

Superdielectrics Limited

- Position :** Senior Polymer Chemist
- Sector :** Science for the renewable energy / energy storage sector
- Location :** Chesterford Research Park, CB10
- Salary :** Negotiable but likely to be in the £30,000-£45,000 bracket and will be very much dependant on ability and experience

Superdielectrics Limited set out in 2013 to develop biocompatible, electrically conducting hydrophilic polymers which had the potential to be used in Bioelectronics. During their research and development programme, they noted that their materials exhibited very unusual electrical properties. Following independent research by the Bristol University Electrochemistry group, it was found that when tested in devices with simple carbon electrodes, the devices were characterised by geometrical capacitances three or four orders of magnitude larger than the geometrical capacitances of carbon electrodes in conventional electrolyte solutions. It was determined that these outstanding electrochemical properties could be exploited in the development of high energy density supercapacitors.

Their goal now is to develop high energy density, low cost, low environmental impact electrical energy storage devices that will help create a clean and sustainable global energy and transportation system.

As part of their continued development, they now have an opportunity for someone to join their team in the position of

Senior Polymer Chemist

This exciting position will see you working at the cutting edge of technology. You will be primarily developing the methods of polymerisation of our polymers by thermal / UV and gamma. You will develop a range of polymerisation techniques to make novel hydrophilic polymers and look at ways in which to improve their performance.

You will have a good working knowledge of polymer chemistry and will be able to demonstrate the ability to plan, organise and carry out testing work and to analyse the results.

About You:

- Degree (preferably connected to polymerisation and molecular characterisation) in Chemistry, Polymer Science, Material Science, or a very closely related subject – this is **essential**
- Post-Graduate Qualification in Chemistry, Polymer Science, Material Science, or a related subject – this is also **essential** (MSc, PhD etc)
- Industry experience – **this is essential. We cannot consider people who only have experience in an academic environment.**
- Strong understanding of organic chemistry and polymerisation



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- Experience of technology / science driven research and development in an industrial environment
- Previous experience in a R & D environment in a polymer related field
- Experience in using techniques such as Raman Spectroscopy, Fourier Transform Infrared Spectroscopy, UV-Vis Spectroscopy, Gamma Radiation, Differential Scanning Calorimetry, Thermogravimetric Analysis
- Able to develop new formulations and processes
- Specific experience of curing techniques for polymers is extremely beneficial Able to apply a high level of scientific rigor to the analysis of data and results, and use this to draw & present conclusions to other scientists and non-technical people
- Able to keep accurate records and to compile technical reports
- Any experience of patents for science is beneficial
- Able to work to industry standards eg ISO 9001
- Happy to work with pilot plant for scale up and commercialisation of products
- Have a high regard for health and safety and for appropriate housekeeping
- Any interest in renewable energy or energy storage is beneficial as this will ultimately be where the application of the science will be used
- Not happy to accept the status quo, always wanting to push the boundaries of what is deemed acceptable or possible

Candidates **must** have the right to live and work in the UK. We are not able to offer sponsorship for this vacancy.

What is on offer :

- Basic salary from £30,000-£45,000 (very negotiable according to ability and experience)
- Holidays 25 days plus statutory holidays
- Pension Plan
- The Company intends to set up an 'in service' share option scheme subject to HMRC approval.
- The chance to be part of something truly special

To discuss this role in more detail, please contact our recruitment partner Chris Carter at Nicholas Associates Group in Sheffield.

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