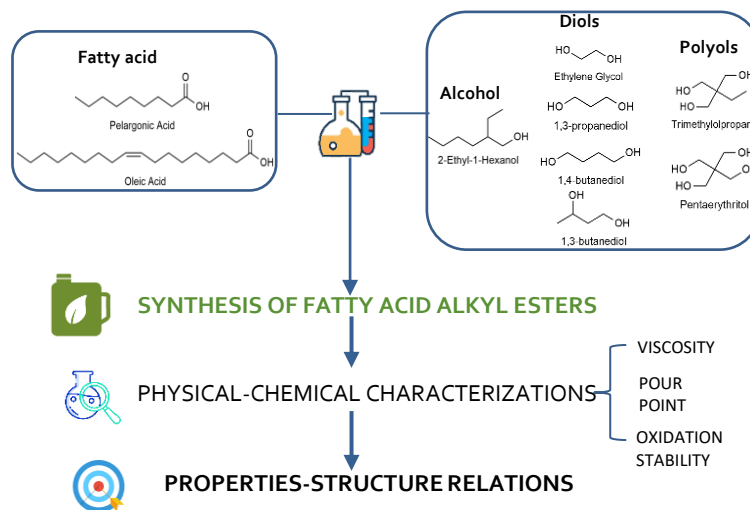




## First year activity

### Table of contents

1. Synthesis of fatty acid alkyl esters by using different fatty acids and alcohols.
2. Physical-chemical characterization of the products.
3. Study of the existing properties-structure relations.
4. Evaluation of the direct use of the synthesized esters as potential bio-lubricant depending on the required performances, in terms of viscosity, pour point and oxidation stability, for a specific application.



Ph.D. Student

**Michele Emanuele Fortunato**

Title

Bio-lubricants derived from waste vegetable oils



Ministero dell'Università e della Ricerca