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Capitalising on Our Numerous Diversities

By: Ir. Mah Soo, Bulletin Editor

Once again, we have reached the festive season of the year. We have just celebrated the festivals of Deepavali and Hari Raya Aidilfitri and will be celebrating Christmas and New Year at the end of December. Hence, even with our diversity in ethnic origins, cultures and religious beliefs, Malaysian could still show the present world of turmoil that people could live harmoniously and celebrate their numerous festivities together through mutual understanding, respect and tolerance.

Malaysia is richly endowed with natural resources such as minerals, terrestrial biodiversity in the form of flora, fauna and cultivated agriculture. Malaysia is aware of their great potential towards generating new wealth and improving our socio-economic status. Biotechnology is currently focussed on the Research and Development (R&D) on phytochemical processing of herbs and plants, genomes and genetics, molecular biology and microbiology towards applications in healthcare, agriculture and food production and the transesterification of palm oil to biodiesel. Our Prime Minister, YAB Dato' Seri Abdullah Haji Ahmad Badawi, in officiating the opening ceremony of BioMalaysia 2005 on 28 April 2005 had quoted that, "Malaysia has identified biotechnology as an important source of growth, particularly given the existence of abundant biological resources in the country. Indeed, biotechnology is capable of creating new sources of wealth and additional income. We would welcome not only local, but also foreign investment in this sector". Biotechnology has now become one of the key drivers of growth in building a knowledge and production-based economy towards achieving Wawasan 2020.

Biotechnology is made up of two parts. 'Bio' implies to living organisms and 'technology' is the application of engineering sciences to industry and commerce. Hence, biotechnology is the interdisciplinary application of engineering techniques and technology to commercially packaging the products from the R&D of the life sciences to the market place. Though yeast could be used as a fermenting agent in proving bread and in the making of beer, the process would become biotechnology when it is translated into businesses such as in the bakery and brewery industries. This is the subtle difference that we, in engineering disciplines such as chemical, production, mechanical, electrical and others, could dig into our vast innovative resources and be part of this exciting entrepreneur venture. We, engineers, have to network and work closely with the various R&D bodies to know intimately their requirements and specifications for engineering support in order to position ourselves to grasp these potential new business opportunities. Also to ensure commercial viability, we have to be aware of the National Biotechnology Policy, the incentives offered and any latest updates.

We wish all of you a Merry Christmas and a Happy New Year. We look forward to your continual contribution of articles to ensure our Bulletin, JURUTERA, remains a pleasure to read and a treasure to keep. ■