

## **Dr Andre Batako (PhD, MSc, BSc, CEng PGCert HE)**

Dr Andre Batako is a chartered engineer and member of the Manufacturing and Management Steering Committee for the IET (Institute of Engineering & Technology) Merseyside and Cheshire Branch. He leads a team of researchers investigating into new and advanced machining processes including controlled vibration assisted high efficiency machining of new and hard-to-machine aerospace materials. He worked for 10 years in the automotive industry before returning to research activities particularly in machining and Dynamics of vibro-impact system. He has led and managed several industrial projects with large consortiums, including the Innovate UK.

He has designed and manufactured the world's first machine tool for High Efficiency Deep Grinding (HEDG). Subsequently he invented and manufactured the world's first machine tool for Resonance High Efficiency Deep Grinding. He has a strong link with industry, e.g. Rolls Royce, Jones and Shipman, Bosch, Fuchs, Tyrolit, Ford-Getrag Transmission and others.

Dr Batako speaks and writes fluently in French, English and Russian which support his international research activities by collaborating with researchers in the Universities in Europe (France, Germany, Ireland, Russia, Ukraine, Poland, Georgia) in Africa (Togo, Ivory-Coast, Sudan), middle-East, China (Zhengzhou, Shanghai, Beijing). He holds a chair at Beijing BEIHANG University of Aeronautics and Astronautics. Along with colleagues in Moscow they invented, designed and manufactured a new machine for nano-coating using a hybrid technology called "Filtered Cathodic Vacuum Arc Deposition". With this technology, one can control the coating thickness down to nano-scale. He has successfully supervised several PhDs and published over 100 Scientific and technical papers, 2 books along with three book-chapters including one in Chinese and one monograph.

With 10 years' experience in the industry and 20 years in academia in advanced countries, Dr Batako sees Education as the main drive to put Africa onto the path of sustainable economic development. Therefore, he currently working with several governments in Africa to promote a mass-education of youth in applied engineering and entrepreneurship that will provide the continent with the much-needed workforce and trade skills for industrial development