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# PRINCIPLES OF VEGETABLE OIL EXTRACTION



VIVEKANAND SADASHIV VADKE

# ABOUT THE BOOK

This book covers technology of vegetable oil extraction including theory, process technologies used for various oilseeds, machinery operation and design aspects. Pertinent topics are covered under two parts as mechanical expression and solvent extraction. Importance of each preparation operation is explained as related to oilseed structure outlining differences in quality of prepared material from various oilseeds. It also covers modern press designs, effect of each unit operation on final product quality, levels of safety and precautions in plant operation, novel technologies used by the industry.

## Features:

- Provides comprehensive coverage of veg oil extraction technology, as applicable to major and minor oil-bearing materials.
- Explains effects of each of the seed preparation steps on cell structure, and how it improves oil extraction.
- Describes mechanical expression technology in detail, including design aspects of Presses and seed preparation equipment.
- Discusses extraction plant safety, plant automation, and discussion of utilities.
- Explores design of solvent extraction process equipment, including Extractor, Desolventiser, Distillation and support.

This book is aimed at professionals and researchers in chemical and food engineering.

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# AUTHOR'S BIOGRAPHY

**Vivekanand Sadashiv Vadke** is a leading process consultant to vegetable oil industry. He completed his B.Tech. in chemical engineering from IIT Kharagpur, India, M.A.Sc. (chem. Eng.) from University of Waterloo, Canada, and Ph.D. in food science from University of Saskatchewan, Canada. He served for seven years with DeSmet India, where he was in charge of process design and marketing.

Dr. Vadke specializes in process design of vegetable oil extraction plants and has helped upgrade many plants across continents to achieve higher process efficiencies and superior product quality, apart from designing new plants based on various oilseeds. He has several research and review papers to his credit and has been a speaker at many conferences.

Dr. Vadke is currently engaged in developing novel technologies to find solutions to problems faced by vegetable oil industry.





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