



## Special Issue on Redox Reaction

### Call for Papers

Redox (reduction-oxidation) reactions include all chemical reactions in which atoms have their oxidation state changed. This can be either a simple redox process, such as the oxidation of carbon to yield carbon dioxide (CO<sub>2</sub>) or the reduction of carbon by hydrogen to yield methane (CH<sub>4</sub>), or a complex process such as the oxidation of glucose (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>) in the human body through a series of complex electron transfer processes.

Fundamentally, redox reactions are a family of reactions that are concerned with the transfer of electrons between species. The term comes from the two concepts of reduction and oxidation. It can be explained in simple terms:

1. Oxidation is the loss of electrons or an increase in oxidation state by a molecule, atom, or ion.
2. Reduction is the gain of electrons or a decrease in oxidation state by a molecule, atom, or ion.

Although oxidation reactions are commonly associated with the formation of oxides from oxygen molecules, these are only specific examples of a more general concept of reactions involving electron transfer.

Redox reactions, or oxidation-reduction reactions, have a number of similarities to acid-base reactions. Like acid-base reactions, redox reactions are a matched set, that is, there cannot be an oxidation reaction without a reduction reaction happening simultaneously. The oxidation alone and the reduction alone are each called a half-reaction, because two half-reactions always occur together to form a whole reaction. When writing half-reactions, the gained or lost electrons are typically included explicitly in order that the half-reaction be balanced with respect to electric charge.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring **Redox Reaction**.

Authors should read over the journal's [Authors' Guidelines](#) carefully before submission, Prospective authors should submit an electronic copy of their complete manuscript through the journal [Paper Submission System](#).

According to the following timetable:

Submission Deadline	August 15th, 2013
Publication Date	October 2013

#### Guest Editor:

For further questions or inquiries

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