

JoAnn Clara Williams

Education and Training

B.S., Biology and Chemistry University of Puget Sound, Tacoma, WA	1979
Ph.D., Biology University of California, San Diego	1986
Visiting Scientist, Molecular Genetics Unit Medical Research Council, Cambridge, England	1986–1987
Visiting Scientist, Central Research and Development Department E. I. du Pont de Nemours & Co., Wilmington, Delaware	1987–1988
Postdoctoral Fellow, Department of Physics University of California, San Diego	1989
Postdoctoral Fellow, Center for the Study of Early Events in Photosynthesis Arizona State University	1989–1990

Professional Experience

Research Professor	2008–present
Research Associate Professor	1995–2007
Faculty Research Associate School of Molecular Sciences (formerly Department of Chemistry and Biochemistry) Arizona State University	1990–1995
Core Course and Curriculum Coordinator Biological Design Graduate Program, Arizona State University	2008–2013

Memberships and Service

Member, International Society of Photosynthesis Research	
Editorial Board, Journal of Bacteriology	1998–2009

Publications

- E. Espiritu, K. D. Chamberlain, J. C. Williams, and J. P. Allen (2020) Bound manganese oxides capable of reducing the bacteriochlorophyll dimer of modified reaction centers from *Rhodobacter sphaeroides*, *Photosyn. Res.* 143, 129–141.
- A. Khmelnskiy, J. C. Williams, J. P. Allen, and R. Jankowiak (2019) Influence of hydrogen bonds on the electron-phonon coupling strength/marker mode structure and charge separation rates in reaction centers from *Rhodobacter sphaeroides*, *J. Phys. Chem. B* 123, 8717–8726.
- S. Mandal, E. Espiritu, N. Akram, S. Lin, J. C. Williams, J. P. Allen, and N. W. Woodbury, (2018) Influence of the electrochemical properties of the bacteriochlorophyll dimer on triplet energy-transfer dynamics in bacterial reaction centers, *J. Phys. Chem. B* 122, 10097–10117.
- E. Espiritu, T. L. Olson, J. C. Williams, and J. P. Allen (2017) Binding and energetics of electron transfer between an artificial four-helix Mn-protein and reaction centers from *Rhodobacter sphaeroides*, *Biochemistry* 56, 6460–6469.

- T. L. Olson, E. Espiritu, S. Edwardraja, E. Canarie, M. Flores, J. C. Williams, G. Ghirlanda, and J. P. Allen (2017) Biochemical and spectroscopic characterization of dinuclear Mn-sites in artificial four-helix bundle proteins, *Biochim. Biophys. Acta* 1858, 945–954.
- S. Mandal, A. M. Carey, J. Locsin, B. R. Gao, J. C. Williams, J. P. Allen, S. Lin, and N. W. Woodbury (2017) Mechanism of triplet energy transfer in photosynthetic bacterial reaction centers, *J. Phys. Chem. B* 121, 6499–6510.
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- J. P. Allen and J. C. Williams (2014) Energetics of cofactors in photosynthetic complexes: Relationship between protein-cofactor interactions and midpoint potentials, in *The Biophysics of Photosynthesis*, J. Golbeck and A. van der Est, Eds., Springer, pp. 275–299.
- A. A. Tufts, M. Flores, T. L. Olson, J. C. Williams, and J. P. Allen (2014) Electronic structure of Mn bound to modified bacterial reaction centers measured by electron paramagnetic resonance and electron spin echo envelope modulation spectroscopies, *Photosyn. Res.* 120, 207–220.
- T. L. Olson, J. C. Williams, and J. P. Allen (2014) The three-dimensional structures of bacterial reaction centers, *Photosyn. Res.* 120, 87–98.
- L. Kuang, T. L. Olson, S. Lin, M. Flores, Y. Jiang, W. Zheng, J. C. Williams, J. P. Allen, J. Liang (2014) Interface for light-driven electron transfer by photosynthetic complexes across block copolymer membranes, *J. Phys. Chem. Lett.* 5, 787–791.
- T. L. Olson, J. C. Williams, and J. P. Allen (2013) Influence of protein interactions on oxidation/reduction midpoint potentials of cofactors in natural and *de novo* metalloproteins, *Biochim. Biophys. Acta*, 1827, 914–922.
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