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Education:

- Ph.D. in Food Process Engineering, IIT Kharagpur
- M.Tech. in Food Process Engineering, IIT Kharagpur
- B.Tech. in Agricultural Engineering, College of Agricultural Engineering, Jabalpur

Research Focus:

Food Process Engineering, Microwave Heating, Puffing of Grains, Grain processing

Publications:

Research Article

- Swarnakar, A. K., Devi, M. K., and Das, S. K. (2014). Popping characteristics of paddy using microwave energy and optimization of process parameters. *International Journal of Food Studies*, 3-45-59.
- Swarnakar, A. K., Kumar R., and Shrivastava, S. P. (2018). Design and development of aonla stone (seed) removing cum slicing equipment. *Journal of Pharmacognosy and Phytochemistry*, 7(3)-27-30.
- Swarnakar, A. K., Srivastav, P. P., & Das, S. K. (2019). Optimization of preconditioning process of pressure parboiled brown rice (unpolished) for microwave puffing and its comparison with hot sand bed puffing. *Journal of Food Process Engineering*, 42(3), e13007.

- Swarnakar, A. K., Srivastav, P. P., & Das, S. K. (2020). Optimization of pressure parboiling conditions and pre-puffing moisture content of brown rice (unpolished rice) for microwave puffing and its comparison with hot sand bed puffing. *International Journal of Food Studies*, 9, SI1–SI16.
- Swarnakar, A. K., Srivastav, P. P., & Das, S. K. (2020). Puffing characteristics of pressure parboiled brown rice in microwave oven and optimization of process parameters. *Journal of Agricultural Engineering*, 57(2), 127-137.
- Swarnakar A. K. (2019). Shelf life estimation of preconditioned brown or unpolished rice (*Oryza sativa*) and its effect in microwave puffing. *Asian Journal of Dairy and Food Research*, 38(3), 231-236.
- Swarnakar, A. K., Mohapatra, M., & Das, S. K. (2022). A review on processes, mechanisms, and quality influencing parameters for puffing and popping of grains. *Journal of Food Processing and Preservation*, 46(10), e16891.
- Lata, S., Swarnakar, A. K., Kumar, A., & Das, S. K. (2023). Effects of mode of heat transfer on puffing quality of rice grain: A modeling and simulation analysis. *Journal of Food Process Engineering*, 46(5), e14323.
- Swarnakar, A. K., Kumar, G., Kumar, A., & Das, S. K. (2023). Changes in sensorial and microstructural characteristics of puffed brown rice in hot sand bed puffing with change in preconditioning. *Agricultural Engineering International: CIGR Journal*, 25(4), 222-235.

Book Chapter

- Verma, D. K., Billoria, S., Mahto, D. K., Swarnakar, A. K., and Srivastav P. P. (2017). Effect of thermal processing on nutritional composition of green leafy vegetables: a review, *Engineering Interventions in Food and Plants*, APPLE ACADEMIC PRESS, 157-194.
- Swarnakar, A. K., and Dalbhat, C. G. (2023). *Mixing, Unit Operations in Food Processing*, Scientific Publication, 87-98.
- Dalbhat, C. G., Swarnakar, A. K., Raigar, R. K., and Mishra, H. N. (2023). *Extrusion Technology, Unit Operations in Food Processing*, Scientific Publication, 299–322.

- Swarnakar, A. K., Banerjee, S., & Raigar, R. K. (2024). Food Texturization. In Future Crops and Processing Technologies for Sustainability and Nutritional Security, CRC Press, (pp. 103-118).

Book

- Swarnakar, A. K. and Das, S. K. (2018). Microwave Popping of Paddy, LAMBERT ACADEMICS PUBLISHING.

Academic Experience:

- Assistant Professor, Department of Food Science and Technology, GITAM University (August 2022 – August 2024)
- Assistant Professor, Food Technology Department, Ganpat University, Gujarat (January 2020 – December 2021)

Awards & Recognitions:

- MHRD Scholarship for Post-Graduation, Govt. of India (GATE – 2011)
- Qualified NET by ICAR (2017)

Professional Memberships:

- Life Member, Indian Society of Agricultural Engineers

Conferences:

- Devi, M. K., Swarnakar, A. K., and Das, S. K. (2015). Popping of paddy in domestic microwave oven: Effect of sample factor and oven factor on popping characteristic. Poster presented in IFT 15 held in Chicago, Illinois, USA on July 11-14, 2015.
- Swarnakar, A. K. and Das, S. K. (2017). Optimization of the pre-conditioning process for microwave puffing of pressure-parboiled brown rice. Poster presented in ASABE Annual International Meeting Held in Spokane, Washington USA on July 16-19, 2017.
- Swarnakar, A. K. and Das, S. K. (2018). Puffing characteristic of brown rice (unpolished rice) in microwave oven. Poster presented in ICRAFT 2018 IIFPT, Thanjavur - Tamilnadu, India held on August 17-18, 2018.

- Swarnakar, A. K., Srivastav, P. P. and Das, S. K. (2018). Shelf life estimation of preconditioned brown rice (unpolished rice) for its microwave puffing. Poster presented in IUFOST 2018 19th world congress for Food Science and Technology Mumbai, India held on October 23-27, 2018.