

ONR Ocean Optics Research Symposium Schedule

Day 1: Thursday February 18, 2010

| Start Time | End Time | Presenter | Title |
|------------|----------|----------------------|------------------------------------------------------------------------------------------------------|
| 2:00 | 5:00 | Ackleson / Cleveland | Programmatic Brief - ONLY OPEN TO BOARD OF REVIEWERS, ONR MANAGEMENT, & INVITED GOVERNMENT PERSONNEL |

Adjourn

Day 2: Friday, February 19, 2010

| Start Time | End Time | Presenter | Presentation Title |
|------------|----------|----------------------|-------------------------------------------------------------------------------------------------------------|
| 8:00 | 8:20 | Ackleson / Cleveland | Introduction |
| 8:20 | 8:40 | Howard Gordon | Light Scattering By Marine Particles: Modeling with Non-spherical Shapes |
| 8:40 | 9:00 | Yogi Agrawal | Backscattering and Polarization Properties of Marine Particles - Instrumentation Development and Field Work |
| 9:00 | 9:20 | Jeff Smart | Expanded Worldwide Ocean Optics Database |
| 9:20 | 9:40 | Tommy Dickey | Time Series Observations of Physical and Optical Properties During the RaDyO Program |
| 9:40 | 10:00 | Marlon Lewis | Quantitative Estimation of the Variability in the Underwater Radiance Distribution (RADCAM) |

10:00 10:20 Break

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| 10:20 | 10:40 | Mike Banner | Recent Progress on Sea Surface Roughness Characterization |
| 10:40 | 11:00 | Johannes Gemmrich | Ocean Surface Wave Optical Roughness - Innovative Measurement and Modeling |
| 11:00 | 11:20 | Svein Vagle | Near Surface Bubbles, Surface-Active Substances, and Turbulence and Their Effects on the Near-Surface Light Field |
| 11:20 | 11:40 | Dave Farmer | Development and Use of an Acoustical Resonator to Detect Bubbles as Part of the RaDyO Program |
| 11:40 | 12:00 | Mike Twardowski | High Fidelity VSF Measurements and Inversion for RaDyO (Hi Fi RaDyO) |
| 12:00 | 12:20 | Chris Zappa | Ocean Surface Wave Roughness, Breaking Waves, and Their Influence on Subsurface Light Fluctuations |

12:20 13:00 Lunch

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| 13:00 | 13:20 | Grace Chang | Radiance in a Dynamic Ocean (RaDyO): Effects of Optical Variability on the Prediction of Underwater Visibility |
| 13:20 | 13:40 | Scott Pegau | Variability of Irradiance in the Wave Boundary Layer |
| 13:40 | 14:00 | Hemantha Wijesekera | Variability of Irradiance in the Wave Boundary Layer: Evidence of Light Focusing in Light and Temperature Records |
| 14:00 | 14:20 | Ken Melville | The Influence of Breaking at the Ocean Surface on Oceanic Radiance and Imaging |
| 14:20 | 14:40 | Lian Shen | A Direct Simulation-Based Study of Radiance in a Dynamic Ocean |
| 15:20 | 15:40 | Dariusz Stramski | Measurements of Wave-Induced Fluctuations in Underwater Radiance Under Various Surface Boundary Conditions |

15:00 15:20 Break

Day 2 cont.

| Start Time | End Time | Presenter | Presentation Title |
|------------|----------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16:00 | 16:20 | George Kattawar | Ultrashort Laser Pulse Propagation in Water / 3D Time Dependent Stokes Vector Radiative Transfer in an Atmosphere-Ocean System Including a Stochastic Interface |
| 16:20 | 16:40 | Dick Yue | A Direct Simulation-Based Study of Radiance in a Dynamic Ocean |
| 16:40 | 17:00 | Curt Mobley | Fast and Accurate Light Calculations for Ecosystem Models |
| 17:00 | 17:20 | Paul Bissett | Imaging Spectroscopy to Operational Bathymetry |

Adjourn**Day 3: Saturday, February 20, 2010**

| Start Time | End Time | Presenter | Presentation Title |
|------------|----------|----------------------------|---------------------------------------------------------------------------------------------------------------------|
| 8:00 | 8:20 | Heidi Sosik / Rob Olson | Automated Submersible Flow Cytometry: Transforming a Specialized Research Instrument into a Broadly Accessible Tool |
| 8:20 | 8:40 | Fraser Dalgleish | HBOI Underwater Imaging and Communications Research - Phase I |
| 8:40 | 9:00 | Jules Jaffe | Development of a Laser Line Scan LIDAR Imaging System for AUV Use |
| 9:00 | 9:20 | Tom Giddings / Joe Shirron | Electro-Optical System Simulation and Performance Prediction Extensions to EODES |
| 9:20 | 9:40 | Molly Cummings | Biological Responses to the Dynamic Spectral-Polarized Underwater Light Field |
| 9:40 | 10:00 | Sonke Johnsen | Dynamic Camouflage in Benthic and Pelagic Cephalopods |

10:00 10:20 Break

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| 10:20 | 10:40 | Alan Blumberg / Bob Chen | Investigation of Coastal CDOM Distributions Using In-Situ and Remote Sensing Observations and a Predictive CDOM Fate and Transport Model |
| 10:40 | 11:00 | Bob Chen | A Chromophoric Dissolved Organic Matter (CDOM) Observatory |
| 11:00 | 11:20 | Bill Miller | Developing, Testing, and Applying Algorithms for Estimates of Chromophoric Dissolved Organic Matter (CDOM) and UV Attenuation in Marine Waters |
| 11:20 | 11:40 | Fei Chai/Emmanuel Boss | Physical-Biological-Optics Model Development and Simulation for the Pacific Ocean and Monterey Bay, California |
| 11:40 | 12:00 | John Cullen | Linking Optical Measurements Directly to Models of Primary Productivity and Particle Dynamics |

12:00 13:00 Lunch

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| 13:00 | 13:20 | Emmanuel Boss | Linking Optical and Acoustical Properties of Particles to Their Properties and Dynamics |
| 13:20 | 13:40 | Paul Hill | Particle Size and the Attenuation of Light in Coastal Waters |
| 13:40 | 14:00 | John Trowbridge | Optics, Acoustics, and Stress In Situ (OASIS): Effects of Aggregation, Vertical Structure, and Relation to Physical Forcing |
| 14:00 | 14:20 | Tim Milligan | Flocculation in a Coastal Bottom Boundary Layer |
| 14:20 | 14:40 | Oscar Schofield | Using Gliders to Resolve Dynamics of Dust and Phytoplankton in the Mediterranean |
| 14:40 | 15:00 | Andrew Barnard | Monitoring and Predicting Transport of Terrestrially-Derived Materials in the Lower Penobscot River System |

15:00 15:20 Break

Day 3 cont.

| Start Time | End Time | Presenter | Presentation Title |
|-------------------|-----------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 15:40 | 16:00 | Sam Ahmed | Exploring Techniques for Improving Retrievals of Bio-Optical Properties of Coastal Waters |
| 16:00 | 16:20 | Zhongping Lee | Remote Sensing Investigations - Coastal Remote Sensing |
| 16:20 | 16:40 | Curt Davis | Hyperspectral Imaging of the Coastal Ocean |
| 16:40 | 17:00 | Chuck Trees | Gliders for Environmental Characterization |
| 17:00 | 17:20 | Darek Bogucki | Laboratory Verification of the Optical Turbulence Sensor (OTS): Particulate Volume Scattering Function and Turbulence Properties of the Flow |

Adjourn