

Research and Project Team

The following research and project team has pioneered mercury and arsenic chemical decontamination for global hydrocarbon processing assets (E&P, midstream and downstream/petro-chemical) and has completed more mercury in steel studies than any other research group save CVX (our clients include Koch Industries, FHR, Shell Upstream, Williams Energy, Endeavor, PG&E, Chevron Technology and others). Members of our group managed CVXs mercury chemical decontamination program for ~2 years to demonstrate what is possible and meet certain confidential objectives including near and total mass removal from subsea pipelines and topside process equipment. This along with recent research for PTT advanced our chemistries and technology for processing spent chemistries to state-of-the-art. We developed gel technologies for application in subsea pipeline chemical decontamination in preparation for decommissioning and one of the most significant research objectives met was the development of chemical gel technology using existing infrastructure on FPSOs for cargo hold decontamination. ISCT and our confidential partners have surpassed the research phase and performed numerous mercury chemical decontamination projects from the Americas to Australia (~10 alone in AP over the last 2 years). Our team does not just focus on mercury in carbon and stainless steel but can perform decontamination of AHX at NGL and LNG plants (see recent PR from Exxon plant in the US).



Ron Radford – President

I manage global operations at ISCT Group US LLC and am responsible for managing mercury management and chemical decontamination programs in the US and overseas. I have 20 years of environmental remediation, consulting and industrial services experience providing specialized services to the energy sector. I am based in Thailand and the US Texas Gulf Coast and responsible for managing projects/programs including remedial construction, facility decontamination, regulatory compliance programs, chemical cleaning, toxic metals sampling and analysis, technology evaluations and remediation technology development.

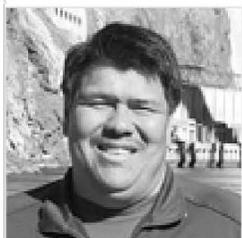
Since 2005 members of my group and the R&D team at ISCT have been researching the sorption dynamics of mercury in carbon and stainless steel hydrocarbon process systems and developing chemistry and methods to remove mercury from subsea pipelines and topside processing equipment for continued use and in preparation for decommissioning.

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Dr. Dennis O'Rear – Technical Research Director

Dr. Dennis O'Rear (*formerly* Chevron) has joined ISCT as Technical Research Director and is responsible for providing technical leadership for ISCT's projects globally. Dr. O'Rear is an internationally recognized authority on mercury, and has over 40 years of experience in the petroleum industry in Hydrocarbon processing, GTL, Production Chemistry and Production Geochemistry. Dr. O'Rear is the author of over 120 U.S. patents (13 dealing with heavy metals), has published 13 technical papers, and has acted as an expert witness in 15 European patent oppositions. His mercury patents and expertise span the value chain of petroleum processing from downhole reservoirs, pipelines, gas and crude/condensate facilities, refineries, waste water, solid wastes, and decommissioning of equipment. This work includes an improved understanding of how mercury accumulates on steel and other metals, and the chemistry of how it can be removed during decommissioning. This knowledge improves the effectiveness and reliability of decommissioning, and approaches to managing the mercury waste from these processes.



Gerard Van der Jagt – Chief Chemist

Gerard Van der Jagt is an internationally recognized mercury analytical chemist, and has 15 years of experience in trace metals analysis, and research programs. He has been involved since 2010 with our research and development team and provided onsite chemical performance and verification analysis on several key projects including recent advanced chemical decontamination and chemical performance/verification analysis for confidential clients in the Americas and Australasia. As chief chemist at ISCT Gerard is responsible for key research and development projects to support our process stream sampling and analysis business and also assist with innovation and technology development associated with our mercury, arsenic and NORM chemical decontamination and processing technologies. Gerard has advanced chemical performance measurements of mercury and hydrocarbon removal chemistries such that hydrocarbon and mercury uptake graphs along with trending provide defensible data for contact time and mass removal.



Ian Bonner – Chemical Cleaning Specialist

Ian Bonner, international project manager for ISCT, is responsible for running decontamination projects across the world. Ian has 17 years of experience in the hydrocarbon processing industry with a focus on downstream and offshore chemical cleaning along with subsequent spent chemistries/fluids processing (reduction technologies). Based in Houston and responsible for the day to day running of large decontamination projects, chemical cleaning, toxic metals sampling and analysis and new technology development.

Since 2014 Ian has been a key member of the ISCT R&D team and involved in the development of innovative chemical application technologies (vapor phase, circulation, robotic, RHD, chemical gel trains and more) for the chemical decontamination of high value equipment for re-use plus decontamination of equipment scheduled for decommissioning. Ian will take lead in the US for sales and technical support of ISCTs hydrocarbon degassing and metals removal chemistries.



Charles C. Overstreet, P.E. – Chief Engineer

As an SME, Charles Overstreet, is a University of Texas Mechanical Engineer with over 25 years of oilfield experience in the pressure control and offshore sector. His vast knowledge in Snubbing (HWO), Well Control, Coiled Tubing, and structural designs for land, offshore, and subsea applications helped him become a Lead Project Engineer. In that key capacity, he provided engineering support for various service lines ranging from job modeling, internal engineering research to supervisor engineer for complex projects. He performed an early research project for determining pressure-life cycles on high pressure coiled tubing. With his technical experience, Mr. Overstreet has registered six (6) US Patents including two primary inventor patents that are directly related to Snubbing and Sub-Sea applications. He is an active member of the Society of Petroleum Engineers (SPE) and has served as a member of API 16C – WIWC subcommittee and director of ICoTA. Charles is a "think outside the box" problem solver with a no problem is to complex attitude - if we can conceptually design a solution, Charles can build it.