

Schmauder, H.-P. (ed.): **Methoden der Biotechnologie**. - Gustav Fischer Verlag, Jena - Stuttgart 1994. 291 pp.

The aim of this book is to present basic methods and experiments for working in biotechnology which could be applied in teaching and training. Such methods were chosen which are easy to handle and reliable, and for which complicated and expensive equipments are not necessary. In the first part of the book biological methods used in biotechnology are presented such as, *e.g.*, growth measurements, vitality tests, isolation of organisms and methods for their cultivation, protoplast techniques, plasmid techniques, transformation techniques. Analytical methods for basic chemical substances are described. The next part of the book concerns different reaction techniques, the basic fermentor techniques and immobilization techniques. The following part concerns product analysis, product isolation and enrichment processes, *e.g.*, Western transfer of proteins, animal and plant cell and tissue cultures, biotransformations. Finally, statistical methods for experiment planing, evaluation and scale-up are treated.

Each of the experiment is described according to the following scheme: title of the experiment, aim and theoretical basis, description of the experiment and its principle, schedule of the operations, necessary organisms, media, material, *etc.*, running the experiment, protocol, evaluation, gain from the experiment, planing of further experiments, literature. Special chapter concerns safety rules and patenting of results. It is further shown that some basic knowledge in biology, chemistry and molecular biology is necessary before experiments in biotechnology can be started. The book is equipped with numerous tables and figures, and a subject index where plants and microorganisms are included, too.

The interdisciplinary manual of the most common methods used in biotechnology experiments will be very useful for graduate and postgraduate students and young research workers who are starting their work in biotechnology.

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