



Welcome Address

Director General of the Yamada Science Foundation

Junjiro KANAMORI

Ladies and Gentlemen,

On behalf of the Yamada Science Foundation, I would like to extend our heartfelt welcome to all participants of the Yamada Symposium (YS-4) on Advanced Photons and Science Evolution 2010. This symposium is the 4th of the Yamada symposium series that was created at 2003 on the occasion of the 25th anniversary of the foundation. According to my predecessor Prof. Yasusada Yamada who was the director of the Foundation at that time, the Yamada Symposium aims at giving new perspectives of selected current research activities for the younger researchers who are going to play central role in research activities of the next generation.

I would like to describe briefly the Yamada Science Foundation (YSF), summarizing the outline given in the homepage of the Foundation (<http://www.yamadazaidan.jp>). The Foundation was established in 1977 with the donation of about 30 million dollars made by late Mr. Kiro Yamada, President of The Rohto Pharmaceutical Company Limited at that time where he worked for more than fifty years. Concerned with the lack of innovative works in Japan's science and technology, he intended to help assist creative basic research in the fields of physics, chemistry and life sciences. His deep understanding is reflected in the following sentences of the outline of the Foundation. It mentions that Science has its own intrinsic motivation of development irrespective of whether it is of practical use or not. The support of the Foundation is made to promote pure science based on its intrinsic motivation.

YSF supports both individual research and international conferences and symposia. One of the characteristics of its support is the promotion of international science activities individual and collective. Another characteristic is an emphasis on interdisciplinary projects.

Before going into further explanation of our intention, let me introduce myself briefly. I was a professor of theoretical solid state physics at Osaka

University from 1965 to 1991 and served as President of the university for six years, then as Director of the International Institute for Advanced Studies Kyoto, until March of the last year. The promotion of cross-disciplinary research has been always one of my main concerns in the career. I used the word 'cross-disciplinary' in place of 'interdisciplinary' following the famous Nobel laureate, P.W.Anderson. Let me quote a few sentences from one of his addresses given in Japan. After mentioning that the growth points of science lie primarily in the gaps between the sciences, so that we believe in fostering cross-disciplinary research in growth areas, he explains the reason why he uses the word cross-disciplinary as follows. It is to emphasize that we are not trying to create new disciplines which often rigidify into new, even narrower intellectual straightjackets, but that we approach problems by cross-coupling between scientists well grounded in their disciplines but thinking about problems outside or between them . I believe that these Anderson's words explain the spirit of this symposium which aims at cross-disciplinary discussions on photon science frontiers in various fields ranging from materials science to particle and astrophysics.

The original purpose of the Yamada symposium is to give new perspectives of current research activities for the younger generations. New perspectives imply cross-disciplinary examination of problems. It is a difficult task, however, for old generations to go beyond their established disciplines. Thus it is expected that younger generations conceive new approaches to their problems through the discussions at the symposium. The Yamada Science Foundation does not expect that this symposium will produce an immediate accomplishment, but hopes that this symposium will be traced back as a birthplace of new concepts in the future.

Hoping sincerely that all participants will enjoy the symposium, find it beneficial and foster friendship across disciplines, I conclude this welcome address. Thank you for your attention.

Junjiro Kanamori

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of Osaka University