

# Early Stage Researcher (ESR) NDTonAIR Cambridge

TWI is a world expert in engineering, materials and joining technologies. We provide industry with advice and know-how in design, fabrication, failure analysis and prevention.

The TWI Integrity Management Group (IMG) has been growing in the past few years due to the strong demand in the inspection and asset reliability business. Over the years, IMG has delivered important and sustainable growth due to the market need in various industries such as the Oil & Gas, Power Generation, Road Transport, and engineering infrastructure.

Condition and Structural Monitoring Section (CSM) will seek talented individuals to join this fast-moving team to underpin and drive technical excellence and expanding business in industrial sectors such as transport, energy and O&G.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie-Sklódowska-Curie grant agreement No 722134 and is part of the Marie Curie Initial Training Network (ITN) project NDTonAIR (Training Network in Non-Destructive Testing and Structural Health Monitoring of Aircraft structures). The ESR will develop a specific research project focused on guided-wave inspection of aerospace components using EMATs.

Within this project, the candidate will be part of an international team from seven European countries working collectively on all the major state of the art SHM techniques for aerospace. The goal is to train a new generation of scientists and engineers with a wide background of theoretical and experimental skills, capable of developing their research and entrepreneurial activities both in academy and industry and playing an active role in promoting the importance of quality inspection and SHM in aerospace components..

Successful candidates will have the opportunity to work together with the other members of the consortium for realizing this training programme and scientific collaboration will be stimulated by secondment of the recruited researchers and it will be aimed at improving the integration and comparison of different NDT techniques.

Applicants must possess good team and networking abilities, demonstrate initiative and self-motivation, and strong verbal and written communication skills. A good science degree and relevant industrial experience in non-destructive testing and structural and condition monitoring is essential. Applicants should have proficiency with the design, test and analysis tools relevant to the function with practical hands-on experience in sensor development and data analysis.

Candidates must have:

- A 1st class degree in mechanical, electrical, electronic or computer science
- Relevant experience on NDT and/or SHM
- Intrinsically high levels of motivation
- Excellent communication and presentation skills
- A good mixture of analytical, experimental and creative capabilities

The researcher must be a full-time employee. At the date of recruitment it is required that the individual is an 'early stage researcher' (i.e. in the first four years of his/her research career and not have a doctoral degree); as he/she will be enrolled in a PhD program at a UK university.

The researcher will spend at least 70% of time based at TWI facilities in Cambridge UK. The secondments are limited to a maximum of 30 % of the months spent implementing the research training activities under the action. The contract includes two planned secondments of 5 months and 6 months (11 months) at Warwick University.

Due to funding regulations the researcher must not have resided in the United Kingdom for more than 12 months in the past 3 years.

This role requires regular travel within the UK and overseas according to the demands of the project work.

Closing Date: 12 February 2017  
Reference number: 08/17

To apply, please click on the link below. You will then be directed to the online application form.

<https://www.octopus-hr.co.uk/recruit/application/apply.aspx?cid=261-5797CB9A-DA67-4F55-BDD5-0D95722A06FD&VacancyID=9291-8EC9586E-6717-4758-BAD5-A89DCEAD0627>