



TEL: 858-534-5399
FAX: 858-534-4864
EMAIL: joelyuen@ucsd.edu

UNIVERSITY OF CALIFORNIA, SAN DIEGO
9500 GILMAN DRIVE, 0340
LA JOLLA, CALIFORNIA 92093

June 30, 2025.

Postdoctoral Positions available in the Yuen-Zhou group at UCSD

The [Yuen-Zhou group](#) at the University of California San Diego (UCSD) is a theoretical chemistry research group working at the intersection of quantum optics, condensed matter theory, and physical chemistry. We are interested in designing and studying new synergistic materials and phenomena that emerge by interfacing molecular systems with novel photonic nano and microstructures, solid state architectures, and quantum and classical electromagnetic fields. Current research interests broadly include molecular polaritonics and nanophotonics, spin dynamics and spin chemistry.

We are looking to hire a postdoctoral fellow (negotiable starting date, but the position is available ASAP and open until filled) to work on a project funded by the [Brown Institute for Basic Sciences](#) to develop theories for molecular spin dynamics, molecular spin-optical interfaces, and photochemistry. Interested applicants should have a strong theoretical chemical physics background but also experience with electronic structure and dynamics of open-shell molecular excited states.

REFERENCES:

- Y. R. Poh, X. Chen, H.-P. Chen, and J. Yuen-Zhou, Electron sextets as optically addressable molecular qubits: triplet carbenes, *J. Am. Chem. Soc.* (2025).
- Y. R. Poh and J. Yuen-Zhou, Enhancing the optically detected magnetic resonance signal of organic molecular qubits, *ACS Cent. Sci.* 11, 1, 116-126 (2025). (*)
- S. M. Kopp, S. Nakamura, B. T. Phelan, Y. Rui Poh, S. B. Tyndall, P. J. Brown, Y. Huang, J. Yuen-Zhou, M. D. Krzyaniak, M. R. Wasielewski, Luminescent organic triplet diradicals as optically addressable molecular qubits, *J. Am. Chem. Soc.* 146, 40, 27935 (2024).
- Y. R. Poh, D. Morozov, N. P. Kazmierczak, R. G. Hadt, G. Groenhof, and J. Yuen-Zhou, Alternant hydrocarbon diradicals as optically addressable molecular qubits, *J. Am. Chem. Soc.* 146, 22, 15549 (2024). (*)

Qualified candidates should be theorists holding a PhD in Chemistry, Physics, Materials Science, or related physical sciences. Strong analytical and computational skills are desired. Interested individuals should send a resume to Professor Joel Yuen-Zhou at joelyuen at ucsd dot edu. UCSD is located in La Jolla, a seaside community within the city of San Diego, California, a city which invariably ranks high in terms of livability, good weather, and recreational activities (e.g., see [here](#)).