

Preface

Utilization of plants and microorganisms for environment and energy

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The JSPS Sweden colloquium “Green Chemistry in Plants and Microorganisms” was held in Stockholm on 25 May 2009 by the great support of the Stockholm Office of the Japanese Society for the Promotion of Science (JSPS) and the Royal Institute of Technology (KTH), with Professor Vincent Bulone at KTH and I at Nara Institute of Science and Technology (NAIST) as the organizers. Since we planned this colloquium on environmental issues related to plants and microorganisms, we proposed the theme of this colloquium as “Green Chemistry”. Although “Green Chemistry” originally means “chemistry that minimize the environmental load”, in this colloquium we considered “Green Chemistry” as “sciences related to environment and energy utilizing characteristics and ability of plants and microorganisms”. Finally we selected 10 invited speakers from Sweden and Japan in this research field. The invited speakers are Johan Schnürer (Swedish University of Agricultural Sciences, Microbiology), Kouki Hikosaka (Tohoku University, Plant Physiological Ecology), Brigitta Bergman (Stockholm University, Cyanobacteria), Toshihisa Kotake (Plant Cell Wall Biosynthesis), Kiyohiko Igarashi (University of Tokyo, Cellulose Degradation), Lars Berglund (KTH, Cellulose

Utilization), Tatu Kaneko (Japan Advanced Institute of Science and Technology, Lignin Utilization), Eva Nordberg-Karlsson (Lund University, Plant Metabolite Utilization), Oskar Werner (Uppsala University/SweTree Technology, Material Surface Modification), and Ove Nilsson (Umeå Plant Science Center, Forest Biotechnology). In addition to the invited speakers a number of researchers and students from Sweden and Japan participated to the colloquium and presented their researches on posters. The participants and audiences discussed actively after the oral presentations and in front of poster presentations, which were expected to promote new collaborations between two countries.

This special issue of *Plant Biotechnology* contains papers presented in the colloquium, which was published as the proceeding of the colloquium, using budget provided by JSPS. We would like to thank Professor Hiroshi Sano and the staffs of the Stockholm Office of JSPS, and Ms. Johanna Fugelstad and Lotta Rosenfeldt of KTH, for their devoted supports in preparing and managing the colloquium. We would also like to thank Ms. Kuniko Yasumi, the manuscript manager, and the invited editors and reviewers for their help in editorial processes.

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