



Lifelong Learning Programme

LEONARDO DA VINCI PROGRAMME
PEOPLE IN THE LABOUR MARKET
MOBILITY

Leonardo da Vinci traineeship offer

Host organisation: Austrian Institute of Technology GmbH, Vienna, Austria

The Austrian Institute of Technology (AIT), Austria's largest non-university research institute, is among the European research institutes a specialist in the key infrastructure issues of the future. As an ingenious partner to industry and public institutions, the AIT is already researching and developing the technologies, methods and tools of tomorrow, paving the way for the innovations of the day after tomorrow. The Republic of Austria (through the Federal Ministry for Transport, Innovation and Technology) has a share of 50.46 %, while the Federation of Austrian Industries owns 49.54 % of the AIT. In Austria, there are over 1 000 employees – largely based at the main facilities Vienna Tech Gate, Vienna TECHbase, Seibersdorf, Wr. Neustadt, Ranshofen and Leoben. Seibersdorf is also where the two wholly-owned subsidiaries Seibersdorf Labor GmbH, which offers laboratory and other services, and Nuclear Engineering Seibersdorf GmbH, are located.

The Safety & Security department of the AIT is a leading player in the field of quantum cryptography and the design of networks secured by QKD systems. The expertise in this topic has been improved throughout the SECOQC project between 2004 and 2008 and is applied since then in several follow-up projects, e.g. in Thailand and Japan. Here, the focus of the AIT is mainly on the design and implementation of the network topology than on the hardware.

Local and temporal specification of the traineeship:

Division/Department: Safety & Security, Vienna, Austria

Starting date (earliest possible): position open continuously

Starting date (latest possible):

Duration: 3-6 months

Working hours: 38,5/week

Training content (activities/tasks):

- ✓ The applicants would be trained to obtain a broad variety of experimental skills in the area of general optical instrumentation with a particular focus on quantum optics and laser physics. The generation and manipulation of coherent light as well as the detection of the smallest possible amount of light, a single photon, are central fields in our labs. Optical setups guiding laser to nonlinear elements will be built out of single opto-mechanical components in combination with fiber-optical equipment, including telecom components and systems.

Required profile of the candidates:

- ✓ **University graduates** in Physics or Optics
- ✓ Experimental experience: quantum optics or quantum information applications and/or Theoretical experience: quantum information and quantum optics theory
- ✓ English or German required
- ✓ Other soft competences might be a plus

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Further, applicants must meet the following criteria:

- ✓ Graduates of Palacky University in Olomouc
- ✓ Date of graduation: no more than 1,5 year ago
- ✓ You have not carried out a Leonardo da Vinci traineeship, mobility of people in the labour market (PLM) yet
- ✓ Permanent residence or perspective employment in the Central Moravia region is advantage

Remuneration:

- ✓ financial support – 500 EUR/month
- ✓ contribution in kind (e.g. accommodation, public transport, meals etc.) – in the value of 0 EUR/month

Note: beside possible financial support and/or contribution in kind provided by the host organisation, the selected candidate shall receive a Leonardo da Vinci grant. The grant shall be allocated in the max. amount of up to a 3-month scholarship (monthly rate being max. 700 EUR).

Please send your application documents (CV and cover letter in English or German language) to Momtchil.peev@ait.ac.at at least two months before the planned start.