Dr. Shaik Parvinnisa
MSc, Ph.D. (Biotechnology)
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A Ph.D. holder in Biotechnology with specialization in Nutrition Biochemistry and Toxicology supported by a strong academic background and research experience.

ACADEMIC RECORD

- **Ph.D.** in Biotechnology under the guidance of Dr. Farhath Khanum, Scientist-G, Associate Director, Head HRD& HOD of Nutrition Biochemistry &Toxicology, at Defense Food Research Laboratory (DFRL-DRDO), Mysore. The project entitled **"Studies on the viability and beneficial properties of probiotic, synbiotic and microencapsulated synbiotic"** under VTU, Belgaum by Maulana Azad National Fellowship (**UGC-MANF**).

- **Post Graduation** in M.Sc. Biotechnology at Jawaharlal Nehru Technological University (JNTU), Anantapur with (runner up to receive gold medal) 82.5% [13-07-2009 to30-09-2011].
- **Graduation** in B.Sc.-Biotechnology from S.K University with 70.16% [June 6th 2005-4th April 2008].
- **Intermediate** in Bi.P.C, Gorantla with 71.2% [2nd June 2003-March 25th 2005].
- **S.S.C**., from Z.P.G.H School, Gorantla (3rd rank at school level) with 85% [May 30th 1998 to March 1st2003].
- **Extra Qualification**: Qualified VTU-ULRAT [2012].
  Qualified Tumkur Ph.D. entrance test with 3rd rank [2012].
  Qualified MAT with 84.61% [2008-9].

RESEARCH EXPERIENCE

- **Ph.D**. Completed under the guidance of Dr Farhath Khanum, Scientist-G, HOD of Nutrition Biochemistry &Toxicology, Head HRD& Associate Director at Defence Food Research Laboratory, Mysore the project entitled **"Studies on the viability and beneficial properties of probiotic, synbiotic and microencapsulated synbiotics"** under VTU, Belgaum by Maulana Azad National Fellowship (**UGC-MANF**).
- Worked as a Project Assistant in Shridevi Institute of Engineering & Technology (SIET), Tumkur on a NABARD project with IISC, Bangalore from 16th April 2012 to 4th May 2012.

- Worked as a Project Assistant in **"Akshaya Biological Corporation"** from 1st June 2011 to 10th April 2012.
- Worked as a Project Assistant in *"***Global Institute of Bioinformatics"** from 21st April 2008 to 10th July 2009.

TEACHING EXPERIENCE

- Worked as a lecturer for BE-Biotechnology & M.Sc. & Awarded as a best junior lecturer two times in SIET, Tumkur from 1st February 2013 to 1st March 2014.
- Worked as guest lecturer for Dhruvathara K.A.S & AIEEE coaching center from 1st February 2013 to 1st March 2014.

PAPERS PUBLISHED

- Farhath Khanum, Shabir Ahmed Wani, Eram Fathima and **Shaik Parvinnisa** "Nano technology in Food Fermentation and Packaging **(Book-Chapter-19)**", "Advances in Fermented Foods & Beverages" by Gopal Kumar Sharma (Editor in Chief), Anil Dutt Semwal and Jenifer Raj Xavier (Editors), Defence Food Research Laboratory), Mysuru-570011, Karnataka.

- **Shaik Parvinnisa[1]**, Farhath Khanum[*1] and Chandrasekhar.N[2] "Determining the in-vitro cholesterol-reducing efficiency of *lactobacillus* and *enterococcus* strains isolated from human breast milk, feces of breast-fed infants and animal milk (goat, cow and buffalo)" International Journal of Pharmacy and Biological Sciences | Volume 8 | Issue 4 | OCT-DEC | 2018 | 671-681.

- **Shaik Parvinnisa[1],** Farhath Khanum[*1] Chandrasekhar. N[2], Girish Kumar.B[2] and Renuka.BS[1] "In vitro screening of the probiotic potential of *lactobacillus* and *enterococcus* strains isolated from human breast milk, feces of breast-fed infants and animal milk (goat, cow and buffalo)" International Journal of Pharmacy and Biological Sciences IJPBSTM | Volume 8 | Issue 4 | OCT-DEC | 2018 | 787-799. International Journal having UGC Journal No 46322 ISSN: 22307605 with Scopus Index.

ACHIEVEMENTS

- Presented a Poster on **"Suppression of Diet–induced Hypercholesterolemia by Fig Fruit Halwa containing Encapsulated Synbiotics"** in 26th Indian Convention of food scientists and technologists-2017(ICFOST) held at CSIR-IICT –Hyderabad.

- Presented a poster on "**Cholesterol reduction and Lactose Hydrolysis and microencapsulation from human milk"** at One Day National Conference entitled "Biology of microbes: Evolution Along Technology" held at Jagadguru Sri shivarathreeshwara university –Mysuru 2017.

- Awarded as a best junior lecturer two times.

- Participated in One Day seminar on "**Analytical and molecular Techniques in the drug discovery process"** held at JSS College of Pharmacy-Mysuru 2017.

- Presented paper on **"Production of Bio-diesel from microalgae "*Chlorella vulgaris*" in open ponds by using different wastewaters"** in "International Conference on Engineering Innovative Technologies for a Sustainable World-2013" conducted by SIET with Oklahoma State University, USA.

- Presented a poster on **"Production of poly beta-hydroxybutyrate (PHB) by Lactobacillus *lactis*"** in the national level seminar **"THRUST AREAS OF BIOTECHNOLOGY"** sponsored by APSCHE, Kurnool in 2012.

- Participated in the National level seminar "FUSION 2010" conducted by JNTUA.

TECHNICAL SKILLS

Microbial analysis techniques — Analytical techniques
Biotechnological techniques — Biochemical technique.

- **Experience in handling:** FESEM, SEM, Microscope, Freeze dryer, Centrifugation, Agarose Gel Electrophoresis, PCR, U.V. Spectrophotometer, Laminar air flow chamber, Animals (Wistar albino rats), Cell lines (Caco-2), CO_2 Incubators, Food product proximate analysis instrument.

Ph.D. & PROJECT WORK DESCRIPTION

- **INSTITUTE: DFRL-DRDO, Mysore. [November-2012 to December 2021]**

  GUIDANCE: **Dr. Farhath Khanum**, Associate Director, Scientist 'G', Head HRD & H.O. D**,** Dept. Of Nutrition Biochemistry and Toxicology,

  TITLE OF THE PROJECT: "Studies on the viability and beneficial properties of probiotic, synbiotic and microencapsulated synbiotics".

  PROJECT DESCRIPTION: The scope of the project is Cholesterol reducing the efficiency of Probiotics, microencapsulated probiotics, microencapsulated synbiotics, synbiotics and the product was investigated in a murine model **[**17 groups(n=6)]. out of 200 strains, NB12 was selected as a potential probiotic based on the therapeutic and probiotic properties and identified as Lactobacillus para casei (OP720969) by PCR-16SrDNA sequencing, BLAST (NCBI-NIH database) analysis method. Out of 15 different encapsulated synbiotics, containing inulin with Na-alginate exhibited the highest degree of survivability i.e., 60 to 96% and was chosen as a potent encapsulated

synbiotic. It was administered with high-fat diet-induced hypercholesterolemic rats, it had a substantial hypocholesterolemia effect by decreasing LDL-C, TG, TC, and increasing HDL, as well as a substantial reduction in fat storage in the liver, adipose tissues, body weights and organ weight, as a result of these a non-dairy fruit-based product was developed (amla spread) and incorporated with encapsulated synbiotic and study the stability and hypocholesterolemia effect. In this study, Amla spread with Alginate-inulin successfully protected the viability of probiotics against adverse environments without disturbing its beneficial effects on the host and was exploited as a potential alternate bio-therapeutic agent to decrease cholesterol levels and the risk of cardiovascular diseases.

- **INSTITUTE: JNTU-HYDERABAD [December-2010 to May2011]**

  GUIDANCE: Dr.V. Himabindu M.Sc, Ph.D. Head and Professor, CENIST JNTU-H.

  TITLE OF THE PROJECT: Production of Bio-diesel from microalgae "*Chlorella vulgaris"* in open ponds by using different wastewaters**.**

  PROJECT DESCRIPTION: The scope of the project is the production of Biodiesel with Carbon dioxide sequestration along with the Bioremediation of different wastewaters using the algal Species *Chlorella vulgaris* at different growth conditions with continuous monitoring.

- **INSTITUTE:** Global Institute of Biotechnology**.**

  GUIDANCE*:* Dr.N.V. Naidu M.S., Ph.D.

  TITLE OF PROJECT: Production of poly beta-hydroxybutyrate (PHB) by *Lactobacillus lactis.*

  PROJECT DESCRIPTION: PHB is a biodegradable plastic and a storage form of carbon in bacterial species of *Lactobacillus lactis* which was Plasmid was isolated from cured. we measured the production of PHB at various parameters by using U.V. Spectrophotometer. We observed that PHB can be only produced by plasmid containing cultures. Hence, we concluded that PHB production depends on the genes present in the plasmid and optimum parameters.

AREAS OF INTEREST

Pharmaceutical biotechnology

Plant biotechnology

Animal biotechnology

Microbial biotechnology

Medical biotechnology	Industrial biotechnology
Diary biotechnology	Genetic engineering
Molecular biology	Food biotechnology

REFERENCES

1. **Dr. Asna Urooj**- Professor & Chairperson
   PG Dept of Food Science and Nutrition, University of Mysore, Manasagangotri,
   Mysuru-06 Ph: +91 821 2419632 (Telefax), +91 9448489334
   E-mail: asnaurooj@foodsci.uni-mysore.ac.in
   asnau321@gmail.com

2. **Dr. Prakash M Halami**- Chief Scientist & Professor
   AcSIR, CSIR-Central Food Technological Research Institute,
   MYSORE 570 020, India.
   Mobile+919448082409, prakashalami@cftri.res.in

3. **Dr. Muralidhara Rao** - Asst. Professor (Sr.)
   Dept. of Biotechnology
   Sri Krishnadevaraya University, Anantapur-515003 Andhra Pradesh, India
   Mobile: 9440699873, 9492060059
   Email: rao.muralidhara@gmail.com, muralidhararao@yahoo.com

4. **Dr. Ramesh Malothu –** Head & Associate professor
   Department of Biotechnology,
   Jawaharlal Nehru Technological University (JNTU-K)
   Kakinada, Andhra Pradesh, India
   Email: malothurameshbio@gmail.com, rameshmalothu@yahoo.co.in
   Mobile: 9491419688

5. **Dr. Chandrasekhar N (Co-Guide)**- Professor&Head,
   Department of Chemistry,
   Shridevi Institute of Engineering & Technology,Tumkur – 572106, Karnataka,
   India. Ph No:9886956195, Email ID: chandru_1409@rediffmail.com

DECLARATION:

I hereby declare that the particulars and facts stated above are true and correct to the best of my knowledge.

PLACE: Sanga Reddy

DATE: 26-08-2023

(Dr. Shaik Parvinnisa)