

Publications of Dr. U.C. Lohani, JRO, PHPFE (2020-22)

1. Aman, J., Shahi, N.C., **Lohani, U.C.**, Balodhi, D., Singh, R., Kumar, N., Bhat, M.I. and Kumar, A.P. 2022. Process Optimization for Development of Guar Gum-Based Biodegradable Hydrogel Film Using Response Surface Methodology. *Bioinorganic Chemistry and Applications*, DOI: 10.1155/2022/9180000
2. Shukla, S., **Lohani, U.C.**, Shahi, N.C. and Dubey, A. 2022. Extraction of Natural Pigments from Red Sorghum (*Sorghum bicolor*) Husk by Ultrasound and Microwave Assisted Extraction: A Comparative Study through Response Surface Analysis. *Journal of Food Process Engineering*, DOI:10.1111/jfpe.14130
3. Bisht, B., **Lohani, U. C.**, Kumar, V., Gururani, P and Sinhmar, R. 2022. Edible Hydrocolloids as Sustainable Substitute for Non-biodegradable Materials. *Critical Reviews in Food Science and Nutrition*, 62 (3): 693-725. Doi: 10.1080/10408398.2020.1827219
4. Bhat, M.I, Shahi, N.C., **Lohani, U.C.**, Singh, S., Siddiqui, Q. and Sirohi, R. 2022. Microwave Irradiation Assisted Intensive and Quick Delignification of Lignocellulosic Biomass, and Confirmation by Spectral, Morphological and Crystallinity Characterization. *Bioresource Technology*, 351, 127029. Doi: 10.1016/j.biortech.2022.127029
5. Richa, R. Shahi, N.C., **Lohani, U.C.**, Kothakota, A., Pandiselvam, R., Sagarika, N., Singh, A., Omre, P.K. and Kumar, A. 2021. Design and Development of Resistance Heating Apparatus cum Solar Drying System for Enhancing Fish Drying Rate. *Journal of Food Process Engineering*, 45 (6): DOI: 10.1111/jfpe.13839
6. Sumit Kumar, Khan Chand, **U C Lohani** and Navin C Shahi 2021. Process Optimization of Hand Operated Machine for Coating of Apples using Carboxymethyl Cellulose. *International Journal of Agriculture Innovations and Research*, 10 (2): 71- 82
7. Thakur, R.R., Shahi, N.C., Mangraj, S., **Lohani, U.C.** and Chand, K. 2021. Development of an organic coating powder and optimization of process parameters for shelf life enhancement of button mushrooms (*Agaricus bisporus*). *Journal of Food Processing and Preservation*, doi.org/10.1111/jfpp.15306
8. Alam, I., Shahi, N.C., **Lohani, U.C.**, Kumar, A. and Prakash, O. 2021. Ultrasound assisted extraction of oil from black cumin (*Nigella sativa* L.). *International Journal of Chemical Studies*, 9(2): 87-91
9. **Lohani, U.C.** and Muthukumarappan, K. 2020. Study of Continuous Flow Ultrasonication to Improve Total Phenolic Content and Antioxidant Activity in Sorghum Flour and its Comparison with Batch Ultrasonication. *Ultrasonics Sonochemistry*, 71, 105402 Doi: 10.1016/j.ultsonch.2020.105402
10. Sirohi, R. Pandey, J.P., Goel, R., Singh, A., **Lohani, U.C.**, and Kumar., A. 2020. Two- stage Enzymatic Hydrolysis for Fermentable Sugars Production from Damaged Wheat Grain Starch with Sequential Process Optimization and Reaction Kinetics. *Starch- Stärke*, 73, 2000082, doi:10.1002/star.202000082
11. Sirohi, R. Pandey, J.P., Singh, A., Sindhu, R., **Lohani, U.C.**, Goel, R., and Kumar., A. 2020.

Acid hydrolysis of damaged wheat grains: Modelling the formation of reducing sugars by a neural network approach. *Industrial Crops & Products*, 149, 112351, Doi: 10.1016/j.indcrop.2020.112351

12. **Lohani, U.C.** and Muthukumarappan, K. 2020. Influence of fermentation followed by ultrasonication on functional properties of sorghum extrudates. *Journal of Food Process Engineering*, 43 (6) e13390 Doi: 10.1111/jfpe.13390
13. Thakur, R.R., Shahi, N.C., Mangaraj, S., **Lohani U.C.** and Khan Chand. 2020. Effect of apple peel based edible coating material on physicochemical properties of button mushrooms (*Agaricus bisporus*) under ambient condition. *International Journal of Chemical Studies*, 8(1): 2362-2370
14. Richa, R. Pandey, J P, Shahi, N C, **Lohani, U C**, Pandey Y, Shukla, R M and Langoo B. 2020. Study of microbial load for storage and optimization conditions of Malta (*Citrus Sinensis*) using response surface methodology. *International Journal of Chemical Studies*, 8 (3): 2909-2914
15. Sruthi, N U, **Lohani, U.C.**, Shahi, N.C. and Pandey, J.P. 2020. Process Optimization of Paddy Drying in Cross-flow Aerated Drying cum Storage Bin, *Agricultural Engineering Today*, 44(3): 7-15
16. Bhat, M.I., Shahi, N.C., **Lohani, U.C.**, Kumar, A. and Malik, S. 2021. Influence of microwave-assisted chemical treatment on delignification of rice straw biomass. *Environment Conservation Journal*, 22 (1&2): 87-95.