MARIE SKŁODOWSKA CURIE ACTIONS

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- GENERAL ASPECTS, TYPES, OBJECTIVES
- THE JOINT RESEARCH & TRAINING PROGRAMME
- THE EARLY STAGE RESEARCHER
- PROPOSAL, SUCCESS RATES, PROJECTS

INDIVIDUAL FELLOWSHIPS (IF)
- GENERAL ASPECTS AND OBJECTIVES
- TYPES, CONDITIONS AND MORE
- PROPOSAL etc.
- SUCCESS RATES, APPLICATION AND PROJECTS
**INNOVATIVE TRAINING NETWORKS - GENERAL ASPECTS**

- **Transnational mobility** (of Early Stage Researcher) as the basic principle
- „Bottom-up“-approach, i.e. research topics are chosen freely by the applicants – all areas of research and technological development are eligible
- Participation of **non-academic sector** is an **important** factor
- **Consortium** size: at least **3 beneficiaries** in **3 different countries** (EU MS/AC)**,
- Compliance with “**40% rule**”: no more that 40% of EU contribution for beneficiaries of the same country
- **Duration** of ITN: **4 years**
- Recruitment of Early Stage Researcher with less than 4 years (full-time equivalent) research experience

**EID: min. 2 beneficiaries**
INNOVATIVE TRAINING NETWORKS - TYPES

 EUROPEAN TRAINING NETWORK – ETN
  ▪ Enrolment in doctoral programme not mandatory (but typical)
  ▪ Secondments up to 30% of ESR’s recruitment time possible
  ▪ 8 scientific panels,

 EUROPEAN INDUSTRIAL DOCTORATE - EID
  ▪ At least 50% stay in non-academic sector,
  ▪ Industry-oriented research,
  ▪ Enrolment in doctoral programme and joint supervision (from 2 sectors) mandatory,
  ▪ 1 multi-disciplinary panel

 EUROPEAN JOINT DOCTORATE (EJD)
  ▪ Enrolment in doctoral programme mandatory (2/3 of ESR: joint, double, multiple p.),
    final degree from min. 2 countries
  ▪ Joint supervision is mandatory,
  ▪ 1 multi-disciplinary panel

* Respect the MSCA mobility rule
** EID: min. 2 beneficiaries
INNOVATIVE TRAINING NETWORKS - OBJECTIVES

- **Raising excellence** by:
  - Establishing a research programme “beyond state of the art” and a
  - Doctoral training beyond traditional academic research training setting
- Establishing a **new generation of creative, entrepreneurial, and innovative Early Stage Researchers** (ESR): converting knowledge & ideas into products & services
- To equip ESR with both: research related and transferable competences
- Improved career perspectives in both the academic and non-academic sector
- Lasting (doctoral) cooperation among institutions and between academic and non-academic sector

*No doctorate & less than 4 years of research experience*
THE JOINT RESEARCH & TRAINING PROGRAMME

- Multi- & interdisciplinary research activities through up to 15 individual, supervised (doctoral) projects (max. 5 in a 2-partner-EID)
- Structured, innovative educational programme: courses (local and network-wide), laboratories, summer schools, e-learning etc.
- Knowledge exchange through inter-sectoral visits and
- Secondments (to partner organisations) are encouraged (EID mandatory)

THE EARLY STAGE RESEARCHER:

- Duration of funding for an ESR: 3 - 36 month
- ESR transnational mobility: main activity (work, studies, etc.) in the country of the recruiting beneficiary is limited to 12 months in the 3 years prior to the recruitment date.
- ESR can be of any nationality, can move from any country (but must respect the mobility rule)
**INNOVATIVE TRAINING NETWORKS – PROPOSAL, SUCCESS RATES, PROJECTS**

**PROPOSAL**

<table>
<thead>
<tr>
<th>Weighting</th>
<th>Priority if ex aquo</th>
<th>Section</th>
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<tbody>
<tr>
<td>50%</td>
<td>1</td>
<td>Excellence</td>
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<tr>
<td>30%</td>
<td>2</td>
<td>Impact</td>
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<tr>
<td>20%</td>
<td>3</td>
<td>Implementation</td>
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</table>

**CALL FOR APPLICATION**

Once a year. Next deadline: **January 2020**

**AFTER EVALUATION**

2018 Success rate: **7.4%**

<table>
<thead>
<tr>
<th>Type</th>
<th>Faculty</th>
<th>Acronym</th>
<th>Title</th>
<th>Prof.</th>
<th>Role</th>
<th>Type</th>
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<tbody>
<tr>
<td>ETN</td>
<td>II</td>
<td>ROMSOC</td>
<td>Reduced Order Modelling, Simulation and Optimization of Coupled systems</td>
<td>Mehrmann</td>
<td>Coordinator</td>
<td>EID</td>
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<td>EID</td>
<td>II</td>
<td>SynCrop</td>
<td>Synthetic Circuits for Robust Orthogonal Production</td>
<td>Budisa</td>
<td>Beneficiary</td>
<td>ETN</td>
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<tr>
<td>EJD</td>
<td>III</td>
<td>Biorapid</td>
<td>Rapid Bioprocess Development</td>
<td>Neubauer</td>
<td>Beneficiary</td>
<td>ETN</td>
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<tr>
<td>EID</td>
<td>III</td>
<td>EJDFoodSci</td>
<td>Food science, technology and engineering</td>
<td>Methner</td>
<td>Beneficiary</td>
<td>EJD</td>
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<tr>
<td>EID</td>
<td>IV</td>
<td>FogGuru</td>
<td>FogGuru: Training the Next Generation of European Fog Computing Experts</td>
<td>Markl</td>
<td>Beneficiary</td>
<td>EID</td>
</tr>
<tr>
<td>ETN</td>
<td>IV</td>
<td>VisIoN</td>
<td>Visible light based Inter-operability and Networking</td>
<td>Caire</td>
<td>Beneficiary</td>
<td>ETN</td>
</tr>
<tr>
<td>EID</td>
<td>V</td>
<td>ANNULIGHT</td>
<td>Annular Instabilities and Transient Phenomena in Gas Turbine Combustors</td>
<td>Paschereit</td>
<td>Beneficiary</td>
<td>EID</td>
</tr>
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INDIVIDUAL FELLOWSHIPS (IF)

- GENERAL ASPECTS AND OBJECTIVES
- TYPES, CONDITIONS AND MORE
- PROPOSAL ETC.
- SUCCESS RATES, APPLICATION AND PROJECTS
INDIVIDUAL FELLOWSHIPS - GENERAL ASPECTS AND OBJECTIVES

**GENERAL ASPECTS**

- **Bottom-up approach**, i.e. research fields are chosen freely by the applicants
- **Joint Application of Experienced Researcher (ER)** and **Supervisor**, i.e. co-development of proposal incl. a convincing integration and supervision concept
- **Transnational mobility** of ER as the basic principle, i.e.:
- **IF mobility rule**: main activity (work, studies, etc.) in the country of the beneficiary is limited to 12 months in the 3 years prior to the call deadline

**OBJECTIVES**

- Supporting **excellent** research
- Enhancing the **creative and innovative potential of ER**: diversify individual competences in terms of skill acquisition (research related and transferable)
- Providing **opportunities to work on research and innovation in** Europe (MS/AC) or **outside Europe**
- Improved **employability** and **career prospects** both in and outside academia
INDIVIDUAL FELLOWSHIPS – TYPES, CONDITIONS AND MORE…

WHO CAN APPLY – THE EXPERIENCED RESEARCHER:

- Shall dispose of a doctorate or more than 4 years of research experience (FTE)
- Can move from any country (EF/GF) to an EU MS/AC – given that mobility rule is respected
- May choose to lecture, tutor, and supervise students, and follow training in order to perform such tasks.

EUROPEAN FELLOWSHIP (EF)

- Researcher of any nationality
- Duration: between 12 and 24 month at an institution in EU MS/AC
- Optional secondment
- Mobility rule applies to the receiving institution (Standard EF)
INDIVIDUAL FELLOWSHIPS – TYPES, CONDITIONS AND MORE…

GLOBAL FELLOWSHIP (GF)
- Researcher with MS/AC nationality or long-term resident
- Duration: Initial outgoing phase to a 3rd country (US, NZ…): 12 to 24 month + mandatory return period to the host institution in EU MS/AC: 12 month
- Optional secondment
- Mobility rule applies to institution in third country

PROPOSAL

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</table>

max. 10 pages

EVALUATION
- Single stage – one step
- Through independent experts
- In eight scientific panels (Standard EF and GF, other types single panels)
## Individual Fellowships – Success Rates, Application and Projects

**APPLICATION**

- One call per year
- Next call opening: April 11, 2019 and
- Deadline: **September 11, 2019**

### IF 2018 Success Rate

<table>
<thead>
<tr>
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<th>EF</th>
<th>13.2%</th>
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<tr>
<td></td>
<td>GF</td>
<td>21.7%</td>
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### Individual Fellows at TU Berlin (H2020)

<table>
<thead>
<tr>
<th>Faculty</th>
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<th>Researcher</th>
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<tbody>
<tr>
<td>II</td>
<td>Cloud-worlds</td>
<td>Cloud Worlds: from Venus to Exoplanet</td>
<td>Lee</td>
<td>Rauer</td>
<td>EF</td>
</tr>
<tr>
<td>III</td>
<td>H2O-Split</td>
<td>Carbon-Oxynitride Coupled Artificial Photosynthesis System for Solar Water Splitting Beyond 600nm</td>
<td>Khujamberdiev</td>
<td>Gurlo</td>
<td>EF</td>
</tr>
<tr>
<td>III</td>
<td>Rotary-Wing</td>
<td>Closed-Loop Flow Control to Enhance Aerodynamic and Aeroacoustic Performance of Wind-Turbine Blades</td>
<td>Stalnov</td>
<td>King</td>
<td>EF</td>
</tr>
<tr>
<td>IV</td>
<td>Machine Cat</td>
<td>Machine Learning for Catalytic Carbon Dioxide Activation</td>
<td>Gastegger</td>
<td>K.R. Müller</td>
<td>EF</td>
</tr>
<tr>
<td>IV</td>
<td>ODICON-ASMA</td>
<td>Optimal Distributed Control and Application to Smart Grids</td>
<td>Charalampidis</td>
<td>Raisch</td>
<td>EF</td>
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<tr>
<td>IV</td>
<td>PACT</td>
<td>Proof-theoretical Approaches to Concurrency Theory</td>
<td>Guenot</td>
<td>Nestmann</td>
<td>EF</td>
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<tr>
<td>IV</td>
<td>SMARTER</td>
<td>A Scalable and Elastic Platform for Near-Realtime Analytics for The Graph of Everything</td>
<td>Le Phoc</td>
<td>Hauswirth</td>
<td>EF</td>
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<tr>
<td>IV</td>
<td>ZERO-TRAIN-BCI</td>
<td>Combining constrained based learning and transfer learning to facilitate Zerotraining Brain-Computer Interfacing</td>
<td>Kindermans</td>
<td>K. R. Müller</td>
<td>EF</td>
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<tr>
<td>VI</td>
<td>Ultra-LightCon-3D</td>
<td>Ultra-Lightweight Concrete for 3D printing technologies</td>
<td>Sikora</td>
<td>D. Stephan</td>
<td>EF</td>
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</tbody>
</table>
THANK YOU FOR YOUR ATTENTION!

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sabine.hutfilter@tu-berlin.de