



## CHAPTER 3

### Essential Oils: As Green Solvents

Abhishek Tiwari<sup>1\*</sup>, Varsha Tiwari<sup>1</sup>, Bimal Krishna Banik<sup>2\*</sup>, Biswa Mohan Sahoo<sup>3</sup>

<sup>1</sup>Faculty of Pharmacy, Pharmacy Academy, IFTM University, Lodhipur-Rajput, Moradabad 244102, Uttar Pradesh, India;

<sup>2</sup>Department of Mathematics and Natural Sciences, College of Sciences and Human Studies, Prince Mohammad Bin Fahd University, Al Khobar 31952, Kingdom of Saudi Arabia;

<sup>3</sup>Roland Institute of Pharmaceutical Sciences, Berhampur 760010 affiliated to Biju Patnaik, University of Technology (BPUT), Rourkela, Odisha, India;

Email: [abhishekt1983@gmail.com](mailto:abhishekt1983@gmail.com); [bimalbanik10@gmail.com](mailto:bimalbanik10@gmail.com)

#### Abstract:

The use of terpenes as green solvents in extraction is explored in this chapter along with introduction to the solubility as well as environmentally friendly green solvents. In contrast with conventional solvents, the physical and chemical characteristics of such solvents have also been discussed. Apart from it applications with examples of EOs have been covered in this chapter along with challenges and future prospects of EOs as green solvents. Various green solvents used in Extraction of Bioactive Components, Multicomponent Synthesis, Catalytic Coupling Reaction and Biobased-solvents are included in this chapter.

**Keywords:** Green solvents, EOs, Biobased-solvents, Bioactive, Catalytic