

Researcher Mobility Grant (RMG)

APPLICATIONS ARE INVITED – Researcher in renewable energy systems

RESEARCH: The RMG-Researcher may propose any activities that add scientific value to the related JRP, which aims to develop and realize strategies for traceable measurements of drivetrain components for renewable energy systems. Preferably and with regard to the activities of the RWTH in the framework of the JRP the RMG-Researcher concentrates on experimental or model-based examination of the thermal-elastic behaviour of drive train components and measurement systems during geometric inspection. For example, a method for determining the measurement uncertainty of the CMM under varying temperatures in the RWTH climate chamber with the help of ETALON laser tracers or API XD laser would be possible. Another example could be to develop a virtual version of the measurements standards that were measured under varying temperature in the RWTH climate chamber. It would visualize the results for an arbitrary given temperature distribution and evaluate the measurement uncertainty for a selected feature. The RMG-Researcher will get access to all the equipment at the RWTH and Fraunhofer IPT and will get the possibility to write publications in cooperation with the professors at the RWTH.

EXPERIENCE REQUIREMENTS: Practical and theoretical experience with production metrology and measurement technology.

PROJECT LOCATION(S): The research will be undertaken at RWTH Aachen Germany (must be located transnationally to the Researcher's employing organisation).

DURATION: Maximum 6 months duration. Earliest start date is November 2016; with completion by 30 April 2017.

ALLOWANCES: The exact allowances can be found by using the "EMRP Researcher Grant Calculator" spreadsheet available at <http://www.emrponline.eu/downloads.html>

The EMRP Researcher Mobility Grant does not include a salary allowance. There is a fixed rate allowance of 1800 € /month living allowance (with an additional sum for those with a family who relocates with them), a further 500 € every 3 months as a travel allowance, and 200 € / month as a contribution to the Guestworking Organisation's overheads. In addition 1500 € may be claimed every 6 months for attendance at a specific named conference or meeting. Note that some of these allowances are corrected for each country.

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RELATED JRP (each RMG is linked to a Joint Research Project of the EMRP)

PROJECT TITLE: ENG56 Traceable measurement of drivetrain components for renewable energy systems

PROJECT DESCRIPTION: Renewable energy resources are essential in guaranteeing sustainable energy for the future. Wind energy systems are regarded as one of the most promising technologies but reliability still needs to be improved, as they rarely reach the desired lifetime of 20 years without at least two mechanical failures of major drivetrain components. These failures can lead to downtimes of several weeks, which mean high operational costs. The problems are compounded for offshore wind farms where access and safety issues increase the costs of maintenance and repairs. This project will develop new approaches to deliver calibrated measuring standards and procedures for use in drivetrain production. There will be a focus on the accurate measurement of vital components such as shafts, bearings, gears and brakes. The results will prevent unnecessary costs, reduce the number of mechanical failures and extend the lifetime of wind energy systems.

For more details see:

<http://www.ptb.de/emrp/eng56-home.html>

http://www.euramet.org/research-innovation/search-research-projects/details/?eurametCtcp_project_show%5Bproject%5D=1265&eurametCtcp_project%5Bback%5D=473&cHash=34ba330b32e5f549fa52a45daadf76f7

The RMG-Researcher may have the opportunity to work with and/or produce joint papers with the following world-leading Researchers: Prof. Robert Schmitt (RWTH), Ralf Bernhardt (ZEISS), Dr. Vit Zeleny (Czech Institute of Metrology)

APPLICATION

ADVERT REFERENCE: ENG56 –RMG1

CLOSING DATE: The closing date is 23:59 CET on Monday, 5 September 2016

INTERVIEW DATES: If interviews are required they will take place between 3 and 7 October 2016

APPLICATION: All applications must be submitted via www.emrponline.eu

An application consists of a Research Schedule (a description of the work to be undertaken), CV, covering letter, and excel datasheet.

ELIGIBILITY: Full eligibility criteria are given here: www.emrponline.eu/downloads.html

THE AIM OF EMRP RESEARCHER MOBILITY GRANTS

"To develop the capacity of individuals in Metrology"

The EMRP provides Researcher Mobility Grants (RMGs) to increase the capability of the European metrology researcher community, by supporting countries in building and furthering their capacity in Metrology.

* From: *Decision No 912/2009/EC*, Official Journal of the European Union, 30 September 2009, L257, p12 available from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:257:0012:0025:EN:PDF>