

Curriculum Vitae

Name: Dr. Swapnil Ganesh Jaiswal

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Date of Birth: 21/07/1987



Academic Credentials

Degree	Specialization	Institution	University	Year	%	Class
PhD	Food Process Engineering	IIT Delhi	IIT Delhi	2016	-	-
M. Tech	Chemical Technology (Oil Technology)	LIT Nagpur	RTMNU Nagpur	2011	67.70	First
B. Tech	Food Science	VDCFT Amravati	Dr. PDKV Akola	2009	83.40	First

NET/SET

Qualified Maharashtra State Eligibility Test (M-SET) Examination-2024 in the stream of Home Science

M. Tech. Project: Preparation and analysis of some eco-friendly industrial products from vegetable oils.

Ph. D. Research: Studies on natural antioxidants for edible oil preservation.

Key Research Areas:

Advanced extraction techniques
Natural antioxidants
Physicochemical properties of food
Analysis of oils and fats
Shelf-life study of food

Experience

Sr. No.	Organization	Post	From to	No. of Years
1	MIT Aurangabad	Assistant Professor	October, 2020 to till date	04 Y 06 M
2	University of Saskatchewan, Canada	Visiting Post-Doctoral Student	September 2018 to August 2019	01 Y
3	IIT Delhi	Post-Doctoral Research Associate	May 2017 to August 2018	01 Y 04 M

Membership of Professional Bodies

Life Member

- Oil Technologists Association of India (L-139)
- The Indian Science Congress Association (L27550)
- Indian Society of Technical Education (LM115822)
- Association of Food Scientists Association of India (AFST/LM/4-2018/DEL/1932)
- The Institute of Engineers - M-1798515

Computer/Software Proficiency

- MS office (Excel, Word, Power point)
- SPSS (Statistical Analysis)

Portfolio handled

1. IIC Convener (Institute Level)
2. MIT Newsletter Committee Member (Institute Level)
3. Department Exam Coordinator (PG Level)
4. NAAC Committee Member (Institute Level)
5. Department PG Admission Coordinator
6. Department NAAC/NBA Coordinator
7. PG Students Guide/Mentor

Courses Taught

Food Plant Equipment, Innovation and Entrepreneurship, Seed Processing Technology, Advances in Dairy Processing, Advances in Analytical Techniques, International Food Legislation and Standards, Microbiology and Chemistry of Food, Advances in Food Packaging Technology, Advances in Food Processing Technology, Food Quality Control, Food Microbiology and Biochemistry, Food Handling and Packaging, Utilization of Food Industry Waste, Food from Animal Sources, Food Analysis Lab., Analytical Techniques Lab., Food Microbiology and Enzymology Lab., Seminar-I/II, Dissertation Part –I/II

Syllabus Design

MSBTE Syllabus Design for following subjects

Program	Subject/year	Post
Diploma in Agricultural Engineering	Agriculture Process Engineering (Second Year, Third Semester) 2022	Subject Expert
	Post-harvest Technology (Second Year, Fourth Semester) 2022	
	Seed Process Engineering (Third Year, Fifth Semester) 2024	

PG Students Guided

Sr. No.	Name of student	Research Title	Status
01	Ms. Ankita Sarkate	Enhancing Nutritional Value of gummies using Moringa & corn Silk extracts	Completed
02	Ms. Riya Shahare	Quality evaluation of the preparation of sesame spread with the incorporation of chicory roots and chia seeds	Completed
03	Ms. Ashwini Gaikwad	Preparation of jelly based value added product enrich with potato peel & apple peel	Completed
04	Ms Shradha Patil	Development of gluten free low alcoholic beverages from buckwheat and foxtail millet	Completed
05	Ms. Prachi Deshmukh	Development of herbal tea powder from <i>Cassia tora</i> Linn. Seeds with value addition of <i>Withania coagulans</i> and Gooseberry	Completed
06	Ms. Mariya Khatoon	Preparation of novel food product based on spirulina (<i>Arthrospira plantensis</i>)	Completed
07	Mr. Akash Wagh	Lemon grass (<i>Cymbopogon citrates</i>) oil: physicochemical analysis and value addition in poultry chicken for shelf life enhancement (2019-2021)	Completed
08	Mr. Rushikesh Jadhavar	Formulation and development of weaning food for infant (2019-2021)	Completed

Seminar/Workshop/	Industrial	Training/	STTP/FDP/CEP/Conference	Attended
Conferences attended:				

Certificate Courses

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| 2024 | Hands on training in Life Cycle Assessment using Open LCA organized by Department of Biotechnology Ramiah Institute of Technology Bengaluru (25 January) |
| 2024 | One Week Faculty Development Program on Emerging Concepts in HVAC&R organized by ISHRAE and KIIT Bhubaneswar (8-15 July) |
| 2024 | One Month International Agriculture Certificate Course Cum Training Program on “Prime Minister and Ministry of Agriculture and Farmers Welfare Sponsored Agriculture Scheme and Indian Agriculture Vision-2050” (1-30 April) |
| 2024 | Online Short-Term Course on “NEP2020 Orientation and Sensitization” Program under MM- TTP organised by UGC-MMTTC, Gujarat University Ahmedabad |
| 2022 | Three Day Training Organized by A2Z EduLearning Hub (11-13 May) |
| | 1. Handling Plagiarism and References Management using Mendeley Certificate number – PLG25M38 |
| 2022 | Two Day Virtual Training Program Organized by AFSTI (10-11 October) |
| | 2. Statistical Methods in Food Processing |
| 2021 | One Week AICTE-ISTE Orientation Program on “Scope of IOT Applications in Automotive and Agricultural Industry (Phase-II)” organized by GCOEARA-ISTE, Awasari, Pune (22-27 March) |
| 2021 | One Week FDP on “Inculcating Universal Human Values in Technical Education” organized by AICTE New Delhi (14-18 June 2021) |
| 2021 | Three Day Workshop Organized by A2Z EduLearning Hub (5-7 November) |
| | 3. Basic Statistical DataAnalysis Using SPSS |
| | Certificate number – SPD084N |
| 2020 | Publons Academy Peer Reviewer Certificate Course (12 August) |
| | 1. Certified Publons Academy Peer Reviewer |
| | 2. Peer Reviewer for journal Food Research |
| 2020 | Two Days Training (27-28 January) |
| | Internal auditing of FSSC 22000:2018 ver. 5.0 |
| | Certificate number – SFS/TRG/28012020/06 |
| | One Day Training (29 January) |
| | FoSTaC Advanced Manufacturing - Level 2 |
| | Certificate number - AMA2031226331 |
| 2020 | Online Training Certificate Course (Organized by Food Standard Agency UK) |
| | 3. The Vacuum packing and modified atmospheric packing of food |
| | 4. Food Allergy |
| 2017 | One Week Short Term Training Programme on “Research Methodology and its Applications” Government Polytechnic Amravati, Maharashtra (9-13 January) |
| 2014 | “Workshop on SEM & EDX” at SEM central facility Indian Institute of Technology Delhi (12-13 September) |

Conferences

Overseas International Conferences

1. Jaiswal S. & Naik S.N. (2014). Extraction of natural antioxidant from spices to increase the shelf life of vegetable oils. 12th Euro. Fed. Lipid Congress, Montpellier (France). 232.
2. Jaiswal S.G. & Naik S.N. (2015). Supercritical CO₂ extraction of natural antioxidants from ginger (*Zingiber officinale*). Biologically Active Compounds in Food. Lodz (Poland).
3. Naik S.N., Jaiswal S.G. & Rout P.K. (2016). Bio refinery of spices and aromatic plants. 14th ISBBB Conference. May 31 to June 3, University of Guelph (Canada).
4. Jaiswal S.G. & Naik S.N. (2017). Green extraction and stability study of antioxidant compounds from spice *Zingiber officinale* Rhizome: A contribution to sustainable food system. 4th ICOAF, August 24-25, Colombo (Sri Lanka).
5. Sahu S.N., Jaiswal S.G., Sahu J.K., Naik S.N., Baitharu I. & Kariali E. (2017). Value addition options for non-timber based forest products towards livelihood improvement in tribals: An Indian prospective. 4th ICOAF, August 24-25, Colombo (Sri Lanka).

Indian International Conferences

1. Jaiswal S. & Naik S.N. (2012). Value added products from Jamun (*Syzygium cumini*), International conference and Exhibition on Food Processing and Technology, Hyderabad (India). OMICS Publishing Group.
2. Jaiswal S.G., Karadbhaje V.Y., Kulkarni A.S. & Naik S.N. (2013). Studies on novel eco-friendly products based on sorbitan esters from microwave induced reactors. 68th Annual Convention of OTAI & International Conference on Emerging Trends in Oleo chemicals and Lipids, IICT Hyderabad (India). 60.
3. Jaiswal S., Patel M. & Naik S.N. (2014). Enhancement of oxidative stability of vegetable oils by using spice extract. 69th Annual Convention & International Conference on Sustainable Technologies and Futuristic Trends: Oilseeds- Oils Processing and Surfactants, Agra (India). 62.
4. Patel M., Jaiswal S., Naik M. & Naik S.N. (2014). *Moringa oleifera*: A potential source of nutrition and edible oil. 69th Annual Convention & International Conference on Sustainable Technologies and Futuristic Trends: Oilseeds- Oils Processing and Surfactants, Agra (India). 62.

5. Jaiswal S.G., Saxena D.K. & Naik S.N. (2015). Development of green processes for extraction of natural antioxidants. 68th Annual Session of Indian Institute of Chemical Engineers 27-30 December, IIT Guwahati (India).

National conferences

1. Jaiswal S.G. & Naik S.N. (2013). Extraction of natural antioxidant from spices. OPEN HOUSE, IITD
2. Jaiswal S.G., Patel M. & Naik S.N. (2014). Rice bran oil distillate as a source of bio-actives for enhancement of oxidative stability of lipid based foods. Symposium on Recent Advances in Biotechnology for Food and Fuel (TERI), New Delhi (India).
3. Patel M., Jaiswal S.G. & Naik S.N. (2014). Exploring Non Timber Forest Products for Nutraceuticals. Symposium on Recent Advances in Biotechnology for Food and Fuel (TERI), New Delhi (India).
4. Naik M.K., Patel M., Jaiswal S.G., Mohanty S. & Naik S.N. (2015). Process optimization for castor based monoglyceroids preparation and purification by molecular distillation. Second Symposium on Advances in Polymers, IIT Guwahati.
5. Jaiswal S.G. & Naik S.N. (2015). Khadya Tel kisanrakshan me prakrutik antioxidants kibhumika. Hindi Workshop for Research Scholars, IIT Delhi.
6. Naik S.N., Prakash K. & Jaiswal S.G. (2016). Development of functional products from rice bran and RBO distillate. 1st Biomass to Bio value Summit organised by Center of Innovative and Applied Bioprocessing, Mohali, Punjab.

Invited talks delivered

- Delivered Expert Talk on “Opportunities in ginger processing sectors” in the training program of “Farmers produce company” organized by Deendayal Research Institute Krishi Vigyan Kendra, Digholamba, Ambejogai Beed. (March 2023, MIT Aurangabad)
- Delivered Expert Lecture in Short Term Training Programme on “Process Design and Intensification: Fundamentals to Applications”. (December 2016, UDCT Jalgaon).

List of Research Publications

Papers in National/ International Journal

- Kumar A., Bisht A., Maqsood S., Amjad S., Baghel S., Jaiswal S.G., Wei S. (2025). The role of micro-biome engineering in enhancing food safety and quality. *Biotechnology Notes*, 6, 67-78.
- Bisht A., Sahu S.C., Kumar A., Maqsood S., Barwant M.M., Jaiswal S.G. (2025). Recent advances in conventional and innovative extraction techniques for recovery of high-added value compounds for food additives and nutraceuticals. *Food Physics*.
- Kumar A., Singh U., Jaiswal S.G., Dave J., Wei S., Hailu G.G. (2024). Recent trends in the encapsulation of functional lipids: Comprehensive review. *Sustainable Food Technology*.
- Alagdeve V., Raval D.P., Koley S., Jaiswal S.G., Mukherjee D. (2024). Analysis of spectrum detection using fusion rule in cognitive radio network. *African Journal of Biological Sciences*, 6(12), 4794-4798.
- Khan J.A., Bornare D.T., Jaiswal S.G. (2024). Review on extraction of melanoidins from coffee waste and value addition in food. *Journal of Current Research in Food Science*, 5(1), 157-161.
- Abdul G., Bornare D.T., Jaiswal S.G. (2024). Review on development of idli pre-mix by incorporation of black cumin seeds (Kalonji Seeds). *Journal of Current Research in Food Science*, 5(1), 162-165.
- Shaikh M.A., Bornare D.T., Jaiswal S.G. (2024). Review on development of texture and nutrients of ice cream by utilization of eggshell or waste. *Journal of Current Research in Food Science*, 5(1), 103-107.
- Jadhavar R.S., Jaiswal S.G. & Bornare D.T. (2022). Development of weaning food premixes for infants based on ragi, green gram and rice. *International Journal of Food and Nutritional Sciences*, 11(6), 96-104. doi: 10.4103/ijfans_173_22.

- Khatoon M., Jaiswal S.G. and Bornare D.T. (2022). Spirulina platensis: An excellent protein source for food supplementation. International Journal of Scientific Research in Engineering and Management, 6(8), 1-15.
- Jaiswal S.G. & Naik S.N. (2021). Turmeric oil: Composition, extraction, potential health benefits and other useful applications. Avicenna Journal of Medical Biochemistry, 9(2), 93-106.doi: 10.34172/ajmb.2021.xx.
- Wagh A.M., Jaiswal S.G. & Bornare D.T. (2021). A review: Extraction of essential oil from lemon grass as a preservative for animal products. The Pharma Innovation Journal, 10(10), 1562-1567.
- Jadhavar R.S. Jaiswal S.G. & Bornare D.T. (2021). A review: Formulation and development of weaning food for infant. International Journal of Food Science and Nutrition, 6(4), 134-137.
- Jaiswal S.G. & Naik S.N. (2018). Contribution of agricultural produce spice Zingiber officinale to sustainable food system: green extraction and stability study of antioxidant compounds. Open Agriculture, 3, 326-338.
- Jaiswal S.G., Dole B.R., Satpathy S.K. & Naik S.N. (2017). Physical attributes and modelling of trans-Himalayan sea-buckthorn berries. Current Research in Nutrition and Food Science Journal, 5(3), 391-397.
- Jaiswal S.G., Patel M., Saxena D.K. & Naik S.N. (2017). Comparative effect of extraction solvent on the antioxidant activity of selected leafy vegetables. Journal of Horticultural Research, 25(2), 75-80.
- Jaiswal S.G. & Naik S.N. (2017). Pressurized Liquid Extraction of Antioxidant Compounds from Green Tea. American Journal of Food Technology, 12(6), 358-366.
- Patel M., Jaiswal S.G., Naik B., Naik M., Saxena D. & Naik S.N. (2016). Development of antioxidant rich beverage from Mahua (Madhuca indica) and Amla (Emblica officinalis). Journal of Scientific and Industrial Research, 75(1), 35-39.
- Jaiswal S.G. & Naik S.N. (2015). Antioxidant properties and stability study of γ -oryzanol separated from rice bran oil distillate. Journal of Lipid Science and Technology, 47(2), 48-53.
- Jaiswal S.G., Patel M. & Naik S.N. (2015). Physicochemical properties of Jamun (*Syzygium cumini*) jam and comparative antioxidant study with other fruit jams. Indian Journal of Natural Product Resources, 6(1), 9-15.

- Jaiswal S.G., Pradhan S., Patel M., Naik M. & Naik S.N. (2015). Rice bran oil distillate, a choice for γ -oryzanol: separation and oxidative stability study. *Journal of Food Research*, 4(2), 36-43.
- Sahu S.N., Jaiswal S.G. & Naik S.N. (2015). Physico-chemical, thermal and oxidative properties of wild chironji (*Buchanania lanzan* Spreng.) kernel oil. *Journal of Lipid Science and Technology*, 47(1), 3-9.
- Jaiswal S.G., Patel M., Saxena D. & Naik S.N., (2014). Antioxidant Properties of Piper Betel (L) Leaf Extracts from Six different Geographical domain of India. *Journal of Bioresource Engineering and Technology*, 2(2), 12-20.
- Jaiswal S. & Naik S.N. (2014). Lipid based antioxidants: An overview. *Lipid Universe*, 1(4), 9-12.

Books/Book Chapters

- Jaiswal S.G. & Naik S.N. (2021). Extraction of natural antioxidants for edible oil preservation, *LAP Lambert Academic Publishing*, ISBN13: 978-620-4-20546-5.
- Jaiswal S.G. & Naik S.N. (2024). Review on supercritical carbon Dioxide Extraction of Medicinal Natural Products. In Editors R.Y. Qassim (Ed.), *Contemporary Perspective on Science, Technology and Research*. B.P. International, pp. 160-184, DOI: 10.9734/bpi/cpstr/v6/8975A. P-ISBN978-81-970867-9-3 E-ISBN 978-81-970867-5-5.
- Siddique M.M., Patil C., Jaiswal S., Patel A.M. (2024). Educational Research Methods – NEP 2020 Perspectives. A2Z Edu Learning Hub LLP. ISBN 978-81-979349-0-2.

MOOC Certification

Sr. No.	Course Name	Duration (in Weeks)	Credits	Marks (Out of 100)	Performance
1	Food Science and Processing	12	04	85	Completed
2	Food Microbiology and Food Safety	15	04	62	Completed
3	Roadmap for Patent Creation	08	02	75	Completed
4	Dairy & Food Process & Product Technology	12	04	65	Completed
5	Accreditation & Outcome Based Learning	08	02	58	Completed
6	NBA Accreditation & Teaching & Learning in Engineering	12	03	66	Completed
7	Natural Resource Management	12	03	50	Completed

8	Sustainable Engineering Concepts & Life Cycle Analysis	08	02	60	Completed
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Awards, Achievements and Recognition

- 2012 - 2014: Junior Research Fellowship (JRF): Project funded by Ministry of Food Processing Industries (MOFPI), Govt. of India.
- 2014 - 2015: Senior Research Fellowship (SRF): Industrial Research and Development Unit, IRD-IITD.
- January 2016 - June 2016: Senior Research Fellowship (SRF): Ministry of Human Resource and Development (MHRD), Govt. of India.
- 2013: 12th Euro. Fed. Lipid Congress, Montpellier (France): Supported by “The International Travel Support Scheme”, IRD-IITD.
- 2015: Biologically Active Compounds in Food International Conference, Lodz (Poland): Supported by DBT funded Project, Govt. of India.
- 2017: CSIR-RA Fellowship for Post-Doctoral Studies has been awarded by Council of Scientific and Industrial Research, Govt. of India. (Grant No. 09/086(1268)/2017-EMR-D).
- 2018: SRSF Post-Doctoral Fellowship has been awarded by Shastri Indo-Canadian Institute (SICI) for Post -Doctoral research work at University of Saskatchewan, Saskatoon, Canada
- Actively participated and contributed as organizing committee member in the international conference “IGC 2024” organized by Indian Geotechnical Society and MIT Chhatrapati Sambhajinagar.
- Teaching Assistant in RDL726 (Herbal, Medicinal and Aromatic products and actively conducted whole practical's of RDL 726 Lab at IITD. (2012-2015).
- Student co-ordinator from Centre for Rural Development and Technology in TRYST, IITD event (2013).
- Student co-ordinator from Centre for Rural Development and Technology for OPEN HOUSE, IITD event (2012).
- 3rd Position in Oil Technology Department at Nagpur University level (2009).
- 1st Prize in “Food Tech 2007” cultural event of Food Technology College (2007)
- First grade in the exam of “Vidarbha Sahitya Sangh: Pariksha Samitee, Nagpur (M.S.) (2003)

Date: 12/04/2025

Place: Chhatrapati Sambhajinagar

