Combine

APPLICATION DEADLINE 15.05.2018

a 3 year PhD position

with your

first research job

ZULF NMR Innovative Training Network

Join our team in Kraków
working on the Zero and Ultra-Low Field Nuclear Magnetic Resonance
Cutting-edge of innovative NMR research
at the interphase between physics and chemistry

2 Open Positions at ITN rates (up to 3 500 €/month)

FUNDAMENTAL AND PRACTICAL APPLICATIONS OF ZULF NMR

Development of a portable ZULF NMR Spectrometer

APPLY BY SENDING YOUR CV, COVER LETTER AND TWO REFERENCE LETTERS TO PROF. SZYMON PUSTELNY PUSTELNY@UJ.EDU.PL AND OFFICE@ZULF.EU

SCIENCE **Nuclear magnetic resonance is a powerful technique** employed in many areas of modern science and industry. Recent progress in physics and chemistry have enabled detection of **NMR** signals **at ultra-low and truly zero magnetic fields**. This completely reverses the conditions under which spin-dynamics are investigated and opens avenues for an analysis of the nuclear spin system under **unique experimental circumstances**. The project's scope encompasses: hyperpolarization techniques, NMR spectroscopy based on indirect spin–spin interactions (J-spectroscopy), and optical magnetometry.

TRAINING **The ZULF Innovative Training Network (ITN)** covers a diverse range of projects that will take the technique to the next level. To help you achieve success you will take part in a **unique training program** on the **most modern and advanced aspects of ZULF NMR,** unavailable in any university curriculum. You will also learn **entrepreneurship, scientific communication, patent law**, and many other crucial skills that will give you **a head start in your academic career**.

The Jagiellonian University in Kraków (Poland) is one of the oldest institutions of higher education in the world, with over 650 years of tradition it is the alma mater of two Nobel Laureates. Situated in a city with rich culture and history, the Jagiellonian University with over 40 000 students greatly contributes to the fact that Kraków is widely thought of as the heart of academic life in Poland.

Prof. Szymon Pustelny's magnetometry group is based in a state of the art, modern (built 2014) Institute of Physics building. With **shielded cleanrooms** and **top of the line laser systems**, the Photonics Department houses one of **the most sensitive atomic magnetometers in the world**, that remains in constant development since 2005. Prof. Pustelny is the initiator and coordinator of the ZULF ITN consortium.

for further details visit www.zulf.eu

You are eligible if on Oct 1. 2018 you will:

a) have your master's or bachelor but no PhD degree;
b) not have been a researcher for longer than 4 years;
c) in the three years before the date have spent at most 12 months in Poland.

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