

**CORNET Call for Proposals: International Collective Research**

**--- Organisation profile ---**

<b>Organisation:</b>	<b>Fraunhofer Institute for Process Engineering and Packaging IVV</b>
<b>Website address:</b>	<a href="https://www.ivv.fraunhofer.de/en.html">https://www.ivv.fraunhofer.de/en.html</a>
<b>Organisation typology:</b>	<input type="checkbox"/> SME Association <input type="checkbox"/> University <input checked="" type="checkbox"/> Research Centre <input type="checkbox"/> Other (please specify)
<b>Sector:</b>	<input type="checkbox"/> Materials <input checked="" type="checkbox"/> Process Engineering, Energy Technology and Environment <input type="checkbox"/> Business Management and Organisation <input type="checkbox"/> Construction and Production <input checked="" type="checkbox"/> Chemistry, Textile, Food, Health and Medical <input type="checkbox"/> Measurement and Information
<b>Field of specialisation:</b>	<p><b>Replace fossil raw materials with renewables</b></p> <p>We use sustainable raw materials for a broad range of applications:</p> <ul style="list-style-type: none"> <li>• Ingredients for food products</li> <li>• Proteins for technical applications (e.g. adhesives, cleaning agents, surfactants, paints, lacquers)</li> <li>• Biobased additives from secondary plant substances for e.g. lubricants, lacquers, paints</li> </ul> <p>Based on the raw material characterization, we develop and optimize products and processes for the food industry and for technical applications. Reliable manufacturing processes ensure consistent product quality.</p>
<b>Expertise offered:</b>	<ul style="list-style-type: none"> <li>• Extraction plant for recovering proteins and secondary plant substances such as phenols, alkaloids, and mustard oil glycosides using organic solvents or supercritical CO<sub>2</sub>. Applications: oxidation inhibitors and corrosion inhibitors, UV-absorbing and blocking additives, friction-reducing agents and anti-abrasion additives, technical pigments and food colorants</li> <li>• Analization of plant-based raw materials and waste materials for valuable and functional plant ingredients.</li> <li>• Measurement of the protein solubility according to Morr, molecular weight distribution, viscosity of formulations, tribological properties, film-forming properties</li> <li>• Preperation of model formulations based on water, solvent, and oil.</li> <li>• Characterization of chemical and functional properties of additives and their interactions with other components of the formulation.</li> </ul>
<b>Contact person:</b>	<p>Name: Sandra Kiese</p> <p>Organisation: Fraunhofer Institute for Process Engineering and Packaging IVV</p> <p>Department: Process Development for Plant Raw Materials</p> <p>E-mail: <a href="mailto:sandra.kiese@ivv.fraunhofer.de">sandra.kiese@ivv.fraunhofer.de</a></p>