

This is an opportunity to join the EC Horizon 2020 funded SUSTICOAT project, a Marie Skłodowska-Curie Initial Training Network (ITN), for PhD students linking synthesis, characterisation, modelling and formulation of sustainable coatings for corrosion protection.

The SUSTICOAT project offers the opportunity to 5 Early Stage Research (ESR) to work at AkzoNobel researching formulations for specific applications. ESRs will also be enrolled in a PhD programme in The School of Chemical Engineering and Analytical Science/School of Materials at The University of Manchester, UK. Students will spend the first 12 months of the project at the University of Manchester, followed by 18 months working in AkzoNobel laboratories (Netherlands, Sweden or Italy depending on the project). The ESRs will return to the University of Manchester for the final 6 months of the project.

ESRs are expected to start at the end of March 2017. An attractive salary and conditions will be provided, including family benefits where relevant.

You will take part in a challenging and exciting project at the forefront of research to develop new coatings formulations addressing the current needs for sustainability in our society. You will benefit from several network-wide activities, workshops and specific training courses plus opportunities for secondments to partner institutions.

We are looking for bright and motivated individuals with the will to excel in a highly competitive environment. Applicants must satisfy the PhD entry requirements of the University of Manchester; full details can be found at: www.manchester.ac.uk/postgraduate/howtoapply. In particular applicants for PhD will generally need to have achieved a level of attainment equivalent to a UK Master level qualification or equivalent (i.e. Bologna level 7) with a course average of 60% or greater (i.e. equivalent to UK degree classifications 2:1 or 1st). However, exceptionally, those with a Bologna Level 6 qualification, such as a UK Bachelor degree graded at 2:1 or above, may be admitted to an MPhil degree from which transfer to a PhD is possible after successful completion of the first year. Applicants whose language of instruction is not English will need to demonstrate English competency by a valid recognised Language qualification such as IELTS or TOEFL and attain a minimum of IELTS 6.5 (with no sub test < 6), TOEFL 570 with 5.0 in the TWE (Test of Written English) or CBTOEFL 230 with 5.0 in the TWE.

Successful applicants have excellent communication skills being networkers capable of interacting and building strong relationships. They have a hands-on and proactive mentality, the ability to work independently or in a team and to learn new concepts outside their core disciplines. Other residency and research experience requirements apply according to Marie Curie Guidelines for ITNs: candidates should not have lived for more than 12 months in the past 36 months in the Netherlands, and candidates should have less than 4 years research experience, since completing their research qualifying degree.

In order to be eligible for these European Commission funded posts you need to classify as an Early Stage Researcher (ESR). An early stage researcher is somebody who has been qualified to undertake a PhD for less than 4 years. Unfortunately if you have more than 4 years research experience and / or you already have a doctorate then you are not eligible.

ESR 4 - Correlating accelerated corrosion testing with real application performance through the characterisation of coating microstructure

PhD supervisors: Dr Michele Curioni & Professor Xiaorong Zhou, School of Materials, The University of Manchester

Successful applicants should have a degree in Materials Science/Engineering, Chemistry, physics or a

closely related subject.

Specific competences that are desirable, but not essential for this position are:

- Previous practical laboratory experience related either to corrosion studies, coating formulation or polymer synthesis
- Demonstrable knowledge of electrochemical processes related to aqueous corrosion
- Demonstrable knowledge on the use of electrochemical methods to characterize corrosion processes
- Basic knowledge of one programming language, preferably LabVIEW, but also C++, Visual Basic, Python or Delphi would be considered.

Demonstrated experience in advanced electrochemical methods for corrosion studies, for example electrochemical impedance spectroscopy or electrochemical noise analysis and advanced computer programming for physical measurements and data acquisition is a plus.

The application will be a two-stage process, where candidates will first apply to AkzoNobel (online see below), then eligibility for a PhD degree at The University of Manchester will be assessed with eligible candidates being invited to AkzoNobel for final interview.

For further information, please contact Simon Gibbon, Community of Practice Leader - Corrosion Protection (simon.gibbon@akzonobel.com). Only online applications will be accepted. We welcome your online application via www.akzonobel.nl/careers, reference **160007XK**. Please note that your application information including CV / proof of qualification will be shared with The University of Manchester, so they can assess your acceptability for the PhD programme.

More information:

<https://www.akzonobel.com/careers/vacancies/160007xk>