**JUNE 1 (SUNDAY)**

**ARRIVAL, REGISTRATION**

**JUNE 2 (MONDAY – 1ST DAY)**

09:00–11:00 – REGISTRATION

11:00 – OPENING CEREMONY

SPECIAL EVENTS IN HONOR OF PROFESSOR VLADIMIR SHUVALOV

Prof. Anatoly I. Miroshnikov, Chairman of the Pushchino Research Center
Dr. Ivan Savintsev, The head of the Pushchino city
Dr. Alexey Semenov, President of Russian Society for Photobiology
Prof. Hans van Gorkom *(The Netherlands)*

**LECTURES**

Chairpersons: Masahiko Ikeuchi (Japan), Govindjee (USA),
Anatoly Tsygankov (Russia)

12:00–12:40 **S1.1**

Govindjee *(University of Illinois, Illinois, USA)* Primary photochemistry of photosynthesis: A perspective in honor of Vlad Shuvalov

12:40–13:20 **S1.2**

Vladimir A. Shuvalov *(Institute of Basic Biological Problems, RAS, Pushchino, Russia)* Light energy convertor for biosphere

13:20–14:50 (90 MIN) LUNCH

**JUNE 3 (TUESDAY – 2ND DAY)**

14:50–15:30 **S3.1**

Jian-Ren Shen *(Photosynthesis Research Center, Graduate School of Natural Science and Technology, Okayama University, Okayama, Japan)* Possible mechanism of photosynthetic water oxidation based on atomic structure of Photosystem II

15:30–16:10 **S7.1**

Andrey B. Rubin *(Faculty of Biology, Moscow State University, Moscow, Russia)* Mechanisms of regulation of the electron transfer in the primary processes of photosynthesis

16:10–16:50 **S7.2**

Hong Gil Nam *(Department of New Biology, DGIST and Center for Plant Aging Research, IBS, Korea)* Functional transition history of chloroplasts along leaf life span in *Arabidopsis* coordinated by multi-layered regulatory networks

16:50–17:30 **S2.1**

Masahiko Ikeuchi *(University of Tokyo, Tokyo and Japan Science and Technology Agency (JST), CREST, Saitama, Japan)* Engineering of antenna and photosystems in cyanobacteria

18:00 – LET’S GET TOGETHER

**JUNE 3 (TUESDAY – 2ND DAY)**

**LECTURES**

Chairpersons: Andrey Rubin (Russia), Victor Nadtochenko (Russia),
Alexey Semenov (Russia)

08:30–09:00 **S1.3**

Hans van Gorkom *(Department of Biophysics, Leiden University, Leiden, The Netherlands)* Why plants are not black
09:00–09:30 S1.4
Victor A. Nadtochenko (Semenov Institute of Chemical Physics, RAS, Moscow and Institute of Chemical Physics Problems, RAS, Chernogolovka, Russia) Primary stages of electron and energy transfer in Photosystem I: Effect of excitation pulse wavelength

09:30–10:00 S1.5
Alexey Yu. Semenov (A.N. Belozersky Institute of Physical-Chemical Biology, Moscow State University, Moscow, Russia) Free energy dependence of the formation of the secondary ion-radical pair P700⁺A⁻₁ in Photosystem I

10:00–10:30 (30 min) COFFEE BREAK
Chairpersons: Tohru Tsuchiya (Japan), Hong Gil Nam (Korea), Alexander Krasnovsky Jr. (Russia)

10:30–11:00 S1.6
Anton Savitsky (Max Planck Institute for Chemical Energy Conversion, 45470 Mülheim (Ruhr), Germany) Photosynthetic reaction centers in disaccharide glasses: Coupling between protein conformational dynamics and electron-transfer kinetics

11:00–11:30 S1.7
Tatsuya Tomo (Tokyo University of Science, Tokyo and PRESTO, Japan Science and Technology Agency (JST), Saitama, Japan) Diversity of chlorophylls in photosynthesis

11:30–12:00 S1.8
Seiji Akimoto (Molecular Photoscience Research Center, Graduate School of Science, Kobe University, and Japan Science and Technology Agency, CREST, Kobe, Japan) Differences in energy transfer of cyanobacteria grown in different cultivation media

12:00–13:30 (90 min) LUNCH

13:30–14:00 S8.1
Barry D. Bruce (University of Tennessee-Knoxville, Energy Science and Engineering Program, Bredesen Center for Interdisciplinary Research and Education, USA) Direct solar conversion using thermophilic cyanobacteria

14:00–14:30 S3.2
Imre Vass (BRC, Institute of Plant Physiology, HAS, Szeged, Hungary) Characterization of singlet oxygen production and its role in photodamage in intact cyanobacteria and microalgae

14:30–15:00 S2.2
Julian Eaton-Rye (University of Otago, Dunedin, New Zealand) Hydrophilic auxiliary proteins of Photosystem II in the cyanobacterium Synechocystis sp. PCC 6803

15:00–15:30 S3.3
Takumi Noguchi (Division of Material Science, Graduate School of Science, Nagoya University, Nagoya, Japan) Molecular mechanism of photosynthetic water oxidation revealed by infrared spectroscopy with quantum chemical calculations

15:30–16:00 (30 min) COFFEE BREAK
Chairpersons: Miwa Sugiura (Japan), Ivan Proskuryakov (Russia), Boris Ivanov (Russia)

16:00–16:30 S2.3
Alexander A. Krasnovsky (Jr.) (A.N. Bach Institute of Biochemistry, RAS and M.V. Lomonosov Moscow State University, Moscow, Russia) Phosphorescence of triplet chlorophylls

16:30–17:00 S7.3
Boris N. Ivanov (Institute of Basic Biological Problems, RAS, Pushchino, Russia) The superoxide radical produced in chloroplast thylakoids in the light is reduced in the plastoquinone pool
17:00–18:30 Poster viewing/discussion:
Sections 1–5
Chairpersons: Imre Vass (Hungary), Hong Gil Nam (Korea), Alexander N. Tikhonov (Russia), Ernst Walter Knapp (Germany)

Sections 6–9
Chairpersons: Julian Eaton-Rye (New Zealand), Vasiliiy Goltsev (Bulgaria), Tatsuya Tomo (Japan), Kostas Stamatakis (Greece), Hazem Kalaji (Poland)

18:30 – Chamber music
Artists:
The member of Spivakov’s orchestra Anastasia Kosarskaya (oboe) and laureate of international contests Vera Kryukova (piano); Vivaldi, Kirnberger, Mozart, Schubert, Debussi

JUNE 4 (WEDNESDAY – 3rd DAY)

Lectures
Chairpersons: Tatsuya Tomo (Japan), Suleyman Allakhverdiev (Russia), Daisuke Seo (Japan)

08:30–09:00 S2.4
Tohr u Tsuchiya (Kyoto University, Kyoto, Japan)
Molecular genetic analysis of the chlorophyll d-dominated cyanobacterium Acaryochloris marina

09:00–09:30 S3.4
Ernst Walter Knapp (Institute of Chemistry and Biochemistry, Freie Universität Berlin, Berlin, Germany) pKa computations of di-manganese model complexes and S1-state EXAFS spectra from DFT optimized Mn-cluster in PS II

09:30–10:00 S3.5
Yuki Kato (Division of Material Science, Graduate School of Science, Nagoya University, Nagoya, Japan) FTIR spectroelectrochemical study on the influence of Mn-depletion on the redox potential of the non-heme iron and its surrounding structure in Photosystem II

10:00–10:30 (30 min) Coffee break
Chairpersons: Imre Vass (Hungary), Takumi Noguchi (Japan), Arvi Freiberg (Estonia)

10:30–11:00 S7.4
Mikhail F. Yanyushin (Institute of Basic Biological Problems, RAS, Pushchino, Moscow Region, Russia) Comparison of dendrograms for electron transporting chains components with the common phylogeny of prokaryotes as an approach to the problem of the origin and the evolution of photosynthesis and respiration

11:00–11:30 S3.6
Miwa Sugiiura (Proteo-Science Research Center, Ehime University, Ehime and PRESTO, Japan Science and Technology Agency (JST), Saitama, Japan) Histidine hydroxyl modification on D2-His336 in Photosystem II of Thermosynechococcus vulcanus and Thermosynechococcus elongates

11:30–12:00 S3.7
Vyacheslav V. Klimov (Institute of Basic Biological Problems, RAS, Pushchino, Moscow Region, Russia) Bicarbonate requirement for the donor side of Photosystem II

12:00–13:30 (90 min) Lunch
Chairpersons: Suleyman Allakhverdiev (Russia), Marian Brestic (Slovak Republic), Yuki Kato (Japan)

13:30–14:00 S5.1
Arvi Freiberg (Institute of Physics and Institute of Molecular and Cell Biology, University of Tartu, Tartu, Estonia) Light harvesting in photosynthetic bacteria acclimated to different levels of light

14:00–14:30 S4.1
Ivan Proskuryakov (Institute of Basic Biological Problems, RAS, Pushchino, Moscow region, Russia) TR EPR study of singlet-triplet fission of carotenoid excitation
14:30–15:00 S7.5
Evgeny Maksimov (Department of Biophysics, Faculty of Biology, Moscow State University, Moscow, Russia) The signaling state of orange carotenoid protein

15:00–15:30 (30 min) Coffee break
Chairpersons: Subramanyam Rajagopal (India), Franz-Josef Schmitt (Germany), Alex Ivanov (Canada)

15:30–16:00 S7.6
Subramanyam Rajagopal (Department of Plant Sciences, School of Life Sciences, University of Hyderabad, Hyderabad, India) Anaerobic and heat induced state transitions in Arabidopsis thaliana and its signal mechanism in thylakoid membranes

16:00–16:30 S5.2
Vadim Selyanin (Institute of Microbiology, Academy of Sciences, Třeboň, Czech Republic) The size and amount of photosynthetic unit in purple bacteria

16:30–17:40 Poster viewing/discussion:
Sections 1–5
Chairpersons: Imre Vass (Hungary), Hong Gil Nam (Korea), Alexander N. Tikhonov (Russia), Ernst Walter Knapp (Germany)
Sections 6–11
Chairpersons: Julian Eaton-Rye (New Zealand), Vasiliy Goltsev (Bulgaria), Tatsuya Tomo (Japan), Kostas Stamatakis (Greece), Hazem Kalaji (Poland)

18:00 – Bonfire

14:30–15:00 S7.5
Evgeny Maksimov (Department of Biophysics, Faculty of Biology, Moscow State University, Moscow, Russia) The signaling state of orange carotenoid protein

15:00–15:30 (30 min) Coffee break
Chairpersons: Subramanyam Rajagopal (India), Franz-Josef Schmitt (Germany), Alex Ivanov (Canada)

15:30–16:00 S7.6
Subramanyam Rajagopal (Department of Plant Sciences, School of Life Sciences, University of Hyderabad, Hyderabad, India) Anaerobic and heat induced state transitions in Arabidopsis thaliana and its signal mechanism in thylakoid membranes

16:00–16:30 S5.2
Vadim Selyanin (Institute of Microbiology, Academy of Sciences, Třeboň, Czech Republic) The size and amount of photosynthetic unit in purple bacteria

16:30–17:40 Poster viewing/discussion:
Sections 1–5
Chairpersons: Imre Vass (Hungary), Hong Gil Nam (Korea), Alexander N. Tikhonov (Russia), Ernst Walter Knapp (Germany)
Sections 6–11
Chairpersons: Julian Eaton-Rye (New Zealand), Vasiliy Goltsev (Bulgaria), Tatsuya Tomo (Japan), Kostas Stamatakis (Greece), Hazem Kalaji (Poland)

18:00 – Bonfire

JUNE 5 (THURSDAY – 4TH DAY)

JUNE 6 (FRIDAY – 5TH DAY)

Lectures
Chairpersons: Julian Eaton-Rye (New Zealand), Mi-Sun Kim (Korea), George Papageorgiou (Greece)

08:30–09:00 S8.2
Hiroshi Nishihara (Department of Chemistry, School of Science, The University of Tokyo, Tokyo, Japan) Photoelectron conversion using combination of bio-components with artificial molecules

09:00–09:30 S6.1
Ivelina Zaharieva (Freie Universität Berlin, Berlin, Germany) Manganese oxides as biomimetic water-oxidation catalysts

09:30–10:00 S7.7
Franz-Josef Schmitt (Institute of Physical Chemistry, Technical University of Berlin, Berlin, Germany) Fluorescence imaging of light induced reactive oxygen species (ROS) in plant cell tissue

10:00–10:30 (30 min) Coffee break
Chairpersons: Hiroshi Nishihara (Japan); Ernst Walter Knapp (Germany), Alexander N. Tikhonov (Russia)

10:30–11:00 S8.3
Mi-Sun Kim (Biomass and Waste Energy Laboratory, Korea Institute of Energy Research, Daejeon, Republic of Korea) Photo fermentative hydrogen production in combination with lactate and methane fermentation to maximize the bioenergy recovery from food waste

11:00–11:30 S8.4
Hajime Masukawa (Research Institute for Photobiological Hydrogen Production and Department of Biological Sciences, Kanagawa University, Tsuchiya, Hiratsuka, Kanagawa, Japan) Photobiological hydrogen production by Anabaena PCC 7120 mutants with increased heterocyst frequency
11:30–12:00 S8.5
Azat Abdullatypov (Institute of Basic Biological Problems RAS, Pushchino, Moscow Region, Russia) Modeling the HydSL-hydrogenase from Thiocapsa roseopersicina

12:00–12:30 S4.2
Petar H. Lambrev (Hungarian Academy of Sciences, Biological Research Centre, Szeged, Hungary) Energy transfer in plant light-harvesting complex II revealed by room-temperature 2D electronic spectroscopy

12:30–14:00 (90 min) LUNCH
Chairpersons: Hazem M. Kalaji (Poland), Vasiliy Goltsev (Bulgaria), Mahir Mamedov (Russia)

14:00–14:30 S7.8
Alexander N. Tikhonov (Faculty of Physics, Moscow State University, Moscow, Russia) Light-induced regulation of photosynthetic electron transport in chloroplasts

14:30–15:00 S7.9
Eugene A. Lysenko (Institute of Plant Physiology, RAS, Moscow, Russia) Cadmium uptake into chloroplasts and its impact on chloroplastic mRNAs, proteins, and energy quenching

15:30–16:00 S9.1
Alexandrina Stirbet (204 Anne Burras Ln, Newport News, VA 23606, USA) Photosynthetic performance indexes based on fast Chl a fluorescence induction data: advantages and limitations

16:00–16:30 (30 min) COFFEE BREAK

Poster viewing/discussion:
Sections 1–5
Chairpersons: Imre Vass (Hungary), Hong Gil Nam (Korea), Alexander N. Tikhonov (Russia), Ernst Walter Knapp (Germany)

Sections 6–9
Chairpersons: Julian Eaton-Rye (New Zealand), Vasiliy Goltsev (Bulgaria), Tatsuya Tomo (Japan), Kostas Stamatakis (Greece), Hazem Kalaji (Poland)

18:00 – Special Events
1) Young Talents (4 awards/prizes)
2) Best posters (4 awards/prizes)
The awards will be presented to young researchers who have done outstanding research in the field of photosynthesis research for sustainability. All young researchers, including Ph.D. students and Post-Docs may compete for awards.
The names of winners will be selected by the committee (see below), according to recommendation of chairpersons of poster sections.
Committee: Govindjee (USA), Julian Eaton-Rye (New Zealand), Jian-Ren Shen (Japan), Tatsuya Tomo (Japan), Imre Vass (Hungary), Suleyman Allakhverdiev (Russia)

19:00 – BANQUET

JUNE 7 (SATURDAY – 6TH DAY)

Lectures
Chairpersons: Kimiyuki Satoh (Japan), Govindjee (USA), George Papageorgiou (Greece)

09:00–09:30 S4.3
Alexander N. Malyan (Institute of Basic Biological Problems, RAS, Pushchino, Moscow Region, Russia) Energy-dependent regulation of chloroplast ATP synthase
09:30–10:00 S2.5
Lyudmila G. Vasilieva (Institute of Basic Biological Problems, RAS, Pushchino, Russia) Relocation of BChl axial ligands in Rhodobacter sphaeroides mutant reaction centers

10:00–10:30 S4.4
Anatoly Shkuropatov (Institute of Basic Biological Problems, RAS, Pushchino, Moscow Region, Russia) Photosystem II core complexes from spinach with chemically modified pigment composition

10:00–10:30 S4.4
Anatoly Shkuropatov (Institute of Basic Biological Problems, RAS, Pushchino, Moscow Region, Russia) Photosystem II core complexes from spinach with chemically modified pigment composition

10:30–11:00 S1.9
Roman Y. Pishchalnikov (Prokhorov General Physics Institute, RAS, Moscow, Russia) Numerical studies of the photosynthetic reaction center femtosecond transient absorption by means of hierarchical equations of motions

11:00–11:30 S1.10
Anton Khmelnitskiy (Institute of Basic Biological Problems, RAS, Pushchino, Moscow Region, Russia) Femtosecond processes of charge separation in wild type and mutant reaction centers of Rhodobacter sphaeroides

11:30 – Closing Ceremony

Gowindjee (USA), Hans van Gorkom (The Netherlands), George Papageorgiou (Greece), Kimyuki Satoh (Japan), Yurii Erokhin (Russia)

TAKING PHOTOS, ALL TOGETHER
THE END AND FREE TIME

JUNE 8 (SUNDAY)

DEPARTURE
Section 2

S2.6 Parveen Akhtar, Márta Dorogi, Krzysztof Pawlak, Győző Garab, Petar H. Lambrev
Effects of detergents, lipids and trimer-trimer contacts on the pigment excitonic interactions in plant light-harvesting complex II

S2.7 Aleksandr Ashikhmin, Zoya Makhneva, Maksim Bolshakov, Yurii Erokhin, Andrey Moskalenko
Recovering colored-carotenoid biosynthesis in the cells of the sulfur photosynthetic bacterium Ecctothiorhodospira halosalina

S2.8 Maksim Bolshakov, Aleksandr Ashikhmin, Zoya Makhneva, Andrey Moskalenko
Could the LH2 complex from purple photosynthetic bacteria be assembled in the cell without carotenoids?

S2.9 Kostas Stamatakis, Dimitris Vayenos, Christos Kotakis
Integration of Antarctic phaeophyce Kelp plast in a dinoflagellate host

Section 3

Evolution of the Photosystem II redox states by modeling of the electron transfer

S3.9 Imed Hasni, Saber Hamdani and Robert Carpenter
Impact of the interaction of Al3+ with the proteins composition of Photosystem II

S3.10 Zhiyong Liang, Ivelina Zaharieva, Oliver Karge, Holger Dau
Surprising glycerol effect on the activation enthalpy of water oxidation in Photosystem II

S3.11 Mohammad Mahdi Najafpour, Mahnaz Abasi, Tatsuya Tomo, Suleyman I. Allakhverdiev
Mn Oxide/Nanodiamond composite: A new water-oxidizing catalyst for water oxidation

S3.12 Shin Nakamura and Takumi Noguchi
Vibrational analyses of the water oxidizing center in Photosystem II using QM/MM calculations

S3.13 László Sass, Zsuzsanna Deák, Imre Vass
In silico Photosynthesis: Computer assisted simulation of electron transport processes in Photosystem II

S3.14 Boris Semin, Lira Davletshina, Tatyana Podkovirina, Kirill Timofeev, Andrey Rubin
Extraction of Mn cations from oxygen-evolving complex by hydroquinone at different pH: Correlation between pH-dependent resistance of Mn ions to the action of hydroquinone and oxygen-evolving activity

S3.15 S. Skandary, M. Hussels, A. Konrad, C. Göckner, E. Schlodder, J. Hellmich, A. Zouni, M. Brecht
Single molecule spectroscopy on Photosystem II of Thermosynechococcus elongatus

Section 8

S8.6 Thitirut Assawamongkholsiri, Alissara Reungsang
Simultaneous bio-hydrogen and microbial oil production by Rhodobacter sp. Kku-Ps1

S8.7 Barry D. Bruce
Applied photosynthesis: Putting PS I to work

S8.8 Khorcheska A. Batyrova, Anastasia I. Gavrisheva, Anatoly A. Tsygankov
Sustained hydrogen photoproduction by phosphorous-deprived marine green microalgae Chlorella C65.

S8.9 Arturo Solís Herrera
Human photosynthesis?

S8.10 Shu Ikehira, Mariko Miyachi, Kyoko Okuzono, Yoshinori Yamanoi, Tatsuya Tomo and Hiroshi Nishihara
Construction of a photochemical system using PS II and a molecular wire equipped with a platinum nanoparticle

S8.11 Tatyana Laurinavichene, Evgeny Shastik and Anatoly Tsygankov
Hydrogen photoproduction by mixed culture of Rhodobacter sphaeroides and Clostridium butyricum

S8.12 Valéria Nagy, André Vidal-Meireles, Roland Tengölics, Gábor Rákhely, Győző Garab, László Kovács, Szilvia Z. Tóth
Effects of ascorbate on Photosystem II during sulphur-deprivation of Chlamydomonas reinhardtii
S7.10 Abdelghafar M. Abu-Elsaoud and Allan G. Rasmusson
Does the external mitochondrial NADPH dehydrogenase have a special
role in protecting the chloroplasts from bleaching in young leaves of
Nicotiana sylvestris tobacco?

S7.11 Jalal A. Aliyev
Photosynthetic gas exchange of wheat varieties under water deficit

S7.12 Tofiq I. Allahverdiyev
Effect of drought stress on yield and yield components of durum and bread
wheat genotypes

S7.13 Ulduza Gurbanova, Hasan Babayev, Minakhanym Aliyeva,
Yashar Feyziyev, Novruz Guliyev
Effects of drought on mitochondrial NAD-malate dehydrogenase in
Amaranthus Cruentus L. during ontogenesis

S7.14 Shahniyar Bayramov, Minakhanym Aliyeva,
Taliya Orujova, Wolfgang Brüggemann
Photosynthetic enzyme activities under drought stress in
Chenopodium album L.

S7.15 Maria Borisova-Mubarakshina, Boris Ivanov,
Tatyana Fedorchuk, Natalia Rudenko, Daria Vetoshkina,
Marina Kozuleva, Luca Dall’osto, Stefano Cazzaniga, Roberto Bassi
Identification of the signal messenger for the long-term regulation of
the Photosystem II light-harvesting antenna size in high light

S7.16 Murjian Brestić, Marek Živčák, Kristýna Kunderlíková,
Katarina Oľsovska and Suleyman I. Allakhverdiev
Specific responses of PS I and PS II electron transport in leaves of Chlorina
wheat mutants

S7.17 Nina Djapic
Chlorophyll cababilism under low water regime in Apium graveolens
var. Dulce

S7.18 Tamara Golovko, Igor Dalk, Ilya Zakhozhiy and Olga Dymova
The tolerance of lichen Lobaria pulmonaria photosynthesis to excess light
and UV(A+B)-radiation

S7.19 Olga Dymova, Mikhail Khristin and Tamara Golovko
The state of pigment-protein complexes in chloroplasts of Ajuga reptans
summer and winter green leaves

S7.20 Zinaida Eltsova and Anatoly Tsygankov
Continuous cultures of Rhodobacter sphaeroides

S7.21 Shahniyar Bayramov, Ulduza Gurbanova, Hasan Babayev,
Minakhanym Aliyeva, Novruz Guliyev, Yashar Feyziyev
Effects of temperature and light intensity on photosynthetic enzyme
activities in C4 species of Chenopodaceae family in the natural environment

S7.22 Vasilij Goltsve, Stella Dimitrova, Kolyo Dankov, Vladimir Aleksandrov,
Vasilena Krasteva, Momchil Paunov, Hazem M. Kalaji, Reto J. Strasser
Application of biophysical luminescence methods for plant phenotyping

S7.23 Farida B. Guliyeva, Samira M. Rustamova,
Irada M. Huseynova, Jalal A. Aliyev
Molecular detection of leaf rust resistance genes Lr26 and Lr35 in wheat
cultivars in Azerbaijan

S7.24 Irada M. Huseynova, Durna R. Aliyeva, Jalal A. Aliyev
Generation of free radicals and antioxidative defense system in wheat
plants subjected to long-term soil drought

S7.25 Elena Ilkonen, Tatjana Shibaeva and Aleksandr Titov
Thermal acclimation of photosynthesis in cucumber leaves is enhanced by
a daily short-term temperature drop

S7.26 Alexander G. Ivanov, David P. Sprott, Mona Sedeek, Marc Rosembert,
Leonid Kurepin, Jas Singh, Norman P.A. Huner, Leonid V. Savitch
Role of CBF-mediated alternative electron pathways in balancing
chloroplast redox signaling and cold acclimation of photosynthesis

S7.27 Atabay Jahangirov, Gamid Hamidov, Ali Jahangirov,
Djavanshir Talai, Irada Huseynova, Jalal Aliyev
Investigation of reutilization of photosynthetic products in wheat
genotypes with contrasting morphophysiological parameters under water
stress

S7.28 Hassan Khanzade, Rasoul Fakhari, Ahmad Tobeh
Effects of planting and harvest dates on quantity and quality of sugar beet
seed in Iran

S7.29 E. G. Maksimov, K. E. Klementiev, G. V. Tsaraev,
I. V. Elanskaya, and V. Z. Paschenko
The time course of non-photochemical quenching and fluorescence recovery
in Synechocystis sp. PCC6803

S7.30 Anna V. Komarova, Alexander A. Bulychev and Tatjana N. Bibikova
Mechanical stress in the plant cell: relation to photosynthesis
Ayumi Matsuhashi, Hiroko Tahara, Junji Uchiyama, Satoru Ogawa and Hisataka Ohta

SLR2019, LPIDA TRANSPORTER HOMOLOG, IS ESSENTIAL FOR ACIDIC TOLERANCE IN Synechocystis sp. PCC6803

Ankush Prasad, Aditya Kumar, Pavel Pospíšil

EVIDENCE ON SUPEROXIDE ANION RADICAL FORMATION ON THE ELECTRON DONOR SIDE OF PHOTOSYSTEM II: EPR SPIN TRAPPING STUDY


HOMO-FRET FOR THE INVESTIGATION OF THE Oligomeric STATE OF PROTEINS TO OBSERVE THE D1 REPAIR CYCLE IN PS II

Pavol Slamka, Katarína Olšovská, Marek Živčák and Marián Brestič

EFFECT OF WATER STRESS ON PHOTOSYNTHETIC AND PHYSIOLOGICAL PARAMETERS IN SPRING BARLEY

Hiroko Tahara, Ayumi Matsuhashi, Junji Uchiyama, Satoru Ogawa, Kouji Matsumoto and Hisataka Ohta

SLTB2 AND SLTC2 ARE INVOLVED IN ACID STRESS TOLERANCE IN Synechocystis sp. PCC6803

E. G. Maksimov, K. E. Klementiev, G. V. Tsoraev, M. D. Mamedov, and V. Z. Paschenko

NON-PHOTOCHEMICAL QUENCHING OF CHLOROPHYLL FLUORESCENCE REVEALED FROM PICOSECOND TIME-RESOLVED FLUORIMETRY

Junji Uchiyama, Yu Kanesaki, Naoya Iwata, Ryousuke Asakura, Kento Funamizu, Rizumu Tasaki, Mina Agatsuma, Hiroko Tahara, Ayumi Matsuhashi, Hirofuomi Yoshikawa and Hisataka Ohta

GENOMIC ANALYSIS OF PARALLEL-EVOLVED CYANOBACTERIUM Synechocystis sp. PCC6803 UNDER ACID STRESS

István Z. Vass, P. B. Kós, J. Knoppová, J. Komenda, Imre Vass

EFFICIENT PS II REPAIR IN THE CYANOBACTERIUM Synechocystis PCC 6803 REQUIRES THE CRY-DASH CRYPTOCHROME

Marek Živčák, Marián Brestič, Zuzana Balátová, Katarína Olšovská

REGULATION OF ELECTRON AND PROTON TRANSPORT IN DIFFERENT WHEAT GENOTYPES IN CONDITIONS OF HIGH TEMPERATURE

Kostas Stamatakis and George C. Papageorgiou

THE INDUCTION OF CHLOROPHYLL a FLUORESCENCE IN CYANOBACTERIA IN THE ABSENCE AND IN THE PRESENCE OF EXOGENOUSLY ADDED SINGLET OXYGEN SCAVENGERS

S. M. Pershin, R. Y. Pishchalnikov

H_2O (D_2O) IN PURPLE BACTERIA REACTION CENTER AS A MODULATOR OF PUMP-PROBE KINETICS DUE TO SPIN-CONVERSION

Pavel Krasilnikov, Dmitriy Zlenko, Igor Stadnichuk

MOLECULAR MECHANISM OF PHYCOBILISOME PHOTOPROTECTION AGAINST HIGHLY EXCESS LIGHT

Yoshifumi Ueno, Shimpei Aikawa, Akihiko Kondo, Seiji Akimoto

LIGHT ADAPTATION OF THE PRIMITIVE RED ALGA Cyanidioschyzon merolae, PROVED BY TIME-RESOLVED FLUORESCENCE SPECTROSCOPY

Marina Kozuleva, Anastasia Petrova, Mahir Mamedov, Alexey Semenov, Boris Ivanov

MECHANISMS OF THE MEHLER REACTION IN PHOTOSYSTEM I: CLARIFICATION OF THE ROLE OF PHYLLOQUINONE AND FERREDOXIN

Daisuke Seo, Erika Nishimura, Hiroshi Naito, Takeshi Sakurai

REPLACEMENT OF THE TYR50 STACKED ON THE SI-FACE OF THE ISOALLOXAZINE RING OF FAD IN Bacillus subtilis FERREDOXIN-NADP" OXIDOREDUCTASE MODULATES ITS REDOX PROPERTIES
Section 6

S6.2 Gennady Komissarov
Artificial photosynthesis based on hydrogen peroxide

S6.3 Mohammad Mahdi Najafpour, Atefeh Nemati Moghaddam,
Małgorzata Hołyńska, Sayed Habib Kazemi, Amir Nasser Shamkhali,
Emad Amini, Mostafa Ghaemmaghami, Davood Jafarian Sedigh,
Rahim Mohamadi, Sasan Zaynalpoor, Katrin Beckmann,
and Warwick Hillier
Oxygen evolution by manganese complexes in the presence of chemical oxidants

S6.4 A. A. Volgusheva, T. K. Antal, G. P. Kukarskikh,
O. G. Lavrukhina, T. E. Krendeleva
Magnesium deprivation as an alternative approach to sustain hydrogen photoproduction in green microalgae

S6.5 Neal Woodbury
Towards design rules for building photosynthetic systems

Section 9

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S9.4 Thomas Friedrich, Franz-Josef Schmitt and Neslihan N. Tavraz
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S9.6 Ateeq ur-Rehman, Zsuzsanna Deák, Anthony Larkum,
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