

# Oceanography Seminar

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## **“Hunting Bubbles: Understanding Plumes of Seafloor Methane”**

While methane may not be the best known greenhouse gas, it nevertheless greatly impacts the climate system of our planet. Seafloor methane emissions have been documented for several decades, with newer evidence suggesting that methane bubble plumes from the deep sea are far more numerous than previously assumed. However, the physical, chemical and biological processes that dictate exactly how this methane is transferred into the ocean, or in some cases possibly even directly into the shallow ocean and atmosphere, remain challenging to understand.

This multidisciplinary cruise led by Drs. Scott Wankel and Anna Michel of Woods Hole Oceanographic Institution will utilize novel instruments and techniques to better understand the processes responsible for the transfer of methane from the seafloor: first into the ocean waters, and in some circumstances possibly into the shallow ocean and overlying atmosphere. The resulting methane transfer model will inform our understanding of global climate in the present, as well as our interpretation of historical climate data from the geological record.

**Thursday September 6, 2018 3:00p.m. MSB 114**