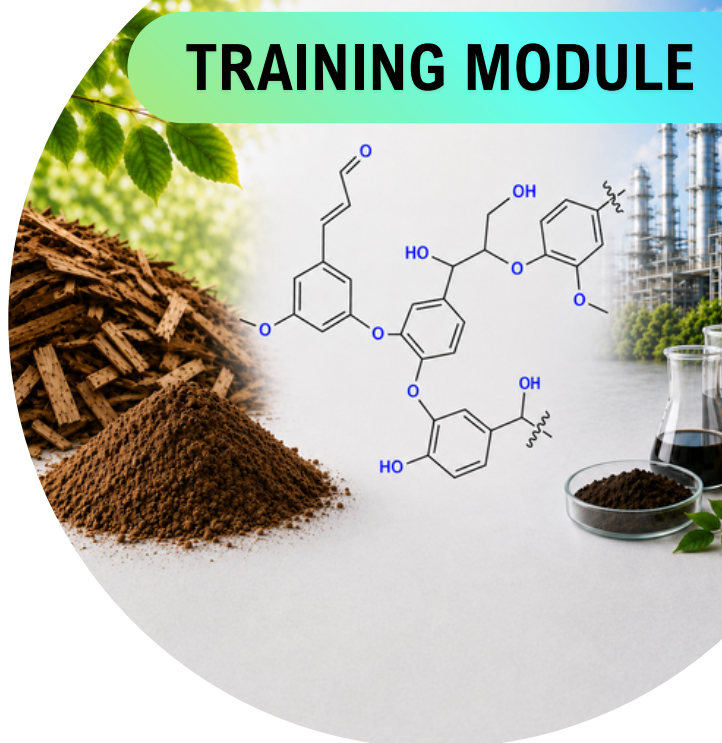


BIO-BASED RAW MATERIALS: LIGNIN



- **Format:** Online self-learning module
- **Duration:** 2 hours
- **Target group:** Researchers
- **Level:** EQF 3 - 8
- **Provider:** University of Twente
- **Language:** English
- **Certificate:** Digital badge
- **Costs:** Free

Emerging bio-based raw materials are becoming essential building blocks of the green transition, offering viable alternatives to fossil-based resources across the Chemical Industry. Building on the previous module on cellulose, this training module continues the exploration of these materials, turning its focus to lignin.

Lignin is the second most abundant polymer on Earth, used in a wide range of applications across different industrial sectors. As with cellulose, this free online training module explores the general features and properties of the material.

The module is organized into 7 sections, each combined with exercises to reinforce learning, covering the basics of lignin and its history, its production and commercial applications, its physical and chemical properties, and the main functionalization reactions.

**SCAN TO
START THE
FREE MODULE**

