Smart Partnerships – The Way to Advance Ultrasound Technologies for Higher Palm Oil Milling Performance

M.A. Augustin\(^1\) and K.H. Lee\(^2\)

\(^1\)CSIRO Division of Animal, Food and Health Sciences, 671 Sneydes Road, Werribee, Vic 3030, Australia

\(^2\)IHMS Sdn Bhd, Unit A2-845, Pusat Dagang Setia Jaya, 9 Jalan PJS8/9, 46150 Petaling Jaya, Malaysia

An effective partnership between an Australian research organisation and an innovative Malaysian palm oil milling company has resulted in a technological advance that has potential for enhancing palm oil milling performance. The bringing of expert knowledge and sound science underpinning ultrasound technology application to emulsion systems (provided by the Australian partner, CSIRO) together with the many years of experience in efficient palm oil milling operations combined with an intimate knowledge of the palm oil industry (provided by Tai Tak Estates in Malaysia & IHMS) facilitated the development of the seed idea into a tangible commercial opportunity. This paper highlights the journey of this partnership. The partners, supported by experts from multiple disciplines, jointly explored the opportunity from both a technology and business perspective. Testing the idea was firstly carried out on a small scale in a research laboratory. This was followed by scaling up the operation to a pilot-scale in a palm oil mill in Malaysia, identifying hurdles that needed to be overcome in the introduction of this new technology to palm oil mills. A smart partnership, with appropriate funding and support, is vital for the successful introduction of this step-change innovation in palm oil milling operations.