

**The Placement**

Innovation Placements aim to encourage and facilitate knowledge exchange by giving PhD students the opportunity to work with industry, SMEs and policy organisations relevant to the [Industrial Strategy](https://www.gov.uk/government/topical-events/the-uks-industrial-strategy).

These placements will enable researchers to develop and enhance their professional and research skills; increase their future employability; and develop and consolidate relationships between Higher Education and industry sectors.

**General Guidelines**

* This award is available for EPSRC PhD students (supported by any routeof EPSRC funding) who are currently completing their PhD Applications from MRes students will not be considered.
* Applications will be considered for placements scheduled between thesis submission and viva.
* Year 1 students must have passed their MPhil/PhD upgrade by the time of the placement to be eligible for the fund.
* The placement must be unpaid and not directly related to your research project.
* Your registration must be interrupted for the duration of the placement.
* Length of placement: up to a maximum of six months for current student applications.
* Types of placement: applications will be considered for placements with a non-academic partner if they can provide the student with distinctive research training and experience not available in an academic setting. To date, King’s has supported Innovation Placements in Pharma, MedTech, the Third Sector and the Civil Service
* Applicants can apply for a maximum of £8,000. Applications above the maximum limit will be considered on a case-by-case basis.
* All placements need to be completed and payments made by the end of March 2020.

**The Application**

Please ensure that your Faculty supports this request for a placement and will extend/approve interruption of studies, then complete all sections of this form and return to [doctoralstudies@kcl.ac.uk](mailto:doctoralstudies@kcl.ac.uk)

**Applicant details**

|  |  |
| --- | --- |
| Name | Tigany Noor Abubaker Tigany Zarrouk |
| Student Number | 1734605 |
| E-mail address | tigany.zarrouk@kcl.ac.uk |
| Telephone Number | 07833198259 |
| School and Department | Physics |
| Primary/Co- Supervisor/s | Tony Paxton and Andrew Horsfield |
| PhD Start Date | 01/10/2017 |
| Expected thesis submission deadline | 30/09/2021 |
| Project Title | Discovering atomic scale mechanisms of stress corrosion cracking in aerospace titanium alloys |
| Please attach evidence that you have successfully upgraded from MPhil to PhD | Yes |

**Please select your EPSRC funding stream:**

EPSRC Industrial CASE Student

|  |  |
| --- | --- |
| Placement Organisation | Potential organisations are, in order of preference:  SKF (Svenska Kullagerfabriken, Netherlands)  ThyssenKrupp Crankshaft Co. LLC (Germany)  Timet |
| Address of Placement site | TBC |
| Placement Coordinator name and job title | Sebastian Echeverri Restrepo (SKF) |
| E-mail address |  |
| Start date (*dd/mm/yy)* |  |
| End date *(dd/mm/yy)* |  |
| Please attach a letter/email from the placement coordinator confirming details of the placement | Attached Yes  No |

**Rationale for the Placement**

Please give a brief description of the proposed host organisation and the nature of the placement. Then provide a rationale describing how you expect this experience will:

* offer complementarity with your research project;
* enable you to develop and/or consolidate specific professional and/or research skills;
* enhance your employability; and
* develop and/or consolidate a synergistic relationship with an external organisation which will facilitate knowledge exchange between King’s and that organisation.

(maximum 600 words)

Having the opportunity for a placement with SKF will provide me with a much broader learning experience during my PhD. The metal industry is fascinating: large-scale organisations are in fierce competitiion to create products which work evermore efficiently and at lower cost, with a small margin for error. In addition, their success in innovation is critical to other secondary economies, such as the motor and aerospace industry. As such, cutting-edge research, effective management and teamwork are paramount to the continued growth and profit of the company. I wish to learn more about how such a large company manages its workforce to enact strategies, in both research and the marketplace, to outdo their competitors, and how I can play a role in being a part of their success. The placement will give me the opportunity to to network and build connections with people in industry, which will further aid my applications for jobs outside of academia, where industry is my intended trajectory.

My research is currently focussed on the atomistic simulation of titanium alloys currently used by Rolls-Royce in their jet engines, and how defects, inherent in all materials, can cause macroscopic changes to the properties of these alloys by interaction with impurities, which are introduced in the processing stages of the components and during service. Furthermore, my aim is to simulate the stress corrosion cracking of titanium alloys, such that one can elucidate a particular mechanism by which these alloys fail due to the introduction of corrosive impurities and defects. Thus my research probes the very fundamentals of how manufactured metals change service how a particular component can operate while in service. My placement with SKF is

To become immersed in industry will be

Please provide a budget for the placement. Costs will include your monthly stipend payment at your current rate. If you are working away from London please budget for accommodation, travel and subsistence costs. We will consider budget requests above £8000 on merit in relation to the pool of applications received.

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| --- | --- |
| **Item** | **Cost** |
| Stipend @ £ 1,564.75 pcm for *x* months |  |
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|  |  |
| **Total requested** | **£** |

I confirm that the information provided in this application is, to the best of my knowledge, true, accurate and complete. I confirm that I will provide a report on the impact of any funding that is awarded.

|  |  |  |
| --- | --- | --- |
| **Applicant signature** |  | Date |
| **Supervisor Name** | Tony Paxton |  |
| **Supervisor Signature** |  | Date |
| **CDT Director / PGR Lead Name** |  | Date |
| **CDT Director / PGR Lead Signature** |  | Date |
| **Student Activity Code for funding transfer if successful:** | |  |

**Supporting statement from your supervisor**

Please comment on the applicant’s progress through their research programme and how this Innovation Placement opportunity will be of benefit to the applicant, to the host organisation and to King’s.