

ANNOUNCEMENT

Invitation to the 17th international congress on photosynthesis research in 2016: photosynthesis in a changing world

Herbert van Amerongen¹ · Roberta Croce²

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Abstract The 17th International Congress on Photosynthesis will be held from August 7 to 12, 2016 in Maastricht, The Netherlands. The congress will include an opening reception, 15 plenary lectures, 28 scientific symposia, many poster sessions, displays by scientific companies, excursions, congress dinner, social activities, and the first photosynthesis soccer world championship. See <http://www.ps2016.com/>. The congress is organized as an official event of the International Society of Photosynthesis Research (see <http://www.photosynthesisresearch.org/>).



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✉ Herbert van Amerongen
herbert.vanamerongen@wur.nl

¹ Laboratory of Biophysics, Wageningen University,
Dreijenlaan 3, 6703 HA Wageningen, The Netherlands

² Department of Physics and Astronomy, Faculty of Sciences,
VU University Amsterdam, De Boelelaan 1081,
1081 HV Amsterdam, The Netherlands

Life on earth is almost entirely fuelled by light from the sun, a nearly endless source of free energy. The process of photosynthesis transforms light energy into chemical energy in plants, algae, cyanobacteria and anoxygenic photosynthetic bacteria, inhabiting nearly all ecosystems of our Earth. Photosynthesis, which fixes carbon on a massive scale, has shaped our planet and photosynthetic organisms provide all our food and oxygen; it is also the basis of nearly all our energy resources. The evolution of photosynthesis is widely seen as the benchmark for widespread, sustainable life on Earth; to understand it is the most exciting and fundamental quest of science. Such an understanding is also crucial for us to address the three critical challenges facing our world: food, energy, and climate change.

Although the emphasis of the congress will be on the basic understanding of the photosynthesis process, we plan to address its impact on the present and the future life on Earth.

The International Congress on Photosynthesis has been held on a 3-year basis in North America, Europe, Asia and Oceania, and the last one (16th) was in St. Louis, USA; it was organized by Bob Blankenship and Don Ort (see Blankenship et al. 2013). For information on some of the earlier congresses, see Govindjee (2004), Foyer (2006) and Govindjee and Yoo (2007). In all cases the goal was to bring together scientists working on photosynthesis from all over the world. After the 2016 meeting in Maastricht the congress will continue on a 4-year basis in order not to clash with the biannual Gordon conferences in photosynthesis.

This will be the first time that the Photosynthesis international conference is being organized in The Netherlands, a country, which has made important contributions to the field of photosynthesis. We do note that many international scientists did attend the second Western

European conference, organized by Jan B. Thomas and J. H. C. Goedheer, which was held, in 1965, in Woudschoten, Zeist, The Netherlands. All of us are aware of the pioneering work of Jan Ingenhousz, who demonstrated in his famous experiments in the 18th century that plants need light to make oxygen. And everyone knows the famous Kok cycle, named after Bessel Kok, for oxygen evolution; it explained the period 4 oscillations in oxygen evolution as a function of flash number, discovered by Pierre Joliot in 1969. Kok was also the discoverer of the reaction center chlorophyll a P700, while he was in Wageningen. Currently, this cycle receives a lot of attention again, because it is at the basis of oxygenic photosynthesis, and it will have a prominent place at the 17th Congress in Maastricht. Extremely important contributions were made by Louis N. M. Duysens, who, sadly passed away in 2015. His 1952 Ph.D. thesis on “*Excitation Energy Transfer in Photosynthesis*” is a classic, where the concept of reaction center pigment that he called “P” was born. Among his many important discoveries, a major one has been the alternating effect of green (photosystem II light) and red (photosystem I light) on the redox state of cytochrome f in red algae, which firmly established the now familiar model of Photosystems I and II acting in series.

The 2016 conference will be held in Maastricht, the oldest city in The Netherlands, once ruled by the Romans, on the river Meuse (Maas in Dutch). It has a wonderful atmosphere for socializing in the evening after the conference with plenty of restaurants and bars with terraces to eat and drink and enjoy life. The city has been nominated to become the cultural capital of Europe in 2018 but it is also well known because of the Maastricht Treaty, which has for instance led to the creation of the single European currency, the *Euro*. See Fig. 1 for a view of the city.

Maastricht Exhibition & Congress Centre (MECC) is located just outside the historical center and most hotels and restaurants in Maastricht can easily be reached by foot from there (see Fig. 2 for a photograph of the MECC facility). However, if you are not able or willing to walk, you will be able to rent a bike (a great Dutch way of life) or to take a bus, which will be free for all the participants during the entire conference. See Figs. 3 and 4 for photographs of the Chateau where the conference dinner will be held and the city, respectively; Fig. 5 shows a view of Bonbonniere, where a party is planned on Tuesday, August 9, 2016.

Speakers from around the world are expected to present their most recent results, either in plenary lectures or in one of the 28 symposia that are being held in four parallel sessions. In each session, we will have two invited speakers and a discussion leader who will select three additional oral presentations from the submitted poster abstracts. In addition each discussion leader will



Fig. 1 View on Maastricht and bridge across the river Meuse (Maas) (source VVV Maastricht, Kleine Staat 1, 6211 ED Maastricht, The Netherlands, www.vvv-maastricht.eu, info@vvvmaastricht.nl)



Fig. 2 One of the MECC lecture halls (source MECC Maastricht, Forum 100, 6229GV Maastricht, The Netherlands, www.mecc.nl, info@mecc.nl)



Fig. 3 Chateau Neercanne (Castle Neercanne). Our conference dinner will be held here in the place where the Euro was born (source Maastricht Convention Bureau, Duboisdomein 5b, 6229GT Maastricht, The Netherlands, www.maastrichtconventionbureau.com, info@maastrichtconventionbureau.com)

chair a discussion session of 50 min in which many of the posters will be discussed. *Poster presenters are, therefore, encouraged to prepare a short poster flash in case their*



(a)



(b)

Fig. 4 Maastricht has many places to (vi)sit (source Maastricht Convention Bureau, Duboisdomein 5b, 6229GT Maastricht, The Netherlands, www.maastrichtconventionbureau.com, info@maastrichtconventionbureau.com)



Fig. 5 A party will be held on Tuesday (August 9, 2016) evening in the Bonbonniere (source Love4Lasers, Schoener, wijk 43, 8243VZ Lelystad, The Netherlands, www.love4lasers.nl, info@love4lasers.nl)

poster is selected for discussion. We are very happy with the fact that all the posters can be up during the entire conference; this will permit lots of discussion among the participants. There will also be many commercial exhibits from well-known vendors, easily accessible during breaks and poster sessions.

We hope to see many of you next year and we hope there will be a lot of interactions both within and across the borders between different research fields, and we expect many new collaborations to be started. We also hope that this meeting will contribute a little bit towards finding solutions for our global challenges. But besides that we wish you all a great time at the conference and one or two of its satellite meetings. Both of us and the members of the entire program committee (see [Appendix](#)) encourage you to take a few extra days to visit other parts of The Netherlands or the surrounding countries, which are very close to Maastricht. On behalf of the various committees associated with the congress (see [Appendix](#) and/or our website <http://www.ps2016.com>) and Pauwels Conference Organizers (PCO, Maastricht) we welcome you all to Maastricht next year.

We end this announcement by mentioning a few dates: Registration for the Congress starts on **February 1, 2016**, deadline for early registration is **June 1, 2016**, and the deadline for abstract submission is **April 1, 2016**.

Acknowledgments We are grateful to Kevin Redding and John Golbeck and all the current and former members of the Executive Committee of the International Society of Photosynthesis Research (ISPR) for the support they have provided us. In particular we

mention Bill Rutherford, who is actively involved in helping us prepare and finalize the scientific program. We have also received a lot of help and feedback from the members of the various committees listed in the Appendix. Without the help of Pauwels Conference Organizers (PCO), it would have been impossible to organize this conference. Netty Hoefakker is thanked for help in preparing this announcement and we would also like to acknowledge the contribution of Jeremy Harbinson.

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Appendix

Congress co-chairs

Herbert **van Amerongen** (Wageningen University, The Netherlands) and Roberta **Croce** (VU University Amsterdam, The Netherlands).

Program committee

Roberta Croce (chair; VU University Amsterdam, The Netherlands), Herbert van Amerongen (Wageningen University, The Netherlands), Bill Rutherford (former president of the ISPR; Imperial College, UK), Egbert Boekema (University of Groningen, The Netherlands), Jan Dekker (VU University Amsterdam, The Netherlands), Huub de Groot (Leiden University, The Netherlands), Rienk van Grondelle (VU University Amsterdam, The Netherlands), Jeremy Harbinson (Wageningen University, The Netherlands), Shizue Matsubara (Forschungszentrum Jülich, Germany), and Paul Struik (Wageningen University, The Netherlands).

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