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LETTER TO THE EDITOR

Honoring George C. Papageorgiou

With this Letter to the Editor, we honor Dr. George C. Papageorgiou, of the National Center for Scientific Research Demokritos, in Athens, Greece, for his contributions to the science of photosynthesis for more than 50 years. Papageorgiou joined the Demokritos group, at George Akoyunoglou's invitation, having received a PhD from the University of Illinois at Urbana-Champaign, working with one of us, Govindjee (Papageorgiou and Govindjee 1967, 1968a,b; Govindjee and Papageorgiou 1971; Papageorgiou 1968). Papageorgiou was Govindjee's first PhD student; he had come to Biophysics from Physical Chemistry.

For several years, the group in the Department of Biology at the Demokritos was the only internationally recognized photosynthesis research group of Greece. It projected itself through publications, active participation in conferences, research collaborations, and organization of international meetings. Certainly, the peak was the organization of 5th International Photosynthesis Congress in Halkidiki, Greece in 1980 (Akoyunoglou 1981). George is a founding member and Executive Board member of the Hellenic Biochemical and Biophysical Society, and member of the American Chemical Society, and of the American Biophysical Society. In addition, he is a member of European Expert Committee on Biomaterials of UNESCO (United Nations Educational, Scientific and Cultural Organization), representative of Greece to Advanced Studies Institutes Program of NATO, and represented Greece in the "Biophysics of Photosynthesis Programme of the European Science Foundation". George has had a special relation with *Photosynthetica*; he served this journal for twenty years from 1991 (volume 25) through 2013 (volume 51). George published papers in this journal on several important topics, for example: on the immobilization of photosynthetic organisms (Papageorgiou 1987); on the role of chloride in photosynthesis (Papageorgiou and Kalosaka 1990); on the use of glycinebetaine in stabilizing photosystems in spinach thylakoids (Allakhverdieva *et al*. 1999); and on salt tolerance in cyanobacteria (Ladas and Papageorgiou 2000). In addition, he wrote a wonderful tribute to Prasanna Mohanty, who had also been a student of one of us (Govindjee), and had published with George (Mohanty *et al*. 1971, Papageorgiou 2014).

Papageorgiou is an international authority on photosynthesis, regulation of photosynthesis, and in the use of chlorophyll (Chl) *a* fluorescence as a noninvasive tool to measure various photosynthetic reactions (*see e.g*., Papageorgiou and Govindjee 2004), including the photoprotective mechanism of nonphotochemical quenching (NPQ) of the first singlet excited state of Chl *a* (Papageorgiou and Govindjee 2014). We give here reference to one of his major reviews on fast and slow Chl fluorescence induction (Papageorgiou *et al*. 2007). He has published extensively in top international journals, and this list is available from one of us, a former student of George (Kostas Stamatakis).

To honor Papageorgiou, an international meeting, on Photosynthesis Research for Sustainability, was held in Crete, Greece, on 22–26 September, 2015. The journal *Photosynthesis Research*, also published by Springer, has scheduled the publication of a special issue on "Photosynthesis and Sustainability" to honor Papageorgiou. It is being edited by A. Melis, K. Stamatakis, and S.I. Allakhverdiev. A News Report of the Crete conference will also appear there (Allakhverdiev *et al*. 2016). *See* two of George's photographs taken at this conference (Figs. 1, 2).

Fig. 1. George C. Papageorgiou in the audience listening to the lectures at the conference. Photo provided by Govindjee.

Fig. 2. Three generations: Left to right: Govindjee, George C. Papageorgiou, and Kostas Stamatakis. Photo provided by Rajni Govindjee.

We end this Letter to the Editor with two more photographs of George, one with his long-time collaborator and friend Norio Murata (Fig. 3; *see* their joint contribution on the elegant use of glycine betaine in exploiting photosynthesis: Papageorgiou *et al*. 1991; 1998a,b), and the last one is with his life partner Sophie as well as with Govindjee, his academic collaborator (Fig. 4); in the background is George's favorite place: the Parthenon and Acropolis.

Fig. 3. Norio Murata and George C. Papageorgiou in a restaurant in Okazaki, Japan, 1993. Photo from the family archives of Papageorgiou.

Fig. 4. Left to right: Sophie Papageorgiou, Govindjee and George C. Papageorgiou, 2015. Photo provided by Rajni Govindjee.

In addition, Helena Synkova, the Edditor-in-Chief of Photosynthetica, extends the following invitation:" On behalf of Photosynthetica, we welcome reviews dedicated to honor Prof. George C. Papageorgiou during 2016. They will go through our normal peer-review process, but they will remind us of his contributions to photosynthesis research and his long-term work for our journal Photosynthetica.

KOSTAS STAMATAKIS
Greece (kstam@bio.demokritos.gr)

SULEYMAN I. ALLAKHVERDIEV
Russia (suleyman.allakhverdiev@gmail.com)

GYOZO GARAB
Hungary (gyozo@brc.hu)

GOVINDJEE+
USA (+Corresponding author; gov@illinois.edu)

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