



# Inorganic Chemistry Seminar Series

Tuesday, February 6, 2018, 12:30 pm

Seaver Science Library, Room 150

*SSC Auditorium next to the library*

## Professor Vincent Artero

*Department of Chemistry*

*Universite Grenoble Alpes, Grenoble, France*

### ***Towards molecular-based H<sub>2</sub>-evolving photocathodes***

#### **Abstract:**

Mimicking photosynthesis and producing solar fuels is an appealing way to store the huge amount of renewable energy from the sun in a durable and sustainable way. Hydrogen production through water splitting has been set as a primary target for artificial photosynthesis, which requires the development of efficient and stable catalytic systems, based only on earth abundant elements, for the reduction of protons from water to molecular hydrogen. We will report on our contributions to the development of various series of catalysts for H<sub>2</sub> evolution, including the reinvestigation of amorphous molybdenum sulfide, and to the development of methodologies towards the benchmarking of their catalytic activity. We will also describe our efforts towards the combination of such catalysts with various photoactive motifs for the preparation of photoelectrode materials that can be implemented into photoelectrochemical (PEC) cells for water splitting.

Hosted by Professor Smaranda Marinescu

*The scientific community is invited*

**USC Department of Chemistry**

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