

Method tags:

- Materials Science
- Computational Chemistry
- Polymer Science
- Scattering Techniques

Scientific tags:

- BioBased Materials
- Sustainable Adhesives
- Packaging Materials
- Nanostructure

Link to research group: <https://www.compchem.lu.se/marie-skepo>

Contact Information:

Title of Project: Unlocking the potential of bio-based adhesives in packaging

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Lab: Skepö research group

We are offering three master's projects (30–60 ECTS) in materials science and computational chemistry at Lund University in 2026. The projects are part of the WISE industrial postdoc project "Unlocking the potential of bio-based adhesives in packaging", see project here: <https://wise-materials.org/project/unlocking-the-potential-of-bio-based-adhesives-in-packaging-by-an-integrative-research-approach/>.

The work focuses on polymer–clay interactions in emerging bio-based adhesive systems. Two projects are experimental, and one is computational. Students will combine computer simulations and scattering techniques to examine nanostructure and structure–property relationships. The goal is to support the development of sustainable, high-performance adhesives for next-generation packaging. The projects are conducted in partnership with Tetra Pak, Anna Svensson, and Martina Ambroggi, with a flexible start date.