



Plenary 6

Teaching Old Enzymes New Tricks

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While nature evolves its catalysts over millions of years, enzyme engineers try to do it a bit faster. Enzyme active sites provide highly optimized micro-environments for the catalysis of biologically useful chemical transformations. Consequently, changes at these centers can have large effects on enzyme activity. The prediction and control of these effects provides a promising way to access new functions. In this talk, several strategies for tailoring the properties of existing enzymes will be presented, together with the insights into function and evolution that emerge from such studies.