

**Okayama University International Symposium
“Structure and Dynamics of Photosynthetic Systems”**

October 22 (Monday)-23 (Tuesday), 2012

Okayama University, The 50th Anniversary Hall, Tsushima-naka, Kita-ku, Okayama
city, Okayama, Japan

Home page: http://www.okayama-u.ac.jp/en/tp/cooperation/inter_sympto.html

Tentative Program

October 22 (Monday)

9:00-9:20 Opening

Session I: Structures of the Photosynthetic systems (9:20--12:10)

Chair: Nobuo Kamiya

9:20-10:00 Jian-Ren Shen (Okayama University, Japan)

Mechanism of water-splitting based on the atomic structure of photosystem II

10:00-10:40 Nathan Nelson (Tel Aviv Univ., Israel)

Structure and function of viral, cyanobacterial and plant photosystem I

Break (10:40--11:00)

Chair: Hiroshi Ishikita

11:00-11:30 Egbert J. Boekema (Univ. Groningen, The Netherlands)

Photosystem II supercomplexes

11:30-12:00 Mei Li (Institute of Biophysics, Chinese Academy of Sciences, China)

Structural insight into energy regulation of peripheral antenna complexes in higher plant
photosystem II

Lunch : 12:00--13:00

Poster Session-1: 13:00 -- 14:00

Session II: Mechanism of Natural and Artificial Water-splitting (14:00--15:40)

Chair: Kizashi Yamaguchi

14:00--14:40 Gary Brudvig (Yale Univ., USA)

Water Oxidation Chemistry of Photosystem II

14:40--15:10 Johannes Messinger (Umea Univ., Sweden)

Approaches towards the mechanism of photosynthetic water-oxidation

15:10--15:35 Takumi Noguchi (Nagoya University)

Infrared Studies on the Molecular Mechanism of Photosynthetic Water Oxidation

Break (15:35--16:00)

Session III-1: Assembly and Dynamics of Photosynthetic Systems (16:00-17:40)

Chair: Tatsuru Masuda

16:00-16:40 Peter Nixon (Imperial College London, UK)

Assembly and repair of the Photosystem II complex in cyanobacteria

16:40-17:10 Li-Xin Zhang (Institute of Botany, Chinese Academy of Sciences, China)

TBA

17:10-17:40 Masahiko Ikeuchi (Univ. Tokyo, Japan)

TBA

Reception (18:30-20:00) Okayama University Cafeteria "Peach Union"

October 23 (Tuesday)

Session III-2: Assembly and Dynamics of Photosynthetic Systems

Chair: Yuichi Fujita

9:00-9:40 Jean-David Rochaix (Univ. of Geneva, Switzerland)

Conditional repression of essential chloroplast genes reveals new signaling pathways in *Chlamydomonas reinhardtii*

9:40-10:05 Yuichiro Takahashi (Okayama Univ. , Japan)

Biogenesis of chlorophyll-protein complexes during greening of *Chlamydomonas y-1* cells

Break (10:05--10:25)

Chair: Hiroyuki Ohta

10:25-11:05 Francis-André Wollman (CNRS, France)

TBA

11:05-11:30 Ayumi Tanaka (Hokkaido Univ. , Japan)

Degradation of chlorophyll and chlorophyll-protein complexes

11:30-11:55 Hajime Wada (Univ. Tokyo, Japan)

Indispensable function of lipids in photosynthesis

Lunch (11:55 -- 12:40)

Poster Session-2: 12:40--13:40

Session IV: Photosynthetic Systems and Environment (13:40-16:40)

Chair: Hideya Fukuzawa

13:40-14:20 Kris K. Niyogi (Univ. of California Berkeley, USA)

Regulation of photosynthetic light harvesting

14:20-14:45 Wataru Sakamoto (Okayama Univ. , Japan)

Cooperative D1 degradation in the photosystem II repair mediated by chloroplastic proteases in Arabidopsis

14:45-15:10 Toru Hisabori (Tokyo Institute of Tech. , Japan)

Regulation of the cyanobacterial ATP synthase *via* conformational change of the γ subunit

Break (15:10-15:30)

Chair: Kintake Sonoike

15:30-16:00 Gyozo Garab (Biological Research Center, Hungarian Academy of Sciences, Hungary)

Elements of structural flexibility of the thylakoid membranes in oxygenic photosynthetic organisms

16:00-16:25 Yasushi Yamamoto (Okayama Univ. , Japan)

Quality control of Photosystem II: the impact of light and heat stresses on the thylakoid lipids and the proteins in Photosystem II

Closing