

THE EU FRAMEWORK PROGRAMME  
FOR RESEARCH AND INNOVATION

# HORIZON 2020



EXCELLENT SCIENCE  
COMPETITIVE INDUSTRIES  
BETTER SOCIETY

**Dr. Samrat S. Kumar**  
Country Representative EURAXESS India



# Horizon 2020 World



EU's Research  
and Innovation  
Framework  
Programme  
(2014-2020)



## Open to the

Scientifically-  
excellent  
research,  
innovation, and  
technological  
development.

Collaborative  
and innovative  
research  
projects as well  
as grants and  
fellowships to  
individuals



- Participation from **across the world. 28 EU MS and 16 AC** to collaborate with.
- Many topics are **flagged** for cooperation with **partners outside** Europe such as **India**.
- **Indian** *researchers, universities, research organisations and enterprises* **team up** with European partners to **participate in projects** under Horizon 2020.
- Indian participant gain **great benefits** from access to **excellent talent, knowledge, data and infrastructures** and connection to **world-leading teams**, networks and value chains.



- Participants from certain **Asian countries** are automatically **eligible for funding**: e.g. Afghanistan, Bangladesh, Nepal, Pakistan, Sri Lanka,
- **India or Singapore**, for example, are **no longer** automatically eligible for funding. **Exceptional circumstances**: funding can be received; **co-funding Mechanism (CFM)** to fund the successful Indian participants in a number of **pre-identified calls of proposals**.
- **Organisations** from **any sector and country**, can participate in H2020 projects. **Individual researchers** of **any nationality** are eligible to funding by H2020 mobility programmes (e.g. MSCA, ERC)



There are four main ways Indian nationals can participate in 'Horizon 2020':

1. **Participant/scientist in Marie Skłodowska-Curie Actions** programmes (MSCA)
2. Apply for a **European Research Council (ERC) grant** or become a team member
3. **Collaborative research**: participate as partner in Research and Innovation (RIA) and Innovation Actions (IA):
4. **Pre-identified joint calls** between EU-Partner Country

All calls are announced on the Horizon 2020 Participant Portal recently renamed **Funding & Tender Opportunities**.



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# Marie Skłodowska- Curie Actions

Boosting research  
careers





**ERC Advanced**

**ERC Consolidators**

**ERC Starters**

**Senior  
Professor**

**Full Professor**

**Marie Skłodowska  
Curie Actions**

**Junior Professor/  
Junior Researcher  
Associated Professor**

**Doctoral students  
Post-docs**

**Erasmus +**

**Post Graduates**

**Students**

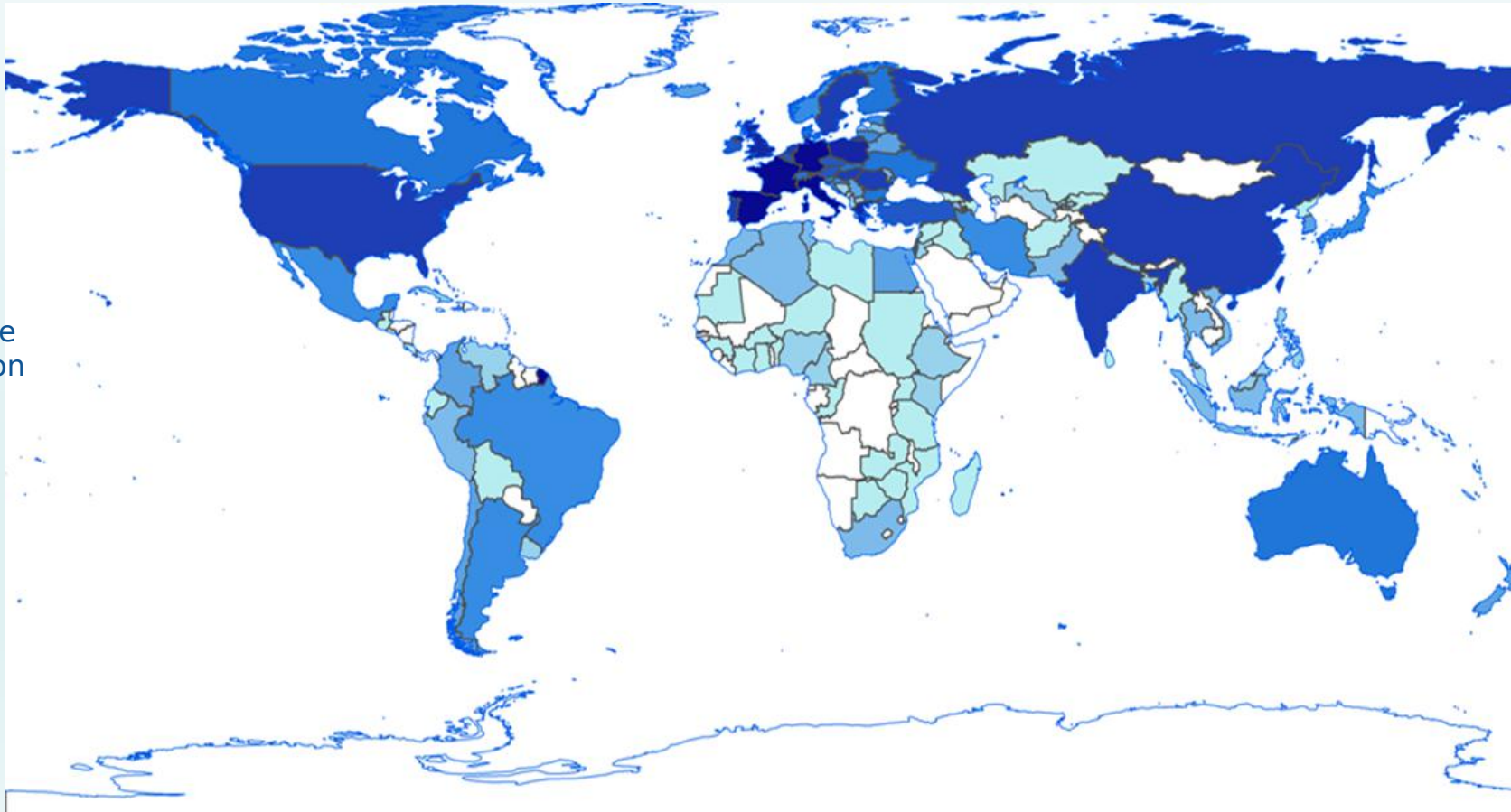
## Mobility

Requirement in all projects

Since 1994: **120 000**  
researchers: **80 000**  
before 2014, and more  
than **40 000** in Horizon  
2020 so far.

## Global reach

**130 nationalities, 80 countries**



Since 2014:  
**25% fellows**  
nationals  
**outside** either  
the EU or the  
16 AC of  
Horizon 2020.

**6 1 0 0**  
**organisations**  
from more than  
**100 countries**  
h a v e  
participated

**1 3 4 0**  
**companies,**  
including 786  
SMEs, have  
received  
funding





**IF**  
Individual Fellowships



**RISE**  
Research and Innovation  
Staff Exchange



**ITN**  
Innovative Training Networks



**COFUND**

# Eligible researchers



## Early-Stage Researchers (ESR)

No PhD  
< 4 years of experience



## Experienced Researchers (ER)

PhD or  
> 4 years of experience







## Doctoral training programmes for young researchers across the world:

- **European Training Network (ETN):**

Participants implement a joint research programme

- **European Industrial Doctorate (EID):**

Doctoral training with non-academic sector

- **European Joint Doctorates (EJD):**

Doctoral programmes to deliver joint degrees.

## Aims:

- Train a new generation of creative, entrepreneurial and innovative early-stage researchers
- Raise excellence and structure research and doctoral training
- Provide enhanced career perspectives in both the academic and non-academic sectors through international, interdisciplinary and inter-sectoral mobility

## How to apply?

- Applying for an **MSCA-ITN position** is very much like applying for a **job**. *One of most generous PhD programs in Europe -Innovative Training Networks (ITN) with a higher salary than PhD students in many European countries ( Salary, living, family and mobility allowance).*
- **Projects** have already been set by the Beneficiaries and Partner Organisations involved in a given ITN *-all you have to do is apply to one that interests you.*
- **ALL Fields:** STEM + SSH + Economies
- **Deadline:** not fixed -Generally March/April
- **Start:** September



# Eligibility

- **For most positions:**
- • Proof that you are **qualified** to undertake a PhD. *You will usually need to have obtained a relevant Master's Degree or equivalent qualification;*
- • A **transcript** of your grades
- • A **CV** detailing prior experiences of projects, and any publications
- • A **personal statement** detailing why you are suitable for the project
- • **Contact details** for two or more individuals that can provide a **reference/** letter of recommendation • Certificate of language proficiency (if required)
- • **Eligibility** for the different ITNs **varies**. However, all available

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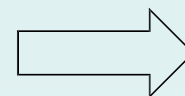
**European  
Fellowships**

For fellows coming to or moving within  
MS/AC (12-24 months)



**Global  
Fellowships**

For fellows from MS/AC  
going to Third countries (12-24 months)  
and returning to Europe (12 months)



Total = 24/36  
months



## EUROPEAN FELLOWSHIPS | Asia => Europe

(Host in 28 Member States and 16 Associated Countries)

For **postdoctoral** research stays in a EU MS or AC.

Lasts from **1 to 2 years**.

Can help to **restart research** careers after a break such as parental leave.

Can also help **reintegrate** researchers coming back to Europe.

## GLOBAL FELLOWSHIPS | Europe => Asia

For **postdoctoral** research stays (1 to 2 years) outside Europe for researchers based in a EU MS or AC. Return to Europe (12m)

**Asian universities, institutes and companies can host** European nationals as postdoctoral or senior researchers at their lab/dept. Asian organisation = "**Partner organisation**" in the proposal.

## WIDENING FELLOWSHIP | Asia => Europe **NEW**

Proposals above the **threshold of 70%** but not retained for funding through the MSCA IF

Automatically **reassigned** to the Widening Fellowships call

Host institutions in countries listed in the Widening Fellowship



## WHO CAN APPLY?

- **All nationalities** can apply. **No age** restriction apply.
- **Mobility** is a must: you have to come to Europe, move within Europe or move outside Europe.
- **Experienced researchers** only: you will have your doctoral degree or at least four years' full-time research experience by the time of the call deadline.
- **All areas** of research - **social science and humanities included!**
- **Bottom-up: Your research!**

Most **TC MSCA IF fellows** from **India (1250) and China** in H2020. But also fellows from other Asian Countries: Vietnam, Thailand, Malaysia, Singapore

# BUDGET

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## Institutional unit cost person/month

Research, networking,  
training costs 800 €

Management and indirect  
costs 650 €

## Researcher unit cost person/month

Living allowance 4 880 €

Mobility allowance 600 €

Family allowance 500 €





## INDIVIDUAL FELLOWSHIPS (2020-MSCA-IF)

### HOW DOES IT WORK?

- 1<sup>st</sup> You => **Find host organisation** in any European country (list of 44 countries).
- 2<sup>nd</sup> **discuss** your **project proposal** with European Host/supervisor.
- 3<sup>rd</sup> write **joint proposal** with chosen host organisation in Europe => **submit** proposal with host .
- 4<sup>th</sup> if selected **grant** is given **to the host organisation located in a EU MS or AC** that recruits you (takes complete responsibility for the proper implementation of the action).

# H2020-MSCA-IF CALLS 2019 - 2020

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H2020-MSCA-IF call	2019	2020
Opening & Closing date	<b>11 April 2019- 11 Sept 2019</b>	<b>08 April 2020- 09 Sept 2020</b>
Budget	<b>237.62 million €</b>	<b>325 million €</b>

Indicative budget and deadlines



## **Marie Skłodowska-Curie Actions**

Website: <http://ec.europa.eu/msca>

Facebook: <https://www.facebook.com/Marie.Curie.Actions>

### **Horizon 2020**

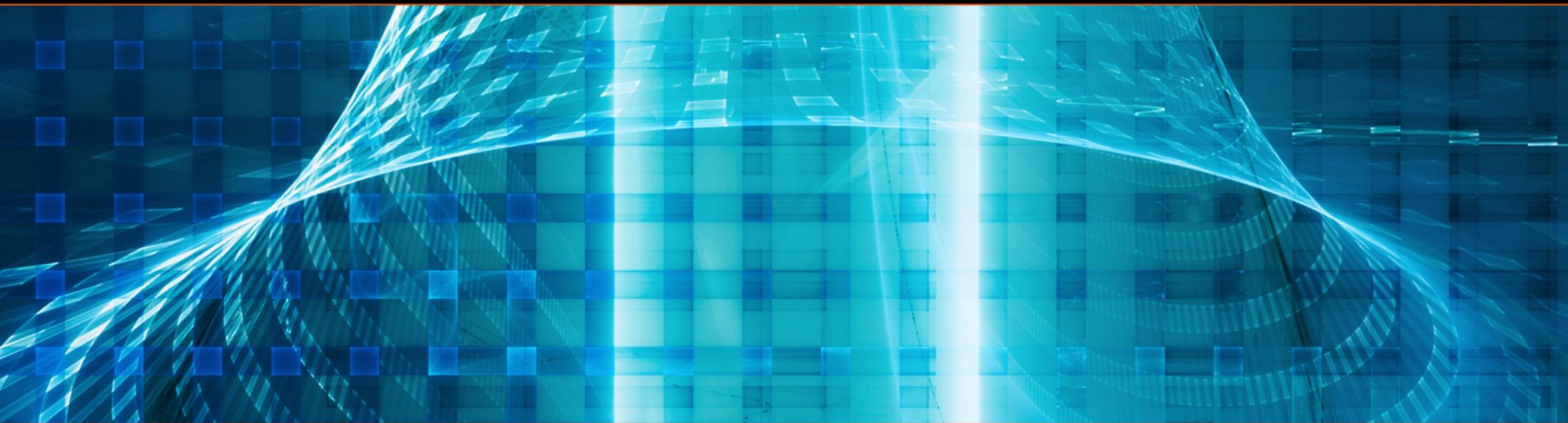
<http://ec.europa.eu/research/horizon2020>



European Research Council

Established by the European Commission

# Beyond the first 10 years



Horizon 2020  
European Union Funding  
for Research & Innovation



- Integral part of Horizon 2020 (**pillar 1**)
- Long term grants (up to six years) for the best scientists/**disruptive research**
- Open to **any field of research** (also Social Sciences and Humanities)
- **Bottom up**, no priorities set
- Sole evaluation criteria: **Excellence**
- **+50 Indians** have received an ERC grants.
- More than **1000 Indians** have worked as ERC team members



# ERC Funding schemes



## Starting Grants

starters  
(2-7 years after  
PhD) up to €2.0  
M  
for 5 years

## Consolidator Grants

consolidators  
(7-12 years after  
PhD) up to  
€2.75 M  
for 5 years

## Advanced Grants

significant  
research  
achievements in  
the last 10 years  
up to €3.5 M  
for 5 years

**Proof-of-Concept**  
bridging gap between research -  
earliest stage of marketable  
innovation  
up to €150,000 for ERC grant  
holders

**Synergy grants**  
A group of 2-4 PI. Any field of  
research. One PI could be  
outside EU MS/AC as well. Up to  
€10 million for 6 years



- **Excellent Research** across all fields, including SSH.
- Promote investigator-driven, or '**bottom-up**' frontier research; innovative proposals.
- Encourage the work of the established and **next generation** of independent top research leaders in Europe.



- Awarded through **open competition** to projects headed by starting and established researchers, irrespective of their origins.
- Sole criterion for selection is **scientific excellence**.
- **Research idea!** rather than research area.
- **New and unpredictable** scientific and technological discoveries - form the basis of new industries, markets, and broader social innovations of the future.



- Indian researchers can apply to ERC grants - **PI**
- Recipients can use their funding to **recruit** other researchers and team members for their project. On average, each team has 4-5 members.
- Open positions for non-European scientists are available on **EURAXESS job portal**.
- International agreements with funding agencies and science ministries with some countries support young researchers to temporarily join ERC teams in Europe. Currently Implementing Arrangements are in place with India, signed in October 2017, with the Scientific Engineering Research Board (**SERB**).



- In 2017, an Implementing Arrangement (IA) between India/ SERB and the European Commission (EC) was signed allowing SERB grantees **to join ERC teams in Europe.**
- The IA facilitates Indian researchers (Early Career Researchers, National Post-doctoral Fellows and Doctoral candidates) benefitting from a SERB grant to join for short periods of time (**up to one year**) an ERC team in one of the leading universities in Europe (28 Member States and 16 countries associated to Horizon 2020).
- Open to all areas in **STEM.**





- Additional 'start-up' funding for scientists moving to Europe (EUR 500.000 for STG, EUR 750.000 for CoG, 1Mio EUR for AdVG)
- Grantee can keep affiliation with home institute outside Europe (min 50 %work time in Europe)
- Team members can be based outside Europe
- Grantee can move within Europe with the grant

# How to participate in Horizon 2020?

**= OPEN COMPETITION + PEER REVIEW**





# EURAXESS - Researchers in Motion -Gateway to Europe



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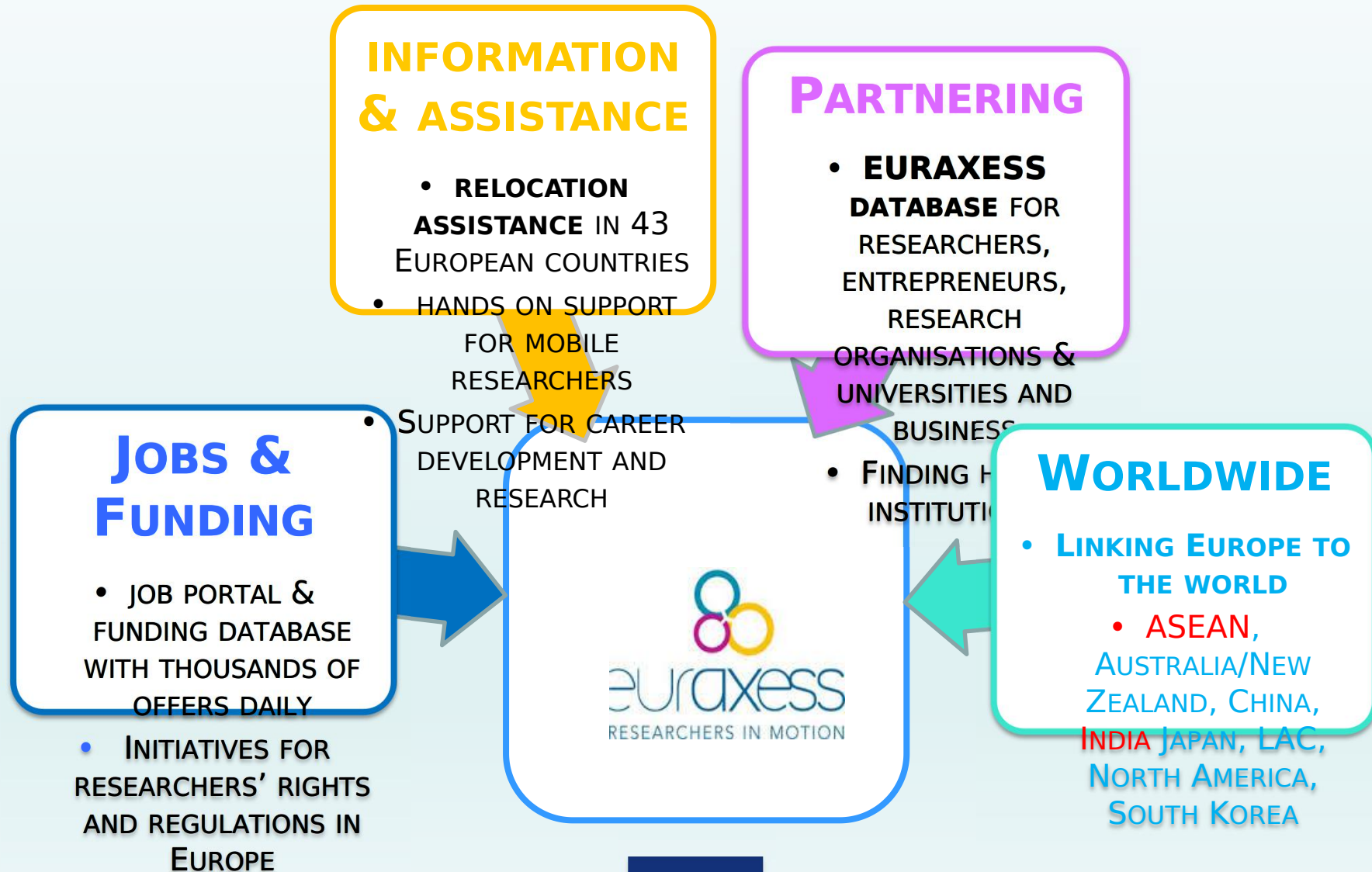


# EURAXESS-Researchers in Motion

- **Pan-European Initiative:** Backed by the European Union, Member States (MS) and Associated Countries (AC) – European Research Area (ERA)
- **Supporting Researcher Mobility** and **Career Development**
- **Enhancing Scientific Collaboration** between **Europe** and **the World**
- **Made** of 4 **Main Components:**

[www.euraxess.org](http://www.euraxess.org)





# EURAXESS JOBS & FUNDING

-  *1 60,000 job vacancies published annually (12,000 research job positions available right now!)*
-  *116,000 registered research organisations and universities*
-  *1 80,000 registered users with EURAXESS*
-  *1500 funding opportunities available for Entrepreneurs*
-  *All areas of Science, Technology, Innovation; also Social Sciences & Humanities*



## NATIONAL PORTALS

- At European level, the **EURAXESS main platform** is complemented by **40+ national EURAXESS websites**, in the countries members of the initiative.
- The **40+ countries** provide information on research jobs and funding opportunities, as well as on **personalised services** in each country (1600 service centres)
- Adverts published in the **JOBS & FUNDING section** of EURAXESS are also displayed on the complementary 40+ portals.



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# EURAXESS Worldwide



## EURAXESS Worldwide

-  EURAXESS WORLDWIDE is the **international branch of *EURAXESS - Researchers in Motion***
-  EURAXESS WORLDWIDE seeks to promote research cooperation and to **facilitate the mobility of researchers between Europe and the world**
-  EURAXESS WORLDWIDE is present in **ASEAN**, Australia and New Zealand, China, **India**, Japan, Korea, Latin America and Caribbean (LAC) and North America

# EURAXESS Worldwide Network

-  **Tailored** information on **jobs, research calls** and **funding**.
-  **Email alerts** about **events and breaking news**.
-  **Connecting** with fellow **research professionals**.
-  **Exclusive access** to a global pool of highly qualified talent.
-  **Support** from our dedicated country representatives and support officers.



- *For more information visit:*

- **<https://euraxess.ec.europa.eu/worldwide>**



EURAXESS - Researchers in Motion

JOBS & FUNDING

PARTNERING

INFORMATION & ASSISTANCE

EURAXESS WORLDWIDE

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# EURAXESS India

EURAXESS India links researchers in India with Europe. Free information and events on research funding, research careers and collaboration opportunities. EURAXESS India has been serving researchers in all fields interested in a research career in Europe since 2011.

[SIGN UP AND BECOME A MEMBER FOR FREE!](#)

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NEWS







## EURAXESS India

- Network is **open to all researchers** at all stage of their careers.
- **Open to universities, research institutes and business**
- **Open to European + Indian initiatives**
- **Membership is free!**
- **Register on the site: [india.euraxess.org](http://india.euraxess.org) or send us an e-mail : [india@euraxess.net](mailto:india@euraxess.net)**

# EURAXESS India **Services**



**Community Register!**  
and **Website** (India)



**Newsletters** (quarterly),  
**Flashnotes**



EURAXESS Info Sessions and  
**EURAXESS Events**



# EURAXESS India Events

## EURAXESS Events

**Info sessions** on Researchers mobility, H2020 mobility programmes and EU-India collaboration

**European Research Day, 18 September in New Delhi**

**Science Communication Workshop, 18 October in Pune**



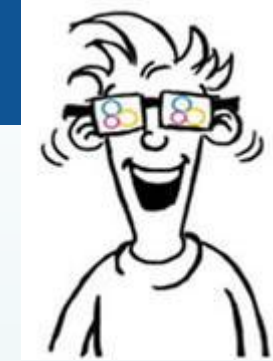
## EURAXESS Science Slam

1<sup>st</sup> prize: Research **trip to Europe!**

Science communication **competition**

**Live finals 30 November in Trivandrum**





# EURAXESS Science Slam India 2019 - Your next research trip to Europe!

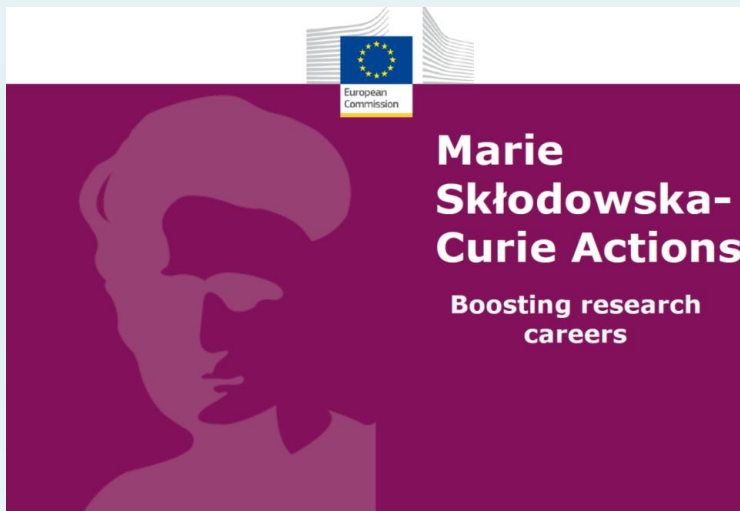
## 1st prize

EURAXESS Science Slammer **title** and **a round trip to Europe to visit a research institute of your choice in the EU!**

<https://euraxess.ec.europa.eu/worldwide/india/euraxess-science-slam-india-back>

# EU-Funded Calls

# & Fellowships







# Marie Skłodowska-Curie Actions (MSCA): *Current Open Calls*

- Austria - PhD positions on MSCA-ITN 'DoSSIER' in Computer Science (Domain Specific Systems for Information Extraction and Retrieval) attractive salary including mobility allowance and family allowance; **Duration:** 36 months. **Deadline:** various
- Sweden - COFUND-MSCA-EU program 'CanFaster' recruiting five post-doc fellows within Cancer Research and Entrepreneurship **Duration:** 2 years. **Deadline:** 7 January 2020
- France -13 PhD positions on the MSCA ITN Project 'FLOWER' (offshore wind energy) **Duration:** 36 months. **Deadline:** 31 December 2020





## Marie Skłodowska-Curie Actions (MSCA) | *Current Open Calls II*

- Ireland / 26 Post-doc fellowships in Computer Science/Software Engineering - ALECS **Duration: 24 months. Deadline: 13 January 2020**
- Spain / 35 PhD Fellowships at IdiPAZ Institute for Health Research in Madrid **Duration: 3 years. Deadline: 4 February 2020**
- Spain / 6 Postdoctoral Fellowships in Biomedicine **Duration: 36 months. Deadline: 10 January 2020**
-



# Fellowships and Funding in EU Member States and Associated Countries

- Switzerland / ETH Student Summer Research Fellowship 2020 for Undergraduate & Graduate students in computer science - monthly allowance of about **CHF 1.750** to cover housing and living expenses. Travel and visa expenses will be covered as well. **Duration: 2 months. Deadline: 15 December 2020**
- Germany / International Climate Protection Fellowship for Young Climate Experts from Developing Countries
- Monthly fellowship of between **€2,170 and €2,670**; additional financial support for travel expenses etc. **Duration: 1 year. Deadline: 1 March 2020**
-



# EU-India *Open Calls*

- **DBT-EU H2020 calls on Health, Agriculture, Bioeconomy, Clean Energy, Innovation**
- Researchers and innovators from universities, research institutions, enterprises and non-profit organizations **from India** can **team up** with European partners in the 30 **calls** for proposals in areas of: **health, agriculture, agri-food, fisheries, aquaculture, forestry, biofuels, bioeconomy, biotechnology, medical technology innovations etc.** Successful Indian participant(s) will be funded by DBT as per its national rule and regulations. DBT funding is applicable for preselected 30 calls only!  
**Deadline: various**
- **EU-DST joint call on Smart and Integrated Local Energy Systems**
- The EU Delegation to India and **DST** call for proposals. Proposals should develop and demonstrate **novel solutions**, integrating all energy vectors (electricity, heating, cooling, water, wastes, etc.), including possibilities offered by **batteries and electric vehicles**, interconnect them and optimize joint operation with increased share of **renewables and a higher energy efficiency**. Cooperation will take the form of a proposal demonstrating a local energy system (or several) in Europe and/or India. **Deadline: 31 January 2020**



**REGISTER @ <http://india.euraxess.org>**



***india@euraxess.net***



***linkedin.euraxess.org***



***Euraxess Links India***



***Thank you***

***Dr. Samrat S. Kumar,  
Country Representative India***

