Title: Plant-based coagulants for food industry wastewater treatment

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Abstract:

Industrial activities are one of the leading causes of water pollution due to the generation of significant amounts of wastewater that contain toxic species or species that are difficult to degrade. The production of liquid waste by the food industry is sizeable, especially in the animal based food sector. Slaughtering operations and meat processing generate massive volumes of wastewater rich in proteins, organic compounds, and fats.

Sustainable effluent treatments are essential tools in lowering the environmental impact of industrial activities. The partial or complete replacement of synthetic coagulants by natural coagulants, especially plant-based ones, can reduce the footprint of the effluent treatment due to the higher biodegradability and non-toxicity. Natural coagulants are also generally cheaper.

Biography:

Graduated in Environmental Engineering at the Federal University of Technology, Paraná – UTFPR. Postgraduate in Work Safety Engineer at the Pontifical Catholic University of Paraná. Master of Science (MS) in Environmental and Technology at the Federal University of Technology, Paraná – UTFPR. PhD student in Chemical Engineering at the Federal University of Paraná (UFPR). Eight years of professional experience as a university teacher and legal expert in labor law. Today is a Work Safety Engineer at the Serviço Social da Indústria do Mato Grosso do Sul (SESI), Brasil, working as an innovation project leader.