National Institute of Technology Rourkela

Departmental Seminar

Seminar Title : Conf. Return Seminar: Superheated steam as novel pre-treatment technology for quality and safety of agricultural

commodities

Speaker : Dr. Rachna Sehrawat Supervisor : Dr. Rachna Sehrawat

Venue : CH-113

Date and Time : 30 Dec 2024 (10.30AM)

Abstract : The superheated steam

: The superheated steam technique is an innovative pre-treatment method for agricultural commodities that offers several benefits, particularly in enhancing the quality and safety of agricultural commodities. It is found to be very effective in reduction of enzymes and antinutritional factors present in guar seed flour while maintaining the nutrient value, structural characteristics. Moreover it is quite effective in improving the digestibility of flour which has potential application to be used in formulation of variety of product otherwise the guar seed flour has limited applications due to presence of antinutritional factors. Apart from this technology is very energy efficient, environment friendly and versatile in nature. Moreover future work is being targeted to reduce the microbial load reduction from agro-industrial waste to add value to the by-products. The superheated steam technique holds promise as an effective pre-treatment for agricultural commodities, enhancing food safety, quality, and nutritional value while offering environmentally friendly alternatives to chemical treatments.