

CITATION ON PROFESSOR GABRIEL MAKANJUOLA

PROFESSOR GABRIEL MAKANJUOLA a renowned Professor of agricultural Engineering, fellow of the Nigerian academy of Science, Fellow of the Nigerian Society of Engineers, first laureate of the continental Gold Medal award of the Joint African Regional Centre for Technology, was born on April 22, 1938 at Ilesa in Osun State. Professor Makanjuola was educated at the University of Ibadan, Ibadan, the Ahamadu Bello University, Zaria and the University of Newcastle-upon-Tyne, England where he obtained his Doctorate degree in agricultural Engineering in 1967.

After a five-year stint at the Ministry of agriculture and Natural Resources of the Western Region of Nigeria, Professor Makanjuola moved to the Obafemi Awolowo University to commence what has turned out to be a most impressive and productive career in engineering creativity. Professor Makanjuola's academic career to date personifies a balanced fulfillment of the very best in Professional engineering practice and productive research.

Professor Makanjuola's creative geniuses were early manifested in his years at the Obafemi Awolowo University. This was revealed by an incomparable facility with innovative designs of mechanical devices. Some of the more notable among these designs include the yam pounder, low-cost machine for decorticating fiber crops such as kenaf; the mechanical device for uprooting cassava roots, a machine for cracking nuts and separating the cotyledons from the shells, a centrifugal device for shelling melon seeds, and a pneumatic device for separating melon seeds cotyledons from their husks. But perhaps of very special note is his inventive design of the differential gear device. This device differs significantly from the more conventional differential gear system which uses bevel wheels. His device depends essentially on sprockets and chains. This device is of particular relevance because it greatly improved chain driven, low-cost, transportation vehicles such as tricycles needed in developing countries. Consequently, Professor Mankanjuola had no difficulty in having the invention patented in Great Britain.