Triplet Oxygen Evolution Catalyzed by a Biomimetic Oxomanganese Complex: Functional Role of the Carboxylate Buffer

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Triplet oxygen evolution via Formation of a Mn(III)-superoxo species. (a) OEC of PSII, including carboxylate groups in close contact with the inorganic core and the proposed nucleophilic attack responsible for O–O bond formation. (b) Mn-terpy dimer (1, terpy=2,2′:6′,2″-terpyridine) during O–O bond formation after exchanging one of its water ligands by acetate.