# OSPR/Chevron Oil Spill Response Technology Workshop

# San Ramon, CA

February 26 - March 1, 2019

**AGENDA**

January 9, 2016

**Day 1: February 26 Morning Session**

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| 0730-0800 **Sign-in**  0800-0820 **Welcome & Orientation** Paul Gugg, General Manager  Emergency Management, *Chevron*    Tom Cullen, Administrator  *CA Dept. of Fish and Wildlife,*  *Office of Spill Prevention and*  *Response*  **Research and Coordination Updates** | | |
| 0820-0840  0845-0905  0910-0930  0935-0955  1000-1020  1020-1040 | **ICCOPR Activities Update**  **BSEE's Oil Spill Response Research Highlights**  **Oil Spill Response Research Testing and Training at Ohmsett**  **NOAA Spill Science Update**  **OSPR Overview**  **----- BREAK -----**  **-------** | Kirsten Trego (remote)  *USCG*  Suzanne Chang  *BSEE*  Paul Panetta  *Ohmsett*  Jordan Stout &  Lisa Dipinto  *NOAA*  Tom Cullen  *OSPR* |
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**Applied Response Technologies (ART)**

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| 1040-1100 | **ExxonMobil’s Oil Spill Prevention and Response Research** | Tim Nedwed  *ExxonMobil* |

1105-1125 **Reducing Uncertainty for Subsea** Martin Cramer

**Dispersant Injection – A Summary** *ConocoPhillips*

**of API-IPIECA Research**

**Collaboration**

1130-1155 i-**Petrogel: A Comprehensive** Dr. T.C. Mike Chung

**Solution for Oil Spill Recovery,** *Penn State*

**Cleanup, and Prevention**

1155-1300 ----- **LUNCH** -----

**Day 1: February 26 Afternoon Session**

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| **Applied Response Technologies (ART), cont.** | | |
| 1300-1320  1325-1345  1350-1410  1415-1425  1430-1450  1450-1510  1510-1520  1525-1545  1545-1600 | **Lessons Learned from In-situ Burning of Wetlands in Louisiana**  **Flame Refluxer: Enhanced Burning of Oil Slicks**  **Techniques and Technologies to Increase *In Situ* Burning Efficiencies**  **Fresh Water In-Situ Burn Research**  **A Review of Recent Research Projects in Three Areas Related to Oil Spill Response: Behavior of Conventional and Unconventional Oils, Linear Augmented ISB, and Decanting Practices**  **---- BREAK -----**  **Response Technology Evaluation and Advancement**  **Implementing a Best Achievable Protection (BAP) & Best Achievable Technology (BAT) Review Process in Washington State**  **Daily Debrief** | Jacqui Michel  *RPI/NOAA*  Ali Rangwala  *Worchester Poly Institute*  Karen Stone  *BSEE*  Elizabeth Murphy (remote)  *USCG*  Steve Potter  *SL Ross*  Greg McGowan  *CA OSPR*  Sonja Larson  *WA DOE*  Greg McGowan  *CA OSPR* |

**Day 2: February 27 Morning Session**

**Mechanical Response Technologies**

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| 0800-0820  0825-0845  0850-0910  0915-0935  0940-1000  1000-1020  1020-1040  1045-1105  1110-1130  1135-1155  1200-1300 | **Marine and Inland Technologies**  **Instant Underflow Dams to Prevent the Spread of Oil and Fuel Spills in Streams and Creeks**  **Advancements in Non-Floating Oil Detection and Recovery**  **Response to Moving Sunken Oil**  **Spill Control Association of America**  **---- BREAK -----**  **Otter Series Skimmers/ Creating Community Spill Response Programs Require New and Cutting-Edge Technology**  **Robotic Oil Spill Recovery Vessel**  **Sea Machines- Autonomous Vessel Controls for Spill Response and Site Assessment**  **Vessel of Opportunity Programs and Equipment Considerations**  **----- LUNCH -----** | Shon Mosier  *Elastec*  Donny Beaver  *HalenHardy*  Jim Elliott  *T&T Marine Salvage*  Alexander Balsley (remote)  *USCG*  Devon Grennan  *SCAA & Global Diving*  Kevin Kennedy  *PPR Alaska*  David Prior (remote)  *Extreme Spill Technology*  Carlton Schumacher  *Sea Machines*  Vince Mitchell  *Lamor*  *.* |

**Day 2: February 27 Afternoon Session**

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| **Mechanical Response Technologies (cont.)** | | |
| 1300-1320  1325-1355  1400-1420  1420-1500  1500-1505  1505-1520  1525-1545  1550-1610  1615-1635  1635-1700 | **SlickSnake**  **SMALL SPILLS, BIG PROBLEMS**  **New Technology that Prevents Oil Spills from Vessel Bilges**  **Case Studies in Pipeline Spill Elimination**  **----- BREAK/TRANSITION -----**  ***2018 Santa Barbara Seep Demo***  *Introduction to the Demo*  *Technologies Used in Demo*  **Unmanned Vessel for Chemical-Free Dispersion of Oil**  **Block Spills Before They Spread and Avoid Devastating Consequences**  **Fluorometry Summary for the Santa Barbara Seep Demonstration**  **Unique Applications of Remote Sensing and Surveillance Technologies Traditionally Used for Oil Spill Response**  **Daily Debrief** | Susan Cavoretto  *Green Bag Co*  Ken Lukins  *USCG (retired)*  Zdravko Divjak  *Blue Guard*  David McMasters  *Chevron*  Ellen Faurot-Daniels  *OSPR*  Karl Nevland  Børge Kjeldstad  *Blue Impact*  Igor Kwiatkowski  *HARBO Technologies*  Jordan Stout  *NOAA (for SMART)*  Mark Hess  *Ocean Imaging*  Kevin Hoskins  *MSRC*  All Attendees |

**Day 3: February 28 Morning Session**

**Remote Sensing & Field Data Collection**

0800-0820 **OSRL’s Remote Sensing Capabilities** Paul Schuler

**and Outlook**  *OSRL*

0825-0845 **Emergency Response with PLANET**  Trevor McDonald

*PLANET*

0850-0910 **Satellite and Enhanced Airborne** Alessandro Vagata

**Spill Integrated Remote Sensing:** *Fototerra*

**A New Concept**

0915-0935 **Evaluating the Use of Near Real-Time** Christian Haselwimmer

**Aerial Photography Collected from** *Chevron*

**BVLOS** **UAS and Fixed-Wing Platforms**

**for Rapid Coastal Reconnaissance and**

**SCAT**

0940-1000 **Managing Resources in the Field** Kenny Rhame

*TRG*

1000-1020 **----- BREAK -----**

1020-1040 **The Alaska Oil Spill Technology** Jessica Garron

**Symposium 2018: Research and** *Univ. of Alaska*

**Collaboration in Action**

1045-1105 **OSPR’s Digital Applications & ERMA** Judd Muskat

*CDFW OSPR*

1110-1130 **Ocean Observing Systems in California** Henry Ruhl

**and Their Application for Oil Spills** *CeNCOOS*

1135-1155 **RADARSAT-2 Products and Services** Gordon Staples

**to Support Near-Real Time Oil Spill** *MDA Corp.*

**Response**

1200-1300 **----- LUNCH -----**

**Day 3: February 28 Afternoon Session**

**Remote Sensing & Field Data Collection (cont.)**

1300-1320 **Autonomous Underwater Vehicle (AUV)** Amy Kukulya (remote)

**Capabilities for Oil Spill and** *Woods Hole*

**Environmental Anomaly Detection in** *Oceanographic*

**Open Water and Under Ice** *Institute*

1325-1345 **Multispectral UAS for Oil Spill** Oscar Garcia

**Response Operations** *WaterMapping*

1350-1410 **Passive Remote Detection and** Ira Leifer

**Characterization: The Longwave in** *Bubbleology*

**a Full Spectrum Context**

1415-1435 **Spill Detection and Environmental** David Chenault

**Monitoring with the Pyxis IR Camera** *Polaris Sensor*

1440-1500 **----- BREAK -----**

1500-1520 **Update on Transport Canada’s** Louis Armstrong

**National Aerial Surveillance Program** Transport Canada

1525-1545 **Slick Thickness Measurements from** Paul Panetta

**ROV and AUV Platforms** *Applied* *Research*

*Associates, Inc*

1550-1610 **Development of a Self-propelled Camera** Douglas Mitchell

**System for Estimating Oil Thickness** *ExxonMobil*

1615-1630 Daily **Debrief**  All Attendees

**Day 4: March 1 Morning Session**

**Remote Sensing & Field Data Collection (cont.)**

0830-0850 **Wireless Connectivity Without Internet** Kjetil Aasebø (remote)

**Connection: How the Norwegian** *Norwegian Coastal*

**Coastal Administration’s Aircraft** *Administration*

**and Vessels Build and Share a Common**

**Operating Picture**

0855-0915 **Mobile Ad Hoc Networking Radios** Jeremy Hickman

**for Situational Awareness** *Persistent Systems*

0920-0950 **Using Reality Based Mapping and** Brian Footen

**GIS for Improving Waterway Monitoring** *Fishviews*

**and Early Warning Systems**

0955-1015 **Oil Spill Monitoring and Disaster** Souma Chowdhury

**Response with Drone Swarms** *University of Buffalo*

1020--1050 **DOI Drone Capabilities (with a Focus** John Vogel

**on the Kilauea Eruption Response)** *DOI*

1050-1110 **Debrief and Closing** All Attendees