

DR. RUPALI DHARA MITRA (Ph.D, PDF)

Assistant Professor,
Department of Food and Nutrition
School of Allied Health Sciences
Swami Vivekananda University
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PRESENT STATUS

March 2022 – till date

Assistant Professor

Working as an Assistant Professor in the department of Food and Nutrition, Swami Vivekananda University, Barrackpore, West Bengal.

Subjects Taught

Nutrition, Biochemistry, Dietetics, Biostat and allied subjects in PG and UG level

RESEARCH INTEREST

Nutraceuticals, Food product development, Food product analysis, Chromatography, Biostatistics, Structured lipid, Biopolymer, Biofuel (biodiesel) etc.

Research Guide

Acting as a Ph.D guide for two Ph.D scholars
Dissertation conducted for 22 Masters students.

ACADEMIC EXPERIENCE

Assistant Professor

March 2022-Till date

Working as an assistant Professor in the department of Food and Nutrition, Swami Vivekananda University, Barrackpore, West Bengal

Guest Lecturer

Nov 2018 – Feb 2022

Worked as a guest Lecturer (Post- graduate section) in the department of Food and Nutrition, University of Calcutta, West Bengal.

GCMS Lab in-charge

May-2016-Dec 2017

Institute of Chemical Technology, Deptt. of food engineering and technology, Mumbai

Analytical Scientist

Aug-2015-Dec-2015

Firmenich Aromatic India Private Ltd.

Post-Doctoral Fellow

Apr 2012 - Apr2015

Institute of Chemical Technology, Deptt. of food engineering and technology, Mumbai

Worked as a post-doctoral fellow in a UGC sponsored **Kothari postdoctoral fellowship** project entitled 'Phytosterol enriched diacylglycerol and their stability in Food processing', under mentorship of prof. Rekha S.Singhal

Project Fellow

Jan 2006 – Dec2010

University of Calcutta, Dept. of Chemical Technology

- Completed **Ph.D from University of Calcutta**. Presented thesis on '**Production and Nutritional Evaluation of Vegetableoil-basedNutraceuticals**'
- Carried out **U.G.C. sponsored** research project entitled "**Production of structured lipids and nutraceuticals from natural oil(s) and other lipid materials by Biotransformation process**",forPh.D under the supervision of Dr. Mahua Ghosh

Jan 2005 – Dec 2005

Research Fellow

University of Calcutta, Dept. of Home Science

- Conducted research on "Studies on effect of wheat grass juice (*triticumastevum*) in transfusion dependent β and E β thalassemia"

INDUSTRY EXPERIENCE

Analytical Scientist

Aug-2015-Dec-2015

Firmenich Aromatic India Private Ltd.

JOURNAL REVIEWER

- **Journal of Food Science & Technology**
 - **Acta scientific Nutritional Health (Board Member)**
-

Journal Publications

1. **Dhara R**, Bhattacharyya DK, Ghosh M. (2010) Analysis of sterol and other components present in unsaponifiable matters of mahua, sal and mango kernel oil. *Journal of Oleo Science*, 59(4):169-76. doi: 10.5650/jos.59.169. PMID: 20299763.
2. **Dhara R**, Dhar P, Ghosh M. (2012) Dietary effects of pure and diacylglycerol-rich rice bran oil on growth pattern and lipid profile of rats. *Journal of Oleo Science*. 61(7):369-75. doi:

10.5650/jos.61.369. PMID: 22790167

3. **Dhara R**, Dhar P, Ghosh M. (2011) Dietary effects of diacylglycerol rich mustard oil on lipid profile of normocholesterolemic and hypercholesterolemic rats. *Journal of Food Science and Technology*. Aug; 50(4):678-86. doi: 10.1007/s13197-011-0388-y. Epub 2011 May 11. PMID: 24425969; PMCID: PMC3671051
4. **Dhara R**, Singhal RS. (2014) Process optimization of enzyme catalyzed production of dietary diacylglycerol (DAG) using TLIM as biocatalyst. *Journal of Oleo Science*. 63(2):169-76. doi: 10.5650/jos.ess13159. PMID: 24500104.
5. Biswas A., Pal S, **Mitra D. R.** (2024). A Review on- Preparation of Bioplastics from agri-waste. *Bioscan*, 19(2), 9-12. DOI:<https://doi.org/10.63001/tbs.2024.v19.i02.S1>.
6. Bhattacharyjee S., Das S, Ghosh S., Maity D., Saha P., Roy S., **Mitra D. R.** (2023) Regulation of Uncontrolled Cell Growth (cancer) by Curcumin and Piperine- A Review. *Journal of Surveys of Fisheries Sciences*, 10 (1S) 6104-6110. <https://doi.org/10.53555/sfs.v10i1S.2114>
7. Dutta S, **Mitra D. R.** (2023). Applications of Diacylglycerol (dag) rich Microencapsulated Vitamin-c in Food Processing -A Review. *Journal of Advanced Zoology*, 44(S6), 2006–2011. <https://doi.org/10.17762/jaz.v44iS6.2687>
8. Mondal T, Chitra S, **Mitra D. R.** (2023). Investigating the Comparative Antioxidant Partitioning in Fried Oils and Fried Potatoes: A Scientific Evaluation. *Journal of Advanced Zoology*, 44(S6), 1999–2005. <https://doi.org/10.17762/jaz.v44iS6.2685>
9. Sen S, Saha D , **Mitra D. R.** (2023). Exploring the Scientific Benefits of Phytosterol Enriched Soya-butter- A Comprehensive Review. *Journal of Advanced Zoology*, 44(S6), 1992–1998. <https://doi.org/10.17762/jaz.v44iS6.2684>
10. Bhattacharjee B, Nag M S, Bhattacharjee A, Singh K, Roychowdhury S, Roy A, Sarkar S, Raza M A, Khaita J, Dutta S, Bhowmick S, **Mitra D. R.** (2023). Association Of Handgrip Strength, Body Mass Index, Waist Circumference And Depression Scale Among Adults: A Hospital Based Cross-Sectional Observational Study. *Journal of Advanced Zoology*, 44(S5), 2630–2635. <https://doi.org/10.53555/jaz.v44iS5.3297>
11. Ruj M, Biswas S, **Mitra D. R.** (2023). Phytosterol (ps) Enriched Nutella Spread From Yam Bean Milk -A Review. *Journal of Advanced Zoology*, 44(S6), 1986–1991. <https://doi.org/10.17762/jaz.v44iS6.2683>.
12. Shabnom M, Datta A, **Mitra D. R.** (2023). Probiotics: A Promising Solution for Irritable Bowel Syndrome (Ibs). *Journal of Advanced Zoology*, 44(S6), 1663–1667. <https://doi.org/10.17762/jaz.v44iS6.2588> 3
13. Hait R, Das A, **Mitra D. R.** (2023). Exploring The Effect of Wheat Grass Juice on Thalassaemia: A Comprehensive Review. *Journal of Advanced Zoology*, 44(S6), 1636–1639 <https://doi.org/10.17762/jaz.v44iS6.2583>
14. Ash S, Saha P, **Mitra D. R.** (2023). Comparative Nutritional Analysis Of Sweet Yam Bean (Jicama) Milk With Soya Milk -- A Review. *Journal of Advanced Zoology*, 44(S5), 2617–2623. <https://doi.org/10.53555/jaz.v44iS5.3293>

15. Ghosh, B Bhowmik I, Dey S, **Mitra D. R.** (2023). A Review On Phytosterol (Ps) Enriched Mayonnaise. *Journal of Advanced Zoology*, 44(S5), 2624–2629. <https://doi.org/10.53555/jaz.v44iS5.3295>
16. Shabnom M, **Mitra D. R.** (2023). Prevalence Of Substance Abuse Among Street Children In West Bengal, India. *Journal of Advanced Zoology*, 44(S5), 2611–2616. <https://doi.org/10.53555/jaz.v44iS5.3291>
17. Ghosh R.P, Saha D, Chowdhury S, **Mitra. D. R.** (2023). Waste To Wonder: Production Of Bio-Diesel From Agri-Waste- A Comprehensive Review. *Journal of Advanced Zoology*, 44(S5), 2551–2556. <https://doi.org/10.53555/jaz.v44iS5.3278>
18. **Dhara R**, Dhar P, Ghosh M. (2011) The role of DAG rich oils in controlling plasma leptin level, a potent regular of obesity. *Journal of lipid Science and Technology*, vol 44(1) 534-541.
19. **R. Dhara**, M. Ghosh (2009) Lipase Catalyzed Synthesis of Diacylglycerol Rich Oil from Mustard oil (Brassica juncea). *Socio-Economic Development Challenges Before Women Scientist, Technologists & Engineers*, Indian Institute of Technology, Rourkela., 173-178.
20. Sultana S., **Mitra D Rupali**, Gawal J, Singh S. (2021) Impact of Exozymes serving as a tool of nano-drug delivery in neurotherapeutic anti-alzheimers. *Samriddhi; A Journal of Physical Sciences, Engineering and Technology*.13, 7-9.
21. **Dhara R**, Dhar P, Ghosh M. (2009) Effect of short term ingestion of diacylglycerol (DAG) rich mustard oil on hypercholesterolemic rats. *Annals of Nutrition and Metabolism*, vol 55, 449-450.
22. Sengupta P, Bandyopadhyay K, Bhattacharjee A, **Mitra D R**, Koley S, Bhuvanewari M (2024) Evaluating The Role Of Low Carbohydrate Diets In Polycystic Ovarian Disease Management. *African Journal of Biological Sciences*. 6(14),5374-5378.
23. Prantika Sengupta, Kakali Bandyopadhyay, Poulomi Mistry, **Rupali Dhara Mitra.** (2024). A Review on Adolescent Obesity and PCOD: Causes, Symptoms and Remedial Measures. *Acta Scientific Nutritional Health*. 8(10) 69-73.
24. Saheli Dutta, **Rupali Dhara Mitra.** Effects of walnut consumption on brain health: A review. *J Curr Res Food Sci* 2025;6(1):25-27.
25. Poulomi Mistry, **Rupali Dhara Mitra.** Applications of shea butter in new food product formulations. *Int J Home Sci* 2025;11(1):05-08.
26. Juhi Das, Moumita Dev, **Rupali Dhara Mitra.** A comprehensive study on muscle paralysis linked with botulism disease. *Int. J. Biol. Sci.* 2025;7(1):75-82
27. Sritama Banerjee, **Rupali Dhara Mitra.** Diabetic jam prepared from beetroot enriched with flaxseed. *Int J Adv Acad Stud* 2025;7(1):01-05.
28. Priya Rani Ghosh and **Rupali Dhara Mitra.** The role of Caffeine in the regulation of obesity: Mechanism and implications. *Int. J. Biol. Sci.* 2025;7(1):83-89.

Book Chapter

1. **Rupali. Dhara**, M. Ghosh. Lipase Catalyzed Synthesis of Diacylglycerol Rich Oil from Mustard oil (*Brassica juncea*). Socio-Economic Development Challenges Before Women Scientist, Technologists & Engineers, Indian Institute of Technology, Rourkela. 2009, 173-178. Excel India Publisher, New Delhi.
2. **Rupali Dhara Mitra**. Fundamentals of Food Science and beyond, Chapter 7, Food Quality Evaluation, Pg-99-119. Swami Vivekananda University, Barrackpore (Institutional publisher), 1st edition, November, 2023, ISBN: 978-93-6039-536-0.
3. Ishita Bhowmik, **Rupali Dhara Mitra**. A Review on Yam Bean Milk: Application in Production of Phytosterol Enriched Chocolate, Futuristic Trends in Agriculture Engineering & Food Sciences e-ISBN: 978-93-5747-615-7, 2024, IIP Series, Volume 3, Book 9, Part 3, Chapter 1, Page-47-52. Publishers (IIP) Selfpage Developer Pvt LTD.
4. Sadiya Khan, Disha Guchat, Nabonita Ghosh, Sashiya Ali, **Rupali Dhara Mitra**; Exploring the application of lemon seed oil- A comprehensive review, Applied Clinical Nutrition and Food Science- ISBN: 978-93-6233-051-2; 2024, DOI: <https://doi.org/10.62906/bs.book.142>, Chapter 8,Page-77-86, Bright Sky Publication, New Delhi.
5. Srijani Pal, **Rupali Dhara Mitra**; Recent trends and Innovations in Food Science, Food Technology and Nutrition; Anthocyanins and its role in Cancer prevention ,Chapter 5,Page-53-60, Akinik Publication, 2024,169, C-11 Sector-3, Rohini, Delhi, India

Patent

1. **Mitra Dhara. Rupali**, Ghosh R. Priya, Das S., Mondal K Kingshuk, Dubey K Kriti, Singh S., Sarangi K Ashok, Kumar S. Rumila, Basu S., Jaiswal G. Swapnil., Koley S. (2024) A Method for Preparation and Composition of Millet Starch Based Bioplastics. Indian patent Application no.: 202431048156, Date of Filing: 23/06/2024, Date of Publication: 05/07/2024.
2. Maji D Sucheta, Giri A., Biswas Wendrila,Ghati A.,Sarkar S., Sarangi K Ashok, **Mitra Dhara.Rupali.**, Negi, P.N., Pandey P Ramendra, Chang M C., Koley S.(2024). An Enhanced Method of Immobilization of Microbial Alkaline Protease for Industrial Application. Indian patent Application no.: 202431038779, Date of Filing: 17/05/2024, Date of Publication: 31/05/2024.
3. Ashok Kumar Sarangi, Vishal Ahuja, Dr. Sucheta Das Maji, **Dr. Rupali Dhara Mitra**, Suman Bhandary, Dr. Shamba Chatterjee, Dr. Swetnisha, Dr. Atul Kumar Jaiswal, Jayanta Chanda, A Microorganism Formulation and Method for Efficient Plastic Waste Degradation and Sustainable Recycling. Application No.202431091332 A, INDIA, Date of filing :23/11/2024; Date of Publication : 29/11/2024.
4. **Mitra Dhara Rupali**, Poulomi Mistry, Sengupta Prantika, Das Shreyasi, Dubey Kumari Kriti, Mondal Kumar Kingsuk, Mukherjee Papia, Jaiswal Ganesh Swapnil, Sudam Kalyani, Thote Londhe Vitthal Muktanand, Dagaduappa Manmath Sontakke, Maske Vishwanath Sachin, an efficient method and system for preparing nutrient-rich broccoli and cashew nut spread. Indian patent Application no.: .202531001844 A, Date of Filing: :08/01/2025 Date of Publication: 17/01/2025

Conference Papers

1. **Rupali Dhara, Mahua Ghosh**, Dietary Effects of Diacylglycerol Rich Mustard Oil on Fatty acid Profile of Normocholesterolemic and Hypercholesterolemic Rats, Walkway of Discovery', 8th Nutra India summit organized by MM active March 13-16th, Cuffe Parade,

Mumbai, India, 2013.

2. **Rupali Dhara, Mahua Ghosh**, Studies on Composition of Unsaponifiable matter of Mahua (*Madhuca latifolia*), Sal (*Sorea robusta*) and Mango Kernel (*Magnifera indica*) Fats Using HPTLS technique, 63rd annual convention & National Seminar of OTAI (Eastern Zone) India, Nov 29-30, 2008.
3. **Rupali Dhara, Mahua Ghosh** Lipase Catalized Synthesis of Diacylglycerol Rich Oil from Mustard oil (*Brassica juncea*), National Conference on Socio- Economic Development: Challenges Before Women Scientist, Technologists & Engineers, Indian Institute of Technology, Rourkela, and Feb 13-15, 2009.
4. **Rupai Dhara, Mahua Ghosh, Pubali Dhar** Dietary Effects of Blended Diacylglycerol (DAG) rich oil in Hypercholesterolemic rats, , International Conference on Integrative Physiology: Modern Perspective & Platinum Jubilee Celebration organized by Physiological Society of India, Nov 12-14th, 2010, Science City Convention Centre, Kolkata
5. **Rupali Dhara, Pubali Dhara, Mahua Ghosh**, Effects of DAG rich Mustard Oil on Obesity, , 64th Annual Convention and International Conference on Oils, Fats, Fuels and Surfactants (ICOFFS), 9-11 December 2009; New Delhi, Oil Technologists' Association of India.
6. Sultana S., **Rupali Dhara**, Sudhansu Singh. Role of Engineering Nanomaterials for Early detection of Disease as a Hand Held device for Biomedical Application, ASM International Student Chapter, School of Life Sciences, Manipal Academy of Higher Education - Dubai, UAE, 2nd May, 2021.

PROJECTS

UGC sponsored project entitled '**Phytosterol enriched diacylglycerol and their stability in Food processing**, 2012-2015

ACADEMIC

AWARDS/RECOGNITION

-
- Obtained **Best research paper award** 'for the paper entitled 'Regulation of uncontrolled cell growth (Cancer) by curcumin and piperine- A Review, in International Conference on Technological Innovations in Agriculture, Life Science and Food and Nutrition (ICALF), 27th -28th February, 2023 organized by Swami Vivekananda University, Barrackpore, West Bengal.
 - Conferred **Super Women** title by Indian Medical Association (IMA) on International Women's Day. 2023
 - Won the **R.K.Khanna memorial award** the '**Best research paper award**' for the paper entitled 'The role of DAG-rich oils in controlling plasma leptin level, a potent regulator of obesity' published in Journal of lipid science and technology, vol 44 (1), 2012, 3-9, organised by Oil Technology Association of India.
 - Obtained **Best Poster award in the Poster Walkway of Discovery' at the 8th Nutra India**

summit organized by MM active March 13-16th, Cuffe Parade, Mumbai, India,2013.

- Obtained **Best Presentation award in the International Conference on Integrative Physiology: Modern Perspective & Platinum Jubilee Celebration** organized by Physiological Society of India, Nov 12-14th, Science City Convention Centre, Kolkata, India,2009.

Membership: American oil Chemist Society (AOCS)
OTA-Oil Technologists Association of India

Extra Curricular Activities:

1990-1994-**5th year Diploma**(1stdiv.withdistinction)in **Drawing** from“Sarba Bharatiya Sangeet and Sanskriti Parisad”

Personal Details:

Name : Dr. Rupali Dhara Mitra

Husband's Name : Suman Kumar Mitra

Marrital Status :Married.

Nationality :Indian.

Dateofbirth : 6th June1978

Permanent Address: Tirupati Residency, Flat No. 7, 30, Babupara, PurbaPutiary,
Near YuvaMoitra Club.
Pin – 700 093, West Bengal.

Indianpassport : Number – Z3616712; Valid upto - 12/01/2026

LinguisticAbilities : English, Hindi, Bengali.

References

Name: PROF. D.K.BHATTACHARYYA

Department: BENGAL ENGINEERING AND SCIENCE UNIV.

Designation: EMERITOUS PROFESSOR

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Department: FOOD ENGINEERING AND TECHNOLOGY,INSTITUTE OF CHEMICAL TECHNOLOGY

Designation: DEAN

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Department. UNIV. OF CALCUTTA, DEPARTMENT OF HOME SCIENCE, FOOD AND NUTRITION
DIVISION

Designation: HEAD


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Mobile No: 09433122560.

Declaration:

✓ I hereby declare that all the information provided by me are true and correct to the best of my knowledge and belief.

Date: 22.01.2025.

Place: Kolkata, West Bengal



[Dr. Rupali Dhara Mitra]