

3. PUBLICATIONS

3.1 Research Papers

1. Priyanka Roy, Poojal Chhirang, Vijay Kumar Gahlawat (2023). Comparative Study of the Effect of Temperature and pH on the Growth of Bio-flavor Producing Microorganisms *Kluyveromyces marxianus* and *Ceratocystis fimbriata*. *Scienc Letters*, 11(1):1-5. <https://doi.org/10.47262/SL/11.1.132022900>
2. Priyanka Roy, Vijay K. Gahlawat, Chakkaravarthi Saravanan, Bhim P. Singh (2022). Enhancing bioflavor production by solid-state fermentation using *Kluyveromyces marxianus* and l-phenylalanine. *Journal of Basic Microbiology*, 75-91/1-17. <https://doi.org/10.1002/jobm.202200503>
3. Khurshid Wani, Atif & Roy, Priyanka & Kumar, Vijay & Mir, Tahir-Ul Gani. (2022). Metagenomics and artificial intelligence in the context of human health. *Infection, Genetics and Evolution*. 100. 105267. 10.1016/j.meegid.2022.105267.
4. Sadhan Jyoti Dutta, Gourav Chakraborty, Vineet Chauhan, Lochan Singh, Vijay Singh Sharanagat, Vijay Kumar Gahlawat (2022). Development of a predictive model for determination of urea in milk using silver nanoparticles and UV–Vis spectroscopy, *LWT*, Volume 168, 2022, 113893, ISSN 0023-6438. <https://doi.org/10.1016/j.lwt.2022.113893>.
5. Malik, M.; Gahlawat, V.K.; Mor, R.S.; Dahiya, V.; Yadav, M. Application of Optimization Techniques in the Dairy Supply Chain: A Systematic Review. *Logistics* 2022, 6, 74. <https://doi.org/10.3390/logistics6040074>
6. Das, K., Rahman, M., Srinivas, M., Das, A., Kumar, V. (2022). Analysis of thunderstorms in Bangladesh using ARIMA model. *International Journal of Nonlinear Analysis and Applications*, 13(1), 2897-2909. <http://dx.doi.org/10.22075/ijnaa.2021.21639.2284>
7. Gahlawat, V. K., Indra., Rahul, K., **Mor, R. S.**, & Malik, M. (2021). A Two State Time-Dependent Bulk Queue Model with Intermittently Available Server. *Reliability: Theory & Applications*, 16, 2(64), 114-122, <https://doi.org/10.24412/1932-2321-2021-264-114-122>. ISSN: 1932-2321.
8. Sharma, S.; Gahlawat, V.K.; Rahul, K.; Mor, R.S.; Malik, M. Sustainable Innovations in the Food Industry through Artificial Intelligence and Big Data Analytics. *Logistics* 2021, 5, 66. <https://doi.org/10.3390/logistics5040066>
9. Sid, S., **Mor, R. S.**, Panghal, A., Kumar, D., & Gahlawat, V. K. (2021). Agri-food supply chain and disruptions due to COVID-19: Effects and Strategies. *Brazilian Journal of Operations & Production Management*, 18(2). <https://doi.org/10.14488/BJOPM.2021.031>.
10. Suhag, R., Dhiman, A., Deswal, G., Thakur, D., Sharanagat, V.S., Kumar, K., Kumar, V., Microwave processing: A way to reduce the anti-nutritional factors (ANFs) in food grains, *LWT - Food Science and Technology* (2021), doi: <https://doi.org/10.1016/j.lwt.2021.111960>
11. Priyanka Roy & Vijay Kumar (2019). Production of Bioflavour from Microbial Sources and its health benefits, *Indian Journal of Biochemistry & Biophysics (IJBB)*, Vol. 56, October 2019, pp. 352-357.

12. KS Srikanth, Vijay Singh Sarnagat, Yogesh Kumar, Ria Bhadra, Lochan Singh, Prabhat K. Nema & Vijay Kumar (2019). Convective drying and quality of elephant foot yam (*Amorphophallus paeoniifolius*), LWT-Food Science and Technology, Vol. 99, Jan 2019, pp. 8-16.
13. Priyanka and Vijay Kumar (2018). Functional Food: Probiotic as Health Booster, Journal of Food, Nutrition and Population Health, Vol.2, No.2:12, 2018.
14. Vijay Kumar, Akshay Bisht and Kumar Rahul (2018). Development of Cost Effective Nutritive Diet for Children using Linear Programming Problem, International Journal of Computer Sciences and Engineering, Vol.-6, Issue-5.
15. Gaurav Aggarwal, Vijay Kumar & Vijay K Gahlawat (2014). Application of LPP to Identify Optimal Production Mix in Ready to Eat snacks factory, International Journal of Research in Engineering & Applied Sciences, Vol. 4, Issue 3.
16. Vijay Kumar & Indra (2013). Some New Results for a Two State Batch Departure Multiple Vacation Queueing model, American Journal of Operational Research (AJOR), 3 (2A): 26-33.
17. Vijay Kumar and Indra (2010). A Two-State Markovian Queueing Model with Arrivals in Batches of Variable Size”, Int. J. Eng. Sc. & Mgmt., Vol.II, Issue-1.
18. Vijay Kumar and Indra (2010). Transient analysis for a two-state bulk arrival queueing system with bulk departure” is published in International journal of Operations Research and Optimization, **Vol. 1, No. 1, pp.190-203.**
19. Vijay Kumar (2010). Bulk Queueing Models, GYANPRATHA (Accman Journal of Management Science), Vol. 2, Issue No. 2.
20. Indra and Vijay Kumar (2010). Analysis of a two-dimensional bulk arrival queueing model with exhaustive and non-exhaustive service policy, Arya **Bhatta Journal of Mathematics & Informatics, Vol. 2, No. 1.**
21. Indra and Vijay Kumar (2008). Transient solution of a two-state Markovian queueing model with intermittently available server and arrivals in batches of variable size” in the *International journal of Agriculture and Statistical Sciences, Vol. 4, No. 1, pp. 97-106.*

3.2 Book chapters

1. Mohit Malik, Vijay Kumar Gahlawat, Rahul S Mor, Kumar Rahul, Shekhar Agnihotri, Anupama Panghal, Neela Emanuel (2023). Artificial Intelligence and Data Science in Food Processing Industry. In: Kamble, S.S., Mor, R.S., Belhadi, A. (eds) Digital Transformation and Industry 4.0 for Sustainable Supply Chain Performance. EAI/Springer Innovations in Communication and Computing. Springer, Cham. https://doi.org/10.1007/978-3-031-19711-6_11
2. Twinkle Moolchandani, Sarika Yadav, Vijay Kumar Gahlawat (2022). Revamping the corporate business models amid COVID-19: A way forward. System Reboot: The life After COVID, edited book, chapter 23, pp 163-194. ISBN: 978-81-954790-5-4.
3. Rahul, K., Banyal, R.K., Kumar, V., Hooda, D. (2022). Cloud Computing: Technological Innovations in the Food Industry. In: Mor, R.S., Kamble, S.S., Sangwan, K.S. (eds) Operations and Supply Chain Management in the Food Industry. Lecture Notes in Management and Industrial Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-16-5555-5_10.
4. Rahul K., Banyal R.K., Goswami P., Kumar V. (2020) Machine Learning Algorithms for Big Data Analytics. In: Singh V., Asari V., Kumar S., Patel R. (eds) Computational Methods and

Data Engineering. Advances in Intelligent Systems and Computing, vol 1227. Springer, Singapore. https://doi.org/10.1007/978-981-15-6876-3_27

5. Priyanka Roy, Intelli Kaur, Simranjeet Singh and Vijay Kumar (2019). Beneficial microbes as an alternative of food flavour ingredients for achieving the sustainability, is published in Microbial Biotechnology: Basic research and applications (ISBN 978-981-15-2817-0) (Book Chapter-4) Springer Publisher (ULR: <https://www.springer.com/gp/book/9789811528163>).
6. Indra and Vijay Kumar (2005). A two-state queueing model with intermittent available server and departures in batches of variable size, is published in Vision 2020: the Strategic Role of Operational Research, Allied publishers, pp.222-232, 2005. Allied Publishers Pvt. Ltd.. (ISBN: 81-8424-108-9) (Edited Book Chapter – OPSERARCH)

3.3 Books

1. Fermentation of Gooseberry Juice and Analysis of its Physico-Chemical and Functional Properties” published by Blue Rose Publishers, May 2018 (ISBN: 978-93-87923-97-3).
2. Two-State bulk queueing models with multiple vacations” published by LAMBERT Academic Publishing GmbH & Co. KG, 2011-12 (ISBN: 978-3-8443-8733-9).

3.4 Conference Proceedings

1. Vijay Kumar, Vijay Dahiya and Kumar Rahul (2014). Transient Solution of a Two-State Multiple Vacation Queueing Model with Arrivals and Departures in Batches of Variable Size, published in proceedings of International Conference on Emerging Trends in Computational and Applied Mathematics (ICCAM-2014), pp. 267-271, June 2014. (ISBN: 978-93-81212-76-9).
2. Indra and Vijay Kumar (2005). A two-state multiple vacation queueing model with departures in batches of variable size, is published in the proceedings of the National Conference on Applications of Mathematics in Engineering & Technology & 7th Annual Conference of Indian Society of Information Theory & Application, pp.141-145, 2005.
3. Indra and Vijay Kumar (2005). A two-state multiple vacation queueing model with intermittent available server and departures in batches of variable size, published in CD Proceedings: International Conference on Operations Research Applications to Infrastructure Development in conjunction with 2005 Annual Convention of ORSI (ICORAID-2005-ORSI), Bangalore, India, December 27-29, 2005