# 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**  |
| 0820-08400845-09050910-09300935-09551000-10201020-1040 | **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.** |
| 1300-13201325-13451350-14101415-14251430-14501450-15101510-15201525-15451545-1600 | **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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| 0800-08200825-08450850-09100915-09350940-10001000-10201020-10401045-11051110-11301135-11551200-1300 | **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.)** |
| 1300-13201325-13551400-14201420-15001500-15051505-15201525-15451550-16101615-16351635-1700 | **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 NevlandBørge 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