



## 5G STEP-FWD: 15 PhD positions

5G STEP-FWD, a newly launched Marie Skłodowska-Curie Innovative Training Network (ITN) offers fifteen (15) PhD positions in six European countries. The project will work towards a new high capacity and low latency architecture for backhauling 5G networks. The proposed architecture takes full advantage of the ultra-narrow wavelength spacing of the UDWDM technology, in order to provide connectivity to a dense small-cell population. The project researchers will work both at the physical and the network layer domains, aiming at designing systems and algorithms for building the 5G cellular network of tomorrow. More information on the project can be found here: [http://cordis.europa.eu/project/rcn/210469\\_en.html](http://cordis.europa.eu/project/rcn/210469_en.html)

### Benefits

The Early Stage Researchers (ESR) enrollments are under very attractive employment conditions and competitive salaries offered in Marie Curie Innovative Training Networks. The selected ESRs will join top-class research groups and have a unique opportunity to pursue a career in mobile and optical communications. Working in this ambitious research project, ESRs could lead to the successful completion of a doctoral degree, together with a very strong joint multidisciplinary research training program in the field of wireless and optical networks. The planned mobility among six EU countries and nine institutions is a plus of these job positions.

### Eligibility criteria

Candidates must also meet the following criteria: 1) be in the first four years (full-time equivalent research experience) of their research careers; 2) be of any nationality, but not having resided or carried out their main activity in the country of the host institution of the position they are applying to for more than 1 year in the past 3 years; 3) have not yet been awarded a PhD degree.

### Selection process

Applicants must complete and upload the requested information via the following application form: <http://5gstepfwd.eu/oaf-2017> and need to select the positions IQU-1 and/or IQU-2.

Additionally, applicants must email the application material (a cover letter indicating the applied position(s) and justifying your suitability, a detailed CV and complete transcripts, the name and address of two referees to support your application, and any other relevant documents), to [pm@iquadrat.com](mailto:pm@iquadrat.com).

## LIST OF OPEN POSITIONS

<b>ESR1</b> -Project Title: SDN control plane for converged mmWave-UDWDM PONs.	IQUADRAT-1 (Spain)
<b>ESR2</b> - Project Title: Medium-Transparent MAC protocols for seamless wired-wireless communication	IQUADRAT-2 (Spain)
<b>ESR3</b> -Project Title: Modeling mmWave cellular communications via hyper dense small cell deployments	CNRS-1 (France)
<b>ESR4</b> - Project Title: Device- or user-centric wireless access and multi-connectivity design at mmWave frequencies	CNRS-2 (France)
<b>ESR5</b> -Project Title: Holistic system design via load, backhaul, channel and interference awareness	OTE-1 (Greece)
<b>ESR6</b> - Project Title: Development of ONU with integrated wireless module	OTE-2 (Greece)
<b>ESR7</b> -Project Title: Network architecture design for service provision in urban areas with existing fiber infrastructure	AUTH-1 (Greece)
<b>ESR8</b> -Project Title: Network architecture design for service provision in urban based on new fiber infrastructure	AUTH-2 (Greece)
<b>ESR9</b> -Project Title: Network control design for UDWDM PONs	KTH-1 (Sweden)
<b>ESR10</b> -Project Title: Mobile backhaul network design for cost-efficient service delivery	KTH-2 (Sweden)
<b>ESR11</b> -Project Title: Design of the physical layer of the converged mmWave-UDWDM-PON	TU/e-1 (Netherlands)
<b>ESR12</b> -Project Title: Modulation techniques for enabling the transmission of mmWave signals through UDWDM-PONs	TU/e-2 (Netherlands)
<b>ESR13</b> - Project Title: Energy control schemes for mmWave heterogeneous networks	CTTC-1 (Spain)
<b>ESR14</b> -Project Title: Design of the antenna array for mmWave wireless communications	SIAE-1 (Italy)
<b>ESR15</b> - Project Title: Design of Ultra Dense Passive Optical Network to support high number of end user	III-V Lab- 1 (France)