## Dr. Sridevi Nidumukkala

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## **Professional summay**

Biotechnologist with 10 years of experience in reputed organisations such as National Chemical Laboratory, Institute of bioinformatics and Applied biotechnology, Osmania University and also from biotech industries, Richcore lifesciences and Kfirm lifesciences.

I am looking for a challenging position which can utilize my skills and abilities while being resourceful, innovative and flexible in the biotechnology.

## **Educational Qualifications**

Ph.D in Biotechnology, National Chemical Laboratory, Pune, 2009.

M.sc in Biotechnology, Goa University, Goa, 2003.

B.sc in Botany, Zoology, Chemistry, Sri Venkateswara University, Tirupati, 2000.

### **Skills**

Database search, Sequence alignment, phylogenetic tree construction.

Protein purification and characterization

Expression of genes in bacterial systems.

Development and evaluation of transgenic rice lines.

# **Work Experience**

- Consultant Kfirm Lifesciences (July 2018-till date).
- ➤ Role: Development of new products in food industry and wastewater treatment.
- ➤ Dr.D.S.Kothari fellow at Centre for Plant and molecular biology, Osmania university, Hyderabad (July 2015 to June 2018).
- ➤ Role: Development of transgenic rice lines expressing DEAD box helicase genes.
- ➤ Scientific writer at Neometrix consulting Inc, Canada (June 2013 to June 2014).
  - Role: Provide scientific articles on new advances in the field of medicine and biology.
- ➤ Guest faculty and research associate at Institute of Bioinformatics and Applied Biotechnology, Bengaluru (Sept.2010 to Oct. 2011).
- ➤ Role: Training of students on bioinformatics tools such as sequence alignment, phylogenetic tree construction, prediction of protein and gene function analysis, expression data clustering.
- An instrument free DNA isolation and amplification method was developed using magnetic beads and multifunctional proteins for point of care studies.

- R & D Manager, Richcore Life sciences, Bengaluru (June 2009-May 2010).
- > Role: Group leader in the following projects:
- Hydrolysis of lignocellulosic materials for their use in ethanol production and animal feed.
- > Optimisation of enzymatic hydrolysis method for the production of grain alcohol.
- > Studied role of different enzymes in solubilising kidney stones.
- Research scholar at National Chemical Laboratory, Pune, Worked for Ph.D degree and submitted a thesis entitled "Studies on biochemical aspects of bile salt hydrolase from the thermophile *Brevibacillus* sp" (2004-2009).
- > Worked on isolation of an organism producing cholesterol lowering enzyme, bile salt hydrolase.
- > Protein purification and characterization of bile salt hydrolase.
- ➤ Immobilization and characterization of immobilized enzymes, bile salt hydrolase and penicillin acylase by biochemical and physical methods such as nitrogen adsorption, powdered X-ray diffraction (XRD), and Transmission electron microscopy (TEM).
- Research student at National Institute of Oceanography, Goa (2002-2003).
- Worked on Immobilization of Marine nitrifiers.
- Trainee at National Institute of Nutrition, Hyderabad (May 2002- June 2002).
- ➤ Worked on food analysis by various chemical methods.

### **Academic Achievements**

- ➤ Received **best poster award** for the poster entitled "Isolation, Identification of a *Brevibacillus sp*: A novel thermophilic source for the production of bile salt hydrolase" during the International Conference on New Horizons in Biotechnology (NHBT 2007) jointly organized by the Biotech Research Society (BRSI) and National Institute for Interdisciplinary Science and Technology at Trivandrum during November 26-29, 2007.
- ➤ Selected for CSIR-Tech Led Entrepreneurship programme (2008) jointly conducted by Council of Scientific and Industrial Research (CSIR) and Indian Institute of Management (IIM) Bangalore.
- ➤ Qualified Junior Research Fellowship (JRF) examination conducted by Council of Scientific and Industrial Research (CSIR), India through national level examination held in June 2004.
- ➤ Received scholarship from Department of Biotechnology, Govt. of India during Masters Degree (2001-2003).
- ➤ Selected for Masters Degree in Biotechnology through All India Combined Entrance Examination for Biotechnology conducted by Jawaharlal Nehru University, New Delhi (2001).

### **Publications**

In Peer Reviewed International Journals

- 1. Sridevi Nidumukkala, Lavanya Tayi, Rajani.Kant Chittela, Dashavantha Reddy Vudem and Venkateswara Rao Khareedu(2019) DEAD box helicases as promising molecular tools for engineering abiotic stress tolerance in plants **Crit.Rev.Biotechnol.**39(3),pp.395-407.
- Bhange, Pallavi & Sridevi, N & D.S., Bhange & Prabhune, Asmita & Ramaswamy, Veda. (2013). Immobilization of bile salt hydrolase enzyme on mesoporous SBA-15 for co-precipitation of cholesterol. International journal of biological macromolecules. 63.

- 3. Rajani kanth Vangala, Veeresh S.Hugar, and **Sridevi** (2012) Biological activity enhanced iron oxide particles for genomic DNA isolation for genomics and molecular diagnositics. **International Journal of Applied Biotechnology and Biochemistry** 2(3), pp. 221-227.
- 4. Rajani kanth Vangala, **Sridevi** and Veeresh Hugar (2012) Instrument-free, automation and multi-platform ready unmodified iron oxide DNA isolation system (accepted for publication in **J. Biochem Tech**).
- 5. Shah, P., **Sridevi, N.**, Prabhune, A., and Ramaswamy, V (2008) Structural features of Penicillin acylase adsorption on APTES functionalized SBA-15. **Microporous and Mesoporous Materials** 116 (1-3), pp. 157-165.
- 6. Shah, P., **Sridevi, N.**, Prabhune, A., and Ramaswamy, V (2007) Immobilisation of Ntn hydrolases on APTES functionalised SBA-15. **Studies in surface science and catalysis** 170 (B), pp. 1891-1898.
- 7. **N. Sridevi**, A. Prabhune (2009) *Brevibacillus* sp: A Novel Thermophilic Source for the production of Bile salt hydrolase. **Appl. Biochem. Biotechnol** 157(2), pp. 254-62.
- 8. **N. Sridevi**, S.Srivastava, B.M.Khan, Asmita Prabhune (2009) Characterization of the smallest dimeric bile salt hydrolase from a thermophile *Brevibacillus* sp. **Extremophiles** 13(2), pp.363-70.
- 9. **N. Sridevi**, Pradnya Vishwe, Asmita Prabhune. (2009) Hypocholesteremic effect of bile salt hydrolase from *Lactobacillus buchneri* ATCC 4005. **Food Research International** 42(4), pp. 516-520.

#### References

1. Dr. Asmita Prabhune

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Pune.

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2. Dr.Rajani Kanth Vangala

Co-Founder and CEO Neuome Technologies Pvt.Ltd

Bengaluru.

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