

Quarterly Newsletter Issue 4 2017



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# **EURAXESS China**

Dear readers,

Happy New Year! We hope you had a great 2017 and welcome you to enjoy our final quarterly newsletter of the year.

The quarter saw the reveal of the Horizon 2020 work programme for 2018-2020 and to help us members active in Sino-European research collaboration in this edition's *Hot Topic* we have collected a comprehensive list of all the calls that are relevant for Chinese co-funding.

Looking back on the year, we found our 2016 **EURAXESS Science Slam winner** Meng Xiaotong and got her to tell about her **winner's tour to Europe** in our regular segment *Meet the Researcher*. She shared with us her experience visiting Oxford and Cambridge and various countries of Europe in her first visit abroad.

As usual, we also have a *EURAXESS Country in Focus* – this time it's **Hungary.** 

*In case you missed* anything from our website and events over the last months, we end the newsletter with a brief recall of some our main activities.

Best regards

Your EURAXESS China team

# 1 Hot Topic: Horizon 2020 New Work Programme

## Calls targeting China in 2018-2020

On 27 October, the European Union published the 2018-2020 Workplan for Horizon 2020 as was celebrated in a special event held at the Italian Embassy in Beijing. The work plan encompasses all upcoming deadlines, focus areas and other details of the framework programme for the next three years. See more about the work programme here: https://ec.europa.eu/programmes/horizon2020/en/what-work-programme.

The work programme includes all the calls for funding that specifically targets cooperation with China. The following is an overview of calls that might be of special interest to Chinese researchers and institutions. It's mainly built on information which can be found on the <u>China country page</u>.



## **Flagship initiatives**

There are 5 special flagship initiatives for EU-China research innovation receiving special support from China and the EU.

## Flaghship Initiative: Food, Agriculture and Biotechnologies (FAB)

The EU China research and innovation flagship initiative on food, agriculture and biotechnologies (FAB) is a comprehensive research and innovation cooperation programme launched in 2014 to tackle sustainable agriculture, food security and safety in the EU and China. This has translated so far into 12 Horizon WP 2020 topics dedicated to cooperation with China with a total EU budget of 94 million euro. Common priorities and WP topics have been jointly identified and co-funded by the EC with CAAS and MOST. As a result, 13 joint projects have been launched involving 63 Chinese partner organisations.

For third phase of the FAB Flagship (Work Programme 2018-20), a more balanced EU-China cooperation is envisaged with emphasis on integrated approaches to food safety in agri-food chain, high-efficient management of soil quality and land resources, healthy soils for healthy food production, and use of biogas digestate for high-quality organic fertilisers, fertilisers and other topics of common interests when it is appropriate;



SFS-37-2019: Integrated approaches to food safety controls across the agri-food chain

SFS-38-2018: Highly efficient management of soil quality and land resources

<u>CE-SFS-39-2019: High-quality</u> organic fertilisers from biogas digestate

SFS-40-2020 - Healthy soils for healthy food production (Information to be published soon)



SC5-13-2018-2019: Strengthening international cooperation on sustainable urbanisation: naturebased solutions for restoration and rehabilitation of urban ecosystems.

SC5-25-2020: Strengthening EU-China cooperation on sustainable urbanisation: Enhanced natural treatment solutions for water security and ecological quality of water in cities (Information to be published soon)



LC-MG-1-1-2018: InCo flagship on reduction of transport impact on air quality C) Sensing and monitoring emission in urban road transportation system (China)



CE-BIOTEC-04-2018: New biotechnologies for environmental remediation

<u>CE-BIOTEC-05-2019: Microorganism</u> communities for plastics biodegradation (RIA)

NMBP-21-2020:Custom-madebiological scaffolds for specific tissueregenerationandrepair(Information to be published soon)



LC-MG-1-6-2019: Aviation operations impact on climate change

## Flaghship Initiative: Environment and Sustainable Urbanisation

Strategic joint EU-China research and innovation cooperation in environment and sustainable urbanisation is a long standing priority for both regions and it has been pursued with a number of joint projects in FP7 and no less than 8 topics in Horizon 2020 so far. For the period 2018-20, cooperation will target green urban mobility and sustainable electrification in large urban areas, and reduction of transport impact on urban air quality with the two topics below. These topics are intended to promote balanced and substantial cooperation between European and Chinese partners. China-based participants in projects selected under Horizon 2020 are invited to apply for co-funding from MOST.

#### Flaghship Initiative: Surface Transport

Cooperation with China on Surface Transport builds on past multilateral cooperation with CSA projects like "SOLUTIONS" launched in May 2013 supporting the uptake of innovative sustainable urban mobility solutions in Europe. Future cooperation will focus on transport impact on urban mobility, sustainable electrification, air quality, and freight transport systems, and will be promoted through the following topics targeting China as well as other international partner countries. China-based participants in projects selected under Horizon 2020 are invited to apply for co-funding from MOST.

#### Flaghship Initiative: Aviation

Building on a long standing cooperation on aviation research the European Commission and the Ministry of Industry and Information Technology agreed to promote further cooperation with a topic on Aviation operations impact on climate change. This topic is intended to promote balanced and substantial cooperation between EU and Chinese organisations. China-based participants in applications and projects selected under Horizon 2020 are invited to apply for co-funding from MIIT

## Flaghship Initiative: Biotechnologies

Following fruitful cooperation on biomaterials under FP7, the European Commission and the National Natural Science Foundation of China (NSFC) agreed to further promote research and innovation cooperation with three new research topics on biotechnology for the environment and human health involving co-funding from both sides.

## **China-EU Co-funding Mechanism**

The China-EU co-funding mechanism on research and innovation (CFM) cooperation has played a significant role in supporting win-win STI cooperation since its launch in December 2015. The European Commission and Chinese Ministry of Science and Technology (MOST) agreed the renewal of the CFM for the period 2018-2020 to support joint projects between European and Chinese universities, research institutions and companies.

Under the co-funding mechanism (CFM) the Chinese Ministry of Science and Technology (MOST) will provide financial support on a competitive basis to China-based entities that will participate in joint projects with European partners under Horizon 2020. For the period 2018-2020, MOST intends to reserve an annual budget of up to 200 Million RMB, and the EC intends to reserve a budget of up to 100 Million Euro in Horizon 2020 calls targeting cooperation with China.

See more information about co-funding by downloading *the Horizon 2020 & EU-China Co-funding Mechanism Booklet* here:

## http://www.dragon-star.eu/horizon-2020-eu-china-co-funding-mechanismbooklet/

The China-EU co-funding mechanism is also open for application from other projects outside of the flagship initiatives. Projects that fit particularly well for Sino-European funding would be ones that fit either or both of the list of Chinese Ministry of Science and Technology (MOST) Priority areas and the list of Horizon 2020 calls that target China.



**MOST Priority areas** 



Horizon 2020 Calls Targeting China

To see a list of MOST Priority areas as well as particular Horizon 2020 Calls targeting China see our overview from EURAXESS China website:

https://euraxess.ec.europa.eu/worldwide/china/other-horizon-2020-callstargeting-china

# Black Magic



#### **EURAXESS Science Slam**

A science slam is a scientific talk where researchers compete to present their work in front of a non-expert audience. The slam is a way to show the engaging and fascinating side of research to the wider public.

The EURAXESS Science Slam take place on regular bases in China, India and Brazil.

# 2 Meet the researcher: Science Slam Winner Meng Xiaotong Tells Us About her 2017 Winner's Tour

Meng Xiaotong is a soon to be graduated masters student in Biophotonics at the Institute of Laser Engineering at the Beijing University of Technology. She is also the youngest winner of EURAXESS Science Slam China after taking the first place in the competition that was held in Beijing in 2016. Her slam titled "Black Magic" used creative theatrics, story-telling and art to introduce her research on using biophotonics for early cancer detection. The prize for first place was a trip to Europe sponsored by **Finnair** and help with arranging a meeting with any research organisation in Europe which she undertook this summer. We caught up with Xiaotong for this last newsletter of 2017 and asked her how her trip went.

# How did it come to be that you became an active member of EURAXESS China and participated in the Science Slam in 2016?

I heard about it first from one of my professors at my university here in Beijing, Marian. She is a German researcher and she was already familiar with EURAXESS. She encouraged me and her other students to attend the EURAXESS events. It started with the finals of the Science Slam 2015 which a group of came to and had great fun. After that Marian contacted me on WeChat and asked me, if I didn't think this was a good event encouraging me to participate in the event the year after saying she was convinced I could win! After that I became a member of EURAXESS and when I got the call for participation in 2016, I was quick to apply.

I put a lot of effort into preparing for it! Honestly, there are only three times in my life that I've prepared so well for anything. The first time was at 18 years old when I was finishing high school and preparing for the Gaokao, the Chinese university entrance exam. Secondly there was the time that I did my entrance exam for my graduate studies. And after that there is the Science Slam. I had never had such a good opportunity in my life. This was my first chance to go abroad and to think about my future. It was a big motivation for me.

# Tell us a little bit about your trip in May and June. Where did you go? What did you do?

This was my first time abroad and I decided to go with my mom. We went first to the United Kingdom where I visited certain research groups and representatives of Oxford and Cambridge. The meetings were arranged by EURAXESS. After that we flew to the Greek island of Santorini and from there we went to Italy and France before finally returning to China from London again.

People in the United Kingdom strike me as very civilized and polite and the cities were clean and beautiful. In my opinion, it was the nicest place I visited during my trip, but it was so much colder in England than I was expecting! Compared to England Greece was incredibly hot and really sunny. I spent mothers' day with my mom in Santorini and we had a lovely time, although the island is very small and not very exciting in the long run. After that we went to Rome and saw the Roman ruins and the colosseum. The statues were the most impressive thing, so detailed and beautiful. The city feels very old, there are lots of ancient looking houses with small windows. Compared to that, our next destination Milan felt very modern. The biggest surprise was how many Chinese people there are in Milan! In any given crowd on the street there would always be at least one Chinese person. Unfortunately, I managed to break my phone while in Milan and I couldn't get a temporary fix until we came to Paris. That's quite a crisis when travelling.

After Milan we took the train to the Cote d'Azur in South of France. It's a beautiful train journey that goes by the seaside. Coincidentally, the world-famous Cannes Film Festival was taking place while we were travelling there so we decided to pay it a visit. During the period of the festival the price of all accommodation in Cannes sky-rockets, but we found a way around it. We simply stayed in the nearby city of Nice which is also beautiful. In Cannes there were a lot of celebrities on the red carpet and they were surrounded by people and paparazzi but I didn't recognize any of them. In the end we took the train to Paris where we visited the Eiffel tower.

We finally flew back to London where we stayed again for several days before going back to Beijing. The trip lasted 26 days in total and during that day we visited 9 cities in 4 countries.





# How did your EURAXESS-arranged meetings with researchers in Oxford and Cambridge go?

The first thing I noticed in Oxford is how classical looking it is and how many tall buildings there are. I went to the main building where I met a representative from the university that showed me around. After that I met with Prof Martin Booth who belongs to the Dynamic Optics and Photonics group. He told me about the background of his facility and their research and I introduced myself and my research. He focuses a lot on theory, analysis, modelling and that sort of thing. It sounded very interesting and extremely challenging. Personally I have mostly worked in experimental research, like the work I've been doing on imaging processes and cancer detection. After we finished the meeting a student of his showed me around campus.

The morning after I visited Cambridge. In the morning I met with Dr James A.O.C. Brown works at the office of post-doctoral affairs which is also the local contact point for EURAXESS in Cambridge. He gave me many good tips on how to apply for their programmes. After the meeting he walked me into the direction of the next visit, the Cavendish laboratory of Cambridge. The university buildings are scattered over a very beautiful town with a lot of greenery as well as squirrels! We don't see them so often here in Beijing. The universities in the UK were different from what I expected. Instead of having a well-defined walled-off campus ground over there the academic institutions are all over the town.

At the Cavendish laboratory I met with Dr Sara Bohndiek at her office. She runs a research group of more than 50 researchers in the field of Biophotonics, doing somewhat similar research to the research group I'm affiliated with in Beijing. Amongst other things we discussed research using fiber lasers.

James Joseph, one of the post-docs working as a part of Sara Bohndiek research group on biophotonics took me around their facilities and showed me some of the laboratories and the equipment they have. We ended up having British style milk tea together in the cafeteria. It's very different from the fast-food milk tea we have here in China and is usually made of powder. I had earlier seen them serve tea and milk in two separate mugs but I hadn't realized that people would drink it together. James showed me how he mixed real tea and real milk to make tea. It was really nice. Over a cup of tea we discussed the application requirements, the needed laboratory skills and the importance of having publications.

The visits as a whole were really inspiring for me. My dream is that after studying I can become a professor with my own group and own research, so I've been working really hard to get into an excellent programme. I had always wanted to do a PhD abroad, but I had been focusing more on other countries outside of Europe. These universities that I visited are very impressive and since then I have already started applying for PhD programmes in Europe. It gave me a very clear idea of the level of research going on and what is needed of an early career researcher like me.

# **3 EURAXESS Country in Focus:** HUNGARY

## **HUNGARY - Research & Innovation**

In the knowledge-based market economy, growth in prosperity, performance and employment is determined by the knowledge intensity and the dynamic development of high technology. Hungary considers R & D and innovation as a driving force and accelerating resource of its economy. The vision for the future in their strategy is as follows:

- the world class research institutes in emphasized disciplines
- R & D centres of global companies integrated into the national innovation system
- R & D intensive Hungarian medium-sized companies expanding on international markets
- RDI based small and medium-sized enterprises with fast growth potential
- innovative SME suppliers
- innovative start-ups
- international market integrated early-stage and venture capital investors
- public institutions performing R & D activities and utilising innovations

## Hungarian Research and Innovation institutions

#### National Research, Development and Innovation Office (NKFIH)

NKFIH is the major national strategic and funding agency for scientific research, development and innovation, the primary source of advice on RDI policy. It is in charge of managing the National Research, Development and Innovation Fund (major domestic public source for funding RDI). The program portfolio includes calls for national and bilateral basic research for academic and other research institutes and universities. Competitive research grants are provided for young researchers, postdocs and experienced researchers. It supports bilateral mobility and project based cooperation with partner countries, enhances Hungarian participation in the RDI framework program (Horizon 2020) of the European Union, gives financing for the Hungarian winners of joint programs of EU and member states, EUREKA and ERA-NETs. It supports the development of innovative and competitive products, technologies and services by enterprises or through the collaboration of enterprises, research institutes and universities. The Office takes part in the planning of calls and organises expert evaluation of project applications with RDI focus financed from The European Union Structural Funds under the Economic Development and Innovation Operation Programme (EDIOP) closely cooperating with the responsible Managing Authority, Ministry for National Economy. The calls focus on the improvement of corporate RDI activities, co-operation between the academic and the business sector, as well as the improvement of RDI infrastructures.

See more at http://nkfih.gov.hu/english

Hungary is an OECD highincome mixed economy with very high human development index and skilled labour force with the 16th lowest income inequality in the world, Budapest is the financial and business capital of Hungary. Hungary's achievements in science and technology have been significant, and research and development efforts form an integral part of the country's economy



Budapest is a leading R&D and financial center in Central and Eastern Europe



NEMZETI KUTATÁSI, FEILESZTÉSI ÉS INNOVÁCIÓS HIVATA



#### **MTA Wigner**

The MTA Wigner Research Centre for Physics has been founded in 2012 by the merging of two former research institutes of the Hungarian Academy of Sciences: the Research Institute for Particle and Nuclear Physics, and the Research Institute for Solid State Physics and Optics. The Research Centre has 40 research groups in 2 institutes (Institute for Particle and Nuclear Physics and Institute for Solid State Physics and Optics). Their research fields cover diverse topics ranging from particle physics to space physics, and from theoretical physics to applied research.

See more at <u>https://www.wigner.mta.hu</u> or <u>https://www.facebook.com/MTAWignerFK/</u>

**MTA SZTAKI -** MTA SZTAKI is the Hungarian acronym of "Institute for Computer Science and Control, Hungarian Academy of Sciences". The Institute was founded in 1964.

The fundamental task of the Institute is to perform basic and application-oriented research in an interdisciplinary setting in the fields of computer science, engineering, information technology, intelligent systems, process control, widearea networking and multimedia. Contract-based target research, development, training and expert support for domestic and foreign industrial, governmental and other partners are important activities at the Institute. The mission of MTA SZTAKI includes the transfer of up-to-date research results and state-of-the-art technology to university students. The Institute is very active in graduate and postgraduate education, co-operating with most technical universities in.

See more at https://www.sztaki.hu/en .



**NAIK** - The National Agricultural Research and Innovation Centre was established to align research institutes responsible for providing the professional background of Hungarian agriculture. The research activities of NAIK cover all the important fields of agriculture including irrigation, crop breeding, animal breeding, food science, forestry and horticulture, dairy industry, seed breeding and fishery, viticulture and vine research. NAIK's aims to enable its research institutes to work in cooperation as efficiently as possible.

NAIK places special emphasis on the arrival of new scientists in order to increase competitiveness. To this end, it operates a young researcher program. It also aims to keep talented young people at its institutes on the long term. NAIK's companies work to enable achieved results to appear faster and more competitively on the domestic and international market.

See more at http://www.naik.hu/en.



**BAY-BIO** - Bay Zoltán Non-profit Ltd. is Hungary's leading institution of applied research. Its Institute of Biotechnology (BAY-BIO) was established in 1993 as the first institute of the Ltd.'s legal predecessor.

The main objective of the Biotechnology Division is to fulfil its research and development tasks at the highest possible professional level. The institute aims



to develop cutting-edge technological solutions which can contribute to the establishment and sustainment of a clean and liveable natural environment. In line with the key objectives of the Company, BAY-BIO's mission is to implement technology transfer, i.e. to realize the economic utilization of research-development achievements; to accomplish and publish adaptable research findings in the area of biotechnology.

See more at <u>http://www.bayzoltan.hu/hu/rolunk/diviziok-osztalyok/bay-bio-biotechnologiai-divizio/</u>

**Innostudio, Inc.** is one of the largest upstream technology networks in the CE region in Europe. The company is specialized in high risk – high potential technical innovation. Studios within the corporation are focused towards nanotechnology, bringing flow chemistry and other chemical technology to Space and supporting drug discovery through IT technology, among others. See more at <a href="http://innostudio.org/">http://innostudio.org/</a>



INNOSTUDIO

**ThalesNano**, Inc. is the world leader in bench-top flow chemistry reactors. The company has the widest portfolio of bench-top continuous process instruments for the flavour and fragrance, pharmaceutical, biotech, fine chemical, petroleum/biofuel, and education markets. Its products are used in hundreds of laboratories globally.

See more at http://www.thalesnano.com/



### Investment

#### Hungarian Investment Promotion Agency (HIPA)

HIPA is a national investment promotion organisation governed by the Ministry of Foreign Affairs and Trade. It provides management consulting services to interested companies free of charge in an end-to-end, one-stop-shop service model, supporting them in selecting a business location, providing tailor made incentive offers and information on state aid issues, identifying investment possibilities and dealing with public authorities. See more at <a href="https://hipa.hu/main">https://hipa.hu/main</a>

# Educational relations

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#### **Tempus Public Foundation**

Tempus Public Foundation (TPF) is a non-profit organization established in 1996 in Hungary, managing international cooperation programmes, special projects in the field of education, training and EU-related issues:

- supports initiatives on modernization and quality improvement of education, training and human resources development,
- encourages international cooperation and mobility,
- strengthens the European dimension in these fields,
- coordinates a number of short- and long-term scholarships for students and researchers

Explore Hungarian scholarship opportunities for researchers and students from China: <u>Stipendium Hungaricum Scholarship Programme</u>

Hungarian State Scholarships for researchers

See more at http://studyinhungary.hu/ and http://www.tpf.hu/english.



#### Hungarian Rectors' Conference (HRC)

The Hungarian Rectors' Conference, as the unique representative body of the local universities, is proud to be one of the oldest and most prestigious organizations in Hungary responsible for the university sector, academic cooperation and internationalization of the higher education. Recently, a great emphasis has been put on fostering internationalization in Hungary, and the HRC is taking a major role in enhancing incoming and outgoing student mobility, promotion of Hungarian culture, innovations, academic life and research cooperation, and concluding various international projects and agreements.

Contact person: Ms. Júlia Morován, Secretary for International Affairs, E-mail: <u>mrk@mrk.hu</u>, See more at: <u>http://www.mrk.hu/en/current/</u>



https://www.euraxess.hu/



# Important information for incoming researchers – EURAXESS Hungary

Bay Zoltán Nonprofit Ltd. was appointed to lead the EURAXESS project in Hungary by the National Research, Development and Innovation Office of Hungary. As the Bridgehead Organization, the Hungarian coordinator of EURAXESS in Hungary, Bay Zoltán Nonprofit Ltd. focuses on mobility services for outgoing and incoming researchers to Hungary.

Bay Zoltán Nonprofit Ltd. provides incoming researchers with up-to-date advice on daily life and formalities when living in Hungary including visa and entry conditions to the EU, accommodation, banking, family-related issues, Hungarian language courses for foreigners and health insurance. The EURAXESS network in Hungary has 13 members throughout the country: Hungarian Academy of Sciences, Tempus Public Foundation, Szent István University, Eötvös Loránd University, Corvinus University of Budapest, Semmelweis University, Óbuda University, College of Nyíregyháza, University of Debrecen, University of Miskolc, University of Szeged, University of Pécs, Széchenyi István University.





# 4 In case you missed...

# 4.1 Report: The findings of the Workshop on Joint Research Structures

The report is based on the proceedings of the joint session of the workshop as well as the findings of the parallel working groups. The working groups identified a short list of certain challenges in each of the workshop's four topics of focus. Each challenge was followed by a actionable recommendation that can also be found in the report. See the report <u>here</u>.

## 4.2 European Research Day 2017

EURAXESS China's this year's flagship activity, European Research Day 2017, was held at the Chinese Academy of Urban Planning and Design in the evening of 26 October 2016. The event was held under the name *Researchers' Night on Sustainable Urbanisation* and dedicated to celebrating the 5-year anniversary of EU-China Cooperation in Sustainable Urbanisation. See more here and more about the results of the urbanisation poster competition here.



## 4.3 Blog: The 2017 Research and Innovation Tour -Where Europe and China connect

EURAXESS China was busy in the month of November participating in the <u>2017 Research and Innovation Tour: Where Europe and China</u> <u>connect</u>. The Tour seeks to highlight opportunities for Chinese researchers and innovators in Europe, while promoting Europe is a key global destination for research, innovation and knowledge-creation. We maintained an <u>active blog</u> throughout the whole tour reporting from all of the destinations.



## About us

EURAXESS China is a networking tool for European researchers active in China and for Chinese and international researchers wishing to collaborate and/or pursue a career in Europe. EURAXESS China provides information about research in Europe, European research policy, opportunities for research funding, for EU-China and international collaboration and for trans-national mobility. **Membership is free**.

Visit us at china.euraxess.org and Join the EURAXESS China community.

EURAXESS Worldwide networks have thus far been launched in North America (USA & Canada) Japan, China, India, in ASEAN (currently focusing on Singapore, Thailand, Malaysia, Vietnam and Indonesia) and as of March 2017, the EURAXESS Brazil network has been expanded to cover Latin America and the Caribbean States as well.