



ISCO & THE ISCO NEWSLETTER

The International Spill Control Organization, a not-for profit organization dedicated to raising worldwide preparedness & co-operation in response to oil and chemical spills, marine & freshwater pollution by plastics, promoting technical development and professional competency, & to providing a focus for making the knowledge and experience of spill control professionals available to Intergovernmental, Governmental, NGO's and interested groups and individuals. ISCO holds consultative status at the International Maritime Organisation & Observer Status at the International Oil Pollution Compensation Funds

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Members of the Executive Committee who act as the INTERIM EXECUTIVE (Acting in lieu of President, and as Members of SECRETARIAT (Core Management Team)

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- Ms Mary Ann Dalglish, VP M'ship (USA)
- Mr John Wordrop (Australia)

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- Mr Marc Shaye (USA)
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PLEASE CLICK ON THE BANNERS BELOW FOR MORE INFORMATION



INTERNATIONAL NEWS

HIGH-LEVEL EVENT TO ADDRESS HUMANITY'S GROWING ENVIRONMENTAL "MUST-DO LIST"

The United Nations Environment Assembly (UNEA) will convene in Nairobi from 26 February to 1 March 2024, bringing together governments, civil society groups, journalists, the scientific community, the private sector, and people of all ages.

As the first major international gathering ahead of this year's historic United Nations Summit of the Future, it's fitting that the Assembly will focus on effective, inclusive and sustainable multilateral actions to tackle climate change, biodiversity loss and pollution as the environmental "must-do list" is growing ever longer. UN / [Read more](#)

ECONOMIST – WORLD OCEAN INITIATIVE

The World Economic Forum at Davos this month ended with an unsettling global economic outlook, contrasted by Chile's endorsement of the UN High Seas Treaty—a legal framework that aims to govern huge swathes of the ocean outside any national jurisdiction. It is a step closer to meeting the pledge to protect 30% of the world's land and sea by 2030. However, reaching this target demands more than just this treaty; innovative strategies are essential. The upcoming World Ocean Summit in March puts even more emphasis on action, presenting real-world solutions to global ocean challenges, spotlighting three pioneers as part of the Ocean Changemakers challenge. Economist / [Read more](#)

GEF FAMILY OF FUNDS SET FOR AMBITIOUS INVESTMENTS IN NATURE

The GEF Council will consider a \$916 million work program – the second-largest in the multilateral trust fund's history – during its Feb. 5-9 gathering. The representatives of the GEF's 186 member countries will also consider \$203 million in adaptation financing from the Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF), and will constitute the very first board meeting of the new Global Biodiversity Framework Fund. The GEF / [Read more](#)

ISCO AMBASSADORS

(Members with special responsibilities in specified geographical areas)


Carlos Sagrera Latin America (Spanish speaking)
Matthew Sommerville UK London
John Noble UK London & South'ton
Flavio P. de Andrade Brazil

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ISCO NEWS

ISCO held an Executive Committee Meeting on 22 January 2024. Chaired by Rupert Bravery, attendees were – Capt. Bill Boyle, Carlos Sagrera, Ed Levine, Helena Rowland, Jane Delgado, John McMurtrie, John Wardrop, Dr Larissa Montas, Mary Ann Dalglish, Matthew Somerville, Merv Fingas, Mike Watson, and Charles Usher. Discussions were mainly on internal management matters and are not reported here.

However John Wardrop did advise that within the ISCO Constitution, adjusted wording will make provision for recognition of Regional Branches of ISCO and to rename the existing Executive Committee as the ISCO Council. These changes are not taking place immediately but will be reflected within the arrangements following the completion of ISCO's transition process.

We can also confirm that the ISCO booth at IOISC will be No. 633 and it will be manned by Jane Delgado. More information on ISCO participation in this and other events will be released as soon as possible but the possibility of a face-to-face ISCO meeting of members at IOISC is under active discussion within the EC. It would be helpful to know how many ISCO members will be attending at IOISC. If you are intending to be at IOISC, please drop an email to Mary Ann at mrydetroit@aol.com This will be of help in finalising planning arrangements. Members who are presenting papers at the conference, please let us know.

REGIONAL NEWS

HELCOM TO COLLABORATE WITH THE SAVE THE BALTIC SEA CAMPAIGN

January 18 - [Save the Baltic Sea](#) is a hiking expedition and an environmental campaign around the Baltic Sea covering eight countries, taking place in 2024. The main organizer is a Lithuanian NGO *Už švarią Lietuvą* ("For a clean Lithuania"). HELCOM will be one of the official partners in the campaign, along with the EU4Ocean Platform, the Ministry of Environment of the Republic of Lithuania and a network of scientific institutes and non-governmental organizations from the eight countries. HELCOM / [Read more](#)

BELGIUM, GERMANY AND THE NETHERLANDS MEET TO DISCUSS PROGRESS TOWARDS RATIFICATION OF THE 2010 HNS PROTOCOL

January 25 - The IOPC Funds were invited to join a meeting between the Governments of Belgium, Germany and the Netherlands on 23 January 2024, as they discussed the final steps in their progress towards ratification of the 2010 HNS Protocol. The three States have long been working in close cooperation with the aim of ratifying at the same time to ensure a more equitable sharing of

the costs of contributions when the treaty enters into force. IOPC Funds / [Read more](#)

FRANCE: A NEW ENVIRONMENTAL CRIME DIRECTIVE COMING SOON

January 31 - A provisional agreement has been reached between the European Parliament and the Council on the protection of the environment through criminal law¹. This agreement relates to a proposal for a Directive, the aim of which is to improve the effective enforcement of criminal law and to combat the most serious environmental offenses which can have devastating effects on both the environment and human health. Mondaq / [Read more](#)

NEWS FROM AROUND THE WORLD

REQUEST FOR AN ACTION BY READERS OF THIS SECTION

Gathering useful and relevant news for readers in various countries involves visiting about 60 websites every week – but there are some problems .

NEWS FROM AROUND THE WORLD (CONTINUED)

- Some websites publish “Press Releases” and “Latest News” that are months or even years out of date
- Some websites for a variety of reasons will not open easily – help needed

Readers are being asked to have a look at websites that are relevant to the countries where they live. The list of websites being visited every week can be found at <https://spillcontrol.org/national-organizations/>

- We are planning to **remove** some websites from our weekly checking list because news content is absent or not fit for purpose.
- We would be grateful for details of websites that you recommend should be **added** to our checking lists
- If you have some national news that you would like to share with our international community you can send it directly to the Editor at john.mcmurtrie@spillcontrol.org

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spillcontrol@mwadigital.com

BRAZIL: 20 NOVEMBER: RESHUFFLING BRAZILIAN HOLIDAYS

January 17 - Starting from 2024, Brazil will observe 20 November as a holiday at national level. As the day is currently frequently observed as a holiday at lower levels of government, this decision may cause a ripple effect in the Brazilian holidays. This significant change, from a holiday regulated at the municipal level to a national observance, could cause substantial shifts in Brazil's holiday calendar. BIMCO / [Read more](#)

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CANADA: AIR POLLUTION FROM CANADA'S TAR SANDS IS MUCH WORSE THAN WE THOUGHT

January 27 - Canada's tar sands have gained infamy for being one of the world's most polluting sources of oil, thanks to the large amounts of energy and water use required for their extraction. A new study says the operations are also emitting far higher levels of a range of air pollutants than previously known, with implications for communities living nearby and far downwind.

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The research, published Thursday in Science, took direct measurements of organic carbon emissions from aircraft flying above the tar sands, also called oil sands, and found levels that were 20 to 64 times higher than what companies were reporting. Total organic carbon includes a wide range of compounds, some of which can contribute directly to hazardous air pollution locally and others that can react in the atmosphere to form small particulate matter, or PM 2.5, a dangerous pollutant that can travel long distances and lodge deep in the lungs. Arstechnica / [Read more](#) [Thanks to Marc Shaye, Hon.FISCO]

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CANADA: SUPERSIZED MARINE OIL SPILL RESPONSE VESSEL ARRIVES IN B.C. AS PART OF TRANS MOUNTAIN EXPANSION

February 1 - Canada's largest-ever marine spill response vessel is now on the coast of British Columbia. The vessel – as long as a ten-storey building and as heavy as about 50 Boeing 737 airliners – will reduce response time to within six hours compared to up to three days today. It is one of the final pieces of the biggest expansion of oil spill response capability in Canadian history. The \$150 million program is an investment by the Trans Mountain pipeline expansion that will have widespread safety benefits.

“As much as this expansion was funded by Trans Mountain, they’re available for any spill on the coast,” said Michael Lowry, spokesman for Western Canada Marine Response Corporation (WCMRC), the vessel's new owner.

“It’s a benefit for the entire marine community to have this improved response capacity.”

WCMRC is the only Transport Canada-certified marine response organization on Canada's west coast.

Energy Now CA / [Read more](#)



PANAMA: NATIONAL CONTINGENCY PLAN

January 29 – Carlos Sagrera, ISCO’s Representative in Latin America, reports, after many years of frustrated attempts, the Approval of the National Contingency Plan in Panama. Carlos has also sent your editor an article by Juan Diego Reyna on the current situation of OSROs in Panama and more about this important development.

Juan’s article is published as a Contributed Article on Pages 8-9 of this issue and, in Spanish language, on the Latin American section on the ISCO website.

USA: FIRST HURDLE TO CHANGE NEW MEXICO'S OIL AND GAS RULES CLEARED AMID LITIGATION

January 28 - An effort to modernize state oversight of a thriving petroleum industry in the nation's No. 2 state for oil production moved forward from its first committee inquiry in the New Mexico Legislature on Thursday.

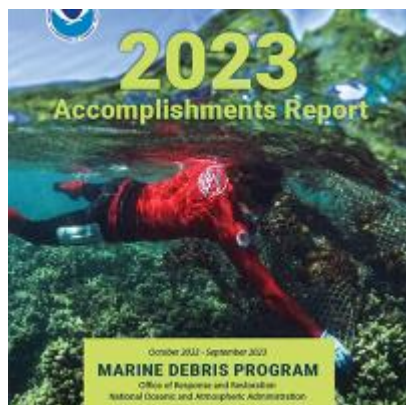
The bill would rewrite parts of the state's 1930s Oil and Gas Act to help regulators keep pace with the industry's rapid growth in recent years — along with concerns about air pollution, spills and costly spills. There will be increasingly vocal calls to hold the sector accountable for this. Cleaning of equipment and abandoned wells. Business News / [Read more](#)

USA: LATEST NEWS REPORTS FROM NOAA OR&R

January 29 – Please click on the links below read the latest news from NOAA OR&R

OR&R Looks Back at 2023: Restoration for Fish, Wildlife, and Communities Coming to Seven Polluted Waterways

On January 25, 2024, NOAA’s National Ocean Service (NOS) highlighted the Office of Response and Restoration’s [coastal recovery and restoration successes in 2023](#). OR&R and partners recovered over \$92.8 million in pollution settlements to restore seven waterways in six states following oil spill and industrial pollution incidents throughout fiscal year 2023.



Marine Debris Program Releases 2023 Accomplishments Report

The NOAA Marine Debris Program is proud to present the 2023 Accomplishments Report, outlining our continued efforts to address marine debris through our program pillars – prevention, removal, research, monitoring and detection, response, and coordination.

Argo Merchant Reprise Exercise Enhances Oil Spill Preparedness

The Office of Response and Restoration conducted an internal preparedness exercise on January 18th, 2024. The exercise was loosely based on the historic Argo Merchant spill that happened off the coast of Massachusetts in December of 1976

Now Live! The Lower Duwamish River Storymap – Restoring Habitat for Injured Resources in an Urban River

A new storymap created by NOAA and the Elliott Bay Trustee Council provides a visual journey of the Lower Duwamish River in Washington and the restoration work that is underway in this important urban river.

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS

A COLUMN CREATED BY DR. MERV FINGAS, MEMBER OF ISCO COUNCIL FOR CANADA



This is part of a weekly column which provides the references and abstracts of new peer-reviewed scientific publications on oil spills. These references are selected on the basis of those papers that provide new insights into the fate, effects and control of oil spills. Readers may choose to obtain the full publications and to do so, one of three methods is suggested; contact your library, search the internet with the DOI (digital object identifier) provided, or search the internet for the exact title. These are given in the order of likely success in obtaining the article. Merv Fingas, ISCO Colleague.

21. Fate, behaviour and microbial response of diluted bitumen and conventional crude spills in a simulated warm freshwater environment

Xin Q., Saborimanesh N., Ridenour C., Farooqi H.
(2024) Environmental Pollution, 343, art. no. 123224,
DOI: 10.1016/j.envpol.2023.123224

ABSTRACT: Diluted bitumen (DB), one of the most transported unconventional crude oils in Canada's pipelines, raises public concerns due to its potential spillage into freshwater environments. This study aimed to compare the fate and behaviour of DB versus conventional crude (CC) in a simulated warm freshwater environment. An equivalent of 10 L of either DB or CC was spilled into 1200 L of North Saskatchewan River (NSR) water containing natural NSR sediment (2.4 kg) in a mesoscale spill tank and its fate and behaviour at air/water temperatures of 18 °C/24 °C were monitored for 56 days. Oil mass distribution analysis showed that 42.3 wt % of CC and 63.6 wt% of DB resided in the oil slicks at the end of 56-day tests, consisting mainly high molecular weight (HMW) compounds (i.e., resins and asphaltenes). The lost oil contained mainly low molecular weight (LMW) compounds (i.e., light saturates and some aromatics) into the atmosphere, water column, and sediment through collective weathering processes. Notably, weathered CC emulsified with water and remained floating until the end, while the weathered DB mat started to lose its buoyancy after 24 days under quiescent conditions and resurfaced once waves were applied. Analysis of the microbial communities of water pre- and post-spills revealed the replacement of indigenous microbial communities with hydrocarbon-degrading species. Exposure to CC reduced the microbial diversity by 12%, while exposure to DB increased the diversity by 10%. During the early stages of the spill (up to Day 21), most dominant species were positively correlated with the benzene, toluene, ethylbenzene, and xylenes (BTEX) content or polycyclic aromatic hydrocarbon (PAH) content of the water column, while the dominant species at the later stages (Days 21–56) of the spill were negatively correlated with BTEX or PAH content and positively correlated with the total organic carbon (TOC) content in waters.

22. Reynolds-averaged Navier-Stokes simulation of nearshore Langmuir circulation and the formation of oil-particle aggregates

Peñaloza-Gutierrez J.J., Tejada-Martínez A.E., Boufadel M.C.
(2024) *Ocean Modelling*, 187, art. no. 102306,
DOI: 10.1016/j.ocemod.2023.102306

ABSTRACT: Langmuir turbulence in the inner shelf coastal ocean is characterized by Langmuir circulation (LC) or cells that can span the full depth of unstratified water columns. A Reynolds-averaged Navier-Stokes (RANS) simulation strategy resolving full-depth LC coupled with an oil-particle aggregate (OPA) formation model is introduced. It is seen that full-depth LC generated by wind and waves under storm conditions can result in sediment resuspension and oil droplet entrainment (in the case of an oil spill) and subsequent mixing between these two, leading to significant OPA formation. This conclusion comes from a simulation in which various classes of oil droplets (with diameters ranging between 40 and 140 μm) were released at the surface, each class initialized with a 0.1 kg m^{-3} concentration. The full-depth LC led to most of the oil becoming trapped within OPAs in the first 5 min. The majority of the larger oil droplets were quickly aggregated with sediments near surface, whereas the smaller oil droplets were first submerged by the downwelling limbs of the Langmuir cells, and eventually aggregated with sediment while being carried upwards by the upwelling limbs. The OPAs conglomerated in the form of clouds transported by the action of the cells, with the heavier OPAs eventually settling within the upwelling limb of the cells while slowly depositing to the bed over time.

23. Does mangrove leaf falling dominate the bury of polycyclic aromatic hydrocarbons in the mangrove of China?

Qian Y., Liang M., Zhao Z., Zhang Z., Cai M., Lin Y.
(2024) *Marine Environmental Research*, 194, art. no. 106318,
DOI: 10.1016/j.marenvres.2023.106318

ABSTRACT: Mangrove wetlands are vital coastal ecosystems that can absorb and accumulate pollutants. Polycyclic aromatic hydrocarbons (PAHs) are persistent organic pollutants that pose potential risks to ecosystems and human health. However, their source and transport fate in mangrove areas are poorly understood. This study investigates 29 PAHs pollution of water and sediment in Zhangjiangkou Mangrove Wetland, the northernmost large-scale mangrove wetland reserve in China. We examine the distribution, source, transport mechanisms and risk assessment of PAHs. The results show that the concentrations of PAHs in mangrove sediment range from 55.62 to 347.36 ng/g (DW), with 5-ring PAHs being the dominant species. While the concentrations of PAHs in surface water range from 10.61 to 46.39 ng/L, with 2-ring PAHs and alkylated PAHs being the dominant species. The PAHs concentrations in surface water and sediment of river are higher than those in mangrove area, indicating that mangrove water could receive PAHs through tidal exchange. Based on diagnostic ratios (DRs), principal component analysis (PCA), and positive matrix factorization (PMF), we infer that the leaf deposition (48.55%) could be an important pathway of PAHs in mangrove sediment except for river water transport (51.45%), while the PAHs in estuary water originate mainly from point sources such as biomass burning (50.96%) and traffic emission (49.04%). The range of toxic equivalents in surface water and sediment was 2.73–16.09 ng TEQ g^{-1} and 0.03–3.63 ng/L, respectively. Although the ecological risk assessment suggests that the PAHs pollution in surface water and sediment poses a low risk, we recommend more attention to the protection of the mangrove ecosystem. This study reveals that mangrove leaf falling might be a significant mechanism of PAH sequestration in the mangrove system, which deserves more attention in future research.

24. Occurrence, sources and water column distribution trends of suspended particle-associated aliphatic and polycyclic aromatic hydrocarbons in the open northeastern Mediterranean Sea,

Parinos C., Skylaki E., Hatzianestis I., Gogou A.
(2024) *Science of the Total Environment*, 914, art. no. 169685,
DOI: 10.1016/j.scitotenv.2023.169685

ABSTRACT: Herein, we study the occurrence and water column distribution trends of suspended particle-associated aliphatic (AHCs) and polycyclic aromatic hydrocarbons (PAHs) collected from 36 offshore/deep sea locations across the open northeastern Mediterranean Sea. Total concentrations of the determined compounds fall within the range previously reported for non-polluted coastal and open sea locations worldwide. Mixed natural and anthropogenic sources were evident for the studied compounds, based on their molecular profile and several diagnostic indices. In all cases, an enhanced fossil signal typifying chronic oil pollution was evident along the water column. AHCs and PAHs mixtures characteristics varied significantly within the studied sub-regions, highlighting the importance of inputs from various point sources and dispersion pathways. The circulation characteristics of water masses along with biogeochemical features impact on the water column distribution trends and overall fate of the determined compounds in the study area.

25. Tar patties are hotspots of hydrocarbon turnover and nitrogen fixation during a nearshore pollution event in the oligotrophic southeastern Mediterranean Sea

Rubin-Blum M., Yudkovsky Y., Marmen S., Raveh O., Amrani A., Kutuzov I., Guy-Haim T., Rahav E.
(2023) *Marine Pollution Bulletin*, 197, art. no. 115747,
DOI: 10.1016/j.marpolbul.2023.115747

ABSTRACT: Weathered oil, that is, tar, forms hotspots of hydrocarbon degradation by complex biota in marine environment. Here, we used marker gene sequencing and metagenomics to characterize the communities of bacteria, archaea and eukaryotes that colonized tar patties and control samples (wood, plastic), collected in the littoral following an offshore spill in the warm, oligotrophic southeastern Mediterranean Sea (SEMS). We show potential aerobic and anaerobic hydrocarbon catabolism niches on tar interior and exterior, linking carbon, sulfur and nitrogen cycles. Alongside aromatics and larger alkanes, short-chain alkanes appear to fuel dominant populations, both the aerobic clade UBA5335 (*Macondimonas*), anaerobic Syntropharchaeales, and facultative Mycobacteriales. Most key organisms, including the hydrocarbon degraders and cyanobacteria, have the potential to fix dinitrogen, potentially alleviating the nitrogen limitation of hydrocarbon degradation in the SEMS. We highlight the complexity of these tar-associated communities, where bacteria, archaea and eukaryotes co-exist, likely exchanging metabolites and competing for resources and space.

26. Bayesian estimation and reconstruction of marine surface contaminant dispersion

Liu Y., Harvey C.M., Hamlyn F.E., Liu C.
(2024) *Science of the Total Environment*, 907, art. no. 167973,
DOI: 10.1016/j.scitotenv.2023.167973

ABSTRACT: Discharge of hazardous substances into the marine environment poses a substantial risk to both public health and the ecosystem. In such incidents, it is imperative to accurately estimate the release strength of the source and reconstruct the spatio-temporal dispersion of the substances based on the collected measurements. In this study, we propose an integrated estimation framework to tackle this challenge, which can be used in conjunction with a sensor network or a mobile sensor for environment monitoring. We employ the fundamental convection-diffusion partial differential equation (PDE) to represent the general dispersion of a physical quantity in a non-uniform flow field. The PDE model is spatially discretised into a linear state-space model using the dynamic transient finite-element method (FEM) so that the characterisation of time-varying dispersion can be cast into the problem of inferring the model states from sensor measurements. We also consider imperfect sensing phenomena, including miss-detection and signal quantisation, which are frequently encountered when using a sensor network. This complicated sensor process introduces nonlinearity into the Bayesian estimation process. A Rao-Blackwellised particle filter (RBPF) is designed to provide an effective solution by exploiting the linear structure of the state-space model, whereas the nonlinearity of the measurement model can be handled by Monte Carlo approximation with particles. The proposed framework is validated using a simulated oil spill incident in the Baltic sea with real ocean flow data. The results show the efficacy of the developed spatio-temporal dispersion model and estimation schemes in the presence of imperfect measurements. Moreover, the parameter selection process is discussed, along with some comparison studies to illustrate the advantages of the proposed algorithm over existing methods.

27. Oil spill soil remediation using thermal desorption: Project synthesis and outcomes

O'Brien P.L., DeSutter T.M., Casey F.X.M., Wick A., Bartsch Z.J., Croat S.J., Struffert S.

RECENT INTERESTING PEER-REVIEWED OIL SPILL PUBLICATIONS (CONTINUED)

(2024) Agrosystems, Geosciences and Environment, 7 (1), art. no. e20463,.

DOI: 10.1002/agg2.20463

ABSTRACT: Farmland within the Williston Basin of North Dakota was the site of the largest terrestrial oil spill to date in the United States in 2013. Over 3200 m³ of oil was released into the topsoil and subsoil, creating a risk to soil, water, and air resources. The purpose of this document is to provide a summary of results from a 7-year project investigating the impacts of how thermal desorption (TD), the method used to remediate topsoil and subsoil, impacted contaminant reduction, soil function, and plant productivity simultaneously with site remediation. Soil disturbance and TD decreased soil organic matter and microbial communities, resulting in decreased soil function and plant production. However, TD did not reduce soil microbial recovery 4 years after treatment. Blending TD-treated soil with uncontaminated topsoil appeared to minimize these negative effects and promote recovery of soil function. These findings provided critical information to stakeholders in the understanding of soil remediation and reclamation in this region.

SCIENCE & TECHNOLOGY (

If you are interested in new technology you will find it useful to visit Technology Innovation News Survey at <https://clu-in.org/products/tins/> and Tech Direct at <https://clu-in.org/techdirect/archive/>

UCO RESEARCHERS ENHANCE WATER TREATMENT WITH PLASMA TECH

Pioneering plasma reactor design by UCO researchers enhances water decontamination, swiftly and efficiently eliminating high dye concentrations. Plasma, often called the fourth state of matter, has long been a technological game-changer. Beyond illuminating our homes and enabling smaller mobile devices, researchers at the University of Cordoba have harnessed its potential to address a critical environmental issue: water contamination.

The FQM-136 Physics of Plasmas and FQM-346 Organic Catalysis and Nanostructured Materials groups collaborated on a study focusing on water decontamination, particularly those with high concentrations of dyes and pollutants from agricultural and industrial activities. Interesting Engineering / [Read more](#)

ELUCIDATING THE SIGNIFICANT ROLES OF ROOT EXUDATES IN ORGANIC POLLUTANT BIOTRANSFORMATION WITHIN THE RHIZOSPHERE

Biotransformation of organic pollutants is crucial for the dissipation of environmental pollutants. While the roles of microorganisms have been extensively studied, the significant contribution of various root exudates are still not very well understood. Through plant growth experiment, coupled with gas and liquid chromatography-mass spectrometry methods, this study examined the effect of the presence of *M. sativa* on microbial-associated biochemical transformation of petroleum hydrocarbons Nature / [Read more](#)

BACTERIAL MECHANISMS FOR REMEDIATION

In this paper, the authors discuss the use of bacteria and different approaches offered by them to remediate metal and metalloid contamination, including bioaccumulation, adsorption, biomethylation, biosurfactants, microbial flocculation, and various other strategies. Scispace / [Read more](#)

INTERESTING ARTICLE

INTRODUCING REMORA: AN INNOVATIVE APPROACH TO SINGLE-USE PLASTIC REDUCTION

Remora aims to reduce single-use plastics on an individual level to prevent trash from entering waterways & ecosystems. Join the Remora community and start tracking your single-use plastic consumption, engage with each other, and track your long-term progress towards refusing plastics in your daily life. [Download the app](#), invite your friends, compare your stats, build your streaks, win badges, make a change. Be a part of a global solution. Reduce.eckerd.edu / [Read more](#) [Thanks to John Wardrop, Hon.FISCO]

TRAINING COURSES

Training Course Providers – Please check entries below and advise editor on any necessary updates

USEFUL LINKS

- INTERNATIONAL – IMO E-LEARNING PLATFORM [e-learning platform](#)
- AUSTRALIA – AMOSC - <https://amosc.com.au/training/>
- AUSTRALIA & NEW ZEALAND – ALGA - <https://landandgroundwater.com>

TRAINING COURSES (CONTINUED)

- CHINA - <http://www.sioetc.com>
- EUROPE – <https://www.emsa.europa.eu/newsroom/latest-news/item/3609-emsa-training-catalogue-2019.html>
- FRANCE - CEDRE - https://wwz.cedre.fr/en/content/download/10912/file/CalendrierFormation2023_EN.pdf
- UK & WORLDWIDE – OIL SPILL RESPONSE LTD. - <https://www.oilspillresponse.com/training/courses/>
- UK & WORLDWIDE – BRIGGS ENVIRONMENTAL SERVICES LTD. - <https://www.briggsmarine.com/services/training/>
- UK & WORLDWIDE – AMBIPAR GROUP <https://ambipar.com/uk/training/>
- UK – NCEC HAZMAT ACADEMY – [More info](#)
- USA – TEXAS A&M UNIVERSITY – NATIONAL SPILL CONTROL SCHOOL <https://www.tamucc.edu/research/nscs/>
- USA – MPC, DETROIT - <https://marinepollutioncontrol.com/services/training-and-compliance>
- USA – ALLIANCE OF HAZARDOUS MATERIALS PROFESSIONALS - https://www.ahmpnet.org/events/event_list.asp
- CANADA - CONTAMINATED SITES HEALTH & SAFETY REFRESHER (8-HOUR HAZWOPER) – FROM ECONEXT – [MORE INFO](#)
- ONLINE - LLOYDS MARITIME ACADEMY – CERTIFICATE IN MARINE POLLUTION PREVENTION & MANAGEMENT. Starts on 14th March 2024 - <https://email.informaconnect.com/q/12ErXbQNGaNK08lQrkPeg62v/wv>

Members who would like to be listed here, please contact your editor – john.mcmurtrie@spillcontrol.org

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CONTRIBUTED ARTICLE

PROTECTING PANAMA'S SEAS: A CALL FOR FUTURE-READY OIL SPILL RESPONSE & NATIONAL CONTINGENCY PLAN

A special article by Juan Diego Reyna. The author is member of ISCO and a shipowner, current member of the Board of Directors of the Maritime Authority of Panama representing the private sector, and an experienced incident commander in oil spill response, co-founder of the COR (Operational Response Center) in Taboga , a cooperation project with Panamas Shipowner Associations and OSROS for the safeguarding of the pacific anchorage of Balboa in Panama.



Photo: Juan Diego Reyna accompanied by ARPA Authorities and the Mayor's Office of Taboga in the Bay of Panama

Introduction:

Panama's seas are among the nation's most invaluable assets. These vast expanses of water are not only critical for the country's maritime industry but also play a crucial role in supporting local ecosystems and communities. However, despite their significance, the protection of Panama's seas remains an unresolved issue, marked by recurring oil spills that threaten this natural and economic resource.

Challenges in Panama's Maritime Industry:

Panama boasts one of the world's most vital trading routes and serves as a major hub for port and marine services. Yet, doubts and concerns linger about the government's ability

to respond effectively to oil spill emergencies. To address this, there is an urgent need to establish clear policies and procedures governing the hiring of private companies for oil spill response.

Additionally, the absence of a comprehensive national contingency plan compounds the challenges. Unlike some of its global counterparts like the United States and Canada, where Oil Spill Response Organizations (OSROs) are mandatory in port limit and offshore operations, Panama lacks such a system.

Collaboration for Sea Protection:

The path forward demands collaboration between the government, private companies, and local communities. Together, these stakeholders can ensure not only the protection of the sea but also the livelihoods that depend on it. Establishing clear performance metrics and regularly monitoring the performance of private companies are essential steps in holding them accountable to their contractual obligations and ensuring the delivery of high-quality services.

The Case for OSROs in Panama:

Surprisingly, in Panama, questions surrounding the necessity and funding of OSROs at sea have persisted, confounding even some local maritime stakeholders. This uncertainty endures despite the undeniable and critical role that OSROs play in swiftly addressing oil spills. To address this ongoing ambiguity, Panama could take a page from the United States and other countries where ships are legally required to have an OSRO on standby. Under this system, licensed OSROs companies would be subject to rigorous audits, carefully overseen by the governing authority, and also it is paramount to establish a new framework guided by transparent contracting procedures, monitoring aided by several agencies and institutions and standardized tariffs, especially tailored for spills of unknown origins which sadly, have occurred much too frequently in Panama. Such a transformation not only guarantees an unwavering, nationwide response capability but also serves as a guiding light for transparency. It establishes a precise legal framework and fortifies the regulation of OSROs activities, nurturing robust quality standards while quelling any doubts that might surface in government procurement during oil spill situations.



Recent Developments: Panama's National Contingency Plan

In a significant stride towards a more robust oil spill response system, Panama has recently approved the National Contingency Plan, after a more than a decade outstanding and has passed the adoption of the OPRC 90 convention in the executive cabinet.

Click on the below link to read the document – [Formal adoption of the National Contingency Plan](#)

This decision positions Panama on the world stage in terms of cooperation concerning response capabilities, aligning the nation's capabilities with its status as a major traffic hub for ships and a biodiversity corridor in its waters. This timing is further emphasized by the involvement the new IMO's Secretary General the Panamanian, Mr. Arsenio Dominguez, whose background in the

Conclusion:

In conclusion, it is imperative to foster a maritime culture in Panama, where the sea is recognized as a vital resource for the country's present and future. A national contingency plan, an operating license system for OSROs, and adherence to the international legal framework of the OPRC should be top priorities for Panama. These measures will prepare the nation for potential oil spills, ensuring the protection of its precious seas for generations to come. Protecting the sea is not just a government responsibility; it is a collective duty, and each Panamanian must commit to its preservation. Juan Diego Reyna

UPCOMING EVENTS

TO VIEW UPCOMING EVENTS CLICK ON [HTTPS://SPILLCONTROL.ORG/UPCOMING-EVENTS/](https://spillcontrol.org/upcoming-events/)

To see ALL of the posted events you will need to click on “LOAD MORE” at the foot of each opened “upcoming events” page. Event organisers are requested to notify ISCO immediately if a listed event is cancelled or postponed. Your Editor does his best to keep the listing up-to-date but it should not be assumed that listed events have not been cancelled or postponed. It is recommended that you check with event organisers before finalising your attendance plans. Please advise the Editor if any of the entries require correction or updating. If you are holding an event you would like to be featured here, please send details to John.mcmurtrie@spillcontrol.org

The listings below give only very basic details – To get access to all information visit <https://spillcontrol.org/upcoming-events/>

FEBRUARY 2024

- JAPAN and ONLINE - PAJ Oil Spill Workshop 2024 - “Oil Spill Prevention during a Civil War, Recent Oil Spill Response and EffectivePublic Relations” - February 15th Thursday 2024, International Convention Hall, 2nd Floor, Keidanren Kaikan, 1-3-2, Ohtemachi, Chiyoda-ku, Tokyo 100-0004. Virtual on line with limited physical attendance
- UAE – International Conference on Environmental Pollution & Remediation, (ICEPR), Dubai, 15-16 February
- WEBINAR - EXXONMOBIL OIL SPILL RESPONSE KNOWLEDGE TRANSFER WEBINAR SERIES – WEBINAR 23. - THE FINAL SEGMENT OF THE OIL IN THE SEA IV WEBINAR SERIES, WHICH WE STARTED IN JUNE 2023. FEBRUARY 13, 2024. PANEL DISCUSSION
- AUSTRALIA – Alga – “Chlorinated Hydrocarbons Groundwater Fate & Transport Symposium”, Adelaide, 22-23 February 2024

MARCH 2024 AND ONWARDS

- PORTUGAL – Economist – “11th Annual World Ocean Summit & Expo”, Lisbon, 11-13 March 2024
- USA – Conference & Exhibition – Clean Waterways – April 9-11, Cincinnati, Ohio
- TUNISIA – MOIG TRAINING COURSE – IMO Level 3, 22-25 April 2024, South Hammamet
- USA – International Oil Spill Conference & Exhibition, 13-16 May 2024, New Orleans, Louisiana
- USA – AHMP – EHS HAZMAT SUMMIT, 14-17 July, 2024, Kansas City, Missouri
- GERMANY – “14th International Conference on Environmental Pollution & Remediation”, Berlin, August 25-27, 2024
- SPAIN & ONLINE – “14th International Conference on Environmental Pollution & Remediation, Barcelona, August 25-27. 2024
- UAE - SPE International Health, Safety, Environment, and Sustainability Conference and Exhibition 10–12 September 2024, Abu Dhabi, United Arab Emirates
- UK – Water, Waste & Environmental Monitoring – 9-10 October 2024, NEC, Birmingham, UK

SOME OTHER INFORMATION

- IOPC Funds has released a calendar of its upcoming events – to view, click on <https://iopcfunds.org/news-events/events/>
- Econext has released a programme of upcoming courses and webinars. This can be viewed at https://econext.myvirtualcampus.co/product-category/webinars/?orderby=date&mc_cid=9c2c758fcd&mc_eid=6a430f153
- Recordings of past ExxonMobil OSR Knowledge Transfer Webinar Recordings – [Access and Download](#)
- UK & Ireland Spill Association Alternative Marine Fuels and their Implications For Spill Response Webinar is [available to watch on YouTube](#). All six of UK & Ireland Spill Association’s Webinar Series on the Wakashio Spill are also available to watch. [More info](#)

UPDATES FROM EVENT ORGANISERS

USA: CLEAN WATERWAYS 2024 – REGISTRATION OPEN - CLICK ON LINKS BELOW

If you have leftover funds in your marketing budget from last year, use it to invest in your business for 2024 and secure participation at the [CLEAN WATERWAYS Conference](#), April 9-11 in Cincinnati, OH. We are accepting exhibit/ sponsorship applications and registration is open.

[DISCOUNTS](#) [PRELIMINARY AGENDA](#)

Registration has officially opened for the 2024 CLEAN WATERWAYS Conference, taking place at the Duke Energy Convention Center in Cincinnati, OH, April 9-11.

[Registration information](#) April 9-11, 2024, Cincinnati, OH – “Incident Prevention & Response for Inland Regions & Waterways”

[View the website](#) The CLEAN WATERWAYS program is developed by a government/industry-based committee of approximately 50 professionals, and the committee is looking for leaders to help shape the conference.

All abstracts submitted are reviewed for content and relevance by the committee and are selected by consensus

USA: REGISTRATION NOW OPEN FOR IOSC 2024

International Oil Spill Conference (IOSC) in New Orleans, May 13-16, 2024

Click on links for more info - [FILM FESTIVAL & PHOTOGRAPHY CONTEST](#)

To qualify for a discounted registration rate, you **MUST** reserve a room at an [IOSC Hosted Hotel](#). Your room must be booked by the Hosted Hotel cutoff date to receive the discounted rate. Please note that each hotel has their own cutoff date. IOSC will perform an audit on the housing block on April 15. Those that have not booked within the block by the respective hotel cutoff date will have their registration rate changed to reflect the difference.

Registration has officially opened for the International Oil Spill Conference (IOSC), May 13-16, 2024 at the New Orleans Convention Center in New Orleans, LA USA.

In order to make it as easy as possible for you to join nearly 2,000 members of the international oil spill response community, IOSC has put together a Justification Toolkit to help you illustrate the value of attending this conference. Use the tools in this kit to explain to your supervisor how attending IOSC will be a smart investment in both your personal career growth and the growth of your organization. [Download the Justification Kit](#)

Meet Dr. Leonard Marcus, IOSC 2024 Keynote Speaker. Join us, May 13 - 16, 2024 in New Orleans, LA for the 2024 International Oil Spill Conference (IOSC) and be inspired by our opening keynote speaker, Dr. Leonard Marcus. [Read about Dr. Marcus](#)

[Why are Sponsorships at IOSC So Valuable?](#) Click to read more

IOSC provides a vital forum for professionals from the international response community, private sector, government, and non-governmental organizations to come together to tackle the greatest challenges facing us with sound science, practical innovation, social engineering and imagination.

Mark your calendars and start planning your trip to join over 1,500 attendees from over 50 countries, representing government agencies, contractors, researchers, industry, and other stakeholders as they exchange ideas and lessons learned from actual spill responses and research around the world.

Learn More about IOSC 2024 Be sure to follow IOSC on [Facebook](#), [Twitter](#), and [LinkedIn](#) for updates and announcements about #IOSC2024. Please contact registration@iosc.org for questions or additional information. Interested in exhibiting or sponsorship? Please reach out to: exhibits@iosc.org

USA: CLEAN GULF CONFERENCE & EXHIBITION 2024

November 18-20, 2024 George R. Brown Convention Center | Houston, TX

Registration for the 2024 event will open in April and Exhibit and Sponsorships are already available! Contact Renie Mayfield at 720-289-7008 or rmayfield@accessintel.com to discuss how you can make an impact on buyers from oil & gas, maritime, rail, environmental companies and regulatory agencies with an Exhibit space or Sponsorship. [More info](#)

Do you have real-world solutions for evolving environmental emergencies? Don't miss your chance to be heard at this year's CLEAN GULF Conference! Submit your abstract for review and your chance to take the stage this November at CLEAN GULF. Abstracts are due by **March 1, 2024**. [More info about submitting abstracts](#).

INDIA: OIL SPILL INDIA CONFERENCE & EXHIBITION, NEW DELHI, 11-12 SEPTEMBER 2024

In the backdrop of the recent oil spill incident, caused during cyclone Michaung in Chennai's Ennore Creek, it is with a sense of urgency and shared responsibility that we announce that the 7th edition of Oil Spill India (OSI 2024), the region's flagship conference & exhibition on the Oil Spill Prevention, Planning, Preparedness, Response & Restoration industry, will be organised during 11th & 12th September 2024 at Hotel JW Marriott, Aerocity, New Delhi, India. [View the OSI 2024 website](#)

EUROPE – INTERSPILL CONFERENCE & EXHIBITION – 8-10 APRIL 2025 – ExCeL, LONDON

This internationally respected triennial event (which connects global stakeholders involved in marine oil spill research, prevention, preparedness, response and restoration) will return on 8-10 April 2025 at ExCeL London. <https://www.interspill.org/2025/>

JOB VACANCIES

APPOINTMENT OF AN INLAND ASSESSOR FOR INTERNATIONAL SPILL ACCREDITATION SCHEME (ISAS)

Due to a forthcoming retirement, a vacancy will exist within a few months for an Assessor to manage the accreditation of Inland Spill

JOB VACANCIES (CONTINUED)

Response companies and the accreditation of spill response courses provided by training companies.

ISAS has a well-developed and functional accreditation scheme for the assessment of companies involved in Inland Spill Response.

Assessors manage a rewarding process as companies grow in confidence and professionalism during the accreditation process. The assessor builds on his/her knowledge and develops a close bond with the company knowing that what the assessor is doing will make a difference.

Assessors are sub contractors and are experienced professionals with experience of attending and managing spill response incidents who may have worked for a spill response organisation, environment agency, emergency service with an understanding of response, mitigation techniques and have the ability to liaise with external stakeholders.

More details at: <https://ukeirespill.org/appointment-of-an-inland-assessor-for-international-spill-accreditation-scheme-isas/>

CONTRACTS, TENDERS AND BUSINESS OPPORTUNITIES

INTERNATIONAL OPEN TENDER NOTIFICATIONS

This is a subscription service. <https://www.tender247.com/keyword/oil+spill+tenders+global>

OTHER OPPORTUNITIES: USA & EUROPE

US Government solicitations are frequently posted in Technology Innovation News Survey <https://clu-in.org/products/tins/>

US Federal Contract Opportunities are posted at <https://clu-in.org/Federal-Contract-Opportunities>

European Maritime Safety Agency invitations to tender are often posted in The EMSA Newsletter at -

<https://www.emsa.europa.eu/newsroom/newsletters.html> ISCO Members can post requests for submission of invitations to tender for supplies / services in this section.

The ISCO Newsletter is circulated to nearly 3,000 registered subscribers in 60 countries worldwide and represents a well targeted audience for sourcing invitations to tender. Send requests to the Editor – john.mcmurtrie@spillcontrol.org

US EPA: FORMAL SOLICITATION REQUEST FOR PROPOSALS ERRS VI: EMERGENCY RESPONSE

[More info](#)

LINKS FOR OTHER PUBLICATIONS

TO VIEW LINKS FOR DOWNLOADING AND READING OTHER PUBLICATIONS PLEASE CLICK ON

<https://spillcontrol.org/2021/10/19/links-for-downloading-and-reading-other-publications/>

As a service to its Members ISCO provides a listing of publications that may be of interest to our community. This page provides details and links for downloading more than 40 publications most of which can be accessed at no cost. This page is managed by Mike Watson mike@mwadigital.com

NEW PUBLICATIONS

RECENTLY RECEIVED LINKS

<https://mailchi.mp/pemsea/ebulletin-january-2024?e=196100a0ff>

INCIDENT REPORTS

MARITIME ACCIDENT REPORTS FROM THE MARITIME BULLETIN

In the Maritime Bulletin, Mikhail Voytenko regularly advises on vessel abandonments, groundings and sinkings – several every week – but, unless there is an immediate and significant release of oil or chemicals, spillages are not reported. However, many of Mikhail's reports cover incidents that may have potential to cause pollution. To view all of his reports, visit <https://www.maritimebulletin.net/>

CORRECTION OF ERROR

USA: DELAWARE – SPILL IN DELAWARE RIVER – Your editor apologizes most sincerely for having published this erroneous report in

INCIDENT REPORTS (CONTINUED)

last week's newsletter. "I am grateful to the US Coastguard (especially LCDR Andrew A Kennedy) for alerting me to this mistake. I picked this up the report from a web post dated January 24 and, being under serious time pressure to meet my publication deadline, I accepted it in good faith. When I looked into it in more detail it looks like the author was referring to a historic 2020 oil spill and made a mistake".



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INCIDENT REPORTS (CONTINUED)

UK: SCOTTISH CANALS: OIL POLLUTION AT THE KELPIES AFTER TWO BOATS SINK



January 12 - There are concerns over oil pollution at The Kelpies after two boats have sunk in the water surrounding the iconic tourist attractions. Environment watchdogs at the Scottish Environment Protection Agency (SEPA) have been alerted and they are monitoring the situation. It is understood that one of the boats sunk several months ago and the other within the last few weeks.

Concerned resident George Rigby said: "The latest sunken boat is now leaking oil and diesel into the water. There is a film of diesel and oil on the water now and a very strong smell of diesel.

A spokesperson for Scottish Canals said: "We are aware of two vessels sunken at The Kelpies. SEPA have been notified and we have taken steps to address the environmental risks around this. The Scotsman / [Read more](#) Photo courtesy of Commons Wikipedia

RED SEA: TANKER FIRE EXTINGUISHED

January 28 - The fire aboard the Marshall Islands registered tanker Marlin Luanda is reported to be out and the vessel is proceeding to an unspecified safe harbor. Trafigura, which chartered the vessel, provided the update confirming that the crew of 23, including 22 Indians and one person from Bangladesh, is safe. The Maritime Executive / [Read more](#)

USA: NORTH-DAKOTA - 300 BARRELS OF OIL SPILLED IN MOUNTRAIL COUNTY

January 30 - The North Dakota Oil and Gas Division reported an oil spill that released 300 gallons of oil on Friday, Jan. 26, in Mountrail County, roughly 15 miles from Powers Lake.

According to a news release, Liberty Resources Management Company LLC reported the spill on Monday, Jan. 29. The spill was attributed to a tank leak. The spill was said to have been contained on-site. Cleanup efforts are underway, and at the time of the report, 175 barrels of oil had been recovered, the release added. Grand Forks Herald / [Read more](#)

Legal disclaimer: Whilst ISCO takes every care to ensure that information published in this newsletter is accurate unintentional mistakes can occur. No liability for consequences of errors is accepted but, if an error is brought to our attention, a correction will be printed in a following issue of this newsletter. Products and services featured in the ISCO Newsletter and/or the ISCO website, including the International Directory of Spill Response Supplies and Services, have not been tested, approved or endorsed by ISCO. Any claims made by suppliers of products or services are solely those of the suppliers and ISCO does not accept any liability for their accuracy. It should not be assumed that views and opinions expressed in linked reports, articles and other content reflect the views of the organization. Subscription is subject to acceptance of ISCO's Terms and Conditions as published on the website www.spillcontrol.org and your acceptance of ISCO's Data Protection and Privacy Policy.
