

Team V'align:

Heterogeneity of lignin variants and its depolymerised products is the major challenge for lignin valorisation. Although lignin is having valuable aromatic components but as a mixture is currently of no use due to difficulty in separation/downstream processing. Also all these products and their quantities may not according to that the demanding quantities. So our idea is to follow the approach of "Biofunneling" where different depolymerised components will be directed towards flux of a particular component. The ideal strain should exhibit the necessary aromatic substrate specificities for the target of interest, be genetically tractable/manipulative/improvable and scalable in industrial bioreactors. *Pseudomonas putida* KT2440 is one such well-studied strain in which metabolic engineering is not relatively new and can be easily directed towards particular products at high concentrations.

