

Preface



Professor Yanagida and I organized the *Dye Solar Cell Osaka Pre-symposium* on 25 July 2003, prior to the XXIst International Conference on Photochemistry at Nara, Japan, which focused on recent developments in the dye-sensitized solar cell (DSC). The pre-symposium was aimed both at reviewing the present and future scope of the DSC technology by inviting distinguished researchers from abroad, by surveying the development of DSC research, and by unveiling a number of unpublished accomplishments by Japanese research institutions. The pre-symposium was also an opportunity to celebrate Prof. Yanagida's retirement in March 2004. As is widely known, a DSC demonstrating a very high conversion efficiency was constructed and reported by Prof. Grätzel. This DSC has attracted attention from researchers and engineers with respect to both basic science and applied technology. Prof. Yanagida is one of the few outstanding researchers who is recognized as having contributed greatly to harness a new energy resource, which helped to initiate DSC research. He started his research to understand and develop DSC just after Prof. Grätzel's discovery. Prof. Yanagida pointed out that it would be important to develop DSC using a solid type hole transport system rather than a liquid electrolyte containing organic solvents, and has demonstrated several types of solid DSC using polymer, conducting polymer, or molecular gelators. He is indeed a leader in the field not only in Japan, but also worldwide. His research has stimulated many Japanese researchers to join this field and has played an important role as a trigger of

a number of remarkable contributions to the development of DSC.

This special issue is dedicated to Prof. Shozo Yanagida on the occasion of his retirement. Not only overview articles by the speakers invited to the pre-symposium, but also scientific and technical papers written by the poster presenters are collected in this issue. The authors include researchers in academic institutions and in industry. This special issue is an excellent opportunity to publish the accomplishments achieved by researchers and engineers in industry. As a guest editor, I hope that readers of the journal will appreciate the information and ideas related to DSC which may previously have been unknown or overlooked.

A brief description of Prof. Yanagida's career follows. Prof. Yanagida graduated Osaka University in 1964. After finishing his master's coursework at the same university, he started his academic career as an assistant professor in organic chemistry at Osaka University. When he was promoted to an associate professor in 1980, Prof. Yanagida entered a new field, photo-energy conversion using photocatalysts. He became a full professor in 1987 and broadened his research field to include not only DSC, but also microwave chemistry and light-emitting systems. He was granted the Young Distinguished Chemist award from the Japan Oil Chemists' Society, the Award for Remarkable Achievement in the research of photo-energy conversion systems from the Yazaki Foundation, and the

SPACC prize for his wide range of scientific achievements from the Society of Pure and Applied Coordination Chemistry.

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