

OCEAN OPTICS XXIV

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<https://oceanopticsconference.org>

Wednesday, October 10

Poster Session 3

16:00–18:00

Poster 254

DATAPRESENCE: A VISION FOR THE FUTURE OF DATA AT SEA

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New technologies developed for research vessels to enable virtual participation, situational awareness and adaptive sampling at sea; the ability to integrate data from a broad suite of ocean and meteorological sensors and facilitate quality real-time data collection and data visualization to inform the science mission, enable shore side participation, and encourage education and community outreach. The design of the next generation Regional Class Research Vessel (RCRV) for the U.S. academic research fleet includes advanced datapresence systems and capabilities. We envision these capabilities as a tool to facilitate research at sea while providing an interdisciplinary approach to ocean science research, one that enhances observational, experimental, and analytical capabilities. This presentation will introduce our vision of datapresence to the community with an emphasis on the optics components of the system including proposed underway sensors, preliminary methods developed for QA and QC of data, and tools for data visualization as demonstrated by data from research cruises utilizing our datapresence prototype.

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