



# Scientific Investigation of Marine Claims

For the  
General Insurance Association of Singapore  
&  
Singapore Maritime Foundation

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# INTRODUCTION



## Topics

- Who are MTD?
- The role of the consultant scientist
- Approach to marine claims investigation
- Presentation Topics



# Our History

- The Company started in the 1890's as a coal sampling and analysis business.
- Today the Minton, Treharne & Davies Group owns and operates a number of companies around the world
- We offer a wide range of scientific services to an ever expanding client base
- Our main field is as investigators of marine incidents and claims for the insurance market

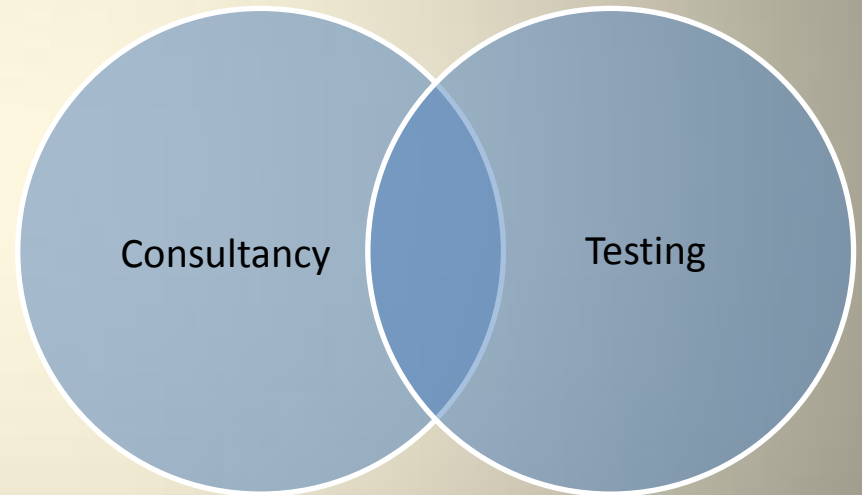


## Our Locations



## Core Business Structure

- Our business has two core activities
- These activities are interwoven and complementary
- We offer expert advice as consultants and perform bespoke testing as and when required
- All of our work is carried out to forensic standards



# The Role of the Consultant Scientist

- For Marine Insurers, a consultant scientist is employed to investigate marine claims
- Investigation should ideally establish:
  - Is there a claim?
  - What is the extent of the claim?
  - What is the cause of the claim?
  - Who is responsible and liable?
- Insurers may also look for advice upon:
  - Has the Assured acted as prudent uninsured?
  - What are the potential mitigation/remediation options?

# Marine Claims Investigation

- The approach taken to marine claims investigation is bespoke to the nature of the claim, but can be summarised generally as follows:
  - On site attendance
  - Collection of evidence and documentation
  - Incident management and implementation of mitigation strategies
  - Appraisal of evidence and documentation
  - Analysis of samples
  - Interpretation of all data
  - Preparation of reports
  - Provision of expert witness services

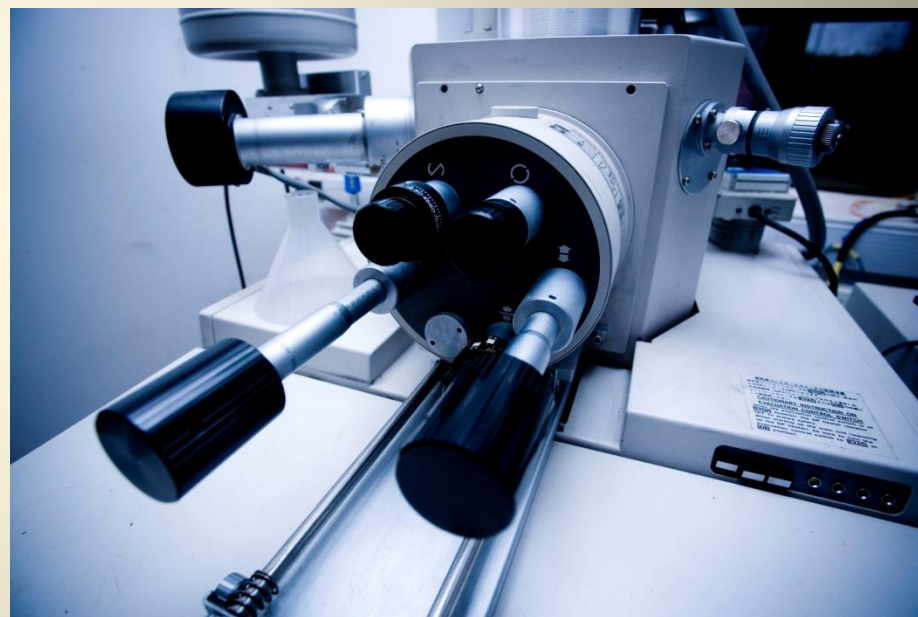
# Claims Investigation – On Site Attendance

- Forensic investigation:
  - Collect evidence
  - Collect documentation
  - Interview relevant parties
  - Assess extent of damage
  - Investigate causation
  - Resample/Retest
  - Ensure all relevant samples retained
  - Arrange and attend joint witnessed analysis
  - Advise upon suitable mitigation strategies
- Incident management and supervision



# Claims Investigation – Forensic Analysis

- Bespoke investigative analysis :
  - Gas-Chromatography
  - Gas-Chromatography/Mass Spectrometry
  - Scanning Electron Microscopy
  - Infra-Red Spectroscopy
  - Ion Chromatography
  - Inductively Coupled Plasma
  - Non Destructive and Destructive Testing techniques
  - Wet Chemistry Methods



## Claims Investigation – Reporting & Expert Witness

- Preparation of technical reports – both using historical data and following our attendance at the site of an incident
- Preparation of expert reports for court submission
- Acting as expert witness in court, arbitration, mediation



## Topics to be Discussed

- In the following talks we are going to give some background to the role of the consultant scientist in marine claims investigation
- Presentation One – **Sampling**
  - Dr Cliff Bennett, MTD Singapore
- Presentation Two – **Oil Contamination Claims**
  - Richard Minton, MTD UK
- Presentation Three – **Fire and Explosion Investigation**
  - Dr Patrick Cook, MTD Australia