

**CURRICULUM VITAE****Eur Ing SIMON CLARKE****BSc(Hons) MBA CEng CSci FIMMM FInstNDT MWeldI  
MICorr ACQI FIAQP MAE MEWI****PARTNER CONSULTANCY DEPARTMENT****PERSONAL DETAILS**

Full name: **Simon Christopher CLARKE**

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Date of Birth: **20 June 1957**

Place of Birth: **Eastleigh, Hampshire**

Nationality: **British**



## EDUCATION AND ACADEMIC QUALIFICATIONS

1995 - 1999	Open University, Milton Keynes.
1975 - 1979	University of Aston, Costa Green, Birmingham Four year 'thin sandwich' course
1973 - 1975	Barton Peveril Sixth Form College, Cedar Road, Eastleigh
1968 - 1973	Toynbee County Secondary School, Toynbee Road, Eastleigh
Degrees:	Masters Degree in Business and Administration. Bachelor of Science Honours Degree (2/2) in Metallurgy
GCE 'A' Levels:	Physics and Biology.
GCE 'O' Levels:	Mathematics, Physics, Biology, English Language and Human Biology, and Chemistry.
CSE passes:	History, French and Chemistry.

## PROFESSIONAL QUALIFICATIONS

European Engineer:	Registered with the European Federation of National Engineering Associations in Paris (Eur Ing status)	Dec 1991
Chartered Engineer:	Registered with Engineers' Registration Board (CEng status)	Jan 1984
Chartered Scientist:	Registered with the Science Council (CSci status)	Jan 2005
Member:	Fellow Institute of Materials, Minerals and Mining (FIMMM) Member since	Jan 2017 Jan 1984
	Fellow Institute of Non-Destructive Testing (FInstNDT) Member since	July 1998 July 1990
	Member of Welding Institute (MWeldI)	Jan 1992
	Member of the Institute of Corrosion (MICorr), Associate of Chartered Quality Institute(ACQI)	Jan 1994 Nov 1993
	Fellow International Association of Quality Practitioners (FIAQP) Member since	Oct 1996 Mar 1995
	Member of Academy of Experts (MAE) Deputy Chairman, Academy of Experts	Sept 1995
	Member of the Expert Witness Institute (MEWI)	May 1997
PCN:	Level III Practitioner - Magnetic Particle and Liquid Penetrant Inspection, July 1992-97. Magnetic Particle only July 1997-02	

## OTHER QUALIFICATIONS AND COURSES

3A's Dispute Resolution and Adjudication (3 days)	1997
Uncertainty of Measurement (1 day)	1993
SANDT NDT Practitioner Level III Welds (1 week)	1992
2 years German Conversation, evening course	1981-83
Teledictor Eddy Current Inspection Course (2 days)	1981
WKK Ultrasonic Inspection Course (2 weeks)	1980
City & Guilds Radio Amateur's Examination	1980

**EMPLOYMENT HISTORY****Professional Work Experience**

My most recent work experience has been with Sandberg LLP, based at 5 Carpenters Place, Clapham High Street, London SW4 7TD. Sandberg provide a consultancy, investigation and quality assurance service to the Off Shore, Construction and Transport Industries. These have included major projects such as involvement with the Olympic Park, Faslane Nuclear Submarine Base, Channel Tunnel and Canary Wharf. I have had projects from all of these concerning the materials involved in their construction. Other types of work include investigations into failures of components and structures which may involve specialist investigations into material issues, welding, corrosion problems, load testing, etc. This work includes both on-site and laboratory testing. Many of these jobs have involve disputes and litigation, some of which require appearances in Court as an Expert Witness. Sandberg are also involved in materials for refurbishment work on buildings/structures of historic note, such as Eros, Albert Memorial, Houses of Parliament, Forth Rail Bridge, etc, all of which I have also worked on.

May 1997-  
to date

**Partner**

Based in the Consultancy Department, responsible for providing consultancy services to Sandberg's clients and the technical aspects of the Metallurgy Department. Much of my work is concerned with dispute resolution, or litigation, and involves a wide range of materials and processes. These failures may involve plant or machinery in installations both on and offshore, or they may be process related such operations, equipment or processes that have resulted in some type of failure or accident. These investigations cover a wide range of specialist materials expertise including materials processing, service failures of ferrous and non ferrous metals, metallic and paint coating problems, corrosion, welding problems, non-destructive testing, etc.

An abbreviated list covering some of the litigation work that I have been involved with is given towards the end of this CV, this work has included investigations into the failure of a winch drum on a fishing vessel, several crane failures (including mobile and tower cranes), engine failures (including a Rover V8 petrol engine and both industrial and marine diesels), failure of the gearbox on a fishing vessel, failure of wire strand ground anchors at Victoria Deep Water Wharf, repairs to failed of a dolphin at Port Kamsa, Guinea, corrosion of a zinc coated profiled steel roof, as well as many other similar jobs. Similar equipment and component failures, not involved with litigation, have included fatal accidents involving various racing cars, window failures, and industrial equipment failures such as a grab for an internal gantry crane at a rubbish processing plant and brake shaft failure on a gantry crane. Additionally, I have acted for both the Police and defendants in criminal prosecutions ranging from fraud and counterfeiting to murders.

I have been instructed to produce reports under the new CPR, including commissions as a Single Joint Expert and I have given evidence in Court on several occasions.

**EMPLOYMENT HISTORY Continued****May 96-Apr 97 Senior Associate**

Duties as defined in my previous roles but taking a more active role as technical consultant with the day management of the laboratory being handled by the Principal Metallurgist. In addition to the litigation work I was also involved in the evaluation of structures after the bomb damage in Canary Wharf.

**Mar 92-Apr 96 Associate**

Responsibilities as per my previous role, managing the Metallurgy Department, but extended to taking a more positive role in representing the Firm, including an active role on the Marketing Team.

**Feb 90-Feb 92 Metallurgy Department Manager**

Responsible to the Central Laboratories Controller for technical and commercial management of the Metallurgy Department. Duties included: marketing, tenders, maintenance of NAMAS accreditation, acting as an expert witness, writing technical reports, representing the Firm at technical forums and maintaining liaison with clients. Also failure investigations concerning both metallic and non metallic materials and preparing reports, and providing consultancy on material problems relating to major projects both in the United Kingdom and overseas. Technical aspects covered include the assessment of steel/wrought or cast iron structures, such as buildings and bridges, and specifying the non-destructive testing techniques required for finding specific types of defect. Where new inspection techniques were required this would entail writing test procedures, producing calibration/test blocks and training personnel.

**Dec 88-Jan 90 Deputy Manager Metallurgy Department**

Responsible to the Department Manager for the day to day operation of the Department. This work including setting up test programmes for failure investigation work, tendering for new jobs, writing and vetting of technical reports and test certificates as well as signing of reports leaving the Department.

**1986-1988 Employment Abroad (whilst travelling around the world on a bicycle)****Sept 87-Feb 88 Metallurgical Process Controller**

Johnson Matthey, Sydney, Australia.

Work included running the Powder Metallurgy Department for two months, supervising staff and advising Senior Management of improvements in operating procedures. Also advising on Continuous Casting, Investment Casting and Chemical Refining practices.

**Oct 86-Feb 87 Consultant Metallurgist**

La Prenca, Bombay, India.

Advising on production methods and design of cast aluminium pistons establishing a Quality Control Laboratory, training personnel, advising customers and giving seminars at customers' factories. Commissioning a computer-controlled ultrasonic piston testing machine.

**EMPLOYMENT HISTORY Continued****Previous Professional Experience**

Full time employment with Wellworthy (AE) Limited, now part of the Turner Newall Group, who are the major manufacturer of pistons, rings and liners for diesel engines in the United Kingdom. Production carried out at five factories in the South of England using some of the latest techniques and designs available. I was based in the Research and Development Department, Lymington, Hampshire.

**Jun 83-Jun 86 Senior Quality Control Metallurgist**

Duties included providing technical consultancy to Wellworthy customers including problem investigations and recommendations to customer management, training of customers technical personnel in use of computer controlled non-destructive testing equipment, also assessing suppliers' quality control procedures and inspection standards for MOD or Lloyds material approvals.

**Jan 81-Jun 83 Project Leader**

Responsible for qualified laboratory personnel working on failure analysis and material examinations for both in-house work and external contracts under NATLAS certification. Also responsible for the complete revision of the company wide procedures and inspection standards for NATLAS accreditation superseding the MOD approval.

**Jun 80-Jan 81 Senior Metallurgist**

Responsible for training qualified laboratory and inspection personnel in various non-destructive testing techniques and writing company test procedures and inspection standards. Also responsible for establishing control procedures for Plasma sprayed coatings.

**Aug 79-Jun 80 Research Metallurgist**

Material testing and analysis of field failures, reporting recommendations to Senior Management and Board level also technical back up to Control Laboratories following material problems in the factories. These problems included heat treatment of aluminium, cast iron and steel, chromium plating of rings, induction hardening and process control.

**UNDER-GRADUATE EXPERIENCE (Thin Sandwich Course)**

Working for Wellworthy (AE) Limited as a Student Metallurgist, I was based at the following places for my six month industrial training periods:

Apr-Sept 78 Foundry Research Department, AE Development, Rugby, Warwickshire. Projects on experimental casting techniques for cast iron from development to production.

Apr-Sept 77 Sand and Centrifugal Casting Foundry Wellworthy, Ringwood, Hampshire. Quality control projects for cast iron pistons, liners and ring parts.

Apr-Sept 76 R&D Metallurgy Department, Wellworthy, Lymington, Hampshire. Working on experimental casting techniques for aluminium pistons.

**PUBLISHED DOCUMENTS AND PRESENTATIONS**

Eros Intrigues - Expert Witness Institute	Autumn 2014
Eros - The Expert and Dispute Resolver	June 2013
Restoration of Eros - Presentation to Historical Society of IStructE	December 2011
Phenolic Insulation - Materials World (joint paper with Marion Ingle)	November 2013
Forth Rail Bridge	March 2010
Cast Steel Forks (Presentation to SCOSS re material issues)	October 2008
Historic Materials - Iron and Steel (Presentations)	May 2001 & April 2004
Dredger Pipework Investigation (Presentation)	March 2002
Inspection and Testing of Lighting Columns	October 1999
Joint paper with Simon Morris and Brian Whitney, presented to Institute of Lighting Column Engineers	
APPRAISAL OF EXISTING STRUCTURES Second Edition (Institute of Structural Engineers Publication) Review and rewriting of section 6.4 Metals and alloys	October 1996
North Sea's Weakest Link IoM <sup>3</sup>	November 1995
Restoration of Eros	
Journal of the Institution of Structural Engineers	August 1994
Performance Materials, National Association of Corrosion Engineers Journal	June 1994
Context, Association of Conservation Officers	June 1994
Materials World Journal of the Institute of Materials	December 1993

**COMMITTEES AND WORKING PARTIES**

BSI Technical Panel to hear evidence concerning dispute from BS 4449 Committee relating to composition and edits required to the standard. November to December 2015

BSI Technical Committee WEE/21/7 - Field welding of pipelines, representing the Association of Consulting Engineers, January 1997 onwards.

CIRIA RP 523 Steering Group Paint Systems for the protection of Constructional Steelwork 1995/1996.

## EXPERT INVOLVEMENTS (Abbreviated List)

McDermott -v- **Friends Provident**<sup>12</sup>  
 Wardell Holdings -v- Williams Tarr & **Atlas Building Pilot Design** -v- Styles and Wood  
**Styles and Wood** -v- Lee Green Glass  
 Dunn -v- **CDE**<sup>2</sup>  
**Ongur** -v- Tuffs  
 Winder -v- Greater Manchester Police & **BMW**  
 Seaward Marine -v- **Woodway Engineering**  
 HSE -v- **Nurdin and Peacock/ Edmead** -v- **N&P**<sup>2</sup>  
 C Leavy -v- **K de Ste Croix**  
 Stephenson Clarke -v- **Mirrlees Blackstone Clayton** -v- Garage  
 Belfast City Hospital -v- **Mirrlees Blackstone Miss A Hill** -v- J Sainsbury  
 Young -v- **Wilkinson**  
**Prudential** -v- Metalen Products  
 MV Ocean Quest -v- **Finnings**  
 Stephens -v- **Bonfiglioli**<sup>2</sup>  
**Wren Church** -v- John Laing and others  
 British Petroleum  
**Morrison** -v- Macdonalds  
 Standard Steamship Ins Co-v- **Factory Mutual Ins Co Russell Johnson** -v- Seeboard  
**Sophie Crawford** -v- St Pauls Ins. Co.  
 Intercon-v-**Queensway Quay Development Company**<sup>2</sup>  
 Crown Prosecution Service -v- **Silver**  
 B&C Fixings -v- **Pennine Windows**  
 Mobil Exxon -v- **PJ Valves Ltd**

Regina -v- **Raymond Ryan**, et al<sup>2</sup>  
 Moran/PHLS -v- **Schaefer Ltd/Torre srl**  
**Wombell** -v- Universal Cycles  
**Barber** -v- Moston  
 Stellenbosch -v- **Supreme Corq**  
**Ricotta**<sup>2</sup> -v- Abject  
**Eyre -v- Draper tools**<sup>3</sup>  
 BBC -v- **Eve Group**<sup>2</sup>  
**Regina** -v- Hunt and Fawley  
 LFEPA -v- **Carltonloco, et Al**  
**Alsim System Building -v- Lambert Plant**<sup>3</sup>  
 Regina -v- **Raymond Cooper**<sup>2</sup>

Leconfield House, Fatality - window failure  
 Corrosion - Profiled steel warehouse roof  
 Failed glass panel in shop  
 Failed glass panel in shop  
 Welds on bulk storage fuel tanks  
 Personal injury - Failed shop canopy  
 Accident - BMW motorbike bearing failure  
 Marine - Fishing vessel winch failure,  
 Personal injury - Warehouse racking failure  
 Fatal accident - Window cleaner fall  
 Marine - Diesel engine failure at sea  
 Rover V8 engine failure  
 HV Generator sets - engine bearing failure  
 Personal Injury - Glass bottle failure  
 Paint failure - Catering trailer corrosion  
 Chemical fire- Paint and structural steel  
 Marine - Fishing vessel gearbox failure  
 Personal injury - Lorry mounted crane failure  
 Vintners Place - Tower crane collapse  
 Grangemouth - Fire damaged sphere  
 Personal injury - Chair collapse  
 Port Kamsar - Damaged Dolphin  
 Injury from glass door panel failure  
 Injury from glass panel failure  
 Corrosion & lead in copper pipe  
 Breaking of Peugeot 306 door window  
 Failure of self drilling, self tapping screws  
 Valves for cryogenic service in high pressure gas processing plant, material dispute  
 Corroded shotgun - Old Bailey murder trial  
 Personal injury - Chair collapse  
 Personal injury - Bicycle failure  
 Fatal car crash investigation  
 High loads to extract corks from wine bottles  
 Personal injury - fall from roof  
 Personal injury - fragment from hammer  
 Corrosion of pipework on Ascension Island  
 Corrosion on knife - possible murder weapon  
 Personal injury - fire truck door lock failure  
 Corrosion of joists on portable steel cabins  
 Damage to bathroom door lock, assault case

<sup>1</sup> Bold fonts are used to identify instructing party

<sup>2</sup> Jobs where I have given verbal evidence, Court or Tribunal

<sup>3</sup> Single Joint Expert appointment

Department for Transport -v- **Pell Frischmann**  
Regina -v- **Hunt**<sup>2</sup>, et Al  
**B&K** -v- Andrews Fasteners  
R G David -v- **Normalair Garret**<sup>2</sup>  
Ellis -v- **Hotel Vienna**<sup>2</sup>  
**SKF** -v- Wheelabrator Group  
Ansell -v- **Williams**  
**Weybridge Group** -v- Handrail Design  
Manzoor -v- **Thames Water Utilities Ltd**  
**Jackson** -v- Suzuki  
Adam -v- **Vestas Blades**  
**Siemens Building Technologies-v- Supershield**<sup>3</sup>  
Regina -v- **Royal SunAlliance**  
**O'Donnell Developments** -v- BuildAbility  
**Dean & Chapter Canterbury Cathedral**  
**Aspen Construction** -v- Lyte Industries  
**Lloyds Register -v- Sir Robert McAlpine**<sup>3</sup>  
**Mrs Rose** -v- Portsmouth Pavilions  
Mitchell Power Systems -v- Wightlink  
British Sugar -v- **ARC Fabrications**  
**DP World** Cochin Port, India  
**Galliford Try Rail** -v- Lanes Group  
**Metallrax Group** -v- Invensys Rail Systems  
**Petrotrin** -v- Fluor Daniel<sup>3</sup>  
**National Oil well Norway AS** -v- Bailey BV  
**NIG Insurance**  
**Gleeds Management Services**  
Notre Dame School -v- **Metalex**  
**Ham & Douling Stone Co. -v-** Balfour Beatty MMCD JV  
**Kier Group** -v- HSE - Abraham Derby Academy  
**T Breen** -v- RE Plant Hire  
L Austen -v- **Balfour Beatty**  
**Diehl Comfort Systems -v-** General Aerospace<sup>2</sup>  
  
**Netto Food Stores** -v- Charles Bentley Son  
Regina -v- **Moxey**  
  
**Shepherd Construction** - Drax Power Station  
  
**BAM Nuttall** -v- Jack Tighe  
**Oseland & Foxall -v- Mr & Mrs Jones -v- Sherwen Eng. Co.**<sup>3</sup>  
Regina -v- **K Mitchell**  
Dale -v- **Central Garage**  
**Garwood -v- Merlin Industries**<sup>3</sup>  
**Liberty Living** -v- Berkeley First  
**C&F Green Energy** -v- Bakker Magnetics

Thelwall Viaduct - roller bearing failures  
Reactivated sub-machine guns, Old Bailey  
Fujitsu Project - Failure of 'Blind bolts'  
Depleted Uranium in aircraft coils  
Personal injury - window lock failure  
Roof damage - failure of shot blast filter  
Corroded nails in stone flag roof  
Damaged paint on handrail components  
Failed manhole cover  
Personal injury - Motorcycle frame failure  
Personal injury - dressing wind turbine blades  
Flood in building - float arm bolt undoing  
Fatality - Caterpillar lifting lug weld failure  
Damage to anodized cladding on 'The Cube'  
Corrosion -12<sup>th</sup> century wrought iron South Oculus  
Personal injury - Scaffold tower failure  
Coating failure on Lloyds Register offices  
Personal injury - Showerhead failure  
Failure of two MTU 2000 hp engines in loW ferries  
Explosion due to welding on sugar conveyors  
Failure of crane rails at new port development  
Coating failure - refurbished Train Depot, Inverness  
Coating failures - Relocatable Engineering Buildings  
Electrical cable in Trinidad & Tobago Refinery  
Derrick failure on mobile drilling rig in Singapore  
Warehouse roof collapse due to poor welding  
ME Hotel assess steelwork damage due to fire  
Investigate staining on terne coated stainless steel  
Corroded stone cutting equipment investigation  
Personal injury - steel roof support failure  
Personal injury -lorry mounted mobile crane failure  
Personal injury - nail gun used on step ladder  
A380 Airbus toilet damper corrosion investigation,  
Arbitration hearing in Germany  
Personal injury due to broom handle failure  
Fatal car accident - examine failed suspension  
component to determine if failed before accident  
Environmental assessment for change to wood pellet  
fired operation  
Liskeard Viaduct - coating failure investigation  
Personal injury - Orbiter fairground ride failure  
Fatal car accident - examination of front springs  
Fatal car accident - new brake pads fitted wrongly  
Contamination on anodized shower screens  
Corroded radiators in student accommodation  
Failure of neodymium magnets in wind turbines