



खाद्य विज्ञान एवं प्रौद्योगिकी विभाग
Division of Food Science and Post Harvest Technology
भारतीय कृषि अनुसंधान संस्थान
INDIAN AGRICULTURAL RESEARCH INSTITUTE
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(Indian Council of Agricultural Research)
नई दिल्ली-110012 (भारत)
New Delhi-110012 (India)



दिनांक /Dated: 31.08.2023

डॉ. नीलम उपाध्याय

वैज्ञानिक (वरिष्ठ वेतनमान)

Dr. Neelam Upadhyay

Scientist (Senior Scale)

CERTIFICATE

This is to certify that the entry entitled ‘Carotenoids from carrot bio-waste: its extraction and encapsulation in emulsion based delivery system for food and pharmaceutical applications’ involved ‘green’ extraction of carotenoids from carrot bio-waste- a waste from carrot juice processing industry. Further, the emulsion of extract was prepared for its utilization in food system.

“This work required no animal and human studies to be conducted except sensory analysis of edible and safe food developed during the study. Prior to sensory evaluation, the samples were tested for microbial load”.

(Major Advisor & Chairman)

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