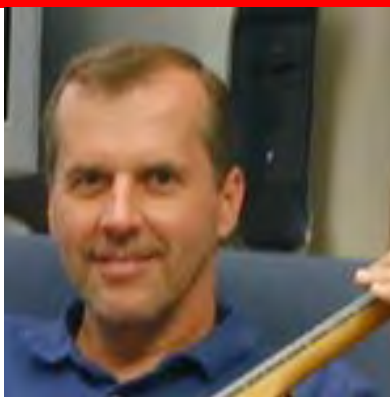


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**Prof. Ralph Nuzzo**  
Dept. of Chem, University of Illinois

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***Making molecules visible to the naked eye***

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**Tuesday Nov. 6th, 1:00pm**  
Otto Maass room 10

There are many problems of contemporary interest in chemistry that have solutions that can be found in the answers developed to very elementary questions. What chemical substances are present? What are their concentrations? How do these compositions change with time? How might the chemical evolution of the system be controlled deterministically? In this lecture I will explore a set of approaches that we are taking to answer questions of this sort, doing so in contexts that provide fundamental new competencies for chemical analysis and sensing more generally. This work exploits two enabling tools—molecular self assembly and powerful new methods of nanoscale fabrication—to create devices that can provide direct quantitative visualizations of complex chemical systems, ones that effectively render them “visible to the naked eye”. This approach to the design of chemically responsive optical systems appears to hold special promise for bioanalytical sensing and demonstrations of such applications will be described.

Everyone is welcome

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