

Dr Marcus Jones, chief executive of the Institute of Marine Engineering, Science and Technology (IMarEST) calls for the industry to face up to the knowledge gap

Some of the very best engineers I have had the privilege of working with, have their roots at sea. Engineers such as the Chief Engineer of *Oriana*; the Technical Manager of *Vela* responsible for some of the largest super tankers in the world; the OIM of the giant Britannia platform; the Thunderhorse semisubmersible; and the shoreside engineers of all disciplines who support these assets. These are all engineers in the marine sector. A tough, intelligent and resourceful breed.

They design, build, operate, maintain, repair and manage some of the most expensive and sophisticated engineering plant on earth, often at the edge of technology, in the harshest environments and far from any support.

The baby boomers, born just after the war, are nearing the top of their profession – indeed many have taken early

retirement or are preparing to do so. I believe these senior engineers and scientists will leave not only a knowledge gap but a giant chasm behind them unless the industry can find effective means to transfer the jewels of technical information, knowledge and experience that they have accumulated over their long working lives.

The shipping industry has flagged out to cheaper flags of convenience and employed seafarers from developing countries. This has been done to such an extent that the European Union countries already lack sufficient expertise in adequate numbers to run their essential ships anymore, the USA is not far behind. Seafarers these days do not consider seafaring as a lifetime profession.

Many engineers from developing countries will be seafarers only long enough to set themselves up in business

DWINDLING OCEANS OF ENGINEERS AND SCIENTISTS



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or pursue other careers at home. When they leave the industry they take all their accumulated knowledge out of the industry altogether. The consequences of this are ever-younger engineers in positions of senior responsibility on increasingly sophisticated and complex ships. There are more accidents these days due to human error than structural or mechanical failures. People are fast becoming the weakest link.

The oil and gas industry has not done much better.

For years some organisations have practised non-committal hire and fire models, with increasingly higher percentages of contract labour that could be laid off at a stroke. Is it any wonder then that the children of these workers do not want to join the industry of their fathers? But that too has been ignored, because some organisations could afford to tempt staff away from their supply

chains. Inevitably this pot too is running dry.

We all know that knowledge can only be lost once. We have already lost it in mining, in nuclear power, in shipbuilding and manufacturing, our hospitals can no longer operate without doctors and nurses from every corner of the world.

However, there is still time to save engineering and science. Indeed, these are the very professionals who can solve the gargantuan problems of climate change and global warming. But it will require a concerted effort from all quarters, from governments around the globe, from industry, from those involved at all levels of education, and from the engineering institutions.

The Institute of Marine Engineering, Science and Technology (IMarEST), in collaboration with many other engineering institutions, is making concerted efforts to promote engineering at all levels of society. However we cannot succeed without your active support. We are creating the networks to build repositories of knowledge and share this knowledge effectively, for the benefit of our communities and the sustainable future of our planet.

It has been said many times that without marine engineers half the world would starve and the other half would freeze to death. Let’s not test that!

The IMarEST welcomes engineers and

scientists of all disciplines and industries who are associated with the sea. If you care about the marine environment, its people and its assets and want to nurture our planet for future generations, come and meet us on our booth at OTC or visit our Web site on www.imarest.org

About IMarEST

Established in London in 1889, the IMarEST is the leading international membership body and learned society for marine professionals, with over 15,000 members worldwide.

The IMarEST has a strong international presence with an extensive marine network of 50 international branches, affiliations with major marine societies around the world, representation on the key marine technical committees and non-governmental status at the International Maritime Organization (IMO).

The IMarEST represents its members internationally at a range of marine bodies including the International Maritime Organisation (IMO), the Intergovernmental Oceanographic Commission of UNESCO (IOC), the Intergovernmental Panel on Climate Change (IPCC), United Nations Convention on the Law of the Sea (UNCLOS), as well as other national marine-focussed groups.

IMarEST membership provides unique opportunities for members to meet others, to network and to exchange ideas and practices. With its divisions and branches all having their own regional activities that you can take part in, you can help grow your network of marine connections. Join a Special Interest Group or our Young Members’ Network more specifically targeted to support students and those at the start of their professional careers. ■■

About the author

Marcus Jones joined IMarEST as its first chief operating officer in January 2008, and took over as chief executive on 1 May 2009. He was previously with Lloyd’s Register Group for 18 years, where, since 2000, he was responsible for its global oil and gas business. He served in the Merchant Navy as a sea-going engineer for 16 years and is qualified as an extra first class marine engineer with a Doctorate in strategic risk management