

Faculty Details

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Area Of Research:CAZymes, Protein Engineering and Proteomics

Faculty Details

Our group works mainly on enzyme discovery, characterization, engineering and application of proteins and enzymes which are involved primarily in the lignocellulose or chitin biomass degradation and modification. We aim at combining high-level basic research with applied studies and innovation. Together with the basic characterization of proteins and enzymes, we use advanced enzyme engineering technologies and state-of-the art analytical, structural and biophysical techniques to obtain an in-depth knowledge about the target proteins or enzymes. This will provide a clear platform for an efficient use of recalcitrant polymers like cellulose or chitin and to generate products-of-value in a sustainable biorefinery. Furthermore, we employ several molecular techniques for functional validation of the enzymatically generated products with a focus on improvement of plant health.

Notice Board

No Records Available

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Publications

29 Vandhana, Theruvothu Madathil., Reyre, Jean-Lou., Sushmaa, Danguubiyam., Berrin, Jean-Guy., Bissaro, Bastien., Madhuprakash, Jogi. (2022) , On the expansion of biological functions of lytic polysaccharide monooxygenases , New Phytologist, WILEY,,,

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20 Manjeet, Kaur., Madhuprakash, Jogi., Mormann, Michael., Moerschbacher, Bruno M., Podile, Appa Rao., (2019) , A carbohydrate binding module-5 is essential for oxidative cleavage of chitin by a multi-modular lytic polysaccharide monooxygenase from *Bacillus thuringiensis* serovar kurstaki , *International Journal of Biological Macromolecules*, Elsevier,127,,649–656.

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