



Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series)

Sirshendu De, Sourav Mondal

Download now

[Click here](#) if your download doesn't start automatically

Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series)

Sirshendu De, Sourav Mondal

Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) Sirshendu De, Sourav Mondal

A response to increasingly stringent regulation of pollution and toxicity levels in industrial waste discharge, **Micellar Enhanced Ultrafiltration: Fundamentals & Applications** offers the most complete book available on the benefits and use of micellar-enhanced ultrafiltration (MEUF) to achieve continuous removal of organic and inorganic pollutants.

An Unparalleled Book That Addresses Both Academic and Industrial Points of View

Several membrane-based techniques, such as microfiltration, ultrafiltration, nanofiltration, and reverse osmosis, are currently used in a wide range of applications throughout the textile, pulp and paper, sugar, chemical, pharmaceutical, biomedical, biotechnological, and food industries. However, although reverse osmosis is an effective means of removing contaminants, this book explains why MEUF is a better substitute, as it is less expensive, less energy-intensive, and more efficient and practical for a wider range of applications.

Topics covered include:

- Effects of pollution in water and its consequences
- Various treatment processes and membrane technologies
- Fundamentals of ultrafiltration
- Outline of various membrane modules and modeling approaches
- Principles of colloid chemistry
- Theories of micelle formation

- Stability and dynamics of micelles
- Phenomena of counterion binding
- Solubilization of organic pollutants
- Selection criteria for surfactants
- Various flux enhancement techniques
- Recovery of precious metals

This book conveys how, with proper selection of surfactant and membrane, MEUF can be used to efficiently remove almost all metal ions (heavy metals, lanthanides, radioactive materials, etc.) with reasonably high efficiency and throughput. It also details the MEUF process for removal of inorganic (cations, anions, and their mixture) and organic pollutants. The authors explain how the economy of the overall process makes recovery and reuse of surfactants essential, and they address various influencing factors on the increase in throughput and the resulting operating problems. Elaborating on technologies involving precipitation and other methods, they also illustrate additional potential applications for MEUF technology.

 [Download Micellar Enhanced Ultrafiltration: Fundamentals & ...pdf](#)

 [Read Online Micellar Enhanced Ultrafiltration: Fundamentals ...pdf](#)

Download and Read Free Online Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) Sirshendu De, Sourav Mondal

From reader reviews:

Walter Harman:

Reading a guide can be one of a lot of pastime that everyone in the world adores. Do you like reading book therefore. There are a lot of reasons why people like it. First reading a publication will give you a lot of new facts. When you read a book you will get new information since book is one of several ways to share the information or perhaps their idea. Second, reading through a book will make an individual more imaginative. When you reading a book especially fiction book the author will bring you to definitely imagine the story how the character types do it anything. Third, you could share your knowledge to some others. When you read this Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series), you could tells your family, friends in addition to soon about yours reserve. Your knowledge can inspire others, make them reading a publication.

Elaine Woodring:

Spent a free a chance to be fun activity to perform! A lot of people spent their sparetime with their family, or their particular friends. Usually they carrying out activity like watching television, likely to beach, or picnic in the park. They actually doing same task every week. Do you feel it? Would you like to something different to fill your personal free time/ holiday? Could possibly be reading a book is usually option to fill your free of charge time/ holiday. The first thing you will ask may be what kinds of publication that you should read. If you want to attempt look for book, may be the reserve untitled Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) can be good book to read. May be it can be best activity to you.

Christine Brooks:

Reading can called thoughts hangout, why? Because if you find yourself reading a book specifically book entitled Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) your mind will drift away trough every dimension, wandering in every single aspect that maybe unfamiliar for but surely will become your mind friends. Imaging each and every word written in a reserve then become one form conclusion and explanation this maybe you never get just before. The Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) giving you one more experience more than blown away the mind but also giving you useful data for your better life with this era. So now let us show you the relaxing pattern the following is your body and mind is going to be pleased when you are finished examining it, like winning an activity. Do you want to try this extraordinary paying spare time activity?

Yolanda Sartain:

What is your hobby? Have you heard in which question when you got students? We believe that that problem was given by teacher for their students. Many kinds of hobby, Everybody has different hobby. And

also you know that little person similar to reading or as looking at become their hobby. You have to know that reading is very important and also book as to be the factor. Book is important thing to incorporate you knowledge, except your own teacher or lecturer. You see good news or update regarding something by book. Amount types of books that can you decide to try be your object. One of them are these claims Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series).

**Download and Read Online Micellar Enhanced Ultrafiltration:
Fundamentals & Applications (IIT Kharagpur Research
Monograph Series) Sirshendu De, Sourav Mondal
#XH0WAS21Y9Z**

Read Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) by Sirshendu De, Sourav Mondal for online ebook

Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) by Sirshendu De, Sourav Mondal Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) by Sirshendu De, Sourav Mondal books to read online.

Online Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) by Sirshendu De, Sourav Mondal ebook PDF download

Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) by Sirshendu De, Sourav Mondal Doc

Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) by Sirshendu De, Sourav Mondal Mobipocket

Micellar Enhanced Ultrafiltration: Fundamentals & Applications (IIT Kharagpur Research Monograph Series) by Sirshendu De, Sourav Mondal EPub