Dear Colleagues,

Welcome to the fourth edition of the EURAXESS ASEAN quarterly newsletter 2019.

December is an opportunity for us here at EURAXESS ASEAN to take stock of our activities throughout the year – and what a brilliant year it has been! Over the past 12 months we have hosted and participated in over 40 events reaching out to over 1500 researchers across ASEAN to inform you about the research opportunities Europe has on offer. We thoroughly enjoyed interacting with so many bright and inspiring researchers and research administrators. A big thank you is due to our partners at universities, research institutes and government institutions.

We hope you enjoy reading our newsletter, and welcome your feedback.

Your EURAXESS ASEAN team, Simon & Susanne
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1 BRIEFING: MSCA Research and Innovation Staff Exchange (RISE) Call 2020 Is Open

Are you interested in strengthening your research network with European and Southeast Asian partners? MSCA-RISE – Research and Innovation Staff Exchange – funds short-term exchanges of personnel between academic, industrial and commercial organisations throughout the world. The scheme helps people develop their knowledge, skills and careers, while building links between organisations working in different sectors of the economy, including universities, research institutes and SMEs.

The MSCA RISE Call 2020 is now open with a deadline of 28 April 2020.

Who Can Apply?

Proposals must include at least three partners, which can be academic or non-academic organisations from three different countries. At least two of these should be from the EU or associated countries. Partners from non-European countries including ASEAN can join.

Exchanges between organisations in EU or associated countries must be between different sectors. In worldwide partnerships, exchanges within the same sector are possible.

Proposals should highlight: knowledge creation, sharing know-how, and skills development.

Research staff of any nationality and at any career level – from PhD preparation to experienced researchers – can undertake a secondment. Staff members working in managerial, technical or administrative roles can also take part.

What can be Funded?

This action is open to all research areas, whether you are examining social issues like youth unemployment, or creating new solar power applications.

How does it Work?

The grant supports the secondment of staff members for one month to one year. They must be engaged in or linked to research and innovation activities at their home organisation for a certain time prior to the secondment. They return to their home organisation after the secondment, to pass on their knowledge.

Funding for a RISE project can last up to four years. The call budget is 80 million Euros.
MSCA-RISE in a nutshell

What?
✓ An action that helps you develop sustainable collaborative projects.
✓ Exchange of best practice across borders and sectors.
✓ For managerial, administrative and technical staff as well.

Who?
✓ Academic institutions and non-academic organizations
✓ At least 3 independent organizations in 3 different countries. (At least 2 organizations from 2 different Member States / Associated Countries plus third countries including ASEAN)
✓ Any nationality. Staff members must have been actively engaged in or linked to research/innovation activities at sending institution for at least 1 month prior to first secondment.

How much?
✓ 100% funding for up to 4 years (exception SGP)

Where?
✓ Europe and Third countries

When?
✓ Call deadline is 28 April 2020

Next steps and Resources
✓ Mobilize your network of European collaborateurs
✓ Find the Call on the Participant Portal and share the information with your European partners
✓ Read the Guide for Applicants
✓ Find Expressions of Interest from potential collaborateurs on the Net4Mobility+ website
✓ Understand the procedure by watching this webinar
Malaysian participation in EU-funded research consortia: An Interview with Dr Shyamala Doraisamy

You are part of the MSCA-RISE consortium ‘ULTRACEPT’. In a nutshell, what is this project all about?

The project ‘Ultra-layered perception with brain-inspired information processing for vehicle collision avoidance’ (ULTRACEPT), is being funded by the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie Actions (MSCA) - Research and Innovation Staff Exchange (RISE) grant number 778062.

The project has 18 partners in total, of which 3 are companies within the robotics sector. The University of Lincoln is the lead coordinator and the University Putra Malaysia (UPM) is listed as a project partner for the duration of the project. The project started on 1 December 2018 and will last for 4 years.

This consortium proposes an innovative solution with brain-inspired multiple layered and multiple modalities information processing for trustworthy vehicle collision detection. It takes the advantages of low cost spatial-temporal and parallel computing capacity of bio-inspired visual neural systems and multiple modalities data inputs in extracting potential collision cues at complex weather and lighting conditions.

Your institute at UPM is one of the partners in this international consortium. How did UPM become involved?

Discussions for possible collaborations on research projects began during my sabbatical period from 2015 at the Computation Intelligence Lab, School of Computer Science, University of Lincoln (UoL) with Professor Shigang Yue. As a visiting researcher then, I was invited to give a talk enabling me to highlight some of the work done at Faculty of Computer Science and Information Technology, UPM, and in particular with the Digital Information Computation and Retrieval (DiCR) Research Group which I was leading. Upon my return to UPM in 2016, discussions continued on the possible areas of collaborations. An invitation to participate as a consortium partner with the Ultracept project study was extended to my institute.

Funded by a €1.8 million grant from the European Union’s Horizon 2020 research and innovation programme, the ULTRACEPT project will develop a miniature, trustworthy collision detection sensor system that could drastically improve the safety of autonomous vehicles. The ULTRACEPT project – which stands for Ultra-layered perception with brain-inspired information processing for vehicle collision avoidance – will develop a new microchip for driverless vehicles which aims to make them safe to serve human society.

Project details

http://ec.europa.eu/euraxess
EURAXESS ASEAN

Shyamala Doraisamy is an Associate Professor at the Department of Multimedia, Faculty of Computer Science and Information Technology, Universiti Putra Malaysia (UPM). She received her PhD from Imperial College London in 2004, specializing in the field of Music Information Retrieval and won an award for her music and computing innovation at the Invention and New Product Exposition (INPEX), Pittsburgh, USA in 2007. Her research interest includes Multimedia Information Processing, focusing in particular on sound analysis and has completed several projects on music and health applications. She has been an invited speaker at various conference and research meetings internationally. She is an active member of the Malaysian Information Retrieval and Knowledge Management Society and was the Chair of the 2018 IEEE 2018 International Conference on Information Retrieval and Knowledge Management Conference (CAMP’18). She is currently a Visiting Scholar at the School of Computer Science, University of Lincoln, United Kingdom on secondment under the Marie Skłodowska-Curie Actions (MSCA) - Research and Innovation Staff Exchange (RISE) programme.

was received in 2017 and areas in which the members of the DICR lab could contribute were finalised. The Ultracept project proposal was accepted in 2018.

What is your role in the consortium?

The consortium comprises nine multidisciplinary partners. The research is coordinated by Prof. Shigang Yue of UoL and managed by a Research Management Board comprising representatives from each of the partners. The Research Management Board is chaired by the project coordinator and will carry out the executive management of the research programme and the administrative functions of the research. It will initially comprise one member from each partner. As for my role in the consortium, I was the appointed member of the board representing UPM.

You are currently on secondment in the UK. How do secondments work and what are you doing at the partner’s lab?

As a member of Ultracept’s Research Management Board representing UPM, I have the responsibility of managing the secondments and ensuring the completion of tasks assigned in the related project’s work packages (WPs). Following the 36 secondment months allocated to UPM, two Experienced Researchers (ERs) with doctoral degrees including me and one ESR (Early Stage Researcher) have undertaken the secondments up to 12 months each at UOL and partner institutions of the consortium.

UPM has been working on the theme of road safety related to the project. The tasks assigned to UPM were mainly based on the work packages, WP2 and WP4. The team has focused in particular on contributions for task 2.3 in WP2 – ‘To develop long range hazard perception methods coping with low light conditions’.

My secondment began in Dec 2018. The first few months included initial meetings with partners and the completion of proposal discussions for a collaborative PhD research work with Siavash Bahrami. The tasks completed have been based on this collaborative PhD research being co-supervised by UPM and UoL. Siavash

http://ec.europa.eu/euraxess
began his secondment at UoL in June 2019. The research involves investigating the use of sound data for road wetness levels estimation to support the development of long range hazard methods coping with low light conditions. The preliminary work planned has been completed and two new CNN architectures were proposed using MFCCs as acoustic signal features. The evaluation for these proposals was performed on a dataset of tyre recordings available on https://lexfridman.com/wetroad/. For the next phase of a larger dataset development, recording equipment has been purchased and data collection has just begun on several roads in Lincoln.

Dr. Azreen Azman, an Associate Professor has just been seconded as an ER from UPM to UoL and the team will continue to utilise audiovisual technologies towards the development of Brain-inspired vision systems for long-range hazard perception (WP2).

Why would you say participation in an MSCA-RISE is beneficial for Malaysian research groups?

Amongst the aims of the MSCA-RISE are knowledge creation, sharing know-how, and skills development. These are valuable opportunities for a large number of Malaysian research groups which are in their early growth stages to expand and build world-class research labs.

This Marie Sklodowska-Curie secondment has given my student access to facilities and recording equipment needed for compiling the dataset needed for both his PhD studies and the Ultracept project. In addition, weekly meetings with other seconded members from Ultracept’s partner institutions provided him the opportunity to discuss with a wider research community and broaden his knowledge in various related research fields.

The Call for application has just opened. What advice would you have on how to get involved in future RISE consortia?

The first advice would be to work closely with European colleagues forming RISE consortia and discussing possible areas of collaborations. Alternatively, researchers could also initiate discussions with potential partners based on ongoing research that would highly benefit from a large scale international collaboration. In addition to forming the research teams, it would be important to identify the administrative team members from your institution. In general, RISE consortia comprise large multidisciplinary research partners from various parts of the world. Managing both the research and administrative tasks would have to be well coordinated via communications not just with the coordinating partner but also within your organisation’s team members.

Thank you Dr Shyamala!
Strengthening Asia-Europe links through data and research

On February 26-28 2020, the first international scientific conference on Asia-Europe Sustainable Connectivity (AESCON) will take place in Singapore. AESCON aims at bringing together researchers and policy makers working in the field of international connectivity, globalisation and their impacts on sustainable development, with a particular focus on Asia-Europe connections. At a time of increasing connectivity, the conference aims to provide an academic forum to discuss global challenges on transport infrastructure, energy transition, climate change, digital economy, trade and investment flows, security, people mobility and cultural exchanges, among other topics.

The conference is jointly organised by the European Commission’s Joint Research Centre, the Asia-Europe Foundation, the Economic Research Institute for ASEAN and East Asia, and the Center for China and Globalization. The conference will feature top academics in the fields of connectivity and globalisation, and will be opened by the EU’s Ambassador at Large for Connectivity, Romana Vlahutin, along with other high-level speakers.

What is connectivity?
Connectivity between Asia and Europe is high on the policy agenda of the 51 Asian and European countries members of the Asia-Europe Meeting (ASEM). Connectivity is about bringing countries, people and societies closer together. It spans physical, economic, financial and people-to-people links, and according to the definition agreed on by ASEM leaders, should contribute to the materialisation of the principles, goals and targets of the 2030 Agenda for Sustainable Development.

At the same time, the European Union launched its EU-Asia Connectivity Strategy in September 2018, in which it sets out its vision of “sustainable, comprehensive and rules-based” connectivity. Among other things, it aims to promote transport links, energy and digital networks and human connections, as well as green financing.

Evidence for policy making
To support these initiatives with concrete data, the ASEM Sustainable Connectivity Portal was launched in 2018 by the European Commission’s Joint Research Centre to assess sustainable connectivity levels in ASEM member countries.
countries. The Portal not only brings together a wealth of data on the links between ASEM countries, but it also allows to assess and visualise the relationship between connectivity and sustainable development in the context of Asia and Europe. It is accompanied by an extensive report which digs deep into the current state of Asia-Europe sustainable connectivity.

**Bringing together researchers**

The conference will be used as an open platform for debate on sustainable connectivity, to build on the work of the Sustainable Connectivity Portal and spur future research linked to policy needs. It will help to build a network of Asia-Europe researchers working on sustainable connectivity, and link them with policy makers.

**Registration is now open**
3 HOT TOPIC: EURAXESS Prize Winners 2019 Return from Europe

Each year, academic institutions across the globe host local Falling Walls Labs to showcase the quality, diversity, and passion of their region's most innovative minds. The winners of these Labs travel to the global Finale in Berlin on 8 November. 100 Labsters present their work in front of a distinguished jury and showcase their solutions to some of the biggest challenges of our time. All finalists win a ticket to attend the Falling Walls Conference, where they meet the world’s movers and shakers of science, business, and policymaking. The three winners of the Lab Finale in Berlin are awarded the title “Falling Walls Young Innovator of the Year”.

Since 2017 EURAXESS ASEAN has been a supporting partner of the Falling Walls Labs in Indonesia, Malaysia, Singapore, Thailand and Vietnam by awarding the EURAXESS Prize to the first winner of each competition. The EURAXESS Prize has a value of 600 Euros and offers the unique opportunity for the awardee to visit a research lab or university in any of the 28 Member States of the European Union. The Prize serves as a career-advancement bursary enabling the winners to expand their professional network through linkages and future collaboration with their research peers in the European Union. EURAXESS ASEAN met up with our 5 bright stars to find out about their recent trips.

About Falling Walls Lab

The Falling Walls Lab is a unique competition that provides young students, researchers and entrepreneurs a platform to present their innovative ideas, research projects and social initiatives. The challenge is to present this in just 3 minutes in English!

The Falling Walls Lab was initiated on the 20th anniversary of the fall of the Berlin wall. Inspired by this world-changing event on 9 November 1989, the question of every Falling Walls gathering is “Which walls will fall next?”

Falling Walls Labs are part of the annual, internationally-renowned conference for breakthroughs in science and society, the Falling Walls Conference. It fosters discussion on research and innovation and promotes the latest scientific findings among a broad audience from all parts of society. International Falling Walls Labs are organised by academic institutions throughout the world – many of those with the support of the EURAXESS Worldwide team. The winners of each international Lab travel to the Falling Walls Lab Finals in Berlin, which takes place every year on 8 November. At the Berlin Lab, 100 innovators receive the opportunity to present their work in front of a distinguished jury and attend the Falling Walls.

http://ec.europa.eu/euraxess
I chose to visit the Max Planck Institute (MPI) of Colloids and Interfaces in Potsdam, Germany. I was hosted by Dr Majd Al-Naji, group leader of the Biorefinery and Sustainable Chemistry group at MPI. I had the opportunity to visit a MPI lab and I also presented my own research to the researchers at MPI. It was a great discussion where we were able to exchange ideas on how our research areas complement each other. The Max Planck Foundation is well-known in Germany. They operate a number of research institutes and conduct their research independently. The MPI Colloids and Interfaces Institute carries out research related to sustainable chemistry and ionic liquids which is related to my own research. It was a great opportunity for me to visit their lab so that we can improve ours. I am optimistic we can set up a collaboration between MPI and Universiti Teknologi PETRONAS.”

Read the full interview with Dr Maisara.

It was once in a lifetime experience! It was the first time for me to pitch my innovation on the international stage. I thought I had practiced a lot so that I would not get nervous. However, once I stepped on the stage, I felt very anxious. Personally, I felt every single pitch was a highlight.

Dr Udom Sae-Ueng
Thailand’s National Centre for Genetic Engineering and Biotechnology (BIOTEC)

European labs visited:
Institute of Biology, Humboldt-University Berlin (Germany) & Molecular Biophysics, Zernike Institute, University of Groningen (Netherlands)
Everyone was well-prepared, and I learned a lot from the very diverse presentations. It gave me a bigger picture of how each one of us tries to make this world a better place through science, technology, and innovation. I encourage everyone to participate in the Falling Walls Lab event. It will certainly widen your horizon in moving forward and it will provide you with an opportunity to show your idea to the world.”

Read the full interview with Dr Udom.

“Being in Singapore, it is challenging to reach out to NGOs and funders in the US and Europe that are leading the global effort in vaccine development. The EURAXESS Prize provided a valuable opportunity to meet and share with these groups that would have been challenging even with a video conference setting. The meetings not only allowed us to gather instant feedback on our technology, but also facilitated the directors in addressing doubts that they have about our work.”

Read the full interview with Dr Poh
Mr James Zulfan  
Research Centre for Water Resources, Ministry of Public Works and Housing, Republic of Indonesia  
European labs visited:  
TU Dresden, Germany  
ETH Zurich, Switzerland  
TU Delft, The Netherlands

“My key takeaway from the participation in Falling Walls would be learning how to effectively use our communication skill to deliver ideas and convince people, because a great idea is not enough without proper communication. My future plan is to continue and improve the research project on modular constructions that I’ve been working on with my team. I also want to intensify the connections that I’ve made with a couple of top institutions around Europe to establish research collaboration in hydraulic structure fields.”

Read the full interview with James.

Mr Nguyen Ngoc Khang  
School of Chemical Engineering, Hanoi University of Science and Technology  
European labs visited:  
Leibniz Institute for Catalysis (LIKAT) at Rostock University in Germany & University of Grenoble Alpes in France

“The Falling Walls Lab Finale was the biggest competition I have ever participated in. This event enabled me to meet amazing finalists from all fields of expertise and from all over the world. Speaking in front of hundreds of international colleagues was nerve-wracking but it was also an amazing once-in-a-lifetime experience. I feel very proud to represent my country Vietnam and to share about the work that we do every day to solve the pressing environmental challenges my country constantly faces.”

Read the full interview with Nguyen Ngoc Khang
4 EURAXESS Network News: Indonesian Researcher Dr Tatas Brotosudarmo Awarded Georg Forster Research Fellowship

Congratulations to Dr Tatas Brotosudarmo who has just been awarded the prestigious Georg Forster Research Fellowship from the Alexander von Humboldt Foundation in Germany.

Georg Forster Research Fellowships allow scientists and scholars of all disciplines from developing countries and transition states to conduct a research project of relevance to the continuing development of their own countries together with an academic host at a research institution in Germany. Dr Tatas is a member of the Southeast Asia chapter of the Marie Curie Alumni Association.

EURAXESS ASEAN asked Dr Tatas about his plans.

Congratulations on this fantastic achievement! Can you share with us what your research project is all about?

My research project deals with the application of single molecule spectroscopy for characterisation of photosynthetic apparatus from brown algae.

Where in Germany will you carry out your research?

I will carry out my research at the laboratory of soft materials, chaired by Prof. Dr. Juergen Koehler, in the Department of Experimental Physics, at the University of Bayreuth.

How will this fellowship benefit you and the people in Indonesia/ASEAN?

Different types of brown algae in Indonesia represent the world’s biodiversity in marine species. Based on reports, Indonesia has about 134 species of eukaryotic brown algae. These species utilise the sun energy in a unique way by having carotenoid, called fucoxanthin, as a major light absorbance material in their light harvesting apparatus. Here, I would like to employ Single Molecule Spectroscopy (SMS) to understand how Sunlight energy absorption and energy transfer occurs in a molecular scale in this unique light-harvesting system. SMS is currently a state of the art method for superresolution imaging microscopy. Based on single-molecule fluorescence, it provides at the same time the photophysical properties of the molecule. In the last decade, it has been used successfully to study biological processes, e.g. to observe HIV virus-cellular host interaction in membrane and to track viral infection into the cell, to visualise the action of a molecular machine like ATP synthase works in the cell.
or to observe the dynamic movement of K+ channel gating in a lipid bilayer. Knowledge of SMS can impact Indonesia to further explore marine resources and its untapped potentials. The competence in SMS is a rare expertise among the scientists in Indonesia, and will have a strong impact for the continued development of education programs at higher academic institutions in Indonesia.

**What motivated you to apply for this Fellowship?**

At the time I returned from Europe back to Indonesia in 2011, I dreamed of establishing my own research group that focuses on the discovery of photosynthetic pigments and light-harvesting system from species that are unique to Indonesia. Indonesia is an exciting place for me as it is the epicentre of the world's biodiversity. Indonesia has the diversity that is typical of the Sundaland ecosystem and hybrid ecosystems in the Wallace region. After returning to Indonesia I was challenged by the unique academic system and research environment in Indonesia. Here, I have to be a politician, a negotiator, an administrator, and an entrepreneur at the same time, in addition to being a good scientist. I was lucky because I work at an institution where people at the top supported my ambition, and I could establish a small research group with a well-equipped laboratory. However, my current situation is still far from my ideal, especially when I think about my young age. I was motivated to apply for the fellowship because it would allow me to strengthen my professional expertise and to better compete in this rapidly changing landscape of global frontier research that also fits the future situation in Indonesia.

**What would be your advice to other potential applicants on how to draft a persuasive application?**

I think it is most important for the applicant to know what they want and how they do it differently compared to others. Then one has to show one’s intention based on past achievements. You have to show that your work is unique and will have an impact on the development of your own academic career as well as contributing to the development of your home country.

Thank you Dr Tatas!
5 In Case You Missed IT...

**EURAXESS Member Countries in Profile – Israel**

Israel is the land of innovation, also known as the “Start-Up Nation”. It is a hotbed of hi-tech activity, with the world’s highest investment per capita in start-up companies. [*Find out more*](#)

**Latest edition of EURAXESS ASEAN Funding Guide published**

The EURAXESS ASEAN Funding Guide provides a compilation of career advancement, funding & collaboration opportunities in Europe. [*Find out more*](#)

**Open Call Erasmus+ Capacity Building in the field of Higher Education (CBHE) – Focus Asia**

CBHE supports the modernisation, accessibility and internationalisation of Higher Education in Partner Countries. Since 2014 a number of Asian Higher Education Institutions (incl Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Vietnam) are able to participate in these proposals addressing challenges in the management and governance of their Higher Education institutions. [*Find out more*](#)

**Erasmus Mundus Joint Masters Degrees –Scholarships available**

An Erasmus Mundus Joint Master Degree (EMJMD), is a prestigious, integrated, international study programme, jointly delivered by an international consortium of higher education institutions. EMJMDs award EU-funded scholarships to the best student candidates applying under annual selection rounds. Study must take place in at least two of the programme countries. [*Find out more*](#)
Become an expert evaluator of EU-funded research proposals

Are you keen to share your professional expertise, network with international peers and get a firm understanding of EU funding mechanisms? The European Commission is constantly looking for experts to assist in the evaluation of proposals and project monitoring. Find out more

Stay updated on European Funding Opportunities – Sign Up for the EURAXESS ASEAN Flashnotes

EURAXESS Flashnotes are bi-monthly emailers on European research funding and mobility programmes.

To join our mailing list, please send us an email at asean@euraxess.net with the heading “join Flashnote mailing list”
6 About Us

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

Visit us at asean.euraxess.org and Join the EURAXESS ASEAN community.

EURAXESS Worldwide networks have thus far been launched in North America (USA & Canada) Japan, China, India, Korea, ASEAN (currently focusing on Singapore, Thailand, Malaysia, Vietnam and Indonesia) and Latin America and the Caribbean States (currently focusing on Brazil, Argentina, Chile, Mexico and Colombia).