

Postdoctoral Researcher Position Available



•• Physical Ecology and Sensory Biophysics of Electoreception ••

A postdoctoral research position is available in the group of Professor Daniel Robert at the School of Biological Sciences, University of Bristol. The post is funded for three years and is part of a multidisciplinary team supported by an ERC Advanced Investigator Grant. The project is entitled “mechanisms of electroreception in bees and other terrestrial animals”, and seeks to elucidate the biophysical sensory mechanisms subtending electroreception in air. The planned work will characterise the generation of mesoscale electric fields at the scale of flowers and insects, as well as investigate the mechanisms by which bees and other insects sense and recognise weak electric fields within their environment and fields that arise as they interact with plants and other insects.

For this post, the successful candidate will have an engineering or physics background, including a track record in sensor research and/or the physics of atmospheric electricity, and show a demonstrable interest in biological research. A key asset will be the capacity to identify and solve problems in electrostatics and its application to mesoscale physics and biological systems, using empirical measurements, computer modelling and innovative characterisation methods. An important quality will be the capacity of working in both laboratory and field environments. The successful candidate will be expected to work in collaboration with the other postdoctoral researchers and other members of the sensory biophysics and bionanoscience research group.

The successful candidate will hold a PhD in physics or in a related engineering research, or have completed their PhD studies and have already submitted their thesis. You will be a highly motivated individual with the capacity to work both independently and in a team, with a keen interest in science at the biology-physics interface. Deadline for applications is November 30th 2017.

References to literature:

Clarke D, Whitney H, Sutton G, Robert D (2013) Detection and learning of floral electric fields by bumblebees. *Science* 340:66-69

Sutton G, Clarke D, Morley E, Robert D (2016) Mechanosensory hairs in bumble bees (*Bombus terrestris*) detect weak electric fields. *PNAS* 113:7261-7265

More information can be found at: <http://www.bristol.ac.uk/biology/people/daniel-robert/overview.html>. For further details or informal enquiry, please contact Prof D. Robert at <D.Robert@Bristol.ac.uk>.