Program
17th International Congress on Photosynthesis Research

Sunday 7 August 2016

08:00 - 17:00	Room: Trajectum / Expo Foyer **Booth setup**
15:30 - 18:30	Room: Trajectum / Expo Foyer **Pre-Registration and Poster boarding**
18:30 - 20:00	Room: Trajectum **Welcome Reception**

Monday 8 August 2016

08:30 - 08:40	Room: Auditorium 1 **Opening Ceremony**			
08:40 - 09:00	Room: Auditorium 1 **Louise Fresco** *(Wageningen University and Reseasch Center, NL)* Photosynthesis in a changing world			
09:00 - 09:30	Room: Auditorium 1 Winner of the lifetime award: **Jean-David Rochaix** *(Univ. Geneva, CH)* The last secrets of the chloroplast genome			
09:30 - 10:00	Coffee break - Trajectum / Lobby			
10:00 - 12:30	Parallel Symposia **Light harvesting and its regulation Part 1** Room: Auditorium 1 Chair/Discussion Leader: **Roberto Bassi** *(Univ. Verona, IT)*	Parallel Symposia **Rubisco and photorespiration** Room: Auditorium 2 Chair/Discussion Leader: **Martin Parry** *(Lancaster Univ. UK)*	Parallel Symposia **Monitoring and modeling photosynthesis at the global scale** Room: Room 0.4 Chair/Discussion Leader: **Joe Berry** *(Carnegie, US)*	Parallel Symposia **Evolution of photosynthesis** Room: Room 0.5 Chair/Discussion Leader: **Debashish Bhattacharya** *(Rutgers Univ. US)*
10:00 - 12:25	**Dan Canniffe** (Penn State U, USA) A paralog of a Photosystem II core subunit is the light-dependent chlorophyll f synthase (ChlF)	**Hermann Bauwe** *(Univ. Rostock, DE)* The interplay between photorespiration, the Calvin-Benson cycle and other metabolism	**Uwe Rascher** *(Forschungsz. Jülich, DE)* The FLEX satellite mission - Imaging and understanding sun-induced fluorescence from the single leaf to the satellite	**Steven Ball** *(Univ. Lille/CNRS, FR)* Was the chlamydial adaptive strategy to tryptophan starvation an early determinant of plastid endosymbiosis?
10:25 - 10:50	**Alexander Ruban** *(Q Mary London, UK)* Regulation of light harvesting in plants: mechanism and efficiency	**Whitney Spencer** *(ANU Camberra, AU)* Improving plant photosynthesis and growth via Rubisco engineering	**Max Gorbunov** *(Rutgers Univ. US)* Photosynthesis in the global ocean from space	**Tanai Cardona** *(Imperial C. London, UK)* Timing the origin of the Mn4CaO5 cluster of Photosystem II
10:50 - 11:05	**Stefano Caffarri** *(Univ. Aix-Marseille, FR)* *Chlamydomonas reinhardtii* PsbS is functional and accumulates rapidly and transiently under high light	**Laura Gunn** *(Uppsala Univ. SE)* A unique Large-subunit loop acts as an in-built Small-subunit mimic by concentrating large subunits in Rubisco from *Methanococcoides burtonii*.	**Christiaan van der Tol** *(Twente U. NL)* Chlorophyll fluorescence and hyperspectral reflectance as remote sensing measures of photosynthesis	**Beverly Green** *(University of British Columbia, CA)* How To Evolve a Novel Light-harvesting Antenna: Reduce, Recycle, Amplify and Diversify
11:05 - 11:20	**Lijin Tian** *(VU Amsterdam, NL)* LHCSR1 induces a fast and reversible pH-dependent fluorescence quenching in LHCII in *Chlamydomonas reinhardtii* cells	**Rebekka Wachter** *(ASU Tempe, US)* Assembly and Regulation of Higher Plant Rubisco Activase	**Atsuko Kanazawa** *(MSU, US)* CORALSPEQ AND PHOTOSYNQ: An open, field-distributable platform for probing coral photosynthesis and health on local and global scales	**John Allen** *(UC London, UK)* Properties of a conserved two-component transcriptional redox regulatory system in cyanobacteria and chloroplasts
11:20 - 11:35	**Alizee Malnoe** *(UC Berkeley, US)* The chloroplastic lipocalin is involved in a sustained photoprotective mechanism regulated by the Suppressor of Quenching 1 protein in Arabidopsis thaliana.	**Devendra Shivhare** *(Nanyang Tech. Univ. SG)* Insights into Rubisco activase mechanism and thermostability gleaned from bioprospecting	**Rhys Wyber** *(Wollongong Univ. AU)* Daily solar induced fluorescence reflects electron transport rates and non-photochemical quenching in two plant species	**Alessandro Alboresi** *(Univ. Padova, IT)* Structural and functional analysis of PSI-LHC of Nannochloropsis gaditana revealed specific adaptation of the photosynthetic apparatus in a secondary endosymbiont alga.
11:40 - 12:30	**Discussion**: Light harvesting and its regulation: eukaryotes	**Discussion**: Rubisco and photorespiration	**Discussion**: Monitoring and modeling photosynthesis at the global scale	**Discussion**: Evolution of photosynthesis
12:30 - 13:30	Lunch break - Trajectum / Lobby			
13:30 - 16:00	Parallel Symposia **Chloroplast development and assembly of the photosynthetic apparatus** Room: Auditorium 1 Chair/Discussion Leader: **Joerg Nickelsen** *(LMU Munich, DE)*	Parallel Symposia **CO2 diffusion and transport** Room: Auditorium 2 Chair/Discussion Leader: **Susanne von Caemmerer** *(ANU, AU)*	Parallel Symposia **Photosynthetic phenomics / phenotyping** Room: Room 0.4 Chair/Discussion Leader: **Jeremy Harbinson** *(Wageningen UR, NL)*	Parallel Symposia **Engineering new photosynthetic complexes and biohybrids** Room: Room 0.5 Chair/Discussion Leader: **Raoul Frese** *(VU Amsterdam, NL)*
13:30 - 13:55	**Joseph Komenda** *(CAS, CZ)* Mechanisms protecting the Photosystem II assembly process in cyanobacteria	**John Evans** *(ANU, AU)* CO2 diffusion and transport within leaves during photosynthesis	**Bart Nicolai** *(KU Leuven, BE)* X-ray and neutron microtomography for visualising leaf anatomy in 3-D	**Joanna Kargul** *(Warsaw Univ., PL)* Nanoengineering the interfaces in PSI-based solar-to-fuel devices and biophotodiodes
13:55 - 14:20	**Francis-André Wollmann** *(CNRS, FR)* The role of FtsH in the accumulation and assembly of thylakoid membrane proteins	**Tracy Lawson** *(Essex Univ., UK)* Effects of fluctuating light on photosynthesis and stomatal behaviour: impacts on carbon gain and water use efficiency	**Jeff Cruz** *(MSU, US)* *In situ* monitoring of photosynthetic performance	**Dror Noy** *(Migal-Galilee RI, IL)* The water-soluble chlorophyll binding proteins from brassicaceae, a novel building block and template for designing chlorophyll-protein light harvesting arrays
14:20 - 14:35	**Melissa Roth** *(UC Berkeley / HHMI, US)* A molecular switch for oxygenic photosynthesis and metabolism in a unicellular green alga	**Guillaume Théroux-Rancourt** *(UC Davis, US)* Structural control of the light response of mesophyll conductance across leaf profiles	**Mark Aarts** *(Wageningen UR, NL)* High throughput phenotyping of photosynthesis to identify relevant quantitative trait loci and underlying genes in *Arabidopsis thaliana*	**Michael Jones** *(Bristol Univ., UK)* Developments in the self-assembly of biohybrid materials employing purple bacterial reaction centres for solar energy conversion
14:35 - 14:50	**Jianfeng Yu** *(Imperial C. London, UK)* Structural and functional analysis of the conserved Ycf48 protein involved in the assembly and repair of Photosystem II	**Bernard Genty** *(CEA/CNRS, FR)* The contribution of cytosolic carbonic anhydrase activity in facilitating CO2 transport in the mesophyll	**Onno Muller** *(Forschungsz. Jülich, DE)* Photosynthetic phenotyping in the field and greenhouse using the Light Induced Fluorescence Transient (LIFT) method with multiple positioning systems.	**Alistair Laos** *(UNSW, AU)* Cooperative subunit refolding of a light-harvesting protein through a self-chaperone mechanism
14:50 - 15:05	**Sonja Bergner** *(MPI-Golm, DE)* Functional characterization of the plastid-encoded PsaI subunit of photosystem I in tobacco	**Asaph Cousins** *(WSU, US)* Temperature response of mesophyll conductance in three C4 species	**Riichi Oguchi** *(Tohoku Univ. JP)* Causes of errors in the estimation of photosynthetic activity of higher plant leaves using conventional chlorophyll fluorometers	**Dan Kallmann** *(Technio, IIT, IL)* A complete Bio-Photo-Electro-Chemical cell: From cyanobacteria to a hydrogenase thru an alternative Z scheme

15:10 - 16:00	**Discussion**: Chloroplast development and assembly of the photosynthetic apparatuss	**Discussion**: CO2 diffusion and transport	**Discussion**: Photosynthetic phenomics / phenotyping	**Discussion**: Engineering new photosynthetic complexes and biohybrids
16:00 - 16:30	Coffee break - Trajectum / Lobby			
16:30 - 17:00	Room: Auditorium 1 **Chris Bowler** *(Ecole Normale Superieure, Paris, FR)* Tara Oceans: Eco-System Biology at Planetary Scale			
17:00 - 17:30	Room: Auditorium 1 **Mei Li** *(Institute of Biophysics, Chinese Academy of Sciences, Beijing, CN)* Structural analysis of plant photosystem II supercomplex			
17:30 - 19:00	Room: Expo Foyer **Poster viewing (sessions 1 and 2 + late abstracts)**			

	Tuesday 9 August 2016			
08:30 - 09:00	Room: Auditorium 1 **Ron Milo** *(Weizmann Institute, IL)* Sugar synthesis from CO2 in E. coli			
09:00 - 09:30	Room: Auditorium 1 **Diana Kirilovsky** *(CNRS-CEA-Univ Paris-Saclay, FR)* The Orange Carotenoid Protein and Photoprotection in Cyanobacteria			
09:30 - 10:00	Coffee break - Trajectum / Lobby			
10:00 - 12:30	Parallel Symposia **Water oxidation** Room: Auditorum 1 Chair/Discussion Leader: **Robert Burnap** *(Oklahoma SU, US)*	Parallel Symposia **Light harvesting and its regulation part 2** Room: Auditorium 2 Chair/Discussion Leader: **Robert Blankenship** *(Washington Unv. in St. Louis, US)*	Parallel Symposia **Systems biology in photosynthesis** Room: Room 0.4 Chair/Discussion Leader: **Klaas van Wijk** *(Cornell Univ., US)*	Parallel Symposia **Regulation of carbon assimilation reactions in C3 systems** Room: Room 0.5 Chair/Discussion Leader: **Christine Raines** *(Univ. Essex, UK)*
10:00 - 10:25	**Richard Debus** *(UC Riverside, US)* FTIR Studies of Water Oxidation in Photosystem II	**Jürgen Köhler** *(Univ. Bayreuth, DE)* Structure of Light-Harvesting Aggregates in individual chlorosomes	**Sabeeha Merchant** *(UCLA, US)* A day in the life of Chlamydomonas	**Stefan Timm** *(Rostock Univ. DE)* 2-Phosphoglycolate levels adjust the Calvin-Benson Cycle Activity and Starch Synthesis under harsh environmental conditions in Arabidopsis
10:25 - 10:50	**Holger Dau** *(Free Univ. Berlin, DE)* Protonation dynamics in photosynthetis water oxidation	**Donatas Zigmantas** *(Univ. Lund, SE)* Light harvesting in green sulfur bacteria studied by two-dimensional electronic spectroscopy	**Hiroyuki Ishida** *(Tohoku Univ., JP)* Autophagy provides substrates to amino acid catabolic pathways as an adaptive response to sugar starvation in Arabidopsis	**Ken Motohashi** *(Kyoto Sangyo Univ., JP)* Thioredoxin-dependent redox regulatory system in chloroplasts
10:50 - 11:05	**Takumi Noguchi** *(Nagoya Univ. JP)* Monitoring the reaction process during the S2-to-S3 transition in photosynthetic water oxidation by time-resolve infrared spectroscopy	**Long-Jiang Yu** *(Okayama Univ., JP)* Crystal structure of LH1-RC supercomplex from Thermochromatium tepidum at 1.9 Å resolution	**Elisa Schulz** *(MPI-Golm, DE)* Global changes in photosynthetic gene expression and lipid composition during leaf ontogenesis of tobacco	**Lauri Nikkanen** *(Turku Univ., FI)* Regulation of chloroplast biogenesis, photosynthesis and metabolism by the plastidial thioredoxin network
11:05 - 11:20	**Dimitrios Pantazis** *(MPI Mulheim, DE)* Interaction of methanol with the oxygen-evolving complex: structural models, species dependence, and mechanistic implications	**Min Chen** *(Univ. Sydney, AU)* The red-shifted phycobiliprotein complexes	**Lars Scharff** *(Univ. Copenhagen, DK)* Co-evolution of assembly of photosynthetic complexes and ribosome pausing	**Danielle Way** *(Univ. Western Ontario, CA)* Does improved Rubisco carboxylation efficiency enhance plant growth and performance across a broad CO2 concentration gradient?
11:20 - 11:35	**Jan Kern** *(Lawrence Berkeley NL, US)* Substrate binding to the OEC and mechanism of water oxidation studied by spectroscopy and room temperature fs X-ray crystallography of PSII	**Michal Gwizdala** *(Univ. Pretoria, SA)* Hidden dynamics of phycobilisomes – how their switching depends on illumination	**David Savage** *(UC Berkeley, US)* Fixed: Systems and synthetic biological approaches for improving photosynthesis	**Florian Busch** *(ANU, AU)* Nitrogen assimilation linked to photorespiration can enhance CO2 assimilation in plants
11:40 - 12:30	**Discussion**: Water oxidation	**Discusson**: Light harvesting and its regulation: prokaryotes	**Discussion**: Systems biology in photosynthesis	**Discussion**: Regulation of carbon assimilation reactions in C3 systems
12:30 - 13:30	Lunch break - Trajectum / Lobby			
13:30 - 16:00	Parallel Symposia **Electron and proton transfer in photosynthesis** Room: Auditorum 1 Chair/Discussion Leader: **Cornelia Spetea-Wiklund** *(Univ. Gothenburg, SE)*	Parallel Symposia **C4 and CAM** Room: Auditorium 2 Chair/Discussion Leader: **Howard Griffiths** *(Univ.Cambridge, UK)*	Parallel Symposia **Excitation energy transfer and quantum effects in photosynthesis** Room: Room 0.4 Chair/Discussion Leader: **Tomas Mancal** *(Charles Univ., CZ)*	Parallel Symposia **Stress: ecophysiology and biodiversity** Room: Room 0.5 Chair/Discussion Leader: **Hendrik Poorter** *(Forschungsz. Jülich, DE)*
13:30 - 13:55	**David Geoffry** *(MSU, US)* The Electric Field Component of the Proton Motive Force Sensitizes Photosystem II to Damage	**Erika Edwards** *(Brown Univ., US)* The distinct evolutionary dynamics of C4 and CAM photosynthesis	**Greg Scholes** *(Princeton Univ., US)* Vibronic coherence improves light harvesting	**Kristine Crous** *(Western Sydney Univ., AU)* How does the photosynthetic capacity of several Eucalyptus species acclimate to warming from warm and cool climates
13:55 - 14:20	**Deserah Strand** *(MPI-Golm, DE)* Reconsidering the redundancy hypothesis of cyclic electron flow	**James Hartwell** *(Univ. Liverpool, UK)* Ground-truthing the biodesign of Crassulacean acid metabolism through funtional genomics and transgenic approaches in Kalanchoë	**Paul Brumer** *(Univ. Toronto, CA)* Quantum Coherences in Photosynthetic Light Harvesting?	**Francesco Loreto** *(CNR, IT)* Photosynthesis under pressure: the volatile armament protecting photosynthesis from stresses
14:20 - 14:35	**Julian Eaton-Rye** *(Univ. Otag, NZ)* Targeted Mutation of D2 Amino Acids Residues Associated with Bicarbonate Binding and the Bicarbonate-Dependent Protonation of Plastoquinone B	**Isabel Abreu** *(ITQB NOVA, PT)* New post-translational level regulation for key enzymes in maize C4 photosynthesis: PEPC, PPDK and NADP-ME	**Howe-Siang Tan** *(Nanyang TU, SG)* Studying the Excitation Energy Transfer Dynamics of LHCII complexes using 2D and 3D Electronic Spectroscopy	**Hesheng Yao** *(Shihezi Univ. CN)* Is diaheliotropic leaf movement a photoacclimation mechanism under soil water deficit?
14:35 - 14:50	**Sasha Rexroth** *(Ruhr-Univ, Bochum, DE)* Structural and functional characterisation of the regulatory subunit PetP from the cytochrome b6f complex in Thermosynechococcus elongatus	**Thomas Jan Wrobel** *(Düsseldorf Univ., DE)* Towards the genetic factors determining C4 specific development in the genus Flaveria	**Sara Massey** *(Univ. Chicago, US)* Delocalization and Energy Transfer Dynamics in Rhodobacter sphaeroides from Two-Dimensional Anisotropy Spectroscopy	**Charilaos Yiotis** *(UC Dublin, IE)* Breathing new air: Atmospheric change control of plant evolution
14:50 - 15:05	**Paula Mulo** *(Univ. Turku, FI)* Novel components in regulation of ferredoxin-NADP+ oxidoreductase membrane tethering	**Steven Kelly** *(Univ. Oxford, UK)* Necessity is the mother of re-invention: the parallel evolution of C4 photosynthesis	**Bart van Oort** *(VU Amsterdam, NL)* Hidden electronic states in Light-Harvesting Complex II	**Haim Treves** *(Hebrew Univ. Jerusalem, IL)* Chlorella ohadii - The alga that never read the literature
15:10 - 16:00	**Discussion**: Electron and proton transfer in photosynthesis	**Discussion:** C4 and CAM	**Discussion**: Excitation energy transfer and quantum effects in photosynthesis	**Discussion**: Stress: ecophysiology and biodiversity

16:00 - 16:30	Coffee break - Trajectum / Lobby
16:30 - 17:00	Room: Auditorium 1 **Manajit Heyer-Hartl** *(Max Planck Institute of Biochemistry, DE)* Chaperone Machineries in RuBisCO Biogenesis and Metabolic Repair
17:00 - 17:30	Room: Auditorium 1 **Daniel G. Nocera** *(Harvard University, US)* A Complete Artificial Photosynthesis
17:30 - 19:00	Room: Expo Foyer **Poster viewing (sessions 3 and 4)**
21:00 - 24:00	Party

	Wednesday 10 August 2016			
08:30 - 09:00	Room: Auditorium 1 Winner of the Hill award: **Nick Cox** Substrate binding and activation of Nature's water splitting catalyst			
09:00 - 09:30	Room: Auditorium 1 Winner of the Calvin award: **Andrew Leakey** Rising [CO2] as a benefit and a challenge to improving crop photosynthesis			
09:30 - 10:00	Coffee break - Trajectum / Lobby			
10:00 - 12:30	Parallel Symposia **Regulation of electron transfer and alternative electron transport pathways** Room: Auditorium 1 Chair/Discussion Leader: **Anja Krieger** *(CNRS Saclay, FR)*	Parallel Symposia **Membrane ultrastucture and dynamics** Room: Auditorium 2 Chair/Discussion Leader: **Gyozo Garab** *(BRC Szeged, HU)*	Parallel Symposia **Multiscale modeling of photosynthesis from thylakoid to canopy** Room: Room 0.4 Chair/Discussion Leader: **Ulo Niinemets** *(Estonian Univ. Life science, EE)*	Parallel Symposia **CO2 concentration mechanisms of lower plants and (micro)algae** Room: Room 0.5 Chair/Discussion Leader: **Cheryl Kerfeld** *(MSU, US)*
10:00 - 10:25	**Eva-Mari Aro** *(Turku Univ. FI)* Dynamics of Photosystem I and II in the thylakoid membrane	**Matt Johnson** *(Univ.Sheffield, UK)* Supramolecular organisation of photosystem I in plants	**Yin Xinyou** *(Wageningen UR, NL)* What has been learnt from a generalised modelling of electron transport limited photosynthesis?	**Dean Price** *(ANU, AU)* The functioning of the cyanpbacterial CO2 concentrating mechanism and progress of transplanting CCM components into C3 plants
10:25 - 10:50	**Toshiharu Shikanai** *(Kyoto Univ, JP)* Regulation of proton motive force in photosynthesis	**Benjamin Engel** *(MPI Biochemistry, DE)* Native Molecular Landscape of the Chloroplast	**Berkley Walker** *(Hienrich Heine Univ. DE)* What are the current and future costs of photorespiration to crop production?	**Martin Jonikas** *(Carnegie IS, US)* A repeat protein links Rubisco to form the eukaryotic carbon concentrating organelle
10:50 - 11:05	**Wojciech Nawrocki** *(CNRS Paris, FR)* The Role of Chlororespiration in Chlamydomonas	**Ryo Yokoyama** *(Kyoto Univ., JP)* Grana-localized Proteins, RIQ1 and RIQ2, Affect the Dynamics of Light-harvesting Complex II and Grana Stacking in Arabidopsis.	**Andrew Ringsmuth** *(VU Amsterdam, NL)* Theoretically optimal light harvesting for scalable, maximal photosynthesis	**Christopher Gee** *(UC Berkeley, US)* The carbonic anhydrase, CAH1, is an essential component of the carbon-concentrating mechanism in the heterokont microalga, *Nannochloropsis oceanica*.
11:05 - 11:20	**Jessica Wiwczar** *(Yale Univ. US)* Divalent cations modulate QA electron transfer in Photosystem II	**Dirk Schneider** *(Univ.Mainz, DE)* A membrane fusion protein inside chloroplasts and cyanobacteria	**Nicolas Bambach-Ortiz** *(UC Davis, US)* A photosynthetic model of heat, water and photoinhibition stress in almond trees	**Luning Liu** *(Univ. Liverpool, UK)* Light modulates the biosynthesis and organization of cyanobacterial carbon fixation machinery
11:20 - 11:35	**Véronique Larosa** *(Univ. Padova, IT)* A mitochondrial mutation increases high light resistance in Chlamydomonas reinhardtii.	**Radek Kana** *(CAS, CZ)* Presence of heterogeneous microdomains in thylakoids of cyanobacteria	**Alejandro Morales Sierra** *(Wageningen UR, NL)* Modelling C3 photosynthesis under fluctuating light conditions at the leaf and canopy level	**Ondrej Prasil** *(CAS, CZ)* Inorganic carbon acquisition of Chromera velia
11:40 - 12:30	**Discussion**: Regulation of electron transfer and alternative electron transport pathways	**Discussion**: Membrane ultrastucture and dynamics	**Discussion**: Multiscale modeling of photosynthesis from thylakoid to canopy	**Discussion**: CO2 concentration mechanisms of lower plants and (micro)algae
12:30 - 13:30	Lunch break - Trajectum / Lobby			
14:00	**Social activities**			

	Thursday 11 August 2016			
08:30 - 09:00	Room: Auditorium 1 **Andreas Weber** *(Heinrich Heine University, DE)* Evolution and function of C4 photosynthesis			
09:00 - 09:30	Room: Auditorium 1 **David Kramer** *(Michigan State University, US)* The Gamut of Photosynthesis: What can we learn when bridging the gaps between the lab and the world?			
09:30 - 10:00	Coffee break - Trajectum / Lobby			
10:00 - 12:30	Parallel Symposia **Acclimation of the photosynthetic apparatus** Room: Auditorium 1 Chair/Discussion Leader: **Ayumi Tanaka** *(Hokkaido Univ., JP)*	Parallel Symposia **Photosynthesis and crop improvement** Room: Auditorum 2 Chair/Discussion Leader: **Don Ort** *(Univ. Illinois, US)*	Parallel Symposia **Metabolites and pathways** Room: Room 0.4 Chair/Discussion Leader: **Frank Ludewig** *(Univ. Erlangen-Nuremberg, DE)*	Parallel Symposia **Artificial photosynthesis** Room: Room 0.5 Chair/Discussion Leader: **Johannes Messinger** *(Umeå Univ. SE)*
10:00 - 10:25	**Michael Hippler** *(Univ. Munster, DE)* Calredoxin – a novel calcium-dependent sensor-responder connected to regulation of photosynthesis	**Lisa Ainsworth** *(USDA ARS, US)* Improving soybean photosynthesis: Insights from 80 years of breeding	**Hans-Henning Kunz** *(WSU, US)* Photosynthesis and chloroplast function under abiotic stress	**Chunxi Zhang** *(Ins. Chemistry, CAS, CN)* Artificial Mn4Ca/Mn4Sr-cluster mimicking the Oxygen-Evolving Center in Photosystem II
10:25 - 10:50	**Giovanni Finazzi** *(CNRS Grenoble, FR)* Chloroplast tomography allows revisiting diatoms photosynthesis	**Elizabete Carmo-Silva** *(Lancaster Univ., UK)* Improving CO2 assimilation in fluctuating environments	**Katrin Philippar** *(LMU Munich, DE)* Plastid fatty acid export and cellular metabolism	**Silviu Balaban** *(Univ. Aix Marseille, Fr)* Biomimetic Light-harvesting
10:50 - 11:05	**Yoshitaka Nishiyama** *(Saitama Univ., JP)* Redox regulation of the repair of photosystem II under photoinhibition	**Congming Lu** *(Ist. Botany, CAS, CN)* Enhanced sucrose loading improves rice yield by increasing grain size	**Tasios Melis** *(UC Berkeley, US)* Photosynthesis-driven fuel and chemicals production	**Gábor Méhes** *(Linköping Univ. , SE)* E-Plant Technology and its Potential for Solar Energy Harvesting

11:05 - 11:20	**Patrycja Haniewicz** *(Warsaw Univ., PL)* Molecular mechanisms of photoprotection in highly robust PSI-LHCI supercomplex from an extremophilic red alga *Cyanidioschyzon merolae*	**Ana Karla Lobo** *(Fed. Univ. Ceara, BR)* Increasing RuBisCo efficiency by overexpression of ca1pase in wheat	**Alena Prusova** *(Wageningen UR,NL)* Source strength manipulation in tomato changes phloem volume flow, but not flow velocity	**Jessica de Ruiter** *(Leiden Univ., NL)* A closed system approach for the in-depth investigation of catalytic steps, as illustrated by a copper based water oxidation catalyst
11:20 - 11:35	**Mikko Tikkanen** *(Turku Univ., FI)* Photoinhibition of PSI and PSII as regulatory mechanisms of photosynthetic energy transduction	**Johannes Kromdijk** *(Univ. Illinois, US)* Plants engineered to have faster relaxation of non-photochemical quenching show increased photosynthetic efficiency and growth.	**Yao-Pin Lin** *(Academia Sinica, TW)* Identification of A Novel Chlorophyll Dephytylase Involved in Chlorophyll Turnover and Thermotolerance in Arabidopsis	**Adriano Monti** *(UC London, UK)* A dynamic view of proton-coupled electron transfer in photocatalytic water splitting
11:40 - 12:30	**Discussion**: Acclimation of the photosynthetic apparatus	**Discussion**: Photosynthesis and crop improvement	**Discussion**: Metabolites and pathways	**Discussion**: Artificial photosynthesis
12:30 - 13:30	Lunch break - Trajectum / Lobby			
13:30 - 14:15	Room: Expo Foyer **Poster viewing (sessions 5, 6 and 7)**			
14:15 - 16:00	Room: auditorium 1 **ISPR session, including ISPR announcements & the Fabrice Rappaport lecture given by Angela Falciatore**			
16:00 - 16:30	Coffee break - Trajectum / Lobby			
16:30 - 17:00	Room: Auditorium 1 **Jennifer McElwain** *(UC Dublin, IE)* Palaeo-ecophysiology and atmospheric change over the past 400 million years			
17:00 - 17:30	Room: Auditorium 1 **Jian-Ren Shen** *(Okayama University, JP)* Structural biology of photosynthetic systems			
17:30 - 19:00	Room: Expo Foyer **Poster viewing (sessions 5, 6 and 7)**			
19:30 - 24:00	**Conference Dinner**			

	Friday 12 August 2016			
09:00 - 09:30	Room: Auditorium 1 **Poster Prizes**			
09:30 - 10:00	Coffee break - Trajectum / Lobby			
10:00 - 12:30	Parallel Symposia **Reaction centers** Room: Auditorium 1 Chair/Discussion Leader: **John Golbeck** *(Penn State Univ., US)*	Parallel Symposia **Chloroplast to nucleus signaling** Room: Room 0.2/0.3 Chair/Discussion Leader: **Shizue Matsubara** *(Forschungsz. Jülich, DE)*	Parallel Symposia **Photosynthesis in natural ecosystems** Room: Room 0.4 Chair/Discussion Leader: **Paul Falkowski** *(Rutgers Univ., US)*	Parallel Symposia **Biofuel, microbes and cell factories** Room: Room 0.5 Chair/Discussion Leader: **Wim Vermaas** *(ASU, Tempe US)*
10:00 - 10:25	**Junko Yano** *(Lawrence Berkeley Nat. Lab, US)* Taking Snapshots of Water Oxidation Reaction in Photosystem II with X-ray Crystallography and X-ray Spectroscopy	**Karin Krupinska** *(Christian-Albrechts-Univ. Kiel, DE)* Chloroplast stability during high light depends on WHIRLY1 mediated biogenesis of microRNA	**Nir Keren** *(Hebrew Univ. Jerusalem, IL)* Control over photosynthetic energy transfer by rearrangements of its basic building blocks	**Shota Atsumi** *(UC Davis, US)* Global metabolic rewiring of an obligate photoautotrophic for production of chemicals under diurnal light conditions
10:25 - 10:50	**Leonas Valkunas** *(Vilnius Univ., LT)* Role of coherent vibrations in photosynthesis	**Kai Xun Chan** *(ANU, AU)* Learning the language of the chloroplast: how chloroplasts can sense oxidative stress and regulate stomatal function	**Michael Kühl** *(Univ. Copenhagen, DK)* Microenvironmental aspects of photosynthesis	**Klaas Hellingwerf** *(Univ. Amsterdam, NL)* Cyanobacterial cell factories for 'direct conversion' of CO2 into commodity products
10:50 - 11:05	**Pavel Maly** *(VU Amsterdam, NL)* Single-molecule spectroscopy observes dynamic disorder in YM210W mutant reaction centers of purple bacteria	**Haruhiko Jimbo** *(Saitama Univ., JP)* A role of mitogen-activated protein kinase (MAPK) signaling in accumulation of photosystem II in *Chlamydomonas reinhardtii*	**Joseph Stinziano** *(Univ. Western Ontario, CA)* Temperature controls timing of autumn decline in photosynthetic capacity but photoperiod controls timing of growth in a boreal conifer	**Noam Adir** *(Technion, IL)* Utilizing photosynthetic complexes for solar energy conversion: Building a Bio-generator
11:05 - 11:20	**Ivan Proskuryakov** *(IBBP Pushchino,RU)* A "new" mechanism of chlorophyll triplet state quenching	**Peter Gollan** *(Turku Univ. FI)* Thylakoid membrane proton gradient is important for enzymatic lipid peroxidation and oxylipin signalling in *Arabidopsis thaliana*	**Steffen Grebe** *(Turku Univ., FI)* Photosynthetic characteristics of evergreen conifers	**Masahiko Ikeuchi** *(Univ. Tokyo, JP)* Improving the photosynthetic biomass production in cyanobacteria
11:20 - 11:35	**Christopher Gisriel** *(ASU, US)* Characterization and crystallization of the photosynthetic reaction center in heliobacteria	**Matthew Terry** *(Univ.Southampto, UK)* Testing the hypothesis that heme is a promotive retrograde signal in Arabidopsis	**Ismael Moya** *(CNRS Palaiseau, FR)* A simple micro-lidar for vegetation monitoring	**Marcel Janssen** *(Wageningen UR, NL)* Microalgal antenna size reduction – implications for mass culture
11:40 - 12:30	**Discussion**: Reaction centers	**Discussion**: Chloroplast to nucleus signaling	**Discussion**: Photosynthesis in natural ecosystems	**Discussion**: Biofuel, microbes and cell factories
12:30 - 13:00	Room: Auditorium 1 **Closing Ceremony and announcement next conference**			