



LETTER TO EDITOR

Happy birthday, Govindjee!

O. PRÁŠIL

Institute of Microbiology of the Czech Academy of Sciences, Center Algatech, Laboratory of Photosynthesis, Třeboň, Czech Republic

I am very glad to have an opportunity to congratulate Govindjee (Fig. 1) on his 90th birthday! Time is flying fast! Only ten years ago we celebrated together his 80th anniversary during his research stay in Třeboň (Prášil 2014) and much I have already said in that essay. Still, I am glad to repeat that Govindjee is dear and close to me. He has influenced and accompanied me during my career in photosynthesis research in several ways. I learned a lot from his research papers and inspiring reviews about chlorophyll fluorescence techniques or the role of bicarbonate in Photosystem II (<https://www.life.illinois.edu/govindjee/pubschron.html>). When I graduated in biophysics I had very little idea about photosynthesis. By chance, I entered the lab of Ivan Šetlík in Třeboň who offered me to do a Ph.D. with him. At this time, photoinhibition was a hot topic and my project was to assemble a thermoluminescence instrument and use it to monitor Photosystem II acceptor side modifications. I was completely new to thermoluminescence and had only a vague idea of what to do. Fortunately, I found the book 'Light Emission by Plants and Bacteria' (Govindjee *et al.* 1986) and learned a lot from it. I noted that the book was edited by someone for me strangely called just 'Govindjee', with no clear name or surname. I was then reading Herman Hesse and somehow I connected Siddhartha with Govindjee, thinking that the latter must be some kind of ascetic and mystic person as well. Only after I met him during my stay in Urbana in 1993, I realized how lively and entertaining Govindjee is in the company of colleagues and students! Later I enjoyed reading numerous review books that Govindjee initiated or edited. Govindjee has founded the famous book series *Advances in Photosynthesis Research* (<https://www.springer.com/series/5599/books?page=1>). The books provided an invaluable source of information, each new volume was eagerly awaited and then read by everyone in our group. Govindjee has visited Třeboň many times. In 2007, I invited Govindjee to give a talk at the Aquaflo conference in Nové Hradky. This started our fruitful research collaboration on the origins of the slow S to M fluorescence rise in cyanobacteria (Kaňa *et al.* 2009, 2012; Bernát *et al.* 2018).

What makes Govindjee stand out from the crowd even in his 90s is his lifelong passion for photosynthesis and



Fig. 1. Govindjee relaxing with a cup of tea in Bhopal, India in 2016. (Source: *Photosynthetica* 56: 1-10, 2018)

the intensity with which he serves the photosynthetic community. Photosynthesis is an integral part of his life and a source of apparently endless positive energy. Govindjee maintains a high level of activity that many much younger can envy him. Even now he is ready to discuss photosynthesis anytime I manage to talk to him. Govindjee has promoted photosynthesis in many nonorthodox ways, like designing and distributing posters about the Z scheme or promoting books for children or songs on photosynthesis. I still keep Z scheme posters and use them with success when explaining the flow and transformation of energy in photosynthetic membranes. Govindjee has initiated or helped to organize many meetings and gatherings on photosynthesis all around the globe. During the decades he has documented the history of photosynthesis research by taking thousands of photos and writing or initiating numerous retrospective articles. Without him, many events and details from the rich history of photosynthesis research would be lost and forgotten by now. Without keeping this historical memory, without acknowledging and honoring our predecessors, the photosynthetic community would lose its cohesive 'spirit' and entropy would prevail.

Thank you, Govindjee, for the inspiration, collaboration, and friendship, for the joy of research! Let me wish you many more active years in photosynthesis!

Received 20 December 2022

Accepted 21 December 2022

Published online 21 December 2022

e-mail: prasil@alga.cz

References

- Bernát G., Steinbach G., Kaňa R. *et al.*: On the origin of the slow M–T chlorophyll *a* fluorescence decline in cyanobacteria: interplay of short-term light-responses. – *Photosynth. Res.* **136**: 183-198, 2018.
- Govindjee, Amesz J., Fork D.C. (ed.): *Light Emission by Plants and Bacteria*. Pp. 638. Academic Press, Orlando 1986.
- Kaňa R., Kotabová E., Komárek O. *et al.*: The slow S to M fluorescence rise in cyanobacteria is due to a state 2 to state 1 transition. – *BBA-Bioenergetics* **1817**: 1237-1247, 2012.
- Kaňa R., Prášil O., Komárek O. *et al.*: Spectral characteristic of fluorescence induction in a model cyanobacterium, *Synechococcus* sp. (PCC 7942). – *BBA-Bioenergetics* **1787**: 1170-1178, 2009.
- Prášil O.: Govindjee, an institution, at his 80th (really 81st) birthday in Třeboň in October, 2013: a pictorial essay. – *Photosynth. Res.* **122**: 113-119, 2014.

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