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| | Sommario/riassunto | Annotation The development of new enzymes is one of the most thriving branches of biotechnology. Although the applications of enzymes are already well established in some areas, recent advances in modern biotechnology have revolutionized the development of new enzymes. The use of genetic engineering has further improved manufacturing processes and enabled the commercialization of enzymes that could previously not be produced. Protein engineering and the possibility of introducing small changes to proteins are bringing ever more powerful means of analysis to the study of enzyme structure and its biochemical and biophysical properties, which have leading to the rational modification of enzymes to match specific requirements and also the design of new enzymes with novel properties. The developments in bioinformatics and the availability of sequence data have significantly increased the efficiency of identifying genes with biotech potential from nature. Complementary to chemical synthesis, biosynthesis of drug metabolites with mammalian or microbial bioreactors offers certain advantages, and sometime is the only practical route to the desired metabolite. At the same time, new technological developments are stimulating the chemical and pharmaceutical industry to embrace enzyme technology. Altogether, these advances have made it possible to provide tailor-made enzymes displaying new activities and adapted to new process conditions, enabling a further expansion of their use in several branches of |

biotechnology. This Special Issue focuses on the discovery and development of new enzymes and their applications in different areas of biotechnology. The Special Issue contains a collection of papers written by authors who are leading experts in the field including selected papers from the 4th International Symposium on Enzymes & Biocatalysis (SEB-2013).