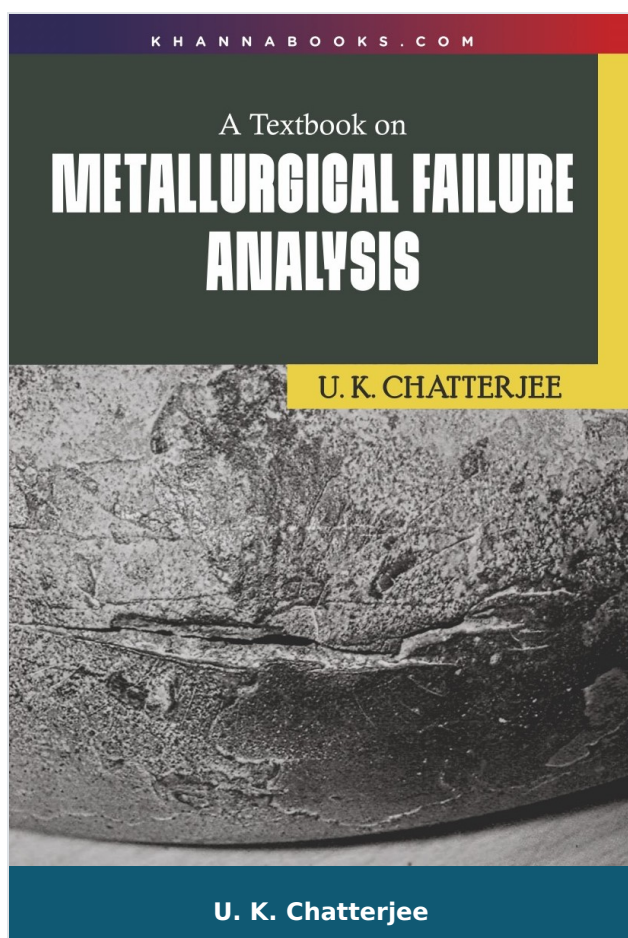




Textbook on Metallurgical Failure Analysis

Author :	U. K. Chatterjee
ISBN 13 :	978-93-55387-11-0
ISBN 10 :	9355387113
E-ISBN 13 :	978-93-55387-11-0
Edition :	1
Pages :	186
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 398.00
Categories :	Metallurgical Engineering, Book Store, New Arrivals
Condition Type :	New
Country Origin :	India

Product Description

A Textbook on METALLURGICAL FAILURE ANALYSIS: This handy textbook presents the basic causes of failure of metallic components and the factors – mechanical, metallurgical, thermal and environmental – that contribute to the failure. Basis of metal deformation and fracture, including fractography, are elaborated. Procedure for failure analysis has been explained and the tools used for failure analysis described. Several actual cases of failure investigation are included.

The classified types of failure covered in the book are:

- Fatigue failure
- Wear failure
- Environment assisted failure
- High temperature failure
- Casting failure
- Heat treatment related failure
- Metalworking defeat related failure
- Weld failure

Table Of Contents

- Source of Failure
- Steps of failure analysis
- Tools of Failure Analysis
- Deformation Fundamentals
- Fracture of Metals
- Fatigue Failure
- Wear Failure
- Environment Assisted failure
- High Temperature failure
- Casting Failure
- Heat Treatment Related Failure
- Metalworking Defects
- weld failure
- Case Failure
- Suggested reading

Author

U. K. Chatterjee

K CHATTERJEE: obtained the B.Tech (1964) and Ph.D. (1968) degree in metallurgical engineering from the Indian Institute of technology , Kharagpur , and served as a faculty member there for 41 years, The author or co-author of 110 papers in professional journals and conference proceedings and co-author of the book 'Environmental degradation of metals' (Marcel Dekker . 2001). He is an alexander von Humboldt fellow and a life of IIT Kharagpur.