

Contributors

Note: Addresses listed in each group of contributors only refers to the lead author.

A. Edward Bence, David S. Page, and Paul D. Boehm 4480 Ponderosa Drive, Peachland, BC V0H 1X5, Canada (ExxonMobil Upstream Research Co., P.O. Box 2189 Houston, TX 77252-2189) *15 Advances of Forensics Techniques for Petroleum Hydrocarbons: the Exxon Valdez Experience*

Abdelrahman Hegazi and Jan T. Andersson Institut für Anorganische und Analytische Chemie Westfälische Wilhelms-Universität Münster Corrensstrasse 30 D-48149 Münster, Germany *4 Characterization of Polycyclic Aromatic Sulfur Heterocycles for Source Identification*

Alan Jeffrey DPRA 100 San Marcos Blvd., Suite 308, San Marcos, CA 92069 *6 Application of Stable Isotope Ratios in Spilled Oil Identification*

Allen D. Uhler, Scott A. Stout, and Gregory S. Douglas NewFields — Environmental Forensics Practice LLC, 100 Ledgewood Place, Suite 302, Rockland, MA 02370 *10 Chemical Heterogeneity in Marine Heavy Fuel Oils*

Asger B. Hansen, Per S. Daling, Liv-Guri Faksness, Kristin R. Sørheim, Paul Kienhuis, and Rolf Duus National Environmental Research Institute Department of Environmental Chemistry & Microbiology, 399 Frederiksborgvej, P.O. Box 358 DK-4000, Denmark *7 Emerging CEN Methodology for Oil Spill Identification*

Debra Simecek-Beatty and William J. Lehr NOAA — HAZMAT 7600 Sand Point Way, NE Seattle, WA 98115 *13 Trajectory Modeling of Marine Oil Spill*

Edward Owens, Elliott Taylor, and Heather Parker-Hall Polaris Applied Sciences, Inc., #302, 755 Winslow Way East, Bainbridge Island, WA 98110 *2 Spill Site Investigation in Environmental Forensic Investigation*

Fatima Meniconi G. and Silvana M. Barbanti Environmental Geochemist PETROBRAS Research and Development Center (CENPES) Cidade Universitaria, Q.7 — Ilha do Fundao 21949-900, Rio de Janeiro, Brazil *17 Case Study: Evaluation of Hydrocarbon sources in Guanabara Bay, Brazil*

Gregory S. Douglas, Scott A. Stout, Allen D. Uhler, Kevin J. McCarthy, and Stephen D. Emsbo-Mattingly NewFields — Environmental Forensics Practice LLC, 100 Ledgewood Place, Suite 302, Rockland, MA 02370 *8 Advantages of Quantitative Chemical Fingerprinting in Oil Spill Identification*

Jan Christensen and Giorgio Tomasi Department of Natural Sciences, The Royal Veterinary and Agricultural University Thorvaldsensvej 40, 1870 Frederiksberg C, Denmark *9 Multivariate Statistical Methods for Oil Hydrocarbon Fingerprinting and Spill Source Identification*

Jeffrey W. Short and Kathrine R. Springman NOAA Alaska Fisheries Science Center, 11205 Glacier Hwy., Juneau, AK 99801-8626 *12 Identification of Hydrocarbons in Biological Samples for Source Determination*

Merv Fingas and Carl Brown ESTD, Environment Canada, 335 River Road, Ottawa, ON, Canada K1A 0H3 *14 Oil Spill Remote Sensing*

Mohamad P. Zakaria and Hideshige Takada Associate Professor, Department of Environmental Sciences Faculty of Environmental Studies, Universiti Putra Malaysia 43400 UPM, Serdang, Selangor Darul Ehsan, Malaysia. Faculty of Agriculture, Tokyo University of Agriculture and Technology, Fuchu, Tokyo 183-8509, Japan *16 Case Study: Oil Spill in the Straits of Malacca, Malaysia*

Richard Gains, Glenn S. Frysinger, Christopher M. Reddy, and Robert K. Nelson Professor Dept. of Science, U.S. Coast Guard Academy, 27 Mohegan Avenue, New London, Connecticut 06320-8101 *5 Oil Spill Source Identification by Comprehensive Two-Dimensional Gas Chromatography (GC × GC)*

Roger C. Prince and Clifford C. Walters ExxonMobil Research and Engineering Co.,

1545 Route 22, East Annandale, NJ 08801 *11 Biodegradation of Oil Hydrocarbons and Its Effects to the Source Identification*

Scott A. Stout and Zhendi Wang NewFields — Environmental Forensics Practice LLC, 100 Ledgewood Place, Suite 302, Rockland, MA 02370 *1 Chemical Fingerprinting of Spilled or Discharged Petroleum — Methods and Controlling Factors*

Zhendi Wang, Chun Yang, Merv Fingas, Bruce Hollebhone, Un Hyuk Jae Yim, and Ryoung Oh ESTD, Environment Canada, 335 River Road, Ottawa, ON, Canada K1A 0H3 *3 Petroleum Biomarker Fingerprinting for Oil Spill Characterization and Source Identification*