



**Department of Chemistry**  
*W. Albert Noyes, Jr. Memorial Lectures*

**Professor Michel Orrit**

Leiden University – Department of Chemistry & Biochemistry



***“Single Molecules and Single Gold Nanoparticles in the Spotlight”***

Tuesday, May 8<sup>th</sup> at 4:15 pm (***Time Change***)

140 Lander Auditorium, Hutchison Hall (***Room Change***)

**Welcome Reception at 5:30pm, 1<sup>st</sup> Floor Lounge**

***“Low-Temperature Single-Molecule Spectroscopy”***

Wednesday, May 9<sup>th</sup> at 12:00 pm

140 Lander Auditorium, Hutchison Hall

***“Spectroscopy and Manipulation of Single Gold Nanoparticles”***

Thursday, May 10<sup>th</sup> at 4:00 pm

140 Lander Auditorium, Hutchison Hall (***Room Change***)

**Professor Michel Orrit** was born in 1956 in Toulouse, France, and studied at Ecole Normale Supérieure in Paris. He obtained a PhD in physics in 1984 at Bordeaux University. During a post-doctoral stay in Göttingen (Germany) with H. Kuhn and D. Möbius, he studied Langmuir-Blodgett films doped with dyes. Back in Bordeaux, he and J. Bernard used the spectral hole-burning technique to investigate low-temperature dynamics and molecular orientation in these systems. They observed the first fluorescence signal from a single pentacene molecule in a p-terphenyl crystal in 1990. Their fluorescence excitation method was quickly adopted in several groups throughout the world, and was soon extended to room temperature in 1993. Since then, Orrit's group first in Bordeaux, then in Leiden (Netherlands) since 2001, have stressed the power of single-molecule spectroscopy to remove ensemble averaging and to reveal dynamics at molecular scales without need for synchronization. Orrit continues developing and applying single-molecule techniques to soft matter, nanoparticle plasmonics and nonlinear optics. He recently received the Edison-Volta Prize of the European Physical Society (2016), and the Spinoza Prize of the Dutch Science Foundation NWO (2017).

**Hosts:** [5/8] Professor Todd Krauss, 404C Hutchison Hall, (585) 275-5093, [todd.krauss@rochester.edu](mailto:todd.krauss@rochester.edu)  
[5/9] Professor Ignacio Franco, 454 Hutchison Hall, (585) 275-8209, [ignacio.franco@rochester.edu](mailto:ignacio.franco@rochester.edu)  
[5/10] Professor David McCamant, B30 Hutchison Hall, (585) 276-3122, [david.mccamant@rochester.edu](mailto:david.mccamant@rochester.edu)