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## **Enantioselective Synthesis of (S) 3-Methyl-4-Octanol as Insect Pheromone Using Polymeric Asymmetric Reagent**

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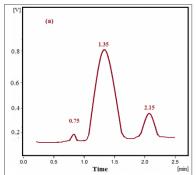
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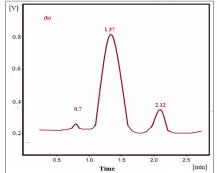
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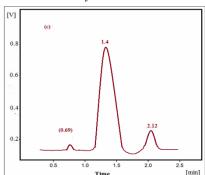
## **ABSTRACT**

In pheromone science, molecular asymmetry is important both chemically and biologically. Techniques for the preparation and determination of the absolute configuration of pheromones are discussed. Enantio selective synthesis of pheromones is the central part of the research on molecular asymmetry in pheromone science. Synthesis of palm weevil pheromone is given as an example in this area. Molecular asymmetry governs the biodiversity of pheromone perception as illustrated by the detailed discussion on the relationships between absolute configuration and pheromone activity.

**Graphical Abstract:** In pheromone science, molecular asymmetry is important both chemically and biologically. In this research we prepare and determine the absolute configuration of palm weevil pheromone. Molecular asymmetry governs the biodiversity of pheromone perception by the detailed discussion on the relationships between absolute configuration and pheromone activity.







The HPLC Chromatogram of the diastereomeric amides using MMA linear polymer which metalated in THF.

**Keywords:** Pheromone, Absolute configuration, Enantioselective, Palmweevil.