



Solving Societal Scale Problems through Science and Technology

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Too little of the great power of modern science and technology has been directed at development. The Philippines has to improve its capacity to use science and technology in order to cope with a globalized world that exposes humanity to processes that are dispassionate, brutally calculating, and fickle. Science and technology have much to offer to improve economic efficiency, facilitate trade, attract investments, ensure food security, assure the quality of our workforce, enhance environmental protection, mitigate risks brought about by hazards and disasters, strengthen our national defense capability and assess the performance of the national innovation system through the social sciences. The higher education institutions must be at the vanguard in promoting a technology-explicit development agenda, including technology transfer and acquisition, and help create a strategic enabling environment for innovation and competitiveness which are both recognized as vital elements for a country to be resilient in coping with poverty and globalization.

About the Speaker:



Dr. William Gonzales Padolina is an academician of the Philippine National Academy of Science and Technology and formerly a full Professor of Chemistry at the University of the Philippines Los Baños. Dr. Padolina was appointed Secretary of the Department of Science and Technology by Philippine President Fidel V. Ramos from July 1994 to 30 June 1998 and was retained by President Joseph Estrada until 31 January 1999. A B.S.Ag.Chem. (magna cum laude) graduate and a licensed chemist, he specialized in Botany/Phytochemistry for his PhD at University of Texas at Austin as a Fulbright-Hays scholar and he further pursued postdoctoral studies at the world famous carotenoid chemistry laboratories of Prof. Synnove Liaaen-Jensen, Norwegian Institute of Technology (now the Norwegian University of Science and Technology), Trondheim, Norway. His research interests include the chemistry of the coconut-- production of novel derivatives of coconut fatty acids, Medicinal

plants chemistry isolation, identification and biological testing of novel active constituents of Philippine medicinal plants, especially those with anti-allergy and anti-diabetic properties, Acetone-butanol production from molasses using *Clostridium acetobutylicum*, Biogas production from cellulosic wastes like coconut coir dust and fiber and rice straw, Science Policy and Food Security. He has received numerous awards, such as the Award of Excellence in Science and Engineering by the Philippine Development Foundation USA, the Tree of Life Award for Research in Coconut by the Philippine Coconut Authority, the Merit Medal "For the cause of agriculture and rural development in Vietnam" Awarded by the Socialist Republic of Vietnam, the ASEAN Meritorious Service Award in Science and Technology, Philippine Legion of Honor (Rank of Officer) by both President Fidel V. Ramos and President Joseph Estrada, Philippine Professional Regulation Commission Outstanding Professional in Chemistry, Pantas Award in Research Management- PCARRD, Ten Outstanding Young Men Award in the field of Science and Technology (1985), and Outstanding Young Scientist in Phytochemistry (1982)