

Dr Victor Rollins  
**External Consultant**

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**Qualifications** Chartered Engineer  
Doctor of Philosophy

**Affiliations** Fellow of the Institute of Materials  
Fellow of the Institute of Marine Engineers  
Fellow of the Institute of Corrosion  
Senior Member of the Welding Institute

**Nationality** British

**Current Position at CWA**

External Consultant to CWA Minerals. Provides wide ranging expert advice on steel and related ferrous materials concerning quality issues, corrosion and failure incidents.

**Specific Expertise and Experience**

Widely experienced in Metallurgical Engineering, specialising in steel and ferrous products, failure analysis, corrosion, physical and non-destructive-testing of metals and the failure of protective coatings. Has extensive experience of providing technical support in metal performance disputes.

Following an industrial and research career has worked as a specialist consultant since 1981. Involved almost on a daily basis with corrosion and failure of steel components, also familiar with shipping industry and ship/machinery damage incidents.

Areas of expertise include the investigation of metal component failures, corrosion investigations, accident investigations, insurance claim reports and the technical assessment of claims, damage and defect investigation, investigation of manufacturing problems, paint-coating failure investigations, on-site inspection and quality control procedures, in-house laboratory testing, preparation of detailed reports, experienced at giving expert evidence in Court.

## Summary of Previous Employment

1981	Independent Metallurgical Consultant
1977-1981	Technical Director, Metalock (Singapore) Ltd Specialist Marine Welding Repairs to Ships' Engines, Propellers, Boilers, Lifting Equipment
1975-1977	Post Doctoral Research Fellow British Steel Corporation
1967-1977	Senior Lecturer, Coventry Polytech. Industrial Metallurgy
1964-1967	Research Associate-Coventry Polytech, PhD Study of Corrosion-Fatigue
1963-1964	Research Officer, British Steel Corp. Development of Low-Alloy Steels
1960-1963	Development Metallurgist, GEC Ltd, Steam-Turbine Materials

### Widely experienced in:

- Metallurgical Engineering
- Engineering Materials, particularly steels and stainless steels
- Failure Analysis
- Corrosion
- Welding and Joining of Materials
- Inspection
- Physical and Non-Destructive Testing of Metals
- Failure of Protective Coatings

### Consulting Activities:

The investigation of material failures and corrosion

## Previous Projects

### 1) Marine Engineering Investigations

Structural failures in ships  
Corrosion of structural steel-work, pipe-work, boiler-tubes, engine-valves, etc  
Corrosion of ships' holds due to the carriage of aggressive cargoes  
Corrosion and cracking of stainless-steel cargo-tanks  
Failure of marine paint coatings  
Failure of ships' engines, propellers, shafts, hulls, etc

2) Civil Engineering Investigations

Failures of equipment

Corrosion of steel-reinforcement in concrete structures

Corrosion of stainless-steel and galvanised steel in freshwater wells

Corrosion in commercial and domestic hot and cold water systems

Failure of protective coatings on commercial buildings

Failure of rock-crushing machinery

Failure of heavy piling equipment

Failure of cranes

3) General Engineering Investigations

Machinery and equipment failures and accidents

Failure of vehicle components

Failure of industrial boilers and kilns

Corrosion of steel sheet and wire raw materials

Corrosion of chemical and water tanks

Atmospheric corrosion of components during storage

**Published Technical Papers**

Conducted research during the period 1964-1977 which resulted in eighteen technical publications concerning the 'corrosion-fatigue' failure of metals and alloys and the influence of 'dynamic plastic strain' on corrosion processes. Presented the results of his research at a number of international technical conferences in the UK, Australia, USA and Singapore.