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### **Recommendation for Dr. Pavel Pospíšil**

To the Dean of the Faculty

Pavel Pavel Pospíšil was my first post-doc when he spent a year in my laboratory in Turku, Finland in 1998. That time was highly productive, and our paper about the molecular mechanism of the high-temperature inhibition of the acceptor side of Photosystem II is well recognized with 66 citations in Web of Science. Dr. Pospíšil had an excellent background for the work with temperature dependence, with excellent understanding of biochemistry and previous research with temperature dependence of chlorophyll fluorescence. After the time in Turku, Dr. Pospíšil worked with Professor Dau's group, producing five important and well-cited papers, continuing his work on chlorophyll fluorescence, with special focus on the oxygen-evolving complex. This work is still highly relevant within the photosynthetic community, as can be seen from the steadily accumulating citations.

Within the plant science community, Dr. Pospíšil is best known for his work with reactive oxygen species (ROS) but he has also 12 interesting papers about ultra-weak photon emission, out of which 7 describe phenomena observed in human skin. These, too, have a connection to reactive oxygen species.

In research focusing on ROS and non-ROS free radicals, Dr. Pospíšil's 2012 comprehensive review about ROS production and scavenging mechanisms was an eye-opening paper for many, including myself. Dr. Pospíšil has always been able to find ROS related mechanisms, both for formation and detoxification, that are often neglected in the literature. He has also pioneered in the use of new, efficient methods for detection of ROS and non-ROS free radicals, including the EPR methods for detection of protein radicals.

The Kale et al. paper (PNAS 2017) and Kumar et al. paper (PNAS 2021) are milestones of advancement in research on the effects of ROS on Photosystem II. The Kale et al. paper was the first one in which oxidation of protein residues in Photosystem II - a phenomenon speculated for three decades - was actually shown to occur.

It is my pleasure to warmly recommend the nomination of Pavel Pospíšil to a Full Professor.

Turku, September 1, 2021

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