**Cover Letter**

Renu Yadav

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9876350625

To

CHATRAPATI SHIVAJI MAHARAJ UNIVERSITY

PANVEL

I am writing to apply for the post of Assistant Professor (BIOCHEMISTRY) advertised online on April 28, 2022. I have done my graduation in Biotechnology (Hons) and masters in Biochemistry subject and also have 3 years of research experience as I have completed my M.Phil. in Bioscience and the Dissertation on the “Preconditioning Chickpea seedling for terminal heat stress; Understanding associated mechanism and HSP expression”.

I have good academic background and qualified various national level exam like CSIR-NET, ICAR NET, ICMR-JRF. I have published one book chapter and three research paper during my Ph.D. Also, I have hands on experience on various technique like spectrophotometric analysis, Physiological and Biochemical assays, antioxidative enzyme activity, SDS-PAGE, Native PAGE, RNA isolation, DNA isolation, cDNA synthesis, Semi-Quantitative RT-PCR, Real Time PCR, Agarose gel electrophoresis, GC-MS analysis, DNA-Sequencing, Bioinformatic tool, Statistical software such as Sigma plot, Origin Pro, Metaboanalyst. Sir, I have submitted my Ph.D thesis for external evaluation entitled “*Strategies to Improve Heat Stress Tolerance in Chickpea and Dissecting the Cross Talk Mechanism*” under the supervision of Dr. Sanjeev Thakur, Professor, Central University of Punjab. I had previously supervised M.Sc. and M.Phil students working on the various projects on the field based and lab based study.

I will prove to be efficient, enthusiastic and strong leader. I do, however believe that my motivation, commitment and pre-existing skill will allow me to apply for the above mentioned post. I would look forward for your email and discuss my application at interview. Please find my resume and certificates attached with application for your reference.



Sincerely

**Resume**

**Personal Information**

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| Name | Renu Yadav |  |
| Date of Birth | 22nd March,1989 |
| Gender | Female |
| Language | English, Hindi |
| Category | OBC |
| Permanent Address | RZ-38, Block R, New Roshanpura, Najafgarh, Najafgarh, New Delhi  Phone no: 9876350625  renukayadav445@gmail.com |

**Educational Qualifications**

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| Examination/  Degree | Board/  University | Year of passing | Subjects | Marks obtained (%/CGPA) |
| 10th | C.B.S.E | 2004 | Hindi, English, Math, Science, Social science | 74.2%  (371/500) |
| 12th | C.B.S.E | 2007 | Physics, Chemistry, Biology, Biotechnology, English | 81.4%  (407/500) |
| B.Sc. (Biotechnology) | G.N.D.U | 2010 | **First Year :** Life science I, Life Science II, Biochemistry I, Organic Chemistry, Inorganic Chemistry, Maths and computer fundamental, General Microbiology, Punjab History and culture  **Second year:** Life Science III, Physical Chemistry, Biochemistry II, Cell Biology, Immunology, Genetics, Agro and Industrial application of Microbes, Communication skills.  **Third Year:** rDNA Technology, Plant tissue culture and Plant Biotechnology, Animal tissue culture and Animal Biotechnology, Patent law in Biotechnology and Enterpreneurship, Bioprocess Engineering, Biophysical and Biochemical techniques. | 75.38%  (1357/1800) |
| M.Sc. (Biochemistry and Molecular Biology) | G.N.D.U | 2012 | **Ist Semester:** Biomolecules, Enzymology, Fundamentals of molecular Biology, Biostatistics, Computer applications  **2nd Semester**: Concepts in Immunology, Biomembranes, Applied molecular biology, Animal Ecology, Metabolism of carbohydrates and lipids **3rd Semester:** Physical Biochemistry and Biochemical techniques, Molecular immunology, Metabolism of proteins and nucleic acid, Environmental Biochemistry, Clinical Biochemistry, Human embryology and developmental genetics  **4th Semester:** Clinical Biochemistry, Advanced molecular biology, Genomics and Proteomics, Structural biology and Pharmacogenomics, Molecular immunology,  **Dissertation Title:** Tostudy antioxidative and antiproliferative properties in T.*chebula* | 8.18/10  (72.80%) |
| M.Phil.  (Bioscience) | Central University of Punjab | 2014 | **Ist Semester:** Research methodology and Trend in Bioscience, Computer application and Biostatistics, Advanced Animal Physiology, Biochemistry and metabolism.  **2nd Semester:** Advanced Genetics, Advanced Plant Physiology  **3rd Semester:**  **Thesis Title: *“Preconditioning of Chickpea seedling for Terminal Heat stress; Understanding associated mechanism and HSP’S expression”*** | 4.94/6  (69%) |
| Ph.D.  (Bioscience) | Central University of Punjab | 2014-2022 | **Thesis Title: “*Strategies to Improve Heat Stress Tolerance in Chickpea and Dissecting the Cross Talk Mechanism*”** | Thesis Submitted for evaluation |

**Achievements/Fellowship**

* Qualified **ICMR-JRF** (Indian Council of Medical Research) in September 2016
* Qualified **UGC-CSIR-NET** (Central Council for Scientific and Industrial Research) in December 2014. National level examination for lectureship eligibility
* Qualified **ICAR-NET in Agriculture Biotechnology** (Indian Council of Agricultural Research, New Delhi) in April 2014
* Qualified **ICAR-NET in Plant Biochemistry** (Indian Council of Agricultural Research, New Delhi) in November 2014

**Awards**

* Received the **Best poster award** at XII Agriculture Science congress organised by NAAS and ICAR held at NDRI – Karnal n 2015 (National level conference).
* Received the **Second prize in poster** in Science Academies Lecture Workshop on “Recent Breakthrough in Plant Science”, held at Central University of Punjab, Bathinda.

**Publication**

**Research Paper**

* Yadav, R., Saini, R., Adhikary A., and Kumar, S. (2022). Unravelling Cross Priming Induced Heat Stress and Combinatorial Heat and Drought stress Response in Contrasting Chickpea Varieties. *Plant Physiology and Biochemistry,* 180, 91-105.
* Yadav, R., Juneja, S., Saini, R., and Kumar, R. (2022). Understanding cross-tolerance mechanism and effect of drought priming on individual heat stress and combinatorial heat and drought stress in Chickpea. *Journal of Crop science and Biotechnology,* 15, 1-19.
* Yadav, R., Juneja, S., and Kumar, S. (2021). Cross priming with drought improves heat-tolerance in chickpea (*Cicer arietinum*.L) by stimulating small heat shock proteins and antioxidative defense. *Environmental Sustainability*, **4** (1), 171-182.

**Book Chapter**

* Yadav, R., Juneja, S., Singh, P., and Kumar, S. (2017). Drought and heat tolerance in chickpea: transcriptome and morphophysiological changes under individual and combined stress. In *Plant tolerance to individual and concurrent stresses* (pp. 91-109): Springer, New Delhi.

**Conference/ Workshop Attended**

1. Presented poster in XIV Agriculture Science Congress organized by Indian Council of Agriculture Research held at IARI, New Delhi, 20-23 Feb 2019.
2. Attended Workshop on “Addressing the Complexity of stress Biology through High Throughput Omics Analysis Using Bioinformatics Tools at G.B. Pant University of Agriculture and Technology, Pantnagar, 4-7 Oct 2016.
3. Presented Poster in Science Academies Lecture Workshop on “Recent Breakthrough in Plant Science”, held at Central University Of Punjab, Bathinda, 22-24 Feb 2016 **(Received Second Prize).**
4. Attended “Science Academies Refresher course on Environmental Biology” and received A grade (82%) organised by Central University of Punjab, Bathinda, 1-15 Feb 2016.
5. Presented poster at XII Agriculture Science Congress organised by ICAR and NAAS at National dairy research institute, Karnal, India, 3-6 Feb 2015 **(Received best poster award).**
6. Attended conference at India International Science Festival at IIT Delhi, 4-8 Dec 2015.
7. Attended one day conference on “Recent Trend in genetic disease and molecular medicine” organised by Central University of Punjab, Bathinda, Dec 5, 2014.

**Name & Addresses of three References**

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| Name: **Dr.** **Sanjeev Kumar** |
| Designation: Professor |
| Department of Botany |
| Central university of Punjab, Bathinda |
| Contact No: 09501278687 |
| Email ID: sanjeevpuchd@gmail.com |
| Name: **Dr**. **Felix Bast** |
| Designation: Professor |
| Department of Botany |
| Central university of Punjab, Bathinda |
| Contact No: 09872152694 |
| Email ID: [bast.felix@gmail](mailto:bast.felix@gmail).com |
|  |
| Name: **Dr**. **Pradeep Kumar** |
| Designation: Assistant Professor |
| Department of Pharmaceutical Science and Natural Products |
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