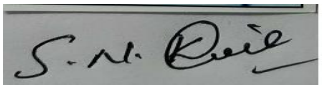
Dear Sir,

I am Dr. S.N.Krushna Naik, I have done a doctoral degree in Biochemistry and a Master's degree in Microbiology., from Sri Krishnadevaraya University, Anantapur. I am writing this letter to explore the possibility of working as faculty in your Institute. I have worked as teaching faculty at SK University, I have 2 years of experience in the Department of Microbiology ICMR -Virus Research and Diagnostic Laboratory (VRDL) I am well versed with Besides Microbial and Biochemical tests for identification, Identification of fungal isolates, Antibiotic sensitive assays, Experiments on Food, Water, Soil, Medical and Dairy Microbiology, Microbial Bio-Degradation studies, Sample preparation and analysis for scanning Electron Microscopy and Transmission Electron Microscopy. And advanced molecular and cellular biology techniques like DNA/RNA isolation, PCR, RT-PCR, western blotting, cell cultures, plasmid isolation and animal handling. I have published my research work in reputed international journals..

I Sincerely Hope That You Will Find My Attached Resume 'meets The Position Requirements. Please Feel Free To Contact Me At Any Time Asking For An Interview To Expose And Discuss My Credentials And Strengths..

Thank you,



(Dr.KRUSHNA NAIK)

Curriculum-vitae

Dr. S.N.KRUSHNA NAIK,
Dept of Biochemistry,
Sri Krishnadevaraya University *Mobile : 91+9985625693*
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Career and goal: To be associated with progressive academic group where I can get ample scope to exhibit my skills to contribute for teaching and research.

Academic Profile:

- **Ph. D. :** Department of Biochemistry, Sri Krishnadevaraya University,AP. 2021

Title of the Thesis : "*Studies on production of cellulase by fungal spp., through biotechnological procedures"*

- **M. Phil. :** Dept of Microbiology,Sri Krishnadevaraya University,Anantapuramu,AP, 2018

Title of the Dissertation: - Exploration of Fungal Isolates of Eastern Ghats of Andhra Pradesh for Cellulase Production by Fungal

- **M. Sc. :** Microbiology, Secured I division with 64% in 2015
- **B. Sc. :** Microbiology, Chemistry, Botany, , Secured I division with 64% in 2013

Professional/employment record:

- **2018-2019 :** worked as a teaching faculty in Dept of Microbiology, Sri Krishnadevaraya University, Anantapur, Andhra Pradesh
- **2016-2018 :** Research Fellow for M.Phil, in Dept of Microbiology, Sri Krishnadevaraya University, Anantapur, Andhra Pradesh.
- **2020-2022 :** worked as a Research assistant Department of Microbiology, ICMR, Virus Research and Diagnostic Laboratory (VRDL), GMC, Anantapur, Andhra Pradesh and RTPCR - Virus Research and Diagnostic Laboratory (VRDL) District Hospital Nandyal,kurnool, Andhra Pradesh.

Details of demonstrable research experience:

- Worked on research topic Exploration of Fungal Isolates of Eastern Ghats of Andhra Pradesh for Cellulase Production by Fungal This work is carried out towards M.Phil dissertation from 2016-2018 in Dept of Microbiology, Sri Krishnadevaraya University, Anantapur, Andhra Pradesh.

- Worked on research topic "***Studies on production of cellulase by fungal spp., through biotechnological procedures"*** This work is carried out towards Ph.D thesis on from 2018-2022 in Dept of Biochemistry, Sri Krishnadevaraya University, Anantapur, Andhra Pradesh.

To summarize the Ph.D thesis:

- 120 fungal samples taken for preliminary screening.
- 36 fungal isolates prelisted in preliminary screening (plate assay).
- 14 isolates were final listed based on SMF method.
- On the results of cellulase components production, 7 isolates (J5, Q12, B41, F3, M1, G8, J3, G2, P1, SG3, K99, CSK, K9 and SK1) were successful.
- However, J5 and Q12 were eliminated, keeping only 5 isolates.
- From 5 isolates, 4 were identified through microscopic and molecular characterization and these, *Aspergillus flavus* (CSK), *Aspergillus niger* (K9), *Aspergillus nomius* (SK1) *and Ganoderma lucidum* (K99) were deposited in NCBI-GENBANK.
- *Aspergillus flavus* (CSK) was used for optimization of cellulase.
- *Aspergillus nomius* (SK1) was studied for improvement of strain through UV and EMS mutagenic process.

Strain SKUV7 from UV and EMSSKU5 from EMS were finalized

<u>Importance in Industrial Prospects:</u>

- 4 fungal isolates, *Aspergillus flavus* (CSK), *Aspergillus niger* (K9), *Aspergillus nomius* (SK1) *and Ganoderma lucidum* (K99) were deposited in NCBI-GENBANK for research and industrial use.
- Studies on optimization of cellulase with *Aspergillus flavus* (CSK) resulted in optimization combination of components - Temperature – 30 °C, Initial pH – 5, Lactose – 1.5%, Yeast extract – 1.5%, Inoculum size – 5 plugs, Agetation – 150 rpm, Surfactants – TritonX-100 resulted in high cellulase production.
- CMCase production more by 45% under optimized components.
- *Aspergillus nomius* (SK1) was studied for improvement of strain through UV and EMS mutagenic process.
- Strain SKUV7 from UV and EMSSKU5 from EMS were finalized.
- Production of CMCase was more by 60% in EMSSKU5 over SKUV7.

Now, I claim that:

Deposition of 4 fungal species in NCBI-GENBANK, 45% increase in CMCase under optimized condition and 60% more CMCase production in EMSSKU5 over SKUV7 are industrial important.

- **Technical Experience gained during doctoral research:**
  - PCR & RT-PCR
  - Separation of protein samples using SDS-PAGE
  - Two dimensional gel electrophoresis
  - Western blotting
  - Agarose Gel Electrophoresis
  - Genotyping
  - Maintenance of different cell lines
  - MTT Assay
  - Isolation of cells and organelles and their membranes from (Erythrocytes, mitochondria, microsomes & synaptosomes)

List of published papers

Full Length Papers: 4.

Abstracts 3.

Full Length Papers:

1. **Krushna Naik S. N**.; Ramanjaneyulu G.; Srinivasulu Cheemanapalli and Rajasekhar Reddy B (2018). Exploration of Fungal Isolates of Forests of Eastern Ghats of Andhra Pradesh For Cellulase Production. *International Journal of Research and Analytical Reviews* (IJRAR) **5**: 704-713.
2. **Krushna naik, S. N**.; Anuradha, C. M.; Srinivasulu cheemanapalli. and Chitta Suresh Kumar, (2020) Comparison of production of cellulolytic enzymes by *Fusarium* sp. under optimized and non-optimized conditions, *J.Env.Bio-Sci.,* **34(2),** 153-168.
3. Sai Geetha, K.; Shanthi Kumari , B. S.; Dileep Kumar, K. and **Krushna Naik, S. N**. (2019) influence of organophosphorus pesticides on activities of antioxidant enzymes by *Pestalotiopsis microspora* TKBRR, *International Journal of Research and Analytical Reviews* (IJRAR) 6(1): 650-660.
4. Ramya, A.; Kanderi Dileep Kumar; Shanthi Kumari, B. S.; **Krushna Naik, S. N**. and Rajasekhar Reddy, B. (2018) Decolorization of the dye Remazol Brilliant Violet by the white rot fungus *Stereum ostrea, International Journal of Creative Research Thoughts (IJCRT),* **6(1):** 828-835.

Abstracts:

1. **Krushna Naik S.N** and Rajasekhar Reddy B (2018) Cellulase of Fungal Cultures Isolated From Eastern Ghats of Andhara Pradesh presented in National Seminar on Recent Advances in Materials Physics (RAMP-2018) organized by the Department of physics, Sri Krishnadevaraya University, Anantapuramu under UGC SAP Programme during 24th and 25th February, 2018 (OP-8), Page No.14-15.

2. **Krushna Naik S.N**.; Ramanjaneyulu, G. and Rajasekhar Reddy B. (2018) Production of cellulolytic enzymes by *fusarium* sp under optimal conditions Presented (PP- 10) in National Seminar on Recent Developments in Applied Microbiology and Biochemistry, organized by the Department of Microbiology, Sri Krishnadevaraya University, Anantapuramu during 30th and 31th May, 2018 (PP-10) Page No.51.

3. **Krushna naik, S. N**.; Srinivasulu Cheemanapalli. and Chitta Suresh Kumar, (2020) Comparison of production of cellulolytic enzymes by *Aspergillus nomius* under optimized and non-optimized conditions, Engineering trends in chemical and environmental sciences, organized by Government College, Anantapur,6-7, February, 2020.

References:

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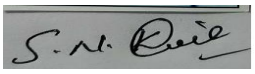
Declaration:

I declare that all the above information is correct and accurate up to my knowledge.



(Dr.KRUSHNA NAIK)