



Practical Manual on Fermentation Technology

By S. Kulandaivel, S. Janarathanan

I.K. International Publishing House Pvt. Ltd., 2012. Paperback. Book Condition: New. 16cm x 24cm. Practical Manual on Fermentation Technology is designed to introduce fermentation technology methods and protocols on the screening of industrially important microbes and production of various industrially important compounds, enzymes, antibiotics, vitamins, etc. by these microorganisms. It also provides assay protocols for the various industrially important microbial products. Each laboratory exercise contains an introductory unit, easy to follow instructions for various media and reagent preparation and procedure for screening of industrially important microbes, production and assay of various fermentation products. This manual will contribute practical knowledge in the area of industrial biotechnology, especially in the area of fermentation technology for teachers, researchers, students and technicians. This book is particularly useful for undergraduate and postgraduate students of Microbiology, Industrial Microbiology, Applied Microbiology, Biotechnology, Bioprocesses Technology and Bioresources Technology.



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Reviews

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-- **Mabelle Dach III**

Laboratory cum practical manual. Fermentation technology. Name : Reg. No. Louis Pasteur's work on fermentation of wine laid the foundation for bioreactors as we know them today, because once the process is identified and understood, it could be controlled. And it is the control of the process that concerns chemical engineers first and foremost. The scope of bioengineering has grown from simple wine-bottle microbiology to the industrialization of not only beer, wine, cheese and milk production, but also the production of biotechnology's newer products - antibiotics, enzymes, steroidal hormones, vitamins, sugars and organic acids. This has been possible due to the inv Practical Fermentation Technology. @inproceedings{Mcneil2015PracticalFT, title={Practical Fermentation Technology}, author={Brian Mcneil and Linda M. Harvey}, year={2015} }. Brian Mcneil, Linda M. Harvey. A hands-on book which begins by setting the context;- defining 'fermentation' and the possible uses of fermenters, and setting the scope for the book. It then proceeds in a methodical manner to cover the equipment for research scale fermentation labs, the different types of fermenters available, their uses and modes of operation. Once the lab is equipped, the issues of fermentation Practical Manual on Ferme has been added to your Cart. Add to Cart. Buy Now. He is teaching Microbiology to undergraduate and postgraduate students. His area of specialization is fermentation technology and has been handling practicals related to fermentation technology since last thirteen years. He has published a number of research publications in reputed journals. S. Janarthanan is Associate Professor, Department of Zoology, University of Madras, Chennai, India.

In reality many fermentation technologists are not aware that during most times of their work they are doing 'scale down studies' Maybe the phrase 'scale up' has more impact factor than 'scale down' studies. Let us simplify the similarities and differences between these two phrases in fermentation technology. A good example is when we intend to start with a fermentation process with the ultimate objective of producing the fermentation products on the level of industrial scale. Products need to be produced at large volume so that the process is economically viable. How old is fermentation technology? In the Henan province in China, scientists found in a pottery jar a mixed fermented beverage of rice, honey and fruit produced about 9000 years ago. Fermented food. Another way to call warm fermentation is high fermentation because of this yeast behavior. This is the "traditional" yeast for beer production. During the practical lessons the main important analysis for products quality check will be explained to the students. In laboratory students could be try some of these analysis. During the practical lessons some real case study in wine and beer production will be presented to the students. The aim is stimulate them to solve real productive problems. A hands-on book which begins by setting the context;- defining 'fermentation' and the possible uses of fermenters, and setting the scope for the book. It then proceeds in a methodical manner to cover the equipment for research scale fermentation labs, the different types of fermenters available, their uses and modes of operation. Once the lab is equipped, the issues of fermentation media, preservation strains and strain improvement strategies are documented, along with the use of mathematical modelling as a method for prediction and control. Broader questions such as scale-up and sca