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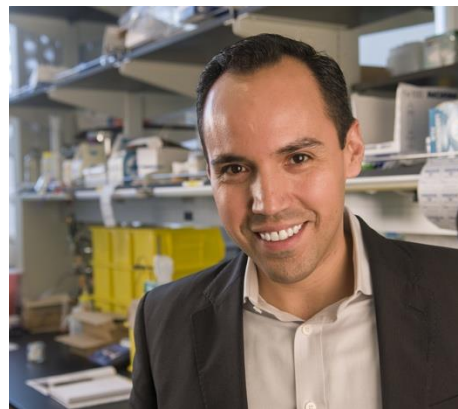
# Molecules and Macromolecules that Harness and Amplify Light Energy

**Dr. Luis M. Campos**

Professor

Department of Chemistry

Columbia University



**Thursday, October 10, 2024**

6:45 PM via Zoom

(Registration required prior to event)

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**Abstract:** Macromolecular engineering of chromophores capable of harnessing and amplifying the energy of light offers numerous advantages for the development of next-generation optoelectronic materials for device applications and photochemistry. Polymers offer a versatile platform for incorporating functional units to tailor properties, but this introduces challenges as architecture can significantly impact both mesoscale and bulk behavior. Our group is interested in understanding the link between building blocks and macromolecules that can be used to exploit organic materials in multiple applications. This talk will provide an overview on the strategies that our team employs in order to investigate structure-property relationships of multiexciton systems.

**Biography:** Luis M. Campos was born on this planet, just like you. Luis grew up in Guadalajara, Mexico, and moved at the age of eleven to Los Angeles, California. He received a B.Sc. in Chemistry from CSU Dominguez Hills in 2001, and a Ph.D. from the Department of Chemistry & Biochemistry at UCLA in 2006 working under the supervision of M. A. Garcia-Garibay and K. N. Houk. At UCLA, he was awarded the NSF Predoctoral Fellowship, Paul & Daisy Soros Fellowship, and the Saul & Silvia Winstein Award for his graduate research in solid-state photochemistry. Switching to materials chemistry, he went to UCSB as a UC President's Postdoctoral Fellow to work under the supervision of C. J. Hawker at the Materials Research Laboratory. At Columbia, his group's research interests lie in physical macromolecular chemistry. To date, he has co-authored over 100 articles and 21 patents; and he has received various awards, including the PECASE, ACS Arthur C. Cope Scholar Award, ONR Young Investigator Award, NSF CAREER Award, and the Herman F. Mark Scholar Award, among others. In addition to these research accolades, Luis has been recognized for his pedagogical contributions by the Cottrell Scholar Award, Columbia University Presidential Teaching Award, and the Camille Dreyfus Teacher-Scholar Award. Luis is currently an Associate Editor for *Chemical Science*.

*Presented by the Long Island Subsection of the American Chemical Society*