Record Nr. UNINA9910879579503321 Autore Nogales Delgado Sergio Titolo Biolubricants Based on Vegetable Oils: From Raw Materials to Specific Uses / / by Sergio Nogales Delgado, Carmen María Álvez Medina, Juan Félix González González Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 3-031-65644-X Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (122 pages) Collana SpringerBriefs in Applied Sciences and Technology, , 2191-5318 Disciplina 621.89 Soggetti Tribology Fluid mechanics Chemistry, Organic Bioorganic chemistry **Engineering Fluid Dynamics** Organic Chemistry Bioorganic Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction: History of lubrication and why we need biolubricants --Advantages and disadvantages (or challenges) of biolubricants -- Main raw materials, and the role of waste cooking oil -- Chemical routes to produce biolubricants. The role of biorefineries -- Biolubricant characterization. What is important to consider our product a good biolubricant? How do we measure it? -- Uses of biolubricants -- Cung edge research about biolubricants -- Conclusions and outlook. Sommario/riassunto This is a book about biolubricants. It provides a general overview of these useful products, paying attention to their contribution to green and sustainable chemistry or the circular economy through the implementation of biorefineries. But also, it is a book about General Chemistry, Physics, Engineering, etc., as this specific subject could act

as a cornerstone for many multidisciplinary fields. The book's chapters include several exercises and questions to track reader's learning and give general and specific idea of how biolubricants are not just a promising research topic, but also a practical reality. The main ideas

covered in this work are the following: history, origin and use of biolubricants, main chemical routes to produce them and their quality assessment.