

EURAXESS INDIA

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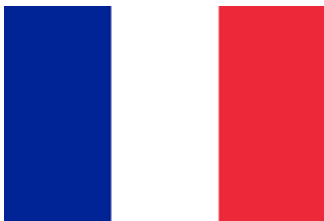
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EURAXESS India Newsletter is a quarterly electronic publication. It provides information about conducting research in Europe or with European partners and gives insights for Indian and European researchers who are interested in the European research landscape.

Please email to india@euraxess.net for any comments on this newsletter, contributions you would like to make.

Editor Dr Samrat S. Kumar,
Country Representative,
EURAXESS India.

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1 EURAXESS members in focus: France – A decade of change

With a total of 63 Nobel prizes and 16 Field medals, France is a country recognised for the excellence of its scientific research. Among the most recent winners are Esther Duflo (Economy) in 2019, Gérard Mourou (Physics) in 2018 and Jean-Pierre Sauvage (Chemistry) in 2016.

France ranks sixth for its world share of scientific publications and fourth in the European patent system. It is very active in the fields of transport technologies, other special machines, mechanical components, chemistry, as well as nuclear technology and space research. It is also the third beneficiary country of the contributions allocated by the European Commission through the Horizon 2020 framework programme for research and innovation.

Research and Development in France

In France, it is the [Ministry for Higher Education, Research and Innovation \(MESRI\)](#), which designs, develops and implements the national research and innovation agenda.

To meet scientific, technological, environmental and societal challenges, a national research strategy has been in place since 2013, which is in keeping with European orientations on these issues. This strategy is revised every five years under the guidance of the minister in charge of research and innovation. Its aim is to maintain a high-level commitment to basic, curiosity-driven research while establishing a level playing field for other stakeholders at national, regional and local levels, such as the industrial sector and businesses, civil society and lawmakers.

Capital Paris
Major cities Bordeaux, Grenoble, Lille, Lyon, Marseille, Montpellier, Nantes, Nice, Rennes, Strasbourg, Toulouse
Language Français
Political system Republic
Currency Euro
Area 244,340 sq mi (632 834 km ²), 213,010 sq mi (551 695 km ²) of which are considered metropolitan France
Promotional page about France: https://www.france.fr/en
EURAXESS France https://www.euraxess.fr/
CPU http://www.cpu.fr/presentation/presentation-of-the-cpu/

A large part of French public research is carried out in higher education institutions. Its organisation relies principally on a two-tier system with universities on one side and national research organisations on the other. Collaboration between the two kinds of entities is achieved in so-called 'mixed research' units (UMR), i.e. laboratories whose management and monitoring is shared by one or more organisations and/or universities.

Research is also largely carried out in private companies. Out of the 300,000 researchers in France, 62% are employed in firms. The sectors employing the most researchers are: IT, the automobile industry, aeronautics and space technology as well as publishing, audio-visual and broadcasting. Domestic spending on research and development in France amounted to € 50.6 billion in 2017. This represents 2.21% of the country's gross domestic product (GDP), placing France in 5th place among all OECD countries.

Entrepreneurship and Innovation

Over the past decade, higher education and research institutions have expanded on programmes to encourage entrepreneurship stemming from public research and innovation. A large number of measures and incentives have been set up, in particular through the Investments for the Future Programme (PIA). With €57 billion at its disposal, the programme is designed to help France face the challenges of tomorrow (competitiveness, environment, health, etc.) and to increase its growth potential by investing in higher education and training, research, industry and SMEs, sustainable development and digitisation.

Funding and Recruitment Opportunities

Research funding

Block funding to research laboratories is jointly allocated from universities and public research organisations while project-based research is mostly funded through independent agencies, such as the National Research Agency (ANR). The ANR supports research projects selected after a peer-reviewed competitive process. In 2018, 1,471 projects were funded at an average of €350,000 per project.

As to private research, it is first and foremost funded by *Bpifrance*, a public investment bank supporting state and regional policy aimed at developing and strengthening the R&D actions carried out by SMEs.

Two more mechanisms specifically targeted at research and innovation include:

- CIFRE contracts which allow a company to benefit from financial aid in order to hire a doctoral student in a company for a three-year contract.
- The research tax credit, which enables companies to be refunded to up of 60% of their initial investments, specifically if they hire early career researchers.

Recruitment opportunities

Several specialised sources can help researchers identify research jobs and research scholarships for their stay in France:

- [EURAXESS Jobs](#), the European Portal, (click on France)
- [ABG \(L'Intelli'Agence\)](#)
- [Campus France grant search engine](#), listing all the grants and scholarship programmes available from national institutions, local governments, corporations, foundations and institutions of higher education

Important Information for Incoming Researchers

The 42 EURAXESS Centres, coordinated by the Conference of University Presidents (CPU), involve about 130 people working on a daily basis in their universities or research organisations in order to help international researchers coming to France and support them during their stay, and after.

In particular, they offer free and personalised assistance to them and their families in order to:

- **Prepare their stay:** assistance on entry, residence and work procedures (visas, work permits, residency permits...)
- **Help them settle in France:** assistance in finding accommodation, healthcare coverage, bank account...
- **Help them with daily administrative procedures:** registering for social security, family benefits, taxes, pensions...
- **Facilitate integration:** French language classes, cultural activities, sports, babysitting and schooling...

More than 60,000 researchers from some 144 different countries have already benefited from the services of the EURAXESS France network.

EURAXESS Centres are distributed across the whole French territory: find your nearest [EURAXESS Centre here](#).

EU Council Presidency

France will be holding the EU Council presidency from January to June 2022.

Indo-French Scientific Cooperation

India and France enjoy privileged and strong relations and strategic partnerships in a wide range of fields including aerospace research, aviation, civil nuclear energy, healthcare, education, science and technology. France and India view each other as important partners in space technology and

EURAXESS –
Researchers in Motion is an initiative of the European Research Area (ERA) that addresses barriers to researchers' mobility and seeks to enhance their career development. This pan-European effort is currently supported by 42 countries, each of which will be profiled in our quarterly e-newsletters.

applications. The establishment of Indo-French Centre for Promotion of Advanced Research (**CEFIPRA**) in 1987 probably represents the most significant and constructive phase of Indo-French scientific relations. CEFIPRA remains as the most attractive mechanism for promoting bilateral scientific cooperation in fundamental and applied research, frontier technologies, conducting workshops and seminars and exchange of scientists and post-doctoral researchers. CEFIPRA has supported 578 projects, allowed the publication of over 2500 research papers with 60,000 citations, financed the mobility and training of over 3300 scientists including *over 1000 doctoral students*.

Public research is also conducted in universities and institutes such as INRA (National Institute of Agricultural Research), INSERM (National Institute of Health and Medical Research), INRIA (National Institute for Research in Digital Science and Technology, <https://www.inria.fr/en>) and INSEE (National Institute of Statistics and Economic Studies, <https://www.insee.fr/en/accueil>) among others. Centre National de Etudes Spatiales (CNES) its Indian counterpart Indian Space Research Organisation (ISRO) have a long history of cooperation spanning about four decades.

Over 70% of the Indo-French research activity involves the National Centre for Scientific Research (CNRS) (<http://www.cnrs.fr/en/cnrs>). Established in 1939, CNRS is among the world's best research organizations. CNRS has a very strong cooperation tools (<https://cnrsindia.com/cnrs-cooperation-tools/>) such as [International Research Laboratory \(IRL\)](#), aimed at structuring highly-localised international research collaboration, [International Research project \(IRP\)](#), dedicated to strengthening research partnerships, [International Research Network \(IRN\)](#), dedicated to structuring international research networks and [International Emerging Action \(IEA\)](#) dedicated to exploring new subjects and partnerships on the international stage.

CNRS has established two International Joint Laboratories in India, namely Indo-French Centre for Applied Mathematics (IFCAM) at the Indian Institute of Science, Bangalore and Indo-French Research Laboratory in Computer Science (RELAX) at Chennai Mathematical Institute, Chennai. It has nine International Research Projects for scientific cooperation in the field of Chemistry, Mathematics, Physics, Biology, Social Sciences, Nuclear Sciences. CNRS collaborates with a wide range of Indian research institutions including Council of Scientific and Industrial Research (CSIR), Ashoka University, National Centre for Biological Sciences, Institute of Mathematical Sciences Chennai, CMI.



2 Hot topic: Covid-19 will have a huge impact on researcher mobility and the academic world – but how exactly?

Covid-19, the pandemic that has ravaged the world for most of 2020, continues to take a massive toll on lives, health systems, economies and society in general. It also has a huge impact on researchers – their physical mobility, the way they work, and how they interact and cooperate through international research networks.

Restrictions on travel and social interactions, which hinder movement within and between countries, make conference participation impossible, thwart international research cooperation, and prevent researchers from visiting partner institutions or working and conducting research in them.

A lot has been written about the effects of these trends on academic teaching. We know that universities have moved towards online classes and are preparing for much-reduced enrolments for the upcoming academic year, especially from foreign students. According to one study, some 36% of students are considering changing their study plans.

But much less is known so far about Covid-19's impact on research, the other side of academia. Research priorities are changing and research budgets have been reallocated. Many people interested in research positions abroad are reconsidering their plans because of travel restrictions, financial uncertainties and other pressures. A lot of uncertainty remains. Researchers are asking themselves questions like: *How can I carry out research and cooperate with my international peers under the new conditions? Can I still research abroad under these circumstances? Should I postpone it? Should I abandon it?* Research institutes and universities are asking: *How should we prepare for the emerging new research context? Do we need new online research collaboration tools? How can we maintain our*

research excellence? Can we host guest researchers under these circumstances?

Nobody has answers to these questions at the moment, but researchers around the world are working hard to try and find them. To support and accelerate this process, EURAXESS will carry out a global survey to collect information about current thinking around these issues and the most recent innovative ideas for solutions.

This survey will also explore how changes related to Covid-19 are affecting researcher/academic mobility, especially EU-centric mobility, as well as the potential wider consequences for the research and academic world – financial effects, research output and quality, career qualifications, hosting dynamics, etc. The survey results will provide researchers with concrete information for their work and career agendas, and create valuable insights for policymakers.

With members in some 40 European countries and in all major regions of the world, the EURAXESS network is uniquely placed to conduct this representative survey. As a first step, the survey will collect information from researchers about their situations and perceptions, and the prospects for international mobility in the days of Covid-19. Following this, a complementary survey of universities, research institutions and research policymakers will explore the possibilities and prospects of hosting international researchers and fostering research mobility under the new conditions. The results will help researchers to re-shape their international collaboration and mobility plans, and support host institutions and policymakers in formulating new strategies and policies to maintain international researcher mobility.

For more information, please contact survey@euraxess.net with your queries or ideas.



Sayani won last year's Science Slam title with her versatile live performance called: **Sensing Mercury: Easier than Ever!!** As the 1st prize winner, she was given a round trip to Europe to visit research institutions of her choice. Due to the Covid-19 outbreak, Sayani was not able to travel to Europe this year. However, we are hopeful that she will soon be able to visit the countries and research institutions she had selected.

3 In focus: Interview with Sayani Das, the winner of EURAXESS India Science Slam 2019

Tell us a bit about yourself:

My dad had to leave his favorite subject Chemistry due to the sudden demise of my grandfather and started working in a tea estate at the age of 22. My entire childhood was amidst the greeneries. My journey to school (30 km), was most adventurous because we travelled through the forest, which had leopards, elephants, monkeys. My desire to pursue PhD in Chemistry is also somewhere linked to my dad's incomplete dream. Stepping out of the tea estate, heading to Kolkata for graduation and finally making it to the city of dreams, Mumbai for PhD was indeed a long journey.

What motivated you for contesting in the EURAXESS Science Slam?

The winner of the 2nd EURAXESS Science Slam held in 2014 was Dr. Anand Kant Das, who was from my institute TIFR, Mumbai. That was the first time I got to know about this particular event and found it very exciting. I was just in my 1st year of PhD back then. I also saw colleagues from my department participating in EURAXESS Science Slam every year throughout my PhD. It was their videos and efforts that motivated me to contest in the slam and try and present my research work in an entertaining yet informative manner to the general public.

How did you use your passion for dance and music as a way to communicate scientific research in your slam?

People not from the scientific community usually hates to listen to science talks and lectures. So to make my presentation exciting and stop people from sleeping, I felt singing and dancing during the slam would be a good idea. I wrote a small poem related to my work and tried adding rhythm to it. Also since my slam finals was scheduled to take place in Kerala, and I loved quite a few Malayalam songs, this was the perfect opportunity to tap my feet to one of them and keep the audience entertained. Along with dance and music, it was also important that I give the audience the science information, I was supposed to.

The Science Slam gives Indian researchers the possibility to be visible to an international audience. In what ways was winning the competition important for the development of your career?

The Science Slam gave me the opportunity to meet new people, travel to new places, and build potential future collaborations. The exciting part is, winning the competition offers a visit to leading research institutions in Europe. I am sure this will give me the chance to interact with the global leaders in science, which will surely be a stepping stone to my future research career. Infact I have already had the oppurtunity to deliver scientific talks in few of the leading research groups in the world and have fruitful discussions after being recognized as the EURAXESS Science Slammer.

You were supposed to travel to Europe this summer and visit different research institutes. Due to the COVID-19 pandemic your trip had to be postponed. How is the lockdown affecting you as a researcher?

The COVID-19 pandemic and hence the lockdown to contain the viral spread is indeed unfortunate. It has affected people of all different occupations as well as various aspects of our daily lives. Although we are not able to go to the labs and carry out our experiments in the usual manner, yet as scientists we always come up with alternative ways to keep our work and research moving ahead. At present, I have all my regular scientific meetings, lab meetings and tutorials through online meeting Apps like Skype or Google meet. In fact I submitted my PhD thesis online from home during the lockdown and preparing to submit my manuscripts too.

My trip to the different research institutions in Europe was finalized but got postponed due to the lockdown. During my trip, I had plans to visit Prof. Lena Daumann's group in Department of Chemistry, Ludwig-Maximilians-Universität München, Germany. Since I cannot travel at present, Prof. Daumann invited me to deliver a talk in AK Daumann group seminar series: **Breakfast with a scientist**. I spoke on my research, followed by a short impulse discussion on "Science Communication" on the 15th June 2020.

What motivates you as a researcher?

I think the simple answer to this would be, it is my curiosity to understand nature and the complex functioning of living organisms, is what always motivates me as a researcher. It really feels amazing to think but hard to imagine how nature functions so perfectly.

Which research path do you envision for your future career?

Having worked in the field of probes/sensors for elucidating mechanisms underlying various disorders by tracking the molecules involved the disorders, I want to continue my research efforts towards developing efficient tools for better understanding of critical diseases like cancer and neurodegeneration. This in turn will help us in the development of diagnostics and therapeutics for treating crucial diseases.

The Science Slam promotes creative means for communicating research to larger audiences. How helpful was the training you received from EURAXESS before your successful performance?

Our science communication training was held in Pune. We had a one day long program with various experts in communication, giving us tips and tricks of what to do and most importantly what not to do, in order to give a great slam presentation. I specifically remember Prof. Arnab Bhattacharya's tips on "How to give a bad presentation", where he pointed out what actually leads to a boring and monotonous presentation and in turn taught us how to make our slam more engaging and interesting.

Another really interesting engagement in the event was "Communication: a two-way street" organized by Dr. Mohit Jolly, where we were taught why and how we tend to make the simplest mistakes during a presentation or slam. He made us play several games and beautifully related the mistakes we made during the games to communication, be it scientific or theatrical. Finally, we finalists were asked to present a small trailer of our slam, followed by which we received a lots of suggestions and questions from the experts as well as the audience, which turned out to be of immense help while preparing my final slam.

Could you kindly share some tip to this year's EURAXESS Science Slam participants?

I would be happy to share a few tips that I have always learnt from my PhD advisor Prof. Ankona Datta, on how to present your research or any science related topic:

- (i) Know the subject of your presentation really well and present with confidence.
- (ii) Keep the presentation simple, entertaining as well as informative.
- (iii) Try and tell the audience your research in the form of a story. As humans we connect well to stories. It is okay to skip a few scientific details in your slam.
- (iv) Make your slam a two-way process. Engage your audience as much as you can to grab their attention till the end.
- (v) Utilize your hobbies as your strength in the slam.

I hope these serve as a tiny help to this year's EURAXESS Science Slam participants. I wish them ALL THE BEST!!!

Thank You Sayani!

The EURAXES India Science Slam is a competition open to researchers from all fields.

The 8th edition of the Science Slam is launching on August 14. For more information and how to participate visit our [website](#).

4 In case you missed it...

Find latest EU Research and Innovation News and open Calls on our EURAXES India [website](#).

Upcoming EURAXESS India Webinars

Event	Location	Date
EURAXESS India Science Slam 2020 – Online Video Submission	Virtual	14 August-4 October
Communicating Research Out of the Lab	Virtual	28 August
How to publish in Open Access Journals and increase your research impact – in partnership with Taylor & Francis	Virtual	9 September
How to apply for European Research Council Grants	Virtual	15 September
Publishing Ethics and Research Integrity – in partnership with Taylor & Francis	Virtual	25 September

About us

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

Visit us at india.euraxess.org and join the EURAXESS India community.

EURAXESS Worldwide has dedicated teams in the following countries and regions ready to assist you: ASEAN (focus on Singapore, Thailand, Indonesia, Malaysia, and Vietnam), Australia & New Zealand, Latin America and the Caribbean (focus on Brazil, Argentina, Chile, Mexico, and Colombia), China, India, Japan, Korea, and North America (USA and Canada).