

**A Special Issue on**  
**“Clean Conversion and Utilization of Energy:**  
**Green Processes and Nanotechnology”**

**ENERGY AND ENVIRONMENT FOCUS (EEF)**

<http://www.aspbs.com/efocus/>

To supply clean, sustainable and economic energy at a terawatt scale in the next one or two decades is required to address most of the existing, critical energy and environmental challenges that hinder the progress of human civilization. The efficient harvest of renewable energy sources, such as solar, hydroelectric, biomass, wind, geothermal *etc.*, and the subsequent conversion and storage of these energies into the forms that can be used by existing industrial/civilian infrastructures through green and sustainable approaches, are highly desired and always believed to be the only way to solve the green energy crisis. This consensus drives the development of fundamental research, frontier nanotechnology and the associated green processes, which in reverse pushes forward the advance of the green energy research, technology and industry. This special issue focuses on the conversion and utilization of energy in various forms by green methodology or advanced nanotechnology, and we invite submissions of **review articles** and **original research articles** (full paper/communication) including but not limited to the following topics:

- Photocatalytic materials and processes
- Photochemical and photoelectrochemical conversion of solar energy
- Homogeneous and heterogeneous catalysis for energy conversion
- Green preparation processes for energy materials
- Advanced nanotechnology for supercapacitors, fuel cells, batteries *etc*
- H<sub>2</sub> generation from water splitting, methane steam reforming *etc*
- Fuel synthesis from CO<sub>2</sub> reduction, biomass conversion *etc*

**Manuscript Submission**

Manuscript must be prepared according to Journal's guidelines, available at [http://www.aspbs.com/efocus/inst-auth\\_efocus.htm](http://www.aspbs.com/efocus/inst-auth_efocus.htm). Submit your manuscripts in a single MS Word or PDF format (including all figures/tables) directly to **the Guest Editors** via **email**. A graphical abstract is mandatory for all types of articles. Please indicate your intention to publish in the special issue “Clean Conversion and

Utilization of Energy: Green Processes and Nanotechnology”.

All papers submitted to this issue will be subject to a strict peer-review process to ensure high quality. Please indicate in the cover letter that the submitted manuscript has not been published in part or in whole, is not currently submitted to any other journals for review, and will not be submitted elsewhere before a final decision is made by this journal.

### **Important Date**

***Manuscript Due: 1 March 2015***

***Authors' Notification: 10 April 2015***

***Expected Publication Date: June 2015***

### **Manuscript Submission Address**

**Dr. Xu Xiang** ([xiangxubuct@163.com](mailto:xiangxubuct@163.com))

### **Guest Editors**

**Prof. Xu Xiang**, State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing, China

Email: [xiangxubuct@163.com](mailto:xiangxubuct@163.com)

**Prof. Yong Ding**, College of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, China

Email: [dingyong1@lzu.edu.cn](mailto:dingyong1@lzu.edu.cn)

**Prof. Dongpeng Yan**, College of Chemistry, Beijing Normal University Beijing, China

Email: [yandp@bnu.edu.cn](mailto:yandp@bnu.edu.cn)

**Dr. Yong Yan**, National Renewable Energy Lab (NREL), Golden, Colorado, USA

Email: [yong.yan@nrel.gov](mailto:yong.yan@nrel.gov)

**Dr. Zhuangqun Huang**, Bruker Nano Surfaces, Santa Barbara, California, USA

Email: [Teddy.Huang@bruker-nano.com](mailto:Teddy.Huang@bruker-nano.com)