

Dr. P. KANDASAMY, Ph.D
Associate Professor
Department of Agricultural Engineering



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Educational qualifications :

- B.E (Ag. Eng.), Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, 1998
- M.E (Ag. Eng.) in Agricultural Process Engineering, TNAU, Coimbatore, Tamil Nadu, 2001
- Ph.D (Ag. Eng.), Visva-Bharati (A Central University), Santiniketan, West Bengal, 2013

Teaching experience:

- Associate Professor : from 15.04.2018 to till date
- Assistant Professor : from 15.04.2004 to 14.04.2018

Area of Specialization:

- Food and Agricultural Process Engineering

Research Area:

- Drying Technology
- Modified/Controlled Atmosphere Storage
- Fruits and vegetables processing and value addition
- Solar energy for food/fish processing
- Food Irradiation

Students guided:

- Supervising four Ph.D Students (ongoing)

Publications:

- National and International journal publications: 23
- Book chapters/Full length papers in proceedings: 11
- Paper presented in Seminar/Conference/Symposium: 23
- Participated in Orientation/Refresher/Short term courses: 7
- Practical Manuals: 3

Significant research publications:

- Balamurugan R and Kandasamy P. (2021). Effectiveness of portable solar-powered light-emitting diode insect trap: Experimental investigation in a groundnut field. *Journal of Asia-Pacific Entomology* (Elsevier), 24(4): 1024-1032. <https://doi.org/10.1016/j.aspen.2021.09.013>
- Mishra M, Kandasamy P, Shukla RN and Kumar A. (2021). Convective hot-air drying of green mango: Influence of hot water blanching and chemical pretreatments on drying kinetics and physicochemical properties of dried product. *International Journal of Fruit Science* (Taylor & Francis), 21(1): 732-757. <https://doi.org/10.1080/15538362.2021.1930626>.
- Biswas O and Kandasamy P. (2021). Development and experimental investigation of portable solar-powered thermoelectric cooler for preservation of perishable foods. *International Journal of Renewable Energy Research*, 11(3): 1292-1303.
- Biswas O, Kandasamy P, Mandal G and Panda D. (2021). Effectiveness of solar thermoelectric cooler for fish preservation: Experimental study on quality characteristics of *Pangasius bocourti* fish fillets during storage. *Journal of Experimental Biology and Agricultural Sciences*, 9(5): 618-629. [https://doi.org/10.18006/2021.9\(5\).618.629](https://doi.org/10.18006/2021.9(5).618.629).
- Biswas O, Kandasamy P and Sarkar P. (2020). Effect of cooling in a fabricated solar cooler on histology of *Pangasius (Pangasianodon hypothalamus)* muscle. *Indian Journal of Animal Health*, 59(1): 73-77. <https://doi.org/10.36062/ijah.59.1.2020.73-77>
- Kandasamy P, Varadharaju N, Dhakre DS and Smritikana S. (2019). Assessment of physicochemical and sensory characteristics of foam-mat dried papaya fruit powder. *International Food Research Journal*, 26(3): 819-829.
- Kandasamy P and Mukherjee S. (2019). Enhancing shelf life of tomato under controlled atmosphere condition using diffusion channel system. *Engineering in Agriculture, Environment and Food* (Elsevier), 12(1): 1-10. <https://doi.org/10.1016/j.eaef.2018.07.001>.
- Kandasamy P. (2017). Mathematical modeling of diffusion channel length to maintain steady-state oxygen concentration for controlled atmosphere storage of tomato. *International Journal of Food Properties* (Taylor & Francis), 20(S2): S1424-S1437. doi: 10.1080/10942912.2017.1347181.
- Kandasamy P (2017). Assessment of physico-chemical characteristics of tomato (*Solanum lycopersicum*) stored under diffusion channel system. *International Journal of Bio-resource and Stress Management*, 8(1):160-166. <https://doi.org/10.23910/IJBSM/2017.8.1.1794>.
- Kandasamy P, Moitra R and Mukherjee S. (2015). Measurement and modeling of respiration rate of tomato (cultivar Roma) for modified atmosphere storage. *Recent Patents on Food, Nutrition & Agriculture*, 7(1): 62-69. <https://doi.org/10.2174/2212798407666150616125550>
- Kandasamy P, Varadharaju N, Kalemullah S and Maladhi D. (2014). Optimization of process parameters for foam-mat drying of papaya pulp. *Journal of Food Science and Technology* (Springer), 51(10): 2526-2534. <https://doi.org/10.1007/s13197-012-0812-y>.

Books/Research books/edited books:

- Kandasamy, P. (2020). *Agricultural Engineering: A Practical Manual*. New India Publishing Agency, New Delhi, India. ISBN: 9788194766803
- Kandasamy P. (2013) *Studies on foam-mat drying of papaya (Carica papaya) fruit*. LAB LAMBERT Academic Publishing, Saarbrücken, Germany. ISBN: 978-3-659-37432-6.

- Kandasamy, P. (2017) Controlled atmosphere storage of tomato using diffusion channel system. LAB LAMBERT Academic Publishing, Saarbrucken, Germany. ISBN: 978-3-330-04812-6.
- K.C.Swain., A.K.Chatterjee and P. Kandasamy (2018). Advance Technologies in Agriculture for Doubling Farmer's Income. New Delhi Publishers, New Delhi. ISBN: 978-93-86453-61-7.

Seminar/workshop/Training program organized:

- One day farmers training program on "Agricultural Machinery and Hands on Tools" on 21st March 2017 as Co-coordinator
- One day National Seminar cum Panel Discussion on "Doubling Farmers Income: Role of Agricultural Mechanization" 29th January, 2018 as Convener
- 5-day workshop on "Geoinformatics in Agriculture and Environment" during 24-29 March 2019 as Co-coordinator

Award/Prize/Certificate/Fellowship:

- Research Leadership Award: International Best Researcher in Post Harvest Engineering awarded by IJRULA & Rula Awards in association with World Research Council and United Medical Council, 26th January, 2020.
- Best participant award: ICAR sponsored Winter School at the National Institute of Research on Jute and Allied Fibre Technology, Kolkata, 2016
- KIADEF- Krishnamurthy International Agricultural Development Foundation (1999-20)

Attached to the Professional Bodies:

- Life member: Association of Food Scientist and Technologists (India), India
- Life member: Indian Society of Agricultural Engineers, New Delhi, India
- Life member: The Institution of Engineers (India), Kolkata, India
- Reviewer: Journal of Food Science and Technology (Springer)
- Reviewer: Journal of Food Process Engineering (Willey)
- Reviewer: International Journal of Fruit Science (Taylor & Francis)

Courses Teaching:

Under Graduate level [B.Sc (Ag.)]

- Introductory Soil and Water Conservation Engineering
- Principles of Food Science and Nutrition
- Protected Cultivation and Postharvest Technology
- Farm Machinery and Power
- Renewable Energy and Green Technology
- Agricultural Waste Management (elective)
- Rural Agricultural Work Experience and Agro-industrial Attachment

Ph.D level (Agricultural Engineering)

- Advances in Food and Agricultural Process Engineering
- Advances in Soil and Water Conservation Engineering
- Research Methodology and Techniques
- Review of Research Work and Written Presentation of Synopsis