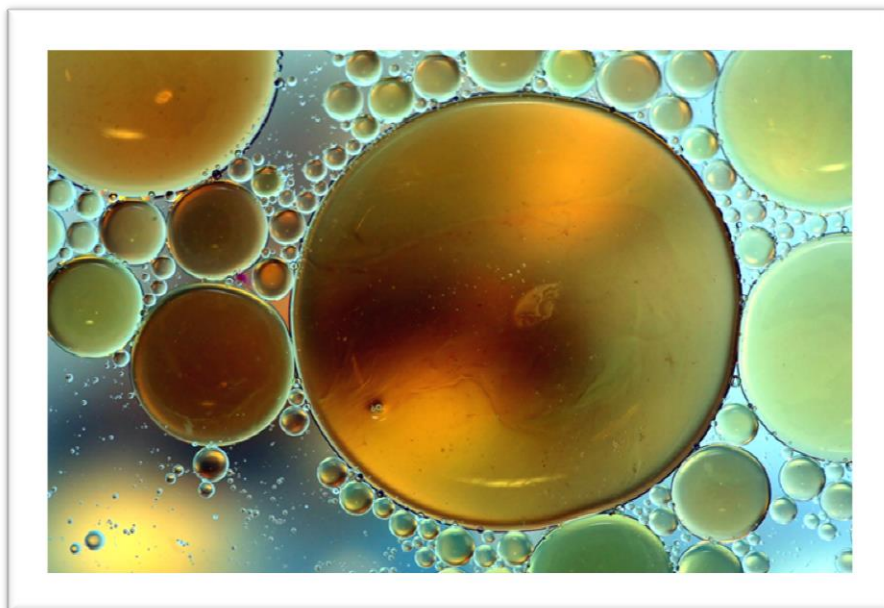


# Understanding Dispersants in Oil Spill Response



## CCA-OSRL Technical Forum

November 12-14, 2014



Fort Lauderdale, Florida



## ***Our Changing Seas II: An Atlantic & Caribbean Coral Reef Story***

At the entrance to the Oceanographic Center is a large ceramic coral reef sculpture by artist and ocean advocate Courtney Mattison. The sculpture unites art and biology and is intended to



inspire increased “marine stewardship.” It illustrates the transition from a healthy and vibrant reef ecosystem into a degraded one that is suffering from coral bleaching due to environmental stress. The goal is to bring heightened awareness to this issue that will, in turn, lead to renewed efforts to save these valuable natural resources.

## ***Guy Harvey Research Institute (GHRI)***

NSUOC is home of the *Guy Harvey Research Institute (GHRI)*. Dr. Guy Harvey is a world renowned marine artist, scientist and explorer, and his artwork is displayed throughout the Oceanographic Center. The mission of GHRI is to provide scientific information necessary to understand, conserve, and effectively manage the world's marine fishes and their ecosystems.



## Background & Purpose

Modern oil spill contingency planning and oil spill response operations must weigh the feasibility and effectiveness of all response options. This inevitably leads to assessing the role of dispersants in preparedness and response. Unfortunately, the use of dispersants is sometimes colored by a high degree of emotionalism, misconception, and occasionally even misinformation, all of which serve to undermine the common goal to minimize the negative impact of an oil spill on the environment. Yet there have been many cases when dispersants have been used very effectively in oil spills.

Recognizing the need to provide the latest scientific and operational information on the use of dispersants to decision-makers, we have gathered many of the world's premiere scientists, academics, government regulators, and response professionals.

The goal of the forum is to lay a foundation of knowledge and create a framework for analysis and decision-making for the use of dispersants in oil spill response. In this regard, we hope to equip attendees with the best available information, science, and tools to make wise policy and operational decisions.

With the proliferation of oil operations in North America, the Caribbean, Central and South America, this forum provides an excellent opportunity to clarify information for government dispersant use policies and National Contingency Plans, as well as oil industry Contingency Response Plans.

We thank Nova Southeastern University Oceanographic Center (NSUOC) opening their world class facility, faculty and students to us and hosting this important forum.

On behalf of Clean Caribbean & Americas and Oil Spill Response Limited

Paul A. Schuler

Wednesday, November 12

0745: **Bus Departs Hilton Garden Inn Fort Lauderdale Airport & Cruise Port Hotel for NSUOC**

0800: **Check-in**

0830: **Welcome, Safety Brief, Purpose of Forum**

Paul Schuler, Moderator

**Official Opening**

Richard Dodge, Ph.D., Director, Nova Southeastern University Oceanographic Center

Ralph Rogers, Ph.D., Provost, Nova Southeastern University

**SCIENCE**

0850: **The Problem & The Challenge:**

**Dispersants in Oil Spill Response: Realities, Myths & Misconceptions**

Paul Schuler, Oil Spill Response Limited

0915: **The Chemistry, Physics & Fates of Spilled Oil & Dispersed Oil (Sea Surface)**

Victoria Broje, Ph.D., Shell

0945: **Subsea Spills & Subsea Dispersant Injection**

Tom Coolbaugh, Ph.D., ExxonMobil

1015: **Break, Delegate Exchange**

1045: **TROPICS Field Study (1984): Relative Effects of Oil & Dispersed Oil on Tropical Ecosystems**

Richard Dodge, Ph.D., Nova Southeastern University

1100: **Toxicology & the Biological Effects of Oil & Dispersed Oil on Marine & Coastal Ecosystems**

Gary Shigenaka, Ph.D., National Oceanic & Atmospheric Administration (NOAA)

1130: **Net Environmental Benefit Analysis (NEBA) & Response Trade-offs**

Gina Coelho, Ph.D., Scientist-Consultant

1200: **International Maritime Organization (IMO) Dispersant Decision-making Template**  
Francois Merlin, Ph.D., Centre de Documentation, de Recherche et d'Expérimentations  
sur les pollutions accidentelles des Eaux (CEDRE)

1215: **Lunch & Delegate Exchange**

1315: **The 2010 Gulf of Mexico Spill Response & (Preliminary) 4 Year Outcome**  
Charlie Henry, Director, National Oceanic & Atmospheric Administration (NOAA)

1345: **Aerial & Vessel Dispersants Preparedness & Operations Guide**  
Charlie Huber, Deepwater Horizon Dispersant Operations Manager

## **POLICY & PROCESS**

1415: **Developing US Dispersant Policy: The Stakeholder Collaboration Process**  
Scott Lundgren, US Coast Guard, Office of Marine Environmental Response Policy

1445: **Break & Delegate Exchange**

1515: **Subsea Intervention Approval Process & Procedures**  
Roger Scheuermann, Helix Well Containment Group (HWCG)

1530: **Subsea Dispersant NEBA & Monitoring**  
Gina Coelho, Ph.D., Scientist-Consultant

1545: **Dispersant Use Policies Around the World**  
Kelly Reynolds, International Tanker Owners Pollution Federations (ITOPF)

1615: **NSUOC Coral Toxicity Threshold Study**  
Abigail Renegar, Ph.D. Candidate, M.S., Nova Southeastern University Oceanographic  
Center

1630: **Tour of Oceanographic Center & Laboratories**  
NSUOC Student Guides

1715: **Reception, NSUOC Café & Veranda**

1915: **Buses depart for Hotel**

Thursday, November 13, 2014

0745: **Bus Departs Hotel for NSUOC**

0815: **Safety Brief & Review**  
Paul Schuler

0830: **E-tools for Dispersant Planning & Decision-making (Overview & Demonstration)**  
Brad Benggio, National Oceanic & Atmospheric Administration (NOAA)

0900: **Human Dimension Challenges of Dispersant Use:  
2013 Le Brea Spill, Trinidad**  
Marc Rudder, Ministry of Energy & Energy Affairs, Trinidad & Tobago

0920: **Human Dimensions Considerations**  
Ann-Hayward Walker, Consultant

0950: **The State of Science: A Synopsis of Scientific Research on Dispersants**  
Nancy Kinner, Ph.D., University of New Hampshire, Coastal Response Research Center (CRRC)

1020: **Break & Delegate Exchange**

1040: **NEBA & Dispersant Decision-making Scenarios Interactive Exercise**  
(Prepared by Wolfgang Konkell, Ph.D., ExxonMobil)  
Paul Schuler & Gina Coelho, Ph.D.

1115: **Communications Tools for Dispersant Response (Joint Industry Project):**  
Ray Bradley, American Petroleum Institute

## **OPERATIONAL CAPABILITIES & RESOURCES**

1145: **OSRL's Global Response Capabilities (Film)**

1200: **Industry's Perspective on Dispersants**  
Robert Limb, CEO, Oil Spill Response Limited

1230: **Lunch**

- 1330: **Subsea Capping, Dispersant Injection, Containment & Global Dispersant Stockpile**  
Kurt Kritter, OSRL Regional Director, Americas
- 1400: **Remote Sensing, Trajectory Modeling, and Monitoring Dispersant Effectiveness**  
Emma Hughes, Oil Spill Response Limited
- 1430: **Global Response Network, Dispersant Operations Team**  
Lucy Heathcote, Oil Spill Response Limited
- 1500: "Short" Break & Delegate Exchange (15 min)
- 1515: **The Way Forward (Panel and Q&A)**  
What are the Key Messages and Key Actions going forward?
- 1550: **Presentation of Drexel P. Pinder Scholarship**
- 1600: **Bus Departs NSUOC for Hotel**
- 1715: **Bus Departs Hotel for M/V JUNGLE QUEEN dock**
- 1745: **Board M/V JUNGLE QUEEN**
- 1800: **Departure to Tropical Island Dinner**
- 2200: **Bus Returns to Hotel**

Friday, November 14, 2014

0745: **Transportation to NSUOC**

0815: **Safety Brief & Review**

0830: **Mobilization & Response Logistics, Delineating Roles**

Matt Simmons, Oil Spill Response Limited

0900: **Health & Safety in Dispersant & Oil Spill Response Operations**

Brian Gove, Oil Spill Response Limited

0930: **Closing of Sessions**

0945: **Break & Delegate Exchange**

### **FIELD TRIP**

1000: **Bus Departs for OSRL Base Fort Lauderdale**

1030: **Tour OSRL Base (Static Display of OSRL Equipment & Discussions)**

OSRL Response Staff

1200: **BBQ Lunch & Delegate Exchange**

1300: **Farewells & Bus Returns to Hotel**