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Paper

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## **Technology, Society and Environment - A New Course?**

It is quite apparent that technology has impacted on our lives often faster than we can cope effectively with it. Without a doubt, it has contributed to the widening of the "generation gap". The way our society functions has also changed: e-commerce, Internet, mass transport and telecommunications have shrunk the planet as the economic democracy takes hold. Intelligent machines are becoming an integral part of our lives – all in a time period of several decades, albeit overlapping two centuries !

Such a rapid paradigm change in the way society functions, engineered by technology, came at a price: massive demand for energy has impacted on our environment in a particularly adverse way. The ozone hole and global warming as a result of the "greenhouse effect" have sent early warnings of impending disaster of global proportions if we do not change our ways. Also, environmental pollution is becoming a daily problem, and most of it seems to be related to energy generation. I believe engineers have a major role to play in meeting this challenge. However, in order to do this effectively, the new breed of engineers have to think laterally and act globally, predicating curriculum reforms.

This paper aims at addressing the need for New Engineers to graduate adequately prepared to face challenges that have emerged with our rapidly changing lifestyles. New Engineering curricula should engender ability of New Engineers to deal with complex systems, often crossing the boundaries of existing disciplines. Subjects such as communication, creativity, behaviour and ethics also ought to play an increasingly more visible role in the engineering course curricula.