

Preface

Structure and Function of Photosystems



Photo 1. Participants at the conference “Photosynthesis in the Post Genomic Era: Structure and Function of Photosystems,” held in Pushchino, Moscow Region, Russia, August 20–26, 2006, in honor of Professor James Barber.

It was a great pleasure to welcome nearly 300 participants from 38 countries to Pushchino at the International Meeting in honor of Professor James Barber FRS: “Photosynthesis in the Post Genomic Era: Structure and Function of Photosystems,” held on August 20–26, 2006.

This special issue contains selected papers presented at the meeting which have been rigorously reviewed in accordance with the standards of the journal and provide a record of the excellence of the science discussed in Pushchino.

The meeting covered broad areas of photosynthesis addressed by Professor James (Jim) Barber during his fruitful career. The meeting was aimed both at reviewing the present status of these areas of research in photosynthesis and at discussing the future directions. The meeting provided a great opportunity to celebrate Professor J. Barber’s retirement in August 2007. Professor Barber is a renowned scientist who has made numerous significant and outstanding contributions in the field of photosynthesis and in particular to our understanding of photosystem II through his structural studies. His uniqueness resides in his ability to recognize

physiological problems at an organism level and to dissect these problems stepwise down to the molecular level. His scientific contributions have always kept pace with the most recent research trends in photosynthesis, and he continues to work at the cutting edge of this subject.

His more than 300 papers in refereed journals and his many other publications, reviews, and books are a true reflection of Professor Barber’s enormous scientific contribution and enthusiasm for his subject. He has played a key role in global dissemination of research through collaborations with scientists all over the world.

Jim Barber grew up and went to school in Portsmouth, a naval town on the south coast of England. After serving an apprenticeship in engineering, he went to the University of Wales (Swansea) and in 1964 graduated with an honours BSc degree in chemistry. He then went on to study biophysics at the University of East Anglia, where he was awarded an MSc in 1965 and a PhD in 1967. From 1967 to 1968 he was a Unilever Fellow in the Biophysics Department at the University of Leiden in The Netherlands. Here, working with Professor L.N.M. Duysens he started his



Photo 2. Professor Suleyman Allakhverdiev, the main organiser, giving his opening address at the Pushchino conference.



Photo 5. A group photograph of participants at the Pushchino conference who contributed to the discussion about the role of bicarbonate in the functional activity of photosystem II. Front row (left to right): Vyacheslav Klimov, James Barber, Govindjee, Alan Stemler, and Paul Castelfranco. Back row (left to right): Goran Samuelsson, Johannes Messinger, Suleyman Allakhverdiev, Julian Eaton-Rye, and Tatiana Shutova.



Photo 3. Participants at the Pushchino conference. Left to right: Professors Prasanna Mohanty, Norio Murata and George Papageorgiou.



Photo 6. Professor Suleyman Allakhverdiev (left), main organiser of the meeting, with Professor James Barber (right) at the conference dinner.



Photo 4. Participants at the Pushchino conference. Immediately behind Dr. Joana Kargul (right-hand bottom corner) is Professor Kimiyuki Satoh and next to him Professors Andrey Rubin and Galina Riznichenko.



Photo 7. Professors Vladimir Shuvalov (left) and Vyacheslav Klimov (middle), co-organisers of the meeting, with Professor James Barber (right) at the conference dinner.



Photo 8. Some of the participants from Japan at the conference dinner. Left to right: Professor Toshi Nagata (one of the organisers of the meeting), Dr. Hiroyuki Suzuki and Professors Iwane Suzuki, Asako Kawamori, and Masami Kusunoki.



Photo 10. Professor Bill Rutherford entertaining participants at the conference dinner. In the foreground is Professor Eva-Mari Aro, President of the International Photosynthesis Society.



Photo 9. Dr. Alain Bussac (foreground) enjoying the conference dinner.



Photo 11. Initiation of Professor Jim Barber at conference dinner as a "Cossak" by drinking a glass of vodka balanced on a sword.

career in photosynthesis research. In 1968 he returned to the UK to take up a lectureship in plant physiology at Imperial College London, where he has remained until the present day, rising through the ranks to become a professor of plant physiology in 1979 and then the Ernst Chain Professor of Biochemistry in 1989. From 1988 to 1989 he was a dean of the Royal College of Science and then went on to be a head of the Biochemistry Department at Imperial College for 10 years. He has received many awards, including the Honorary Doctorate of Stockholm University in 1992, the Flintoff Medal of the Royal Society of Chemistry in 2002, the Italgas Prize for energy research in 2005, the Novartis Medal and the Prize of the Biochemical Society this year, and the 2007 Wheland Medal and the Prize from the

University of Chicago. He was elected into Academia Europaea in 1989, as a Foreign Member of the Royal Swedish Academy of Sciences in 2002, and to the Fellowship of the Royal Society (FRS) in 2005.

Suleyman I. Allakhverdiev *
 Vladimir A. Shuvalov
 Vyacheslav V. Klimov
*Institute of Basic Biological Problems,
 Russian Academy of Sciences, Pushchino,
 Moscow Region, Russia*
E-mail address: suleyman@ims.ac.jp.
 * Corresponding author.