

# **Special Issue: 5th International Conference on Plasma Medicine (ICPM5), Nara, Japan, 18-23 May 2014**

## **FOREWORD**

It is my privilege and honor to serve as the Guest Editor for this Special Issue of *Plasma Medicine*: 5th International Conference on Plasma Medicine (ICPM5). The ICPM5 was held in Nara, Japan, from May 18 to May 23, 2014. The goal of the conference was to provide a venue for the exchange of new ideas and information among those who work on applications of plasma science to fields associated with biology and medicine. As it turned out, the ICPM5 was the largest among all ICPMs that have been held so far, which indicates the rapid growth of the field of plasma medicine in recent years. Approximately 360 participants attended from about 30 countries, including 338 registered professionals in science, medicine, and engineering, as well as students. In total, 308 presentations were given, including 104 oral presentations. The topics covered by the conference were also wide ranging, not limited to therapeutic use of gas plasmas. The 13 categories used in the conference were (1) medical treatment with discharge plasmas, (2) biological reactions to gas plasmas or plasma-treated media/surfaces, (3) plasma-based sterilization or decontamination, (4) agricultural applications of plasma technologies, (5) pharmaceutical applications of plasma technologies, (6) plasma-based surface modification for medical/biological applications, (7) biochemical/biomolecular engineering with plasmas, (8) fundamentals of atmospheric-pressure plasmas, (9) plasma-surface interactions relevant for medical/biological applications, (10) plasma sources for medical/biological applications, (11) plasma and/or liquid diagnostics and sensors, (12) modeling and numerical simulation, and (13) others. Offering many exciting presentations on the latest developments in these areas, the conference, it seemed to me, was a great success.

This special issue of *Plasma Medicine* publishes some of the work presented in the ICPM5 in the form of journal papers accepted after peer review. Although the papers here represent only a small portion of wide-ranging work presented at the conference, I am certain that the reader will have great interest in the latest and most important developments in plasma medicine presented in this special issue.

Satoshi Hamaguchi

hamaguch@ppl.eng.osaka-u.ac.jp

Center for Atomic Molecular Technologies,

Graduate School of Engineering, Osaka University