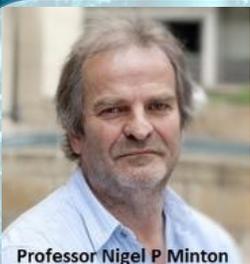
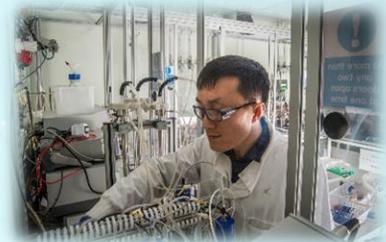
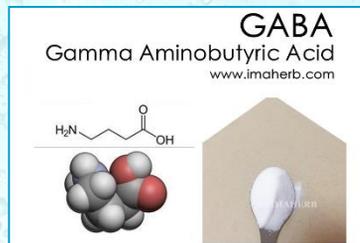


BIOMETCHEM: Sustainable production of added value chemicals from SynGas-derived methanol through Systems and Synthetic Biology approaches. May 2018 to April 2021 - €1,823,000.

BIOMETCHEM will exploit the progress made through C1net BBSRC-NIBB, Proof of Concept funding in developing effective genetic systems for *Eubacterium limosum*.

Developments made will be used to derive engineered strains able to produce the value-added products γ -aminobutyric acid, GABA, (useful in the pharmaceutical and food additive industries) and 1,4-butanediol, BDO (a platform chemical), from biomass derived methanol. Process strain will be developed through a combination of inter-disciplinary methodologies, including systems biology (University of Toulouse), synthetic biology (University of Nottingham), metabolic engineering (University of Ulm), enzymology (University of Frankfurt), and methanol fermentation development (All Partners). Responsible Research Innovation (RRI) practices will be embedded within the programme of work through the participation of dedicated Social Scientists from the Synthetic Biology Research Centre (SBRC) at Nottingham. Life Cycle Analysis (LCA) and Techno-Economic Analysis (TEA) will be undertaken by Nottingham in partnership with Johnson Matthey



Professor Nigel P. Minton

"The evolution of this project showcases the beauty of the BBSRC-NIBB scheme. A chance conversation with Volker Müller (University of Frankfurt) at a C1net partnering meeting in June 2015, led to a successful C1net POC application which sought to develop metabolic engineering tools for *Eubacterium limosum*. Subsequent discussions of POC progress with Peter Dürre (University of Ulm) at the 2016 C1net annual conference precipitated the formation of a consortium to bid for forthcoming European opportunities. Sprinkle in a bit of 'je ne sais quoi' in the form of C1net member Philippe Soucaille (University of Toulouse), the C1net Management board member Stephen Poulston (Johnson Matthey), along came the ERACoBioTech call - and the rest is history"