

**Nanoparticles and the Environment: Chemistry,  
Applications and Impacts**

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Department of Chemistry



**2019 Kenneth J. Klabunde  
Memorial Lecture**

***Abstract***

This talk will focus on the chemistry, applications and impacts of nanoparticles in environmental processes. In particular, applications of nanoparticles in chemical looping combustion, chemical transformations of nanoparticles in environmental and biological *mileu* and the impacts of these transformations will be discussed. Overall, the research that will be presented builds on the legacy of Distinguished Professor Kenneth Klabunde who was a pioneer in recognizing the unique properties and reactivity of nanoparticles.

***Biography***

Vicki H. Grassian is currently a Distinguished Professor at the University of California San Diego with appointments in the Departments of Chemistry & Biochemistry, Nanoengineering and Scripps Institution of Oceanography and she holds the Distinguished Chair of Physical Chemistry within the Department of Chemistry and Biochemistry. She is also the co-Director of the Center for Aerosol Impacts on Climate and the Environment a multi-institutional NSF-Chemical Center of Innovation and the Executive Associate Dean for the Division of Physical Sciences. Prior to her appointments at the University of California San Diego she was a professor at the University of Iowa for 25 years. Professor Grassian has mentored hundreds of students in her laboratory including over twenty-five students who have received their PhDs under her guidance.