



Dr. (Mrs.) MINATI MOHAPATRA
Assistant Professor
Department of Agricultural Process and Food Engineering

Education

- Ph.D. (Agril. Engg.) in Processing and Food Engineering, Indian Institute of Technology, Kharagpur, (India)- 2010
- M. Tech (Agril. Engg.) in Post Harvest Process and Food Engineering, G.B.Pant University of Agriculture and Technology, Pantnagar (India)- 2000
- B.Tech (Agril. Engg.), Orissa University of Agriculture and Technology, Bhubaneswar (India)- 1997

Professional Experience

- Assistant Research Engineer in AICRP on Post Harvest Technology, CAET, OUAT, from August 2012 till date
- SMS (Agril. Engg.) in OUAT, Bhubaneswar from December 2009 to August 2012
- Assistant Professor/ SMS (Agril. Engg.) at GBPUA&T, Pantnagar from December 2004 to December 2009

Research interests

- Processing and Value Addition of Cereals and Oilseed
- Fruits and Vegetable processing
- Heat and Mass Transfer Analysis in Foods

Professional trainings

- Winter School in "Gender Mainstreaming in Agricultural Research and Extension", National Research Center for Women in Agriculture, 01-21 December 2006.
- Participated in Training programme on "Web Designing" by ERNET, India sponsored by ZPD unit, Zone IV, Kanpur, 6-17 October 2008.
- Winter School on "Advanced Tools & Techniques for Project Formulation, Implementation & Evaluation, Orissa University of Agriculture and Technology, 5-25 January 2009.
- Short term training course on "Soil Health and Fertility Management", IISR, Bhopal, 14-15th February 2010.
- Training programme on Thermal Processing of Foods, International Summer and Winter Terms-2014 at IIT, Kharagpur during 2-13 June 2014.

New Innovations/ Reserch Contributions

- Designed and developed a mechanized system to produce pre-conditioned rice for puffing of rice
- Designed and developed Steam generating and drying system for Superheated Steam Drying of foods
- Developed a hand operated Maize Sheller for the farm women to reduce drudgery in maize shelling
- Standarized Foam mat drying characteristics of custard apple pulp
- Developed a Foaming device for foam mat drying of fruit pulps and programme developed for heat and mass transfer analysis in spherical foods with two layer systems.
- Developing Modified atmospheric Packaging of Jamun (Indian blackberry: *Sizium cumini*) fruits.

Courses taught

Advanced Food Process Engineering (M. Tech.)
Unit operations of food processing (M. Tech.)

Students guided Guided two students for M. Tech.

Externally Funded Projects/ schemes

Co. Principal Investigator, National Initiative on Climate Resilient Agriculture (NICRA) project operating under Directorate of extension, OUAT at KVK, Sonapur, 2010-2012

Co-Principal Investigator, Front Line Demonstration on Zero Till Seed cum Fertilizer Drill at KVK, Haridwar, G.B.P.U.A &T., Pantnagar, 2005-2006.

Extension activities

Conducted around 100 off-campus and on-campus trainings for farmers, farm women and entrepreneurs, On farm testing on improved storage structures for wheat and basmati rice, demonstrated improved farm implements e.g. zero till seed-cum-fertilizer drill, reaper, rotavator, combine harvester, polythene mulching of orchard, drip irrigation etc. in around 250 ha, adopted 5 villages, developed 20 extension literatures, success stories, CDs, radio & TV talks.

Awards & Fellowships

- Qualified ICAR-NET in 2004
- Ph.D. : IIT Institute Fellowship (2002-2004)
- M. Tech : ICAR, JRF (1998-2000)
- Fellow member of Association of Rice Research Workers, CRRRI

Publications

Mohapatra M, Kumar A and Das S K. 2012. Mixing characteristics of rice by tracer technique in an agitated cylindrical pre-conditioner developed for puffed rice production system. *Journal of Food Process Engineering*, 35 (5), 784-791

Mohapatra M and Das S K. 2011. Effect of process parameters and optimization on microwave puffing performance of rice. *Research Journal of Chemistry and Environment*, 15 (2), 454-461

Mohapatra M and Das S K. 2011. Development of a pre-conditioner machine for mechanized puffed rice production. *Oryza*, 48(2),114-118

Panda M.K., Mohapatra M and Bakhara C.K. 2014. Effect of pretreatment on quality of dehydrated cauliflower in microwave assisted convective drying. *Environment & Ecology*, 34(2), 471-476

Sahoo, N.R., Panda, M.K., Mohapatra M and Bakhra C.K. 2014. Process optimization for development of extruded product from rice flour– moringa leaf blend. *ORYZA* (Accepted).

Mohapatra M and Mohapatra S.D.2007. On-farm storage of grain for reducing post harvest losses. *Intensive Agriculture*, 45 (2):18-19

Mohapatra M and Das S K. 2011. Effect of Process Parameters and Optimization on Microwave Puffing Performance of Rice. In: ICCE-2011 at Malaysia during May 27-29, 2011 (Abstracts p. 79)

Deep K. and Mohapatra M. 2014. Foam Mat Drying of Custard Apple. Proceeding of All India Seminar on Appropriate Technologies of Farm Mechanization for Marginal and Small Farmers. *Institute of Engineers* at Kolkata 8-9th August 2014 p.38

Mohapatra, M, Bakhara C.K. and Panda M.K. 2014. Post harvest management of vegetables through selection of storage environment and modified atmospheric packaging. Proceeding of National symposium on management options for enhancing farm productivity & livelihood security under changing climate, OUAT, Bhubaneswar, 29th- 31st October 2014, p.115

Book Chapter

Mohapatra M and Narain M. 2004. Effect of dehulling on the overall quality of rapeseed meal. In: Food and Bio-Process Engineering. Anamaya Publisher, New Delhi. p. 238-243.

Contact Address

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