

ImplantSens

European Training Network for development of implantable biosensors

Early stage researcher position at Southampton University

Department of Chemistry

ESR7: Enzyme immobilization and modelling

The fellow will be responsible for modeling the performance of immobilized enzymes in redox-polymer based sensors and directly validating the models using experimental data generated within the ImplantSens project. There will also be an opportunity for the fellow to carry out some experimental measurements of their own. The fellowship will suit candidates with a background in chemistry, chemical engineering or biochemistry and an interest in coupled (bio)chemical kinetics, mass transport and the applications of mathematical modeling. Some familiarity with programming and/or modeling tools such as Matlab, Mathematica, Maple or Comsol would be an advantage.

Planned Secondments:

- Ruhr-University Bochum - Design of redox polymers and development of enzyme switching protocols
- CNRS Bordeaux - Design of electrode architectures.
- Aptusens Malmoe - Biomedical evaluation of biosensors operating ex vivo under homeostatic conditions.

Employment: The fellow will be employed on a full-time, 3 year fixed term, contract as a graduate research assistant.

About the Employer

Southampton is one of the UK's top research universities. It attracts talent from across the globe with 35% of its academic staff and 29% of its students from outside the UK. The University was ranked in the top 20 within the UK and within the top 100 in the QS World University Rankings 2019, based on indicators such as research excellence and employability.

The University has a turnover of over £525 million a year, around 6,200 members of staff and over 16,000 undergraduates and over 7,600 postgraduates, based in its five campuses across the city of Southampton and one in Winchester in the south of England.

The successful applicant will join the research group of Professor P. N. Bartlett FRS based in the Chemistry Department in Southampton. The Department has a strong electrochemistry research group, currently comprising 8 academic research groups, and is well equipped for research in all aspects of electrochemistry.

At the University of Southampton, we value diversity and equality. The University recognises that employees may wish to have working patterns that fit with their caring responsibilities or work-life balance. Due consideration will also be given to applicants who have had career breaks for reasons including maternity, paternity or adoption leave, disability or illness. Both the University of Southampton and Chemistry Department are proud to hold Athena Swan Silver Awards, showing their commitment to maximising the potential of all employees.



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