## **Preface**

This volume collects, in written form, eight plenary lectures and twenty-five selected contributions from invited and contributed lectures delivered at the International Workshop on Potential Theory 2004. The workshop was held at Shimane University, Matsue, Japan, from 23 to 28 August, 2004. There were 19 plenary lectures and 35 invited and contributed lectures with 77 participants coming from 15 countries.

The topic of the workshop was Potential Theory and its related fields. There were stimulus talks from classical potential theory to pluri-potential theory and probabilistic potential theory. The organizing committee consisted of Hiroaki Aikawa (chairman), Takashi Kumagai, Fumi-Yuki Maeda, Hiroaki Masaoka, Yoshihiro Mizuta, Minoru Murata, Masaharu Nishio, Takeo Ohsawa, Katsunori Shimomura, Noriaki Suzuki, Maretsugu Yamasaki; together with local organizers at Shimane University, Daishi Kuroiwa, Shuji Machihara, Toshihiro Nakanishi and Hiroyuki Tsutsumi.

We are very grateful to all institutions and individuals who have supported the workshop. We would like to express our sincere thanks to Professor Masatoshi Fukushima and Professor Jun Kigami who are willing to deliver plenary lectures as well as to support international participants. Professor Junjiro Noguchi kindly offers his grant to invite many participants. His grant is one of our main resources. Professor Minoru Murata, Professor Masaharu Nishio and Professor Takeo Ohsawa of the IWPT organizers also help international participants financially. We would like to acknowledge the supports by

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Sapporo, March 2006

The Editors: Hiroaki Aikawa (Chief) Takashi Kumagai Yoshihiro Mizuta Noriaki Suzuki

All papers in this volume have been referred and are in final form. No version of any of them will be submitted for publication elsewhere.