at which some long-standing questions associated with the Standard Model will be answered and new physics might be observed.

In 2013 a new boson with a mass of 126 GeV was discovered. This boson might be the Higgs boson, which generates the masses of the weak bosons, or an excitation of the weak neutral boson, if the weak bosons are bound states of smaller constituents.

The implications of this discovery for the physics of quark and lepton flavors will be considered. Furthermore the following topics will be discussed:

1. Mixing of leptons and neutrino oscillations
2. Mixing of quarks and CP-violation
3. Mass generation for leptons and quarks
4. Flavor symmetries and models for quark and lepton masses
5. Mass generation in Quantum Chromodynamics
6. Flavor physics and Grand Unification
7. Heavy flavor physics and the LHC
8. Rare B-decay and new physics
9. See-saw mechanism and leptogenesis

The international conference on “Flavor Physics and Mass Generation” will be held at the Nanyang Executive Centre from 10 to 13 February 2014. This conference follows the conference on “Flavor Physics in the LHC Era”, held in Singapore on November 2010.

Deadline for submissions: 15 January 2014

Further information: NTU

8.5 Germany: 18th International Forum on Advanced Microsystems for Automotive Applications (AMAA 2014), 24-24 June 2014

The automobile is going through the biggest transformation in its history. Automation and electrification of vehicles are expected to enable safer and cleaner mobility. The prospects and requirements of the future automobile affect innovations in major technology fields like driver assistance systems, vehicle networking and drivetrain development. Smart systems such as adaptive
ICT components and MEMS devices, novel network architectures, integrated sensor systems, intelligent interfaces and functional materials form the basis of these features and permit their successful and synergetic integration. They increasingly appear to be the key enabling technologies for safe and green road mobility.

It has been the mission of the International Forum on Advanced Microsystems for Automotive Applications (AMAA) for more than fifteen years to detect novel trends like this and to discuss the technological implications from early on. Therefore, the topic of the AMAA 2014 will be “Smart Systems for Safe, Clean and Automated Vehicles”.

Leading engineers and scholars from all around the world are cordially invited to participate in the dialogue and submit proposals for papers addressing ongoing research and novel developments in this field. Discussions at the conference will focus particularly on the application areas mentioned below. A special attention will be given to topics covered in public funding programs like the European Green Vehicles Initiative PPP.

We are looking forward to receiving your proposals, and to meeting you for an inspiring conference in summer 2014.

Further information: AMAA 2014

8.6 Indonesia: 37th Meeting of the Asia Pasific Advanced Network (APAN37), 20-24 January 2014

Institut Teknologi Bandung (ITB) is hosting the Asia Pasific Advanced Network 37th Meeting (APAN37) which will be held at Savoy Homann Bidakara Hotel, Bandung, Indonesia from 20-24 January 2014.

The event will consists of presentations and workshops on advanced network technologies and application. There will be plenty of opportunity to interact with colleagues from Asia-Pacific advanced networking and research communities and beyond during this meeting.

Topics covered in this meeting relates to the development, deployment and/or use of NRENs both domestically and internationally. Existing APAN Working Group are:

- Network Technology Area: IPv6, Future Internet, Security, SIP H323, NW research, Sensor NW
- Natural Resource Area: Agriculture, Earth system, Earth Monitoring
- Application Technology Area: HDTV, Middleware, E-culture, Medical
Further information: ITB

8.7 Brussels: 5th AEBIOM European Bioenergy Conference, 12-14 May 2014

The AEBIOM Bioenergy Conference organized by the European Biomass Association is the fifth edition of the growing series. The annual conference has grown ever since its first edition in 2010 and has quickly become Europe’s major occasion for discussion and networking amongst important industry leaders and policy makers. Bioenergy is the largest renewable energy source in Europe and we expect around 300 industry representatives to be present at this event which is one of the leading bioenergy conferences in Europe.

Further information: AEBIOM

8.8 Germany: Molecular Machines: Lessons from Integrating Structure, Biophysics and Chemistry, 18-21 May 2014

The conference program is designed for biochemists and molecular biologists who are interested in molecular machines. It should provide an overview of how structural biology, and more generally biophysical techniques can be applied to different biological problems. The techniques covered in the program include classical high resolution structural biology techniques such as electron microscopy, crystallography and nuclear magnetic resonance spectroscopy, as well as fluorescence, mass spectrometry, small angle scattering and chemical biology.

The aim of the conference is to show the interdisciplinary nature of the diverse experimental approaches and promote a modern way of thinking, where barriers between specific expertises are crossed. The sessions are organised according to the biological questions, ranging from gene expression to cell division. Experts in the different techniques will present their work back to back, showing the multiplicity of routes that can be followed to understand molecular machines in the cell.

Deadline for submission: 13 February 2014

Further information: EMBO / EMBL

8.9 UK-Southeast Asia: Partners in Science – Forthcoming Events

The team is planning the following events and activities for 2013/14. If you are interested to find out more, please contact the lead team member.

- Chemicals/Synthetic Biology, Singapore, January 2014 (Ching)
Investigative Dermatology Symposium, Singapore, February 2014 (Nashya)
Space and Satellite Technology, Singapore, February 2014 (Mark)
Technology Cooperation for Maritime Applications, Singapore, TBC (Mark)

Further information: UK-Southeast Asia: Partners in Science

8.10 Indonesia: 7th Open Science Meeting, 26-28 January 2014

The 7th Open Science Meeting 2014 will be held from 26 to 28 January 2014 in Makassar, Indonesia.

The Open Science Meeting (OSM) has been organized biannually, mostly in Indonesia, since 2002. Its main goal is to strengthen the scientific bonds between the Netherlands and Indonesia. OSM 2014 will focus on the interconnections between science and society.

Registration: Now open

Further information: OSM 2014

8.11 Austria: Going Green – CARE INNOVATION 2014, 17-20 November 2014

The International CARE Electronics Office is pleased to announce the Going Green – CARE INNOVATION 2014 conference and exhibition on Electronics and the Environment. It will take place in Schoenbrunn Palace Conference Centre Vienna (Austria), which is situated in the Apothecaries’ Wing of the famous building. This Symposium is the only platform for presenting the up-to-date progress on sustainable development and the development of eco-efficient electr(on)ic & automotive products.

This year’s program will feature the latest in environmental design, clean manufacturing, resource efficiency, climate change, new eco-efficient technologies, collection, reverse logistics, refurbishment, carbon trading, re-use, recycling and policy making from leading experts in industry, academia,
consulting, recyclers and public area around the globe. Leading companies and institutions in green electr(on)ics will present their innovative products, processes and services at the exhibition.

All companies in the electr(on)ics, automotive, solar and PV, chemical and recycling industry, power suppliers, electricity generators and distributors, contract manufacturers, material and component suppliers, service and logistic companies, collective systems, academia, consulting and public authorities (local, regional, international) are invited to attend and contribute.

**Deadline for submissions: 31 May 2014**

**Further information:** [CARE INNOVATION 2014](#)

### 8.12 Italy: Third Workshop on Emerging Oncogenic Viruses, 4-8 June 2014

The success of the first two Emerging Oncogenic Viruses meetings, held in 2010 and 2012, and the enthusiastic feedback from the participants, about 120 top scientists, encouraged us to repeat the event in 2014.

You are cordially invited to attend this meeting, which is intended for basic researchers (biologists and epidemiologists) as well as clinicians. The workshop is organized and co-sponsored by the International Agency for Research on Cancer (IARC) and the German Cancer Research Center (Deutsches Krebsforschungszentrum; DKFZ).

The objectives of the meeting will be the critical evaluation of epidemiology, immunology, and biology of cancer-associated viruses. The programme will emphasise new HPV-related cancers and newly discovered human polyomaviruses; advances concerning other pathogens will be incorporated as they arise.

The official language will be English.

**Dates for submissions: 13 January 2014 to 16 April 2014**

**Further information:** [EOV](#)

### 8.13 Austria: 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications – SIMULTECH, 2-4 September 2014

The purpose of the 4th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH) is to bring together researchers, engineers, applied mathematicians and practitioners interested in the advances and applications in the field of system simulation. Four simultaneous tracks will be held, covering on one side domain independent methodologies and technologies and on the other side practical
work developed in specific application areas. The specific topics listed under each of these tracks highlight the interest of this conference in aspects related to computing, including Conceptual Modeling, Agent Based Modeling and Simulation, Interoperability, Ontologies, Knowledge Based Decision Support, Petri Nets, Business Process Modeling and Simulation, amongst others.

Topics:
- Conference Areas
- Simulation tools and platforms
- Formal Methods
- Complex systems modelling and simulation
- Application Domains

SIMULTECH 2014 will be held in conjunction with ICETE 2014 (International Joint Conference on E-Business and Telecommunications), ICSOFT 2014 (International Joint conference on Software Technologies), ICINCO 2014 (International Conference on Informatics in Control, Automation and Robotics) and DATA 2014 (Data Management Technologies and Applications).

Deadlines:
- Regular Papers: Paper Submission: 10 April 2014
- Position Papers: Paper Submission: 20 May 2014
- Special Session SDDOM: Paper Submission: 23 June 2014
- Special Session MSCCEC: Paper Submission: 23 June 2014
- Special Session MSIE: Paper Submission: 26 June 2014
- Special Session HA: Paper Submission: 23 June 2014

Further information: SIMULTECH 2014


In discussions of economic development, industrialization, modernization and urbanization are often in the equation. But as this generation being a product of past environmental transgressions, we are now all inclined to include environmental sustainability in the picture. We now not only refer economic development to quantitative and qualitative progress in the economy, community and society, but we now also consider the kind of natural environment we would be leaving for future generations. Industrialization, modernization and urbanization translate to an insatiable thirst for energy. But as demand for energy grows, so do the greenhouse gas emissions. If the
aspiration of development is to raise living standards, provide proper access to modern energy services, more efficient use of energy to protect the global environment and ensure reliable energy supplies, then green growth must play a key role. Incorporating elements of low-carbon green growth in economic strategies that would cover technological, financial and investment aspects, as well as national and regional energy development policies geared towards achieving a sustainable green future has now become more important. A low-carbon based type of economy will help mitigate environmental pollution and CO2 emissions caused by fossil fuel use, help reduce reliance to dwindling fossil reserves, and encourage technological innovations.

Open for registration: 15 January 2014

Further information: Green Energy

9 Resources

Latest Calls

Here you can find the latest calls on the newly set up Research Participant Portal.

International Cooperation Activities

Access the portal of the European Commission’s International Cooperation Activities here.

Become an Expert Evaluator for FP7

The website to register as an expert for research activities is available on CORDIS. The call for experts is open both for individuals and for organizations. Source: CORDIS

Other Research Career Sites

Find A Postdoc: http://www.findapostdoc.com/
Find Scholarships in Europe: http://www.scholarshipportal.eu/
Find PhDs in Europe: http://www.phdportal.eu/
Academic Jobs EU: http://www.academicjobseu.com
Euro Science Jobs: http://www.eurosciencejobs.com/
EMBO excellence in life sciences: http://www.embo.org
EuroBrussels: http://www.eurobrussels.com/
Jobs at ITER: http://www.iter.org/jobs
Nature.jobs: http://www.nature.com/naturejobs/index.html
Jobs.ac.uk: www.jobs.ac.uk
Research Jobs in Germany: Research-in-Germany.de
Scholarship Database of the German Academic Exchange Service (DAAD)
Brainpower Austria: http://www.brainpower-austria.at/