

Departmental Seminar

Seminar Title : Return Seminar-Understanding the consequence of cold plasma treatment on legume proteins
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Venue : CH-306
Date and Time : 25 Feb 2025 (16.40)
Abstract : Among different legume proteins, guar germ proteins is underexplored. So, isolated guar germ proteins were treated with cold plasma (CP) to understand the impact on nutritional, functional properties, and rheological behaviour. Moderate CP treatment improves digestibility and has a minor impact on amino acids. The higher applied voltage could induce the formation of protein aggregates, as observed in the SDS-PAGE model. At the same time, noticeable changes in functional properties were identified in different CP-treated samples. Most importantly, low or higher CP treatment intensity improves gelling ability. The CP-treated modified proteins can be helpful in developing emulsion and encapsulating valuable ingredients. Keywords: Legume proteins, Cold plasma, Rheology, Functional properties