## Editorial

The Caribbean region, like the rest of the world is faced with special challenges in the areas of science and technology. There are many intellectual advances, technological challenges and economic driving forces in the world.

A major force in today's world is the explosion in information (knowledge), new products and materials, biotechnology and genetics. Engineers and scientists are required to take into account the environmental impact on technology, processes and manufacturing and the transfer of technology. The challenge is to harness and configure the vast amount of knowledge generated in the latter half of the 20th century and now, the early part of this one.

Engineers, scientists and other technologists are called to service industries whose products are quickly superceded in the market by improved ones. The regional engineers have to service industries that compete on the basis of quality and product performance. They are having access to many sophisticated analytical instruments. What impact does this have on the training of the technical people or mechanics? How can the middle level people be equipped to function in this new scenario? How much "handson" is required? How much theory may be required? The engineers and educators must determine this. The major industries in the 1960s were foreign-owned and controlled; all services were effectively government bodies. Medium and small-scale manufacturing was of the assemblytype serving local markets with tariff or import ban protection.

The significant development since that time has been to move away from government ownership and control. We have witnessed the effects of globalisation on our economies. The introduction of trade liberalisation has meant the collapse of small, screwdriver-type industries. Only those with quality products for the export market had the ability to survive. The research in the region must therefore seek to ensure that those remaining in the Caribbean have some competitive advantage or niche if they are to continue to survive.

This journal seeks to bring locally, regionally and internationally the research and developmental issues that can be of significant benefit to the Caribbean region. Among other topics, this issue therefore focuses on the challenges of water management and usage, the area of food, some impact of globalisation and an essay dealing with how the Faculty of Engineering at The University of the West Indies is seeking to meet the challenges of the 21st century.

Went - A. Melleman

Professor Winston Mellowes

Guest Editor