

Edmund Hughes PhD CEng MIMarEST

CASE STUDY

As an Environmental Policy Specialist for the UK's shipping regulator, the Maritime & Coastguard Agency, I am responsible for implementation of UK government policy related to the prevention of air pollution by ships. This role involves briefing Ministers and preparing environmental regulations that have become law. I also have responsibility for implementation of the International Maritime Organisation's Ballast Water Management Convention. This important international regulation seeks to reduce the risk of transfer of non-indigenous invasive aquatic species through ship's ballast water.

Although my role requires significant analytical and communication skills, it also demands considerable technical input. For example, ballast water management systems combine environmental engineering and biochemical engineering disciplines to treat the water effectively.

My HND, BEng (Hons) and PhD combined with practical work experience in academia, industry and government, provided the necessary portfolio for me to register as a Chartered Engineer through IMarEST in 2003. For me, registration indicates a willingness to continuously develop skills and capabilities while maintaining professional standards at all times. Becoming chartered provided affirmation that my skills, knowledge and abilities had achieved the standard required of a professional. As such, it has given me confidence to apply for career opportunities I may have previously ignored.

My career began in a graduate position with Rolls Royce. I then returned to academia to undertake a PhD in Agricultural Water Management, which included six months working on a sugar cane estate in Jamaica, developing a novel technique to reclaim saline soils for agricultural production.

After a period in Italy, working on a project to predict the requirement for global farm power at the Food and Agricultural Organisation of the United Nations, I researched the design of fluid power systems at the University of Bath. Failures in these engineering systems led to my examination of the underlying risks and causal factors for accidents in the offshore oil and gas industries.



I entered the Civil Service in 2002 and initially specialised in risk and safety management for my current employer, the Maritime & Coastguard Agency, which reflected the research I had been doing at Bath. I recently returned to working on environmental policy, which in many respects is where I started!

Because they see CEng status as highly important in supporting my role, my employers pay the annual subscription on my behalf. They were equally supportive while I worked towards registration.

I am now 43 and still enjoying what has proved to be an interesting and rewarding career that utilises my engineering skills and knowledge. There has been plenty of opportunity to develop in all the roles I have undertaken and I look forward to this continuing in the future.

For anyone thinking about registering as a Chartered Engineer my advice is definitely to go for it! However, you must be prepared to continually demonstrate your commitment to professional development and maintaining a recognised international standard of work.

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