Record Nr. UNINA9910299987203321 Autore **Bowers Adam** Titolo An Introductory Course in Functional Analysis / / by Adam Bowers, Nigel J. Kalton New York, NY:,: Springer New York:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4939-1945-8 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (XVI, 232 p. 2 illus.) Collana Universitext, , 0172-5939 Disciplina 515.7 Soggetti Functional analysis **Functional Analysis** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Foreword -- Preface -- 1 Introduction. - 2 Classical Banach spaces and their duals -- 3 The Hahn-Banach theorems.- 4 Consequences of completeness -- 5 Consequences of convexity -- 6 Compact operators and Fredholm theory -- 7 Hilbert space theory -- 8 Banach algebras --A Basics of measure theory -- B Results from other areas of mathematics -- References -- Index. Sommario/riassunto Based on a graduate course by the celebrated analyst Nigel Kalton, this well-balanced introduction to functional analysis makes clear not only how, but why, the field developed. All major topics belonging to a first course in functional analysis are covered. However, unlike traditional introductions to the subject, Banach spaces are emphasized over Hilbert spaces, and many details are presented in a novel manner, such as the proof of the Hahn–Banach theorem based on an inf-convolution technique, the proof of Schauder's theorem, and the proof of the Milman-Pettis theorem. With the inclusion of many illustrative examples and exercises, An Introductory Course in Functional Analysis equips the

reader to apply the theory and to master its subtleties. It is therefore well-suited as a textbook for a one- or two-semester introductory course in functional analysis or as a companion for independent study.

2. Record Nr. UNINA9911019653903321 Autore Pradhan Subhalaxmi Titolo Lubricants from Renewable Feedstocks Pubbl/distr/stampa Newark:,: John Wiley & Sons, Incorporated,, 2024 ©2024 **ISBN** 9781394173037 1394173032 9781394173020 1394173024 Edizione [1st ed.] Descrizione fisica 1 online resource (514 pages) Altri autori (Persone) PrasadLalit MadankarChandu NaikS. N Disciplina 621.89 Vegetable oils Soggetti Green chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Coverlmage -- Series Page -- Title Page -- Copyright Page -- Contents -- Preface -- Chapter 1 Prospectus of Renewable Resources for Lubricant Production -- Abbreviations -- 1.1 Introduction -- 1.2 History -- 1.3 Background of Biolubricants -- 1.4 Classification of Lubricants -- 1.4.1 Types of Base Oil Used -- 1.4.1.1 Synthetic Oils --1.4.1.2 Mineral Oil -- 1.4.1.3 Natural Oils -- 1.4.2 Physical State of Lubricant -- 1.5 Functions of a Good Lubricant -- 1.6 Renewable Sources for Biolubricant Manufacture -- 1.6.1 Jatropha Oil -- 1.6.2 Karanja Oil -- 1.6.3 Palm Oil -- 1.6.4 Rapeseed Oil -- 1.6.5 Castor Oil -- 1.6.6 Sunflower Oil -- 1.6.7 Soyabean Oil -- 1.6.8 Canola Oil --1.6.9 Coconut Oil -- 1.7 Physicochemical Properties of Bioderived Lubricants -- 1.7.1 Viscosity -- 1.7.2 Viscosity Index -- 1.7.3 Flash

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Sommario/riassunto

This book explores the production and applications of lubricants derived from renewable feedstocks. It covers various types of base oils, including synthetic, mineral, and natural oils, and discusses the physical and chemical properties of biobased lubricants. The work highlights the potential of vegetable oils like jatropha, karanja, and palm oil as sources for biolubricant manufacture. It delves into the chemical modification processes necessary for creating biobased lubricants and examines the environmental benefits and challenges associated with their use. The book is intended for researchers, scientists, and professionals in the fields of renewable energy and sustainable chemistry who are interested in the development of ecofriendly lubricant technologies.