

TRAINING OFFER



Trade name	National Physical Laboratory management limited
Taxpayer Identification Number (TIN)	02937881,
Training program Location	Teddington, Greater London, UK
Registered Address of the training programme location	NPL, Hampton RD, Teddington, Middlesex, TW11 0LW, UK
Name of training position	Guest researcher
Bachelor's Degree(s) aimed at	Physicist or engineer
Length of the offered training program (in weeks)	26 weeks
Activities to be performed by the trainee and chronological order of such activities (this information is required in order to enable the home university to assess the relevant credits to be granted to the student for the experience)	<p>Activ 1: Setting up experimental system for room-temperature magnetotransport measurements.</p> <p>Activ 2: Characterization of already fabricated devices by means of AFM and SEM.</p> <p>Activ 3: Initial measurements of domain wall propagation in soft and hard magnetic nanowires by electrical methods.</p> <p>Activ 4: Comparison of results obtained by electrical and magneto-optic methods (transport measurements at NPL; MOKE measurements – outside).</p> <p>Activ 4: Device optimization, modeling and determination of sensitivity.</p>
Skills to be acquired by the student	<ul style="list-style-type: none"> - Transport and noise measurements in nanodevices (LabView programming, transport measurement setup, spectrum analyser, etc.); - Structural characterization (AFM, SEM); - Physical modelling (MATLAB, COMSOL) - High magnetic field operation, cryogenic measurements if required, etc.
Required Languages	English
Any other requirements	Initial knowledge of LabView and MATLAB would be desirable but not necessary.
Other skills the host company considers desirable but not required	Interest and enthusiasm in physics, desire to work hard to get the result.
Economic aid or any other company benefit to be offered to the student by the host company (if any)	NPL is based in a unique research environment, which is located in pleasant surroundings on the edge of Bushy Park in south-west London. NPL has extensive on-site facilities, including a restaurant and a sports and social club. We will help to find accommodation in the nearby area.