

NEXT WEEK'S LECTURE

2022 Celebrating 50 Years of
Ocean Science
for a Better World[®]
LECTURE SERIES



Wednesday, April 20

"Celebrating 50 Years of Ocean Science for a Better World!"

A panel discussion moderated by journalist Anthony Westbury with Dennis Hanisak, Ph.D., Brian Lapointe, Ph.D., Shirley Pomponi, Ph.D., John Reed, M.Sc. and Jim Sullivan, Ph.D., FAU Harbor Branch

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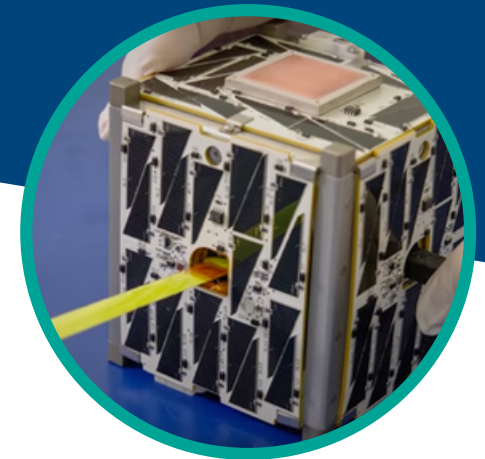
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2022 Celebrating 50 Years of
Ocean Science
for a Better World[®]
LECTURE SERIES



Wednesday, April 13

"The ONR CubeSat"

Mike Twardowski, Ph.D.,
FAU Harbor Branch

To live stream the presentations
or view past lectures visit:

fau.edu/hboi/osls



ABOUT THE LECUTURE



Earth observing satellites are the only means of monitoring the health of our oceans with full global coverage every few days. Measurements from satellites are thus the primary input for global models seeking to understand and predict change from disturbances ranging from short-term episodic storms to climate change. Although satellites observing the ocean have been in orbit since the late 1970's, we are in the midst of a revolution in satellite technologies, with the rapid development and advancement of very small satellites (i.e., hand-held) with sensor payloads that in some cases may approach the performance of conventional \$1-billion car-sized satellite missions.

There is thus an emerging opportunity, where a constellation of such small satellites could be deployed for a small fraction of the cost of a conventional satellite mission with lower risks due to redundancy, while providing higher spatial and temporal resolution. With reduced costs for development and launch, there is also a much lower threshold to test and transition new cutting-edge technological breakthroughs for monitoring our coastal and open oceans. FAU Harbor Branch is at the front line of this revolution, currently developing two nanosatellite payloads for monitoring ocean health with a focus on coastal regions such as the Indian River Lagoon ecosystem.

ABOUT THE SPEAKER

Dr. Michael Twardowski is a Research Professor at FAU Harbor Branch and Director of the Center for Marine Applied Technology and Engineering (C-MATE). Mike has led development of breakthrough sensing technologies to study the ocean for over 20 years. His research has included work on remote sensing of ocean health, monitoring the ocean from autonomous vehicles and platforms, imaging and visibility in water, harmful algal blooms, bioluminescence, biological camouflage, and oil detection. A common theme through all his research is the study of light in water.



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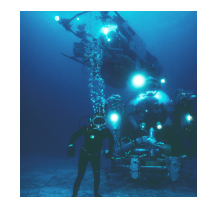
Explore our exhibits to learn about research at FAU Harbor Branch as well as the marine environments we study. The center is open Tuesday-Saturday, from 10 am to 4 pm and a \$5 donation is suggested.



Join us each month at the Ocean Discovery Visitors Center for this fun-filled, family friendly, outdoor event. Science Saturdays will be held on February 26, March 26, April 23, and May 28 from 10 am to 4 pm.



Take a behind the scenes look at our 144-acre waterfront campus, while learning about our history and research. Offered Tuesday- Saturday, 10:30 am to noon. \$20/person, reservations required.



During our Ocean Exploration tour, you'll virtually experience what it's like to be a deep-sea scientist! Offered the 2nd Thursday of each month, 1 to 2:30 pm. \$25/ person, reservations required.