CURRICULUM -VITAE

Dr. Namita Ashish Singh

Assistant Professor

Department of Microbiology,

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Academic qualifications:

Degree	Board/University	Year
Ph.D.	Punjabi University, Patiala, Punjab	2014
M.Sc.	Gurukula Kangri Vishwavidyalaya, Haridwar, UK	2006
B.Sc.	C.C.S. University, Meerut, U.P.	2004

NET qualifications

NET	ASRB- ICAR	2014

Ph.D.

Thesis Title: Development of "On farm" Chromogenic Enzyme Assay for Aflatoxin M1 in milk

Supervisor: Prof. Neelam Verma, Biotechnology Department, Punjabi Univ., Patiala

Co-supervisor: Dr. Naresh Kumar, Principal Scientist, DM Division, National Dairy Research Institute,

Karnal

Professional Experience

S.	Positions held	Name of Institution	Duration
No.			
1	Assistant Professor	School of Biosciences, IMS Ghaziabad, UC Campus affiliated to C.C.S. University, Meerut, U.P.	Aug 2016- May 2018
2	Assistant Professor	Department of Life Sciences, IAMR, Ghaziabad (U.P.) affiliated to C.C.S. University, Meerut	Aug 2014- July 2016
3	Research Associate	Dairy Microbiology Division, National Dairy Research, Karnal, Haryana	June 2009-May 2012
4	Senior Research Fellow	Dairy Microbiology Division, National Dairy Research, Karnal, Haryana	June 2008-May 2009

HONOR & AWARDS:

- **2017** Academic Pride award 2017 from IMS Ghaziabad UC Campus for publishing Nanotechnology book chapter in Springer
- **Second prize for oral presentation** in International Conference entitled "Global Initiatives in Applied Sciences and Green Technologies" at SRM University, Delhi NCR campus Ghaziabad
- **2016 SERS Excellence in Teaching Award** in International Conference entitled "Global Initiatives in Applied Sciences and Green Technologies" at SRM University, Delhi NCR campus Ghaziabad
- **2016** Second prize for oral presentation in National conference entitled "Biotechnological Perspectives in Healthcare" at IMS Engineering College Ghaziabad.
- **Best Paper award** by Indian Dairy Association (IDA) for paper entitled "Spore based chromogenic assay for detection of β-lactam antibiotic in milk" published in Indian Journal of
- 2014 Dairy Science
 - National Eligibility Test (NET-2014) conducted by ICAR/ASRB, India in Agricultural Microbiology

Appreciation award as a coordinator for organizing International Conference on "Life Science and Bioengineering" in Institute of applied medicine and research (IAMR), Ghaziabad, U.P.

Research Projects:

Title of the project: To study the bacterial flora, their antimicrobial properties and shelf life of goat milk of Udaipur district, Rajasthan

Funding agency & Duration: UGC, New Delhi (2019-2021)

LIST OF PUBLICATIONS:

PATENTS: 02

- 1. Patent entitled "Process of preparing a spore inhibition based enzyme substrate assay for monitoring aflatoxin M1 in Milk" Dr. Naresh Kumar, Namita Ashish Singh, Vinai Kumar Singh, Dr. Sunil Bhand, Dr. R. K. Malik, Application No. 3064/DEL/2010 Granted, Patent No. 292836
- 2. Patent entitled "Real time detection of *Enterococci* in dairy foods using spore germination based bioassay" (Dr. Naresh Kumar, Ms. Gurpreet Kaur, Ms. Geetika Thakur, Mr. Raghu HV, Ms. Namita Ashish Singh, Ms. Nishu Raghav, Mr. Vinai Kumar Singh, Patent Application No.119/DEL/2012, Published Journal No 19/2015, Application examined, FER issued

Research papers published in International/ National Journal: 14

- Singh NA, Kumar N, Raghu HV, Bhand S, Chandra S, Sharma PK (2018) A spore-based miniaturized novel assay for rapid aflatoxin detection in milk. Environmental Chemistry Letters DOI: 10.1007/s10311-018-00834-0 (online published) Impact Factor: 3.125
- 2. Nimisha Tehri, Naresh Kumar, Avinash Yadav, Raghu HV, Namita Ashish Singh (2018) Sugars mediated germination in spores of *Bacillus Megaterium*. International Journal of Microbiology Research 10(3): 1058-1061. NAAS: 4.77 Impact Factor: 1.664
- 3. Singh, N.A. (2017) Nanotechnology innovations, industrial applications and patents. Environmental Chemistry Letters 15 (2): 185-191. DOI: 10.1007/s10311-017-0612-8. Impact Factor: 3.125
- 4. Sharma S. and Singh N.A (2017) Isolation and characterization of mesophilic spores in different

- types of milk during winter. Trends in Biosciences, 10 (2):754-757
- 5. **Namita Ashish Singh** (2017) Biomolecules for removal of heavy metal. *Recent Patents on Biotechnology* 11(2):197 203 DOI: 10.2174/1872208311666170223155019
- 6. Singh N. A. and Saxena J. (2016) Evaluation of E. coli bacteria in different food samples. International Journal on Life science and Bioengineering, 3(1):13-19
- 7. V.K. Singh, N.A. Singh, H.V. Raghu, N. Kumar, K.P. Singh, P.K. Sharma and N. Raghav. (2015) Fluorescence-Based Detection of Aflatoxin M1 in Milk using Immobilized Spores. *Journal of Food Safety*, 36 (2): 145–152. DOI: 10.1111/jfs.12221 Impact Factor: 1.275
- 8. Singh V.K., **Singh N.A.,** Kumar N., Raghu H.V., Sharma P.K., Singh K.P. & Avinash (2014) Spore immobilization and its analytical performance for monitoring of aflatoxin M1 in milk. *Canadian Journal of Microbiology*, 60(12):793-798 DOI 10.1139/cjm-2014-0465 **I.F.: 1.24**
- 9. **Singh N.A.**, Kumar N., Raghu H.V., Sharma P.K., Singh V.K., Khan A. and Raghav N. (2013) Spore inhibition-based enzyme substrate assay for monitoring of aflatoxin M1 in milk. *Toxicological & Environmental Chemistry*, 95(5):765-77. **Impact Factor: 0.972**
- 10. Kumar S., Raghu H.V., Kumar N., **Singh N.A.** and Malik R.K. (2013) Spore based chromogenic assay for detection of β-lactam antibiotic in milk. *Indian Journal of Dairy Science*, 66(6):507-514
- 11. Verma N., **Singh N.A.**, Kumar N. and Raghu H.V. (2013) Screening of different media for sporulation of *Bacillus megaterium*. *International Journal of Microbiology Research and Reviews*. 1(4): 68-73
- **12.** Verma N., **Singh N.A.**, Kumar N., Singh V.K., Raghu H.V. (2013) Development of "Field Level" Chromogenic Assay for Aflatoxin M1 Detection in Milk. *Advances in Dairy Research* 1: 108.
- 13. Thakur G., Yadav A., Tehri N., Kumar N., Raghu H.V., **Singh N.** and Singh V.K. (2013) Rapid & novel microscopy technique to detect germination initiation and specificity in Bacillus spores. *International Journal of Research in Pure and Applied Microbiology*, 3(4):134-138
- **14.** Kumar N., Thakur G., Raghu H.V., **Singh N.**, Sharma P.K. et al. (2013) Bacterial Spore Based Biosensor for Detection of Contaminants in Milk. *Journal of Food Processing and Technology* 4:277.

Chapters in Books: 02

1. Singh N.A. (2016) Nanotechnology definitions, research, industry and property rights, In: Nanoscience in Food and Agriculture 1, Sustainable Agriculture Reviews 20 (ed) Shivendu

- Ranjan, Nandita Dasgupta, Eric Lichtfouse, **ISBN:** 978-3-319-39303-2, Springer *International Publishing, Switzerland*
- Singh N.A., Kumar, N., H.V. Raghu (2018) Microbial aspects of drinking water. In: Microbial research: an overview, (ed) Vinita Katiyar, Anubha Joshi, IK Publishers, New Delhi, pp 109-125.
 ISBN: 9789385909443 (In Press)

Manuals / Compendium (editing): 03

- 1. Abha Vasishta, **Namita Ashish Singh** and Sarika Srivastava (2016) "Recent Trends and Advances of Biotechnology" National Conference at IMSUC Ghaziabad
- 2. Alia Khan, **Namita Singh**, Minakshi, Avinash, Pradeep Kumar and Bhawna Arora (2012) A Biosafety Manual-A Holistic Approach to Biosafety in Dairy Industry, published by NDRI, Karnal, pp. 1-116.
- 3. Kumar N., Raghu, H.V., Khan Alia, **Singh N.A.**, Avinash and Singh V.K. 2011 (Cover page designing and chapters) Training manual on "Conventional and rapid microbiological techniques for quality and safety monitoring in dairy industry", published by DM Division, NDRI, Karnal, pp.1-179.

Technical bulletin:03

- 1. Kumar N., Raghu H.V., Malik R.K. and **Singh N**. (2012) Development of a Real Time Spore Based Bioassay for Monitoring Aflatoxin M₁ in Milk. In: The Golden Quinquennium-2007-2012, NDRI Publication No. 76/2012. Pp 20-21.
- 2. Kumar N., Raghu H.V., Malik R.K. and **Singh N**. (2012) Miniaturized Spore Based Assay on Biochip for Aflatoxin M1 in Milk. In: A Quarterly Newsletter of Dairy Science & Technology published by NDRI, 16 (4): 2.
- 3. Kumar, N., H.V. Raghu., Malik R. K, **Singh N.A.**, Raghav N., Kumar V. (2011) Development of a real time spore based bioassay for monitoring Aflatoxin M1 in milk. In: A Quarterly Newsletter of Dairy Science & Technology, published by NDRI, 15(4): 2-3.

Oral/posters in National & International conferences: 09

- 1. Namita Ashish Singh*, Naresh Kumar and Raghu HV (2017) "Development of fluorogenic assay for detection of aflatoxin M 1 in milk" published in "58th Annual Conference of Association of Microbiologists of India (AMI 2017) & International Symposium on "Microbes for Sustainable Development: Scope & Applications" from November 16-19, 2017 at Babasaheb Bhimrao Ambedkar University (A Central University) Lucknow
- 2.Sonia Sharma and Namita Ashish Singh (2016) "Isolation and Characterization of mesophilic *Bacillus* spores in milk" published in National Conference entitled "Recent Trends and Advances of Biotechnology" held on November 26, 2016 at IMS UC campus Ghaziabad pp. 42 ISBN: 978-93-84052-83-6 (Got Second prize in poster presentation)
- **3. Namita Ashish Singh** (2016) "*Bacillus* spore immobilization and its performance for analysis of aflatoxin M1 in milk" published in International Conference entitled "Global Initiatives in Applied Sciences and Green Technologies" held on 9-11 Sep 2016 at SRM University, Delhi NCR campus Ghaziabad pp. 56 **ISBN: 978-93-83774-08-4** (**Got Second prize for oral presentation**)
- **4. Namita Ashish Singh** (2016) "Spore based bio-sensing for detection of Aflatoxin M1 in milk" published in National conference entitled "Biotechnological Perspectives in Healthcare" held on 16th July, 2016 at IMS EC Ghaziabad pp. 25-26 (Got **Second prize for oral presentation**)
- 5. Namita Ashish Singh, NeelamVerma, Naresh Kumar, and HV Raghu (2014) A Chromogenic Assay for Aflatoxin M1 Detection in Milk published in an International Conference entitled "Life Science and Bioengineering" held during 22-23rd Nov. 2014 at Institute of applied medicine and research (IAMR), Ghaziabad, U.P. pp 45
- **6. Singh N.A.,** Kumar N., Chandra S., Raghu H.V., Singh V.K., Sharma P.K. (2012) "Spore based biosensor as an innovative approach for monitoring aflatoxin M1 in milk" published in Conference entitled XXI Indian Convention of Food Scientists & Technologists held during 20-21 January 2012 in Pune, Maharashtra.
- 7. N.A., Kumar N., Chandra S., Raghu H.V., Singh V.K. and Sharma P.K. (2012) "An innovative Spore based biosensing for monitoring aflatoxin M1 in milk" published in Conference entitled XL Dairy Industry held during 2-5 February 2012 in New Delhi
 - 8. Attended 5 days workshop on "Immobilization techniques for miniaturized microarray based biosensors" held during 10-14th Jan. 2011 at Panjabi University Patiala.

9. Kumar N., Manju G., **Namita S.,** Gagan C. and Malik R.K. (2009) "β-lactam group in milk and its monitoring using iodometric assay" published in national symposium/workshop on new trends of biosensor technology (17-19th January 2009) organized By Department Of Physics, Hindustan College of Science And Technology, Farah, Mathura pp. 3

PROFESSIONAL ASSOCIATION/ MEMBERSHIP: 02

- Association of Microbiologists of India (Life Member)
- Scientific Educational Research society, Meerut (Life Member)

(Dr. Namita Ashish Singh)