

San Joaquin Geological Society

Date: Tuesday, April 11th, 2023

Time: 6:00 PM Social Hour 7:00 PM Dinner 8:00 PM Lecture

Place: American Legion Hall 2020 H Street, Bakersfield, CA 93302

PSAAPG Members \$30 with reservation \$35 without reservation

Non PSAAPG Members \$35 with reservation

Full-time Students with ID \$15

* **RSVP** *

By: noon Monday, April 10th, 2023

Register online: http://www.SanJoaquinGeological Society.org/

Pay online or at the door

2022 SJGS OFFICERS

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Drilling Results and New Insights from IODP Expedition 385, Guaymas Basin, Mexico Presented by: Kathleen Marsaglia

Abstract: Drilling in young ocean basins, such as those in the Gulf of California, Mexico, offers insights into the interplay of tectonic, magmatic and sedimentologic processes and into the extent and nature of post- depositional diagenesis/alteration and microbiological activity in the basin fill. The ~4 km of core recovered during International Ocean Discovery Program (IODP) Expedition 385 provide an unprecedented record for a nascent ocean basin setting. These young (<600ka) biosiliceous to terrigenous to volcaniclastic sediments and mafic intrusive rocks were distributed across seven sites, each with multiple holes, drilled to a maximum depth of 507 m below the seafloor. Expedition results have environmental implications for large-scale carbon cycling and applications to hydrocarbon exploration, including Monterey Formation exploration and production in California. A summary of shipboard drilling results along with preliminary post-cruise stratigraphic, lithofacies and petrographic work at CSUN will be presented.

Biography: Kathie Marsaglia joined the Department of Geological Sciences in 2000. She is a sedimentologist with expertise in sandstone petrology, sedimentation and tectonics, and marine geology. Between graduate degrees and before coming to CSUN, she worked at various levels in the petroleum industry including several summer internships and full-time positions, the latter first as an exploration geologist and later as a senior reservoir geologist. Over her career she has spent over two years at sea on scientific cruises collecting, describing, and interpreting marine sediments and sedimentary rocks. She is a Fellow of the Geological Society of America, was an AAPG distinguished lecturer, and received both the Outstanding Faculty and Exceptional Service to Students Awards at CSUN. In 2019 she was honored by AAPG with a Grover E. Murray Distinguished Educator Award and joined the U.S. Advisory Committee (USAC) for the International Ocean Discovery Program (IODP). In 2022 she became the Science Chair of the IODP Science Evaluation Panel. She is co-editor of the Journal of Sedimentary Research and a member of SEPM (Society for Sedimentary Geology) Council.

Maia C. Davis, Inc.



For full biographies and abstracts visit sanjoaquingeologicalsociety.org