Dr PAUL DAVIES

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ACADEMIC AND PROFESSIONAL QUALIFICATIONS

Ph.D., Quantitative Risk Assessment. Transport of Hazardous Materials/Explosives by Road and Rail. Department of Chemical Engineering, Loughborough University, 1990.

B. Eng. (2:1), Mechanical Engineering. The Polytechnic Wolverhampton, 1987.

C.Eng. Reg. No. 621595. Mem. of Safety & Reliability Society via Society of Environmental Engineers.

CAREER

2016 to-date	 Royal Academy of Engineering Visiting Professor in Risk Assessment and Marine Technology at Liverpool John Moores University design and deliver BEng/MEng risk assessment modules, supervise research, mentor students, deliver industrial/career training workshops, develop links with industry
2006 to-date	 Senior Principal Specialist / Senior Business Manager, Lloyd's Register 2011 to-date - Technical Manager for Risk Assessment lead/develop practitioners; provide oversight of projects involving hazardous materials; lead revision of gas-fuelled rules; business development for consultancy/classification. 2006-2011 - Global Business Manager for Risk/Safety Consulting responsible for growing risk management services in the energy sector.
2006 (3 months)	Business Development Manager, Vectra Group - responsible for business development in the chemicals and oil/gas sectors.
1995-2006	 Partner, Risk Assessment, Environmental Resources Management responsible for team leadership, project management and business development in the chemicals, oil & gas, pharmaceuticals and transport sectors.
1994-1995	Team Manager / Principal Consultant, Det Norske Vertis (DNV) - responsible for sales and management of the chemicals risk assessment team.
1992-1994	Team Manager / Principal Consultant, Vectra Group (The Netherlands) - responsible for establishing and growing the Dutch office to serve the oil/gas sector.
1990-1992	Senior Consultant, Four Elements (Environmental Resources Management) - project leader and business development in the chemicals and oil/gas sectors.
1987-1990	Research Assistant, Loughborough University - responsible for development of Quantitative Risk Assessment methodology and calculation of risks to the public for the UK MOD (and PhD under the guidance of Professor Frank Lees).
1980-1987	Technical Apprentice/Degree Sponsored Student, Fafnir Bearings - manufacturing and design training whilst studying mechanical engineering.

BUSINESS DEVELOPMENT

To help improve upon traditional business development, I developed RIG and HazardView. This provided additional insights and trusted and valued relationships with existing and potential clients.

Risks Interest Group (RIG), 1998 to 2006

A quarterly client relationship forum to share information and experiences on risk and safety management in the process industries. Funding members were all directors or senior managers responsible for process safety. Guest presenters included the Health & Safety Executive, Environment Agency, academics (e.g. Trevor Kletz) and industry.

HazardView, 2000 to 2006

A client focused website providing advice on managing major accident hazards. A worldwide membership, in excess of 1200. Provided a means to reach and communicate with potential clients in all geographic locations. A means to gauge interest in services and identify and respond to specific client needs and opportunities.

I have also grown risk and safety management services, capabilities and resources through acquisition (identification and due diligence).

Clients have been from both industry and government in Europe, North America, and Asia. Examples include: AECI; Alcan; Aventis; Babcock; BG; BP; Chevron/Caltex; ConocoPhillips; Corus; Costain; EU; Engen; EMSA; Exmar; Gillete; Government in Ireland, Hong Kong, and the Netherlands; UK HSE; GSK; UK MCA; Meyer Werft; NAM; Pfizer; Rhodia; Rolls Royce; Sasol; Shell; Total; Unilever; Wartsila; and Zeneca.

TECHNICAL WORK

Over 300 projects covering risks to people, business and the environment from storage and warehousing, manufacturing, processing, refining, transport (road, rail, ship, pipeline and aircraft), quarrying, and power generation. These projects included: desktop qualitative and quantitative assessment; chairing workshops; public consultation; auditing; and accident investigation. Examples include:

- Determination of risks to the public from major chemical facilities, identification of risk reduction measures, and public consultation on development of surrounding land.
- Risk assessments for safety case development of North Sea oil/gas production platforms, FPSOs, refineries and underground gas storage facilities.
- Safety/risk due diligence for mergers and acquisitions in the oil/gas industry.
- Calculation, recommendation and public communication of public safety zones around Ireland's three international airports and Manchester's second runway.
- Development of the commercial major accident hazard risk assessment tools, Riskplot Graphic and *ViewRisk* by gaining support of, and funding from the UK HSE (used by HSE to set land-use zones).
- Project and technical management of the risk assessments to enter, clean-up and make safe the destroyed facilities following the Buncefield fire and explosion in December 2005.
- Development and delivery of a 3½ day training course in risk assessment for over 200 engineers involved in the appraisal of risk-based justifications.
- Development of the process for assessing new and novel designs using risk assessment in response to goal-based regulations in the marine industry.
- Review and development of permit-to-work systems, and auditing of chemical facilities in EAME.

PRESENTATIONS AND PUBLICATIONS

Presentations and lectures delivered at numerous public conferences and client gatherings.

Over 50 published papers/articles on risk and safety related issues from 1987. Examples publications include:

- IChemE's The Chemical Engineer, Hazards Symposium, and Loss Prevention Bulletin; Chemical Technology; the European Chemical Engineer; European Process Engineer; Journal of Planning and Environmental Law; Journal of Hazardous Materials; Journal of the Safety and Reliability Society; ESREL conference proceedings; and Journal of Marine Engineering & Technology.

MISCELLANEOUS

- Chair of the Inlt. Assoc. of Class. Soc. working group on risk assessment for gas-fuelled ships.
- Advisor to the UK MCA on LNG, methanol and fuel cells at IMO meetings and correspondence.
- Chair of the Cruise Ship Safety Forum's working group on gas as fuel.
- Member of the European Maritime Safety Agency's working group on LNG bunkering guidance.
- Advisor to UK HSE on societal risks around major accident hazard installations.
- Editorial member of the forthcoming risk/safety journal supported by the S. Korean government.
- Technical committee member of the Society for Gas as Marine Fuel.