

## Pierre Johannes De Jager

<b>Qualifications</b>	MChem CHons in Medicinal Sciences, University of Southampton
<b>Affiliations</b>	Member of the HMC 3 Committee, Energy Institute, advising on petroleum measurement and standards. Registered Scientist, RSci Member of Royal Society of Chemistry, MRSC Member of the Energy Institute, MEI
<b>Date of Birth</b>	1985
<b>Nationality</b>	British
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### Current Position at CWA

#### Chemist / Surveyor

Pierre joined CWA's Oil and Chemicals department as a Chemist, having completed his Masters in Chemistry at Southampton University and became a Director in 2019. His academic background included Organic, Inorganic and Physical Chemistry as well as Pharmacology. Pierre has also considerable laboratory experience, in particular, in the field of electrochemistry where he worked on modifying platinum microelectrodes to optimise oxygen concentration measurement at sea. Furthermore, Pierre's analytical lab experience also covers a broad range of lab testing skills in the petroleum sector including modern chromatography and spectroscopy techniques together with advanced microscopy (scanning electron microscopy) studies. Pierre is the CWA representative serving on the Energy Institute HMC 3 Committee advising on aspects of petroleum measurement and custody transfer. Expert witness.

## Specific Expertise and Experience at CWA

### Process Materials and Cargoes

Pierre has experience of attending and advising on contamination incidents affecting a number of cargoes, including Gas carrier cargoes, Ethane, LPG-propane/Butane; Isoprene, Butadiene, Ammonia; VCM; Chemical carrier cargoes including: Acetone; Palm oil (olein, stearine, kernel oil); Rapeseed Oil (all grades); Sunflower Oil (all grades); Benzene, Toluene, Xylene (BTX) aromatics; Hexamethylenediamine (HMD); Hexene; Methanol; Mono, Di and Tri ethylene glycol (MEG, DEG, TEG), Acrylonitrile (ACN), Caustic Soda, Ethanol, Phosphoric acid and Petroleum cargoes including, Very Low Sulphur Fuel Oil (VLSFO); Crude oils; Slurry Oil; Jet A-1; Fuel oil (light, medium, heavy); Bitumen; Gas oil/Diesel grades; Gasoline (all grades) Naphtha; Methyl tertiary – butyl ether (MTBE).

Pierre has also given evidence in several Arbitration and High Court matters involving residual marine bunker fuel oil grades where contamination by chemical species identified by gas chromatography mass spectrometry and other investigative techniques were alleged.

### Field Attendances

Pierre has attended Gas carriers, Oil/Chemical tankers, bulk carriers and container ships, and numerous Laboratories and Refineries. Attendance assignments include Odessa; Kirovograd, Ilyichevsk, Europort, Immingham, Santos, Rotterdam, Antwerp, Le Havre, Iskenderun, Jebel Ali, Fujairah, Sohar, Las Palmas, Sharjah, Dubai, Southampton, Teesport, Thurrock, Nigeria, Malaysia, Aruba, Mozambique, Santa Domingo, Singapore, Shanghai, Ningbo, South Africa, Spain, Portugal, Bermuda, Curacao, Gibraltar, Zhangjiagang, Hong Kong, Grangemouth, Rafnes, Nyborg, Denmark and other European countries. Surveying experience includes inspection of cargo tanks, ballast tanks, tank suitability conditioning surveys, inspection of steam heating coil systems, pressure testing of gas carrier liquefaction plant, along with various sampling techniques used aboard vessels. Pierre has also advised on alleged VLSFO contaminations, water contamination incidents and undertaken supervision of de-bottoming operations of petroleum products and edible oils. Bulk ship hatch and hold survey, suitability survey to load to grain standard. Container dangerous goods survey for self-ignition incident; IMDG Code mis-declaration survey.

## Summary of Previous Employment

July 2010 – December 2010

**Merck Chemicals**  
Southampton

Development, formulation and printing of organic light emitting diodes. Responsibilities included analysing data collected from experiments, formulating polymer photoresists and organic light emitting diode inks. Results of this assignment were used to optimise processes such as formulation of low surface energy photoresists and to improve the interaction of organic light emitting diode inks on various substrates. Co-inventor of low surface energy photoresists (patent pending).

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