**Focus on Fundamental Properties of Interfaces in Energy Conversion and Storage**

**Guest Editors**

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*JPhys Energy* is delighted to be publishing a focus issue on the Fundamental Properties of Interfaces in Energy Conversion and Storage in conjunction with the 2nd Annual MISE workshop. More information on the journal, which is published by IOP Publishing, can be found [here](http://iopscience.iop.org/journal/2515-7655).

**Scope**

The interface between active components and, indeed, the surface are usually of great importance in determining the functionality of any energy materials application. For example, the critical region determining the performance and lifetime of most electrochemical systems is normally at the electrode side of the electrode/electrolyte interface. Typically this electrochemically active region only extends a few microns and for best performance involves intricate structures and nanocomposites. Much of the most exciting recent energy research involves understanding processes occurring at this interface and in developing new means of controlling the structure at the nanoscale.

This focus collection builds upon a workshop organised under the Multiscale Tuning of Interfaces and Surfaces for Energy Applications Network (UK) and seeks to extend our understanding of the key aspects relating to interfaces in materials for energy conversion and storage. We warmly welcome research papers and topical reviews addressing this understanding covering topics such as:

* Control of defect and interface chemistry for improved energy materials
* Modelling atomistic processes at interfaces and surfaces
* Structure and stability of interfaces
* Modelling transport along and across interfaces
* Creating continuous composite structures using phase transitions and flow
* Materials processing/engineering of ceramic interfaces

**Submission process and deadline for submission**

We encourage submissions from all authors whose work fits with the scope of this focus collection. The collection will also feature invited contributions. All focus issue articles are subject to the same review process as regular *JPhys Energy* articles. Authors are invited to contact one of the guest editors, or the journal team directly, to discuss the suitability of their work prior to submission.

Articles should be submitted via the Web using our [online submission form](https://mc04.manuscriptcentral.com/jpenergy-iop). Where the form asks for 'Article Type' please select 'Special Issue Article'. Then select **Focus on Fundamental Properties of Interfaces in Energy Conversion and Storage**' in the 'Special Issue' drop down box that appears.

The submission window will be open until **31 January 2018**. *JPhys Energy* is able to publish special issues incrementally. This means that articles submitted early will be published as soon as they are accepted and prepared for publication, without being delayed waiting for other papers in the collection. If you are not able to meet the deadline, please let us know.

