

Dr. Jignasha Trikamlal Thumar

Assistant Professor (Microbiology),
Gujarat Education Services- Class 2
Government Science College,
G-Road, Sector-15,
Gandhinagar-382016
Gujarat(INDIA)



Personal Details

Date of Birth: : 27th May, 1979
Marital Status : Married;
Languages known : English, Hindi, Gujarati

Education

Ph.D. in Microbiology from Department of Biosciences, Saurashtra University, Rajkot (March, 2007)

Title of the Thesis: Extracellular enzymes from salt-tolerant alkaliphilic actinomycetes.

M.Sc. (Microbiology) with 69% from Department of Biosciences, Saurashtra University, Rajkot (July-1999- April, 2001)

B.Ed. (Science) with 91% from Saurashtra University, Rajkot (July, 2011-April, 2012)

B.Sc. (Microbiology) with 58.71% from M.V.M. Science and Home science college, Saurashtra University, Rajkot (July-1996- April, 1999)

Teaching Experience (23 years = UG: 16 yrs; PG:07 yrs)

Assistant Professor : Microbiology, Government Science College, Gandhinagar from 24th February, 2014 till date

Assistant Professor & In-charge of PG Programme : Department of Microbiology, Shree M. & N. Virani Science College, Rajkot from 11th July, 2007 to 23rd February, 2014.

Assistant Professor (in UG) : Department of Microbiology, Gyanyagna College of Science and Management, Rajkot from 14th July, 2002 to 10th July, 2007.

Visiting Faculty : Department of Biosciences & Department of Biotechnology, Saurashtra University, Rajkot. (2008-2014)

Research Experience (18 years)

Ph. D. Guideship in Microbiology : **05 Students** are awarded Ph.D. degree

- Recognized Ph.D. guide at Gujarat University, Ahmedabad since 11 September, 2017 (**two students are awarded the degree**).
- Recognized Ph.D. guide at Saurashtra University, Rajkot since 06 May, 2013. (**Three students are awarded the degree**)

Research Projects

Major research Project:

- **Principal Investigator** of a Major research project; Ref: No. BT/Bio-CARE/03/596/2010-11 (Grant sanctioned: Rs. 28.16 lakhs) under Bio-CARE scheme funded by **Department of Biotechnology, Ministry of Science and Technology, Government of India, New Delhi** from January, 2012-February-2014.

Minor research Project

- **Principal Investigator** of a Minor research project; Ref: No. UGC/47-402/08 (Grant sanctioned: Rs. 92,000) funded by **University Grant Commission, Western regional Office, Pune** from January, 18, October, 2008 to 2010.

Special Achievements

- **International Travel Fellowship:**

Awarded **Young Scientist International Travel Fellowship** to attend an “International conference on Extremophiles” at University of Western Cape, Cape Town, South Africa by Department of Science and Technology (Rs. 88,787/- availed) and Department of Biotechnology (Rs. 41,913- Not availed) , Ministry of Science and Technology, Government of India, New Delhi.

- Secured **first position** in Gujarat Public Service Commission, Government of Gujarat recruitment for Assistant Professor in Microbiology, Gujarat Education Services, Class-II.
- **Members of Editorial board of Journal of Advanced research in Bioscience and Biotechnology**

- **Peer Reviewer of the refereed journals:**

- a. Vegetos (Springer)
- b. Current Research in Biotechnology (Elsevier)
- c. Applied Biochemistry and Biotechnology (Springer)
- d. Process Biochemistry (Elsevier)

- **Resource person:**

- ✓ Delivered invited lecture in GSBTM sponsored Crash Workshop organized by Christ College, Rajkot on 12th March, 2024.
- ✓ Shared the expertise **as a judge** in the event of **Oral presentation competition (Microbiology)** in 13th National level science symposium held on 05th February, 2023 at Christ College, Rajkot.
- ✓ Shared the expertise **as a judge** in the event of **Oral presentation competition (Microbiology)** in International level science symposium held on **22-23/1/2022** at Christ College, Rajkot
- ✓ Shared the expertise **as a judge** in the event of **Oral presentation competition (Biotechnology and Biochemistry)** in 11th National level science symposium held on 05th February, 2019 at Christ College, Rajkot.

- ✓ In GSBTM sponsored Crash Workshop organized by Shree M. & N. Virani Science College, Rajkot between 01-08th May, 2013.
- ✓ Delivered **four (04)** invited lectures in the subject of Microbiology for SANDHAN (Knowledge Consortium of Gujarat) Television Lecture Series at BISAG, Gandhinagar.
- ✓ Shared the expertise **as a judge** in the event of **Poster competition (Biotechnology)** in 9th National level science symposium held on 14th February, 2016 at Christ College, Rajkot
- ✓ Shared the expertise **as a judge** in the event of **Poster competition** in National Lecture Workshop on “**Recent Advances in Biology**” organized by Department of Biotechnology, Shree M. & N. Virani Science College, Rajkot on 5-6 March, 2012.
- Completed **Rio+20, India** certification program organized by IARC Education & Outreach division, Mumbai with A (Excellence Grade) in April, 2013.
- Submitted **twenty five (25)** actinomycetes (accession number KF384477 to KF384499), **09 bacterial** (KT600022 - KT600030) 16S rRNA gene sequences and **04 fungal** (KT878484 – KT878487) 18 S rRNA gene sequences to National Centre for Biotechnology Information (NCBI) GenBank, Maryland, USA .

Research Paper Publications

a) Research Papers:

- 1) **Priyanka Sawant and Jignasha Thumar (Corresponding author)** Sensing oxy anodic microbial fuel cell potential of halotolerant protease producer *Priestia megaterium* BorS17B13 belonging to mangrove biota. *Journal of Applied Biology & Biotechnology* Vol. 11(6), pp. 249-254, Nov-Dec, 2023. **ISSN: 2455-7005. Impact Factor: 1.06**
- 2) **Priyanka Sawant and Jignasha Thumar (Corresponding author).** Aerobic Biosensor-A Novel Approach of Microbial Fuel Cell With A Halotolerant *Priestia Megaterium*-BorS17B13. *Bulletin of Environment, Pharmacology and Life Sciences*. Vol 12, September 2023: 204-213. **ISSN 2277-1808.**
- 3) **Priyanka Sawant and Jignasha Thumar (Corresponding author)** Extracellular Protease Production from a Marine, Newly Isolated Halotolerant BorS17B13 from Mangrove-Associated Soil in Western India. *Advances in Bioresearch Adv. Biores.*, Vol 14 (4) July 2023: 141-148. **ISSN 0976-4585. Impact Factor: 0.373**
- 4) Nidhi S Trivedi, **Jignasha Thumar (Corresponding author).** Statistical Optimization for the Production of Antimicrobial Compounds Produced by Mangrove Endophytic *Aspergillus sp.* *Indian Journal of Science and Technology*. June, 2023, 16 (22): 1614-1623. **ISSN: 0974-6846. Impact Factor: 0.162.**
- 5) Nidhi S Trivedi, **Jignasha Thumar (Corresponding author).** Characterization and antibacterial activity of endophytic fungi isolated from *Avicennia marina*. *Vegetos (Springer)*. January, 2023. 36:163–172. **ISSN: 0970-4078. Impact Factor: 1.62.**
- 6) Bhavtosh Kikani, Rajesh Patel, **Jignasha Thumar**, Hitarth Bhatt, Dalip Singh Rathore, Gopi A. Koladiya, Satya P. Singh. Solvent tolerant enzymes in extremophiles: Adaptations and applications. *International Journal of Biological Macromolecules*, May 2023, (238): 124051. **ISSN: 0141-8130. Impact Factor: 8.025.**
- 7) Priyanka Sawant, Kartik Vikani and **Jignasha Thumar (Corresponding author).** Marine-derived Producer Bor S17B13 and its Response to Variations in Salt (NaCl) Concentration and pH in the Growth Medium. *Acta Scientific Pharmaceutical Sciences*. March, 2023, 7(3): 04-10. **ISSN: 2581-5423.**

- 8) Nidhi S. Trivedia and **Jignasha Thumar (Corresponding author)**. Isolation and Identification of an endophytic fungi associated with mangroves of Kutch, Gujarat, India. *European Journal of Molecular & Clinical Medicine*. Volume 09, Issue 07: 9673-9679. ISSN 2515-8260. **Impact Factor: 0.7.**
- 9) Nidhi S. Trivedia and **Jignasha Thumar (Corresponding author)**. MANGROVE ENDOPHYTIC FUNGI: A TREASURE OF BIOACTIVE COMPOUNDS AGAINST INFECTIOUS DISEASES. *ANNALS OF FOREST RESEARCH*. 2002, 65(1): 10908-10937, ISSN: 18448135, 2065244. **Impact Factor: 0.373.**
- 10) Priyanka Sawant and **Jignasha Thumar (Corresponding author)**. Isolation of Marine Microbugs from Mangrove Ecosystem and Screening of Industrially Important Enzymes. *Acta Scientific Microbiology*. July, 2022, 5(7): 35-39. ISSN: 2581-3226.
- 11) Priyanka Sawant and **Jignasha Thumar (Corresponding author)**. Impact of Substrate pH and Enzyme-Substrate Incubation Time on Protease from a New Halo-tolerant Bor S17B13 Found in the Mangroves of Western India. *Acta Scientific Microbiology*. Feb, 2023, 6(3): 35-39. ISSN: 2581-3226.
- 12) Priyanka Sawant and **Jignasha Thumar (Corresponding author)**. AMALGAMATION OF TECHNOLOGIES & SCIENTREPRENEUR PROSPECTIVE OF ELECTROCHEMICALLY ACTIVE HALOPHILIC MICROBUGS - A REVIEW PAPER. *Vidya- A Journal of Gujarat University* Sep, 2021, 17: 128-160. ISSN: ISSN 2321-152.
- 13) Priyanka Sawant and **Jignasha Thumar (Corresponding author)**. MORPHOLOGICAL DOMINANCE OF ISOLATES AT TWO SITES WITH LESS HUMANOID INTERFERENCE IN MAHARASHTRA, INDIVidya- A Journal of Gujarat University. Jan-2023, 02 (01): 53-63. ISSN: ISSN 2321-152.
- 14) Nisha D. Trivedi1 and **Jignasha Thumar (Corresponding author)**. Bioactivity, Chemical Profiling and 16S rRNA-based Phylogeny of Haloalkaliphilic Nocardiosis sp. GhM-HA-6 Isolated from the Gulf of Khambhat, Gujarat, India. *Bioscience Biotechnology Research Communications*, July-2021, 14 (03): 1294-1301. ISSN: 0974-6455.
- 15) Nisha D. Trivedi1 and **Jignasha Thumar (Corresponding author)**. Antimicrobial Metabolites from Halophilic Actinomycete Nocardiosis sp. Al-H10-1 (KF384482) Isolated from Alang, Gulf of Khambhat, India. *International Journal of Current Microbiology and Applied Sciences*. 2021, 10(06): 729-739. ISSN: 2319-7706.
- 16) Riddhi H Rajyaguru, Thirumalaisamy P.P., Kirankumar G. Patel, Jignasha T. Thumar (Corresponding author). Biochemical basis of genotypic and bio-agent induced stem rot resistance in groundnut. *Legume Research- An international journal*. 2017. **40: 929-939**. ISSN: 0250-5371. **Impact Factor: 0.145.**
- 17) Daxa Sakhiya, Jignasha Thumar and Anasuya Lahiry . High quality genomic DNA extraction from Marine diatoms for advance molecular studies. *Life Science Leaflets*. March, 2016, 73: 40-45. ISSN 2277-4297. **Impact Factor 1.22 NAAS:2.69**
- 18) Riddhi H Rajyaguru, **Jignasha T. Thumar** and Thirumalaisamy P.P. Genetic diversity between stem rot resistant and susceptible ground nut genotypes using PCR-RAPD. *International journal of Agricultural science and research*. 2016, 6 (01): 119-124. ISSN: 2250-0057. **Impact Factor (JCC): 4.7987.**
- 19) **Jignasha Thumar** and Bhavin Pethani. Desert actinomycetes as the potential source of new generation of antimicrobial agents: Extraction and partial characterization. *International journal of scientific computing*, 2012, 6: 144-147. **ISSN: 0973-578X.**
- 20) **Jignasha Thumar** and Satya P. Singh. Repression of alkaline protease in salt-tolerant alkaliphilic *Streptomyces clavuligerus* strain Mit-1 under the influence of amino acids in minimal medium. *Biotechnology and Bioprocess Engineering*, 2011, 16(6): 1180-1186. ISSN No. 1226-8372, **Impact Factor: 1.278.**

- 21) **Jignasha T. Thumar**, Kinjal Dhulia and Satya P. Singh. Isolation and partial purification of an antimicrobial agent from halo-tolerant alkaliphilic *Streptomyces aburaviensis* strain Kut-8. *World Journal of Microbiology and Biotechnology*. 2010, 26 (11): 2081-2087. ISSN No. 0959-3993, **Impact Factor: 1.532**.
- 22) **Jignasha Thumar** and Satya P. Singh. Extremophiles, 2008- Meeting report. *Current Science*, 2009, 96 (25): 188-189.
- 23) **Jignasha Thumar** and Satya P. Singh. Organic solvent tolerance of an alkaline protease from salt-tolerant alkaliphilic *Streptomyces clavuligerus* strain Mit-1. *Journal of Industrial Microbiology and Biotechnology*, 2009, 36: 211-218. ISSN No. 11367-5435. **Impact Factor: 2.735**.
- 24) **Jignasha Thumar** and Satya P. Singh. Two - step purification of a highly thermostable alkaline protease from salt-tolerant alkaliphilic *Streptomyces clavuligerus* strain Mit-1. *Journal of Chromatography B*. 2007, 854: 198-203. **ISSN No. 1570-0232, Impact Factor: 2.888**.
- 25) **Jignasha Thumar** and Satya P. Singh. Secretion of an alkaline protease from salt-tolerant and alkaliphilic, *Streptomyces clavuligerus* strain Mit-1. *Brazilian Journal of Microbiology*. 2007, 38:1-9. **ISSN No. 1517-8382, Impact Factor: 0.632**.
- 26) Mehta, V.J., **Thumar J. T.**, and Singh S.P. Production of alkaline protease from an alkaliphilic actinomycete. *Bioresource Technology*. 2006, 97(14):1650-4. **ISSN No. 0960-8524, Impact Factor: 4.980**.
- 27) S.H. Vasavada, **J.T. Thumar** and S. P. Singh. Secretion of a potent antibiotic by salt-tolerant and alkaliphilic actinomycete *Streptomyces sannanensis* strain RJT-1. *Current Science*, 2006, 91 (4): 1393-1397. **Indian Academy of Sciences, Bangaluru. Impact Factor: 0.600**.

b) Books Published

- 1) **Jignasha Thumar**. Thermostable alkaline protease from Haloalkaliphilic Bacteria. by - Lambert Academic Publishing , Germany,. 28th January, 2015. **ISBN No: 978-3-659-682742**.
- 2) **Jignasha Thumar**. “Extracellular Acid Exoglucanase from halophilic fungi” by - Lambert Academic Publishing , Germany, 26th September, 2014. **ISBN No: 978-3-659-61263-3**.
- 3) **Jignasha Thumar**. “Bioactive Compounds from Actinomycetes of The Gulf of Khambhat” by - Lambert Academic Publishing , Germany, 4th August, 2014 **ISBN No: 978-3-659-57990-5**..
- 4) **Jignasha Thumar & Bhavin Pethani**. “Antimicrobial Metabolites of Haloalkaliphilic Actinomycetes” by - Lambert Academic Publishing, Germany, 20th October, 2013. **ISBN No: 978-3-659-48023-2**.

c) Book Chapters Published

- 1) **Jignasha Thumar** and Satya P. Singh. Antimicrobial Potential and Metabolite Profiling of Marine Actinobacteri (Book Chapter), *Actinobacteria: Microbiology to Synthetic Biology*. Springer Nature Singapore Pte Ltd. Editor: Loganathan Karthik 2022. pp 250-264. **ISBN No: 978-981-16-5834-1**.
- 2) S. P. Singh, **J.T. Thumar** , S.D. Gohel. Actinomycetes from marine habitats and their enzymatic potential (Book chapter in “**Marine enzymes for biocatalysis: Sources, biocatalytic characteristics and bioprocesses of marine enzymes**”, edited by Antonio Trincone for Woodhead Publishing, Cambridge, UK, September, 2013, pp 191-214. **ISBN No: 978-1 907568 - 80- 0**.

- 3) Singh, S.P., Raval, V.H., Purohit, M.K., **Thumar, J. T.**, Gohel, S.D., Akbari, V.G. and Rawal, C. M. Haloalkaliphilic bacteria and actinobacteria from the saline habitats: New opportunities for Biocatalysis and Bioremediation. Chapter19 in “**Microorganisms in Environmental Management: Microbes and Environment**”, Springer Publishing, New York, USA, January, 2012, pp 415-249. **ISBN No: 978-94-007-2228-3.**
 - 4) S. P. Singh, **J.T. Thumar** , S.D. Gohel, and M. K. Purohit. Molecular diversity and enzymatic potential of salt-tolerant alkaliphilic actinomycetes (Book chapter), Current research, technology and educational topics in Microbiology and Microbial Technology in A. Mendez Vilas (Ed) by Formatax Research centre, Badajoz, Spain, 2010 pp. 280-286. **ISBN No: 978-84-614-6194-3.**
 - 5) Satya P. Singh and **Jignasha Thumar**. Salt-tolerant Alkaliphilic Actinomycetes and their Biocatalytic Potential (Book Chapter), *Biocatalysis Research Progress* published by Nova Science Publishers, Inc., Hauppauge, New York, USA, 2008. **ISBN No: 978-1-60456-619-2.**
 - 6) **Jignasha Thumar** and Satya P. Singh. Biocatalytic Potential of Haloalkaliphilic Bacteria (Book Chapter), *Biocatalysis Research Progress* published by Nova Science Publishers, Inc., Hauppauge, New York, USA, 2008. **ISBN No: 978-1-60456-619-2.**
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Presentations in Conferences / Seminars/Workshops

(A) Presentations in National/International conferences/seminar/symposia

- 1) Oral Presentation entitled “ANTIMICROBIAL METABOLITES FROM OF HALOPHILIC *Aspergillus sp.* ISOLATED FROM THE GULF OF KHAMBHAT” in 11th National level science symposium held on 03rd February, 2019 at Christ College, Rajkot (**Awarded Second Price**).
- 2) Oral Presentation entitled “ISOLATION AND PURIFICATION OF ANTIMICROBIAL COMPOUNDS FROM HALOALKALIPHILIC *NOCARDIOPSIS SP.* ISOLATED FROM THE GULF OF KHAMBHAT” in National conference and emerging issues in microbiology and pharmaceutical biotechnology held on 15-16 March, 2019 at Department of Microbiology and Biotechnology, Gujarat University, Ahmedabad.
- 3) Oral Presentation entitled “Bioactive metabolites from marine *Nocardiosis sp.* Isolated from the Gulf of Khambhat” in 9th National level science symposium held on 14th February, 2016 at Christ College, Rajkot (**Awarded First Price**).
- 4) Presented a poster entitled “Exploration of the antimicrobial potential of Haloalkaliphilic *Streptomyces spp.* isolated from the great Rann of Kutch” in National seminar on “Recent advances in Biochemical Research” held on 14th February, 2015 at Department of Biochemistry, Saurashtra University, Rajkot.
- 5) Presented a poster entitled “Marine actinomycetes as a potential source of antimicrobial metabolites: A Health Perspective to Sustainable Development” in an International conference on Law, Society and sustainable development: Problems and Prospects held on 17-18 February, 2014. at Nirma University, Ahmadabad.
- 6) Oral Presentation entitled “Diversity and antimicrobial potential of marine actinomycetes isolated from the coastal line of Bhavnagar District, Gujarat” in National level seminar “Scitech Utsav-2014” held on 15-16 February, 2014 at Shree M. & N. Virani Science College, Rajkot. (**Awarded second prize**).
- 7) Oral Presentation entitled “Desert actinomycetes as the potential source of new generation of Antimicrobial agents: Extraction and partial characterization” in International conference on “Innovative Technologies in Engineering “ Sciences-2012 (ITES-2012) held on 22-23 December, 2012 at V.V.P. Engineering college, Rajkot, Gujarat, India.

- 8) Presented a poster entitled “Extraction of antimicrobial metabolites from Halo-tolerant alkaliphilic Actinomycetes Isolated from The Great Rann of Kutch” in 16th National Convention of society of pharmacognosy and International symposium on herbal and traditional medicine held on 9-11th March, 2012 at Department of Pharmaceutical Sciences, Saurashtra University, Rajkot.
- 9) Presented a poster entitled “Diversity and Enzymatic potential of Halo- tolerant and alkaliphilic actinomycetes isolated from Coastal Gujarat in Western India” in Extremophiles, 2008 held on 7-11 September, 2008 at University of Western Cape, Cape Town, South Africa.
- 10) Oral Presentation entitled “Halo-tolerant and alkaliphilic actinomycetes: growth behavior and secretion of extracellular enzymes” in UGC-DSA national conference on Bioresources: Utilization and Conservation held on 17-18 February, 2006 at Department of Biosciences, Saurashtra university, Rajkot.
- 11) Presented a poster entitled “Salt and temperature stress response of an alkaline protease from a salt tolerant-alkaliphilic *Streptomyces clavuligerus* strain Mit-1” in DAE BRNS Life sciences symposium (LSS-2005) on molecular biology of stress response and its Applications held on December-2005 at BARC, Mumbai.
- 12) Presented a poster entitled “Diversity of salt tolerant and alkaliphilic actinomycetes isolated from coastal region of Gujarat” in an International conference on Microbial Diversity held on 16-18, 2005 at University of Delhi South campus, New Delhi.
- 13) Presented a poster entitled “Proteases from Alkaliphilic and Salt Tolerant Actinomycetes” in XVIII Gujarat Science Congress held on 13 March, 2004 at Saurashtra University, Rajkot.
- 14) Oral presentation entitled “Effect of salt and pH on protease secreted by Haloalkaliphilic bacteria isolated from salt industry (Mithapur) and quake affected Bhuj” in National conference on Environmental biology, held on 17-18 October, 2002 at Department of Biosciences, Saurashtra University, Rajkot.

(B) Orientation Programme and Refresher Courses/FDP/STC

Sr. No.	Name of Course	Place	Duration	Sponsoring Agency
1	Orientation Programme	UGC-HRDC, Saurashtra University, Rajkot	06/06/2016 to 03/07/2016	UGC, New Delhi
2	Refresher course –I on” Indian Education system”	UGC-HRDC, Saurashtra University, Rajkot	10/07/2017 to 30/07/2017	UGC, New Delhi
3	Refresher course – II on “The concept of Atmanirbhar Bharat”	UGC-HRDC, Saurashtra University, Rajkot	06/09/2021 to 18/09/2021	UGC, New Delhi
4	Refresher Course – III on “Research Methodology in Basic Sciences”	UGC- HRDC University of Rajasthan, Jaipur	07/11/2022 to 19/11/2022	UGC, New Delhi
5	Online certificate course on IPR	Online i- Hub (A Government of Gujarat Initiative) BY KCG Ahmedabad	06/07/2020 to 14/09/2020	KCG, Ahmedabad
6	UDAYAM E- Content development course	Online KCG Ahmedabad	28/07/2020 to 18/08/2020	KCG, Ahmedabad

		and HRDC Ahmedabad		
7	Online Certificate course on Nurturing Innovation and Startup Ecosystem (NISE)	Online i- Hub (A Government of Gujarat Initiative) BY KCG Ahmedabad	08/09/2020 to 23/10/2020	KCG, Ahmedabad
8	FDP on “Strengthening experimental microbiology for undergraduate study”	Department of Microbiology and Biotechnology, Gujarat University, Ahmedabad	20/07/2022 to 26/07/2022	Gujarat University, Ahmedabad
9	FDP on “Elementary Biostatistics in Biology”	Shree M. & N. Virani Science College, Rajkot	16/01/2012 to 21/01/2012.	Department of Biotechnology, New Delhi
10	FDP on “Bioinformatics	Department of Biotechnology, Shree M. & N. Virani Science College, Rajkot	24/09/2011 to 29/09/2011	Department of Biotechnology, New Delhi
11	FDP on “Training in the use of sophisticated instruments Part I”	Department of Chemistry, Shree M. & N. Virani Science College, Rajkot	24/04/2010 to 26/04/2010	Department of Biotechnology, New Delhi

(C) Workshops

- 1) Staff development programme workshop on the “Effective teaching & Time management” organized by Atmiya Institute of Technology & Science” on 24-26th April, 2010.
- 2) UGC sponsored national level workshop on “Bioinformatics in genetic engineering” organized by Shree M. & N. Virani Science College, Rajkot from 16-17 February, 2009.
- 3) Workshop on “T.Y. B.S.c Microbiology Syllabus framing” organized at Shree M. & N. Virani Science College, Rajkot on 6th October, 2008.
- 4) National workshop on “Nano Technoogy: Opportunities and challenges” organized by Department of Chemistry, Surashtra University, Rajkot on 17th October, 2005.

(C) Conferences/seminar/symposia attended

1. National conference on Microbiomes to Macromolecules: Connecting the dots organized by Department of Microbiology and biotechnology, Gujarat University, Ahmedabad on 22-23 February, 2023.
2. National conference on Recent advances and current trends in Medicinal chemistry and other chemical sciences, organized by Department of chemistry, Saurashtra University, Rajkot on 16-18th March, 2012.
3. 5th National level science symposium organized by Christ college, Rajkot on 18th March, 2012.
4. National seminar on Bioinformatics in Microbial Diversity organized by Department of Microbiology and biotechnology, Gujarat University, Ahmedabad on 4th March, 2012.

5. National Lecture Workshop on **“Recent Advances in Biology”** organized by Department of Biotechnology, Shree M. & N. Virani Science College, Rajkot on 5-6 March, 2012.
6. UGC sponsored one day National level Seminar on Biochemistry: Recent Advances in Molecular Research organized by Department of Biochemistry, Saurashtra University, and Rajkot on 20th February, 2011.
7. Regional conference on **“Microbiial technology for sustainable environment”** held at Department of Microbiology and Biotechnology, University school of sciences, Gujarat University, AHmedabad on 2-3 March, 2009.
8. UGC sponsored National seminar on **“Nanotechnology: Challenges and Opportunities”** held at Shree M. & N. Virani Science College, Rajkot on 28th December, 2009.
9. National Symposium on **“Recent trends in cellular research”** held at Departemnt of Biochemistry, Saurashtra university, Rajkot, India, on 9th March, 2009.
10. UGC sponsored National symposium on **“Global prospective on pharma patents”** held at Department of Pharmaceutical sciences, Saurashtra University, Rajkot, India on 15th March, 2008.
11. Third National level science symposium organized by Christ College, Rajkot on January 06, 2008.
12. UGC sponsored National level seminar on **“Entrepreneurial Challenges in the Aftermath of the WTO”** held at Shree M. & N. Virani Science College, Rajkot on 10th February, 2008.
13. UGC sponsored National level seminar on **“Radiology in Service of Mankind”** held at Yogidham Gurukul, Rajkot on 3rd December, 2006.
14. National symposium on **“Contemporary Developments in Life Sciences”** held at Department of Life Sciences, Hemchandracharya North Gujarat University, Patan on 4th March, 2006.
15. National level science symposium organized by Christ College, Rajkot on January 7, 2006.
16. UGC sponsored National level seminar on **“Bioinformatics- Emerging Trends”** held at Shree M. & N. Virani Science College, Rajkot on 1st January, 2006.
17. **“92nd Indian Science Congress”** held at Nirma University of Science and Technology, Ahmedabad during January 3-7, 2005.
18. Conference on **“Biotechnology and genetics conference: Geneticon-2003”** organized by Indian Medical Association.
19. International symposium on **“Molecular medicine with reference to the molecular biology of infectious diseases”** organized by Comed Bio-tech Ltd. On 27th & 28th December, 2003 at Baroda.
20. UGC sponsored one day national level seminar on **“50 years of DNA double helix- Retrospect and prospects”** held at Hemu Gadhvi Hall Rajkot on 11th October, 2004.
21. State level science symposium organized by Christ College, Rajkot on January 25, 2004.
22. UGC recognized state level seminar on **“Environmental Problems of Saurashtra and Kutch: Challenges and Solutions”** organized by Shree M. & N. Virani Science College, Rajkot on February 1, 2004.
23. UGC recognized state level seminar on **“Frontiers and advancement of biological sciences in new millennium”** organized by Sarvoday Kedavani Samaj, Rajkot on August 11, 2002.

The above information is authentic and sufficient & will be glad to furnish the proofs, if needed.

Date: 22/02/2024

Dr. Jignasha Trikamlal Thumar

Place: Gandhinagar
