



Effect of Ca<sup>2+</sup>/Sr<sup>2+</sup> Substitution on the Electronic Structure of the Oxygen-Evolving Complex of Photosystem II: A Combined Multifrequency EPR, <sup>55</sup>Mn-ENDOR, and DFT Study of the S<sub>2</sub> State [Journal of the American Chemical Society 2011, 133, 3635–3648 DOI: 10.1021/ja110145v]. Nicholas Cox,\* Leonid Rapatskiy, Ji-Hu Su, Dimitrios A. Pantazis, Miwa Sugiura, Leonid Kulik, Pierre Dorlet, A. William Rutherford, Frank Neese, Alain Boussac, Wolfgang Lubitz,\* and Johannes Messinger\*

It came to our attention that we neglected to reference the work of Teutloff et al., <sup>1</sup> which tentatively assigned the position of the Mn<sup>III</sup> ion in the S<sub>2</sub> state of the water-oxidizing complex of *Thermosynechococcus elongatus*, as deduced from <sup>55</sup>Mn-ENDOR studies on PSII single crystals. Our present analysis and the Teutloff et al. <sup>1</sup> report are in agreement and as such, together with recent theoretical calculations <sup>2</sup> of EPR parameters, further strengthen the conclusion that the model for the structure of the water-oxidizing complex in the S<sub>2</sub> state proposed by Siegbahn provides an excellent basis for describing all available magnetic resonance data. Furthermore, with minor adjustments, this model appears broadly consistent with new crystallographic data <sup>3</sup> of PSII at 1.9 Å resolution recently published in Nature (PDB 3ARC).

## **■** REFERENCES

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