



HORIZON 2020



A Marie Skłodowska-Curie Actions Innovative Training Network (ITN)

Applications are invited for 15 early stage researcher positions (PhD equivalent) under the new Horizon 2020 Marie Skłodowska-Curie Innovative Training Network "Spin-NANO" - Nanoscale solid-state spin systems in emerging quantum technologies.

All 15 early stage researchers will be enrolled in a doctoral programme. Recruitment will be for a period of 36 months and start in 2016.

The consortium of 14 academic and 7 industrial groups will deliver top international level multidisciplinary training to 15 early stage researchers, offering them an extended program of multinational exchanges and secondments. Network-wide training course in transferable skills will be specially developed and delivered by the Think Ahead (Sheffield), an award winning programme supporting Early Career Researchers (award by the Times Higher Education, 2014).

The proposed research in physics and applications of spin nano-systems will underpin developments in quantum computing, quantum communications and networks, and nano-imaging.

We will develop electrically-controlled spin-quantum-bits (qubits) in Si-Ge quantum dots and nanowires; will optically manipulate spin impurities in diamond in applications for quantum computing and networks and in nano-magnetometry; will achieve new understanding of quantum phenomena due to the spin-valley coupling in atomically thin 2D semiconductors. Such wide material base emphasizes the truly multidisciplinary character of this collaboration opening opportunities for crossing the boundaries between several areas of solid-state physics and technology.

Remuneration will be according to the [Marie Skłodowska-Curie Actions Horizon 2020 Work Programme 2014-2015](#). This comprises of a very generous living allowance, mobility allowance (600 EUR per month) and a family allowance (500 EUR per month - subject to meeting eligibility criteria).

Further information regarding these vacancies can be found on the [EURAXESS](#) website or by contacting the Group Leaders. The [Spin-NANO](#) website is currently under construction.

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