Editorial

On the Publication of the Special Issue

Macromolecular Research has been launched in 1993 under the name of “Korea Polymer Journal” by the Polymer Society of Korea (PSK). The name of journal was changed to “Macromolecular Research” from 2002 after growing up to be included in Science Citation Index (SCI). Recently, the number of submitted papers and the impact factor of Macromolecular Research have been continuously raising up.

As a new activity to attract broad interests of the readers and to boost up the quality of the journal, the Editor-in-Chief Prof. Chulhee Kim decided to introduce the special issues in which some different research fields are introduced once in a while. The Editorial Board chose me as the first guest editor, since I started the Engineering Research Center in 2010 supported by National Research Foundation of Korea.

During the first decade of the 21st century, a new research trend was born for developing of innovative diagnostic and therapeutic systems based on nanobiotechnology. The new terminology “theranostics” has been created a couple of year ago, which means “the combined delivery of therapeutic and diagnostic agents”. This “theranostics” can be achieved effectively by using functional biomedical polymers, so that the title of this special issue is “Theranostic Macromolecules”.

The biomedical polymer division of PSK has been founded in 1993. The first International Symposium on Biomaterials and Drug Delivery (ISBD) was organized by Dr. Hae Bang Lee in Daejeon in 1993, and was held three times in consecutive year. And the biomedical polymer division meeting was held two times every year together with the annual meeting of PSK, where young scientists get together for interdisciplinary discussions. Successful achievements have been made since then and the importance of biomaterials and drug delivery system (DDS) is now widely recognized in Korea. The total presentation of the biomaterials division was 144 papers in the annual fall meeting of PSK in 2011.

With this special issue, I invited leading scientists from Korea, Japan, China and USA who have contributed significantly to the DDS field from the polymer sciences as well as the pharmaceutical sciences. This issue includes a feature article for stimuli sensitive polymers, and the articles on nanoparticles for drug delivery and molecular imaging, hydrogels for sustained delivery, new biomaterials for drug delivery, biomaterials for gene delivery.

I anticipate that this cutting edge science will be extended to translational research and contribute to the discovery of biomaterials for new drugs and related development in the near future. I express my deepest gratitude to the Editors of Macromolecular Research for their editorial help and this opportunity.

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