

THE UNIVERSITY OF NOTTINGHAM

Recruitment Role Profile Form

- Job Title:** Marie Skłodowska-Curie Fellow
- School/Department:** Institute for Aerospace Technology, Faculty of Engineering
- Salary:** from £27,856 to £35,018 per annum in accordance with the EC Marie Curie financial guidelines for this scheme
- Job Family and Level:** Research and Teaching Off scale
- Contract Status:** This post will be offered on a fixed-term contract for a period of 36 months
- Hours of Work:** Full time – 36.25 per week
- Location:** Aerospace Technology Centre, Innovation Park, Triumph Road, Nottingham, NG7 2TU
- Reporting to:** Dr. Dimitrios Chronopoulos, Prof. Gregor Tanner

Purpose of the New Role:

Failure of aerospace structures can be life-threatening for passengers and financially catastrophic for the operator and the manufacturer. This is the main reason for which a large part of an aircraft's lifecycle and operating cost is spent on inspecting its structural integrity on the ground. On-line detection and characterization of minor failures within composite aerospace structures can lead to a radical reduction of this cost. Computing the wave propagation characteristics through structural damage can be a computationally challenging task.

The successful applicant will be expected to make significant contributions to the development of wave interaction modelling tools as well as robust damage identification and classification tools for complex composites.

	Main Responsibilities	% time per year
1.	Review existing work relevant to the technical area of research.	10%
2.	Conduct original research contributing towards a PhD qualification in ultrasonic wave interaction with damage.	40%
3.	Develop and test new methods to contribute to the technical area of research.	30%
4.	Prepare project report and scientific publications.	10%
5.	Accomplish general tasks in the Composites Research group	10%

Knowledge, Skills, Qualifications & Experience

	Essential	Desirable
Qualifications/ Education	<ul style="list-style-type: none"> Excellent Masters Degree in a relevant discipline (e.g. Mechanical/ Aerospace/Civil) 	

	Engineering or Applied Maths), enabling the candidate to register for a doctoral degree	
Skills/Training	<ul style="list-style-type: none"> • Good communication skills, both orally and in written English, laying groundwork for the preparation of scientific articles and presentation of research at network meetings and conferences • Basic laboratory skills (safe operating practice) and use of instrumentation. 	<ul style="list-style-type: none"> • Expertise in wave modelling • Strong programming skills in C++ or equivalent.
Experience	<ul style="list-style-type: none"> • Research experience in a relevant area (see above). • Scientific writing • Oral presentations 	<ul style="list-style-type: none"> • Data analysis • Computer programming
Personal Attributes	<ul style="list-style-type: none"> • Well organised and self-motivated • Ability to work independently and as part of a team 	
Statutory/Legal	<ul style="list-style-type: none"> • Eligibility criteria for Early Stage Researchers in Marie Skłodowska-Curie ITNs http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-msca_en.pdf 	

Decision Making

i) taken independently by the role holder

Day-to-day work relevant to the individual research project being undertaken.

ii) taken in collaboration with others

Group work related to integration of individual research project into overall SAFE-FLY integrated project

iii) referred to the appropriate line manager (please name) by the role holder

Decisions regarding major changes of design strategies and strategic decisions of scientific direction and priorities, as well as financial, and personnel matters.

Additional Information

Informal enquiries may be addressed to Dr Dimitrios Chronopoulos (dimitrios.chronopoulos@nottingham.ac.uk). Please note that applications sent directly to these email addresses will not be accepted.

Permission to work in the UK

Please note that applicants for this post will be considered on an equal basis, subject to the relevant permission to work in the UK as defined by the requirements set out by UK Visas & Immigration. Please visit: <https://www.gov.uk/government/organisations/uk-visas-and-immigration> for more information.

The successful applicant will be required to satisfy the eligibility criteria for Marie Curie Early Stage Researchers, i.e:

- Must be within the first four years (full-time equivalent) of their research career
- Must not have resided or carried out their main activity (work, studies, etc.) within the UK for more than 12 months in the three years immediately prior to their recruitment.

Further information is available at <http://ec.europa.eu/research/mariecurieactions/>