




## CURRICULUM VITAE

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|---|---|---|
| <b>Name:</b>                                    | <b>Dr. Brijesh Pandey</b>   |  |
| <b>Designation:</b>                             | <b>Associate Professor</b>  |   |
| <b>School:</b>                                  | <b>Life Sciences</b>  |   |
| <b>Department:</b>                              | <b>Biotechnology</b>  |   |
| <b>Specialisation &amp; Research Interests:</b> | Plant metabolism and genetic engineering  |   |
| <b>Email IDs (Official &amp; Personal)</b>      | <a href="mailto:brijeshpandey@mgcub.ac.in">brijeshpandey@mgcub.ac.in</a> , <a href="mailto:brij_pandeyji@yahoo.co.in">brij_pandeyji@yahoo.co.in</a> |   |
| <b>Mobile No.:</b>                              | +91 9415762707  |   |
| <b>Address:</b>                                 | Department of Biotechnology, Mahatma Gandhi central University, Chanakya Parisar, Near Sadar Hospital, Motihari, 845401                             |   |

### 2. ACADEMIC QUALIFICATION (in reverse Chronological order):

| Degree | Year | University / Board |
|--------|------|--------------------|
| Ph.D.  | 2010 | Lucknow University |
| M.Sc   | 1997 | Lucknow University |
| B.Sc.  | 1995 | Luknow University  |

### 3. ANY OTHER QUALIFICATION:

UGC-CSIR NET (JRF)-2002, SRF-2005

**4. PROFESSIONAL EXPERIENCE:**

| Organisation/Institute/University                  | Position Held       | Duration                    |
|--|---------------------|-----------------------------|
| Mahatma Gandhi Central University, Motihari, Bihar | Associate Professor | From July 2017- till date   |
| Amity University Uttar Pradesh, Lucknow campus     | Assistant Professor | July1, 2013 –July15, 2017   |
| Amity University Uttar Pradesh, Lucknow campus     | Senior Lecturer     | July 1, 2009-June 30, 2013  |
| Amity University Uttar Pradesh, Lucknow campus     | Lecturer            | July 17, 2007-June 30, 2009 |

**5. ADMINISTRATIVE ASSIGNMENTS:**

| Position Held  | Duration                    | Nature of Work   |
|--|-----------------------------|--|
| Member, Recruitment cell of IQAC   | From August 2019- till date | Screening and verification of forms for recruitment of teaching and teaching staff                               |
| Proctor, Mahatma Gandhi Central University, Motihari                                       | September 2017 – till date  | Administrative: Maintaining discipline among students  |
| Member, BoS, Department of Biotech, Mahatma Gandhi Central University, Motihari            | 2017- till date             | As member of Board of Studies  |
| Member, School Board, School of Life Sciences, Mahatma Gandhi Central University, Motihari | 2017- till date             | As member of School Board  |
| Member, Student Research Committees, Amity University Uttar Pradesh, Lucknow Campus        | 2014-2017                   | Helping the research students to prepare their synopsis, monitoring the progress and final submission of thesis. |

|  |                |  |
|--|----------------|--|
| Member, Laboratory purchase committee, Amity University Uttar Pradesh, Lucknow Campus                        | 2013-2017      | Purchase of Chemicals/ consumables and instruments with genuine justification.       |
| Convenor, Flying squad, Mahatma Gandhi Central University, Motihari  | 2018 and 2019  | Monitor the free and fair conduct of end semester examinations                       |
| Deputy Chief Proctor, Amity University Uttar Pradesh, Lucknow campus   | 2016-July 2017 | Administrative: Maintaining discipline among students                                |
| Programme Leader, Amity Institute of Biotechnology, Amity University Uttar Pradesh, Lucknow campus           | 2008-2017      | Academic administration including registration, orientation, examination of students |
| Member of Moderation Board, Amity Institute of Biotechnology, Amity University Uttar Pradesh, Lucknow campus | 2016-2017      | Moderation of question papers  |
| Counsellor, UPRTOU, Allahabad  | 2008-2014      | Counselling for M.Sc. Biochemistry   |

## 6. COURSES TAUGHT:

UG: Cell biology, Biochemistry and metabolic regulation, bioanalytical techniques, molecular diagnostics, plant physiology, plant biotechnology

PG: Genetic engineering, recombinant DNA technology, research methodology, advance molecular biology

Doctoral: Plant biotechnology, Bioanalytical tools

## 7. RESEARCH SUPERVISION:

A. Ph.D.:

i. Awarded : 2

- ii. Submitted : NIL
- iii. Ongoing : 1

**B. M.Phil.:NIL**

- i. Awarded : NIL
- ii. Submitted : NIL
- iii. Ongoing : NIL

**C. Non-Degree Oriented (Master's Level Dissertation):**

- i. Awarded : 6
- ii. Submitted : NIL
- iii. Ongoing : NIL

**8. CONTRIBUTION TO CORPORATE LIFE OF THE UNIVERSITY:**

Member, Tender opening committee for hiring out source man power, Mahatma Gandhi Central University, Mothari, Bihar.

Convenor, Capacity assessment committee for out source staff, Mahatma Gandhi Central University, Mothari, Bihar.

Member, Recruitment cell, Mahatma Gandhi Central University, Mothari, Bihar.

Convenor, Campus Ambience Committee, Mahatma Gandhi Central University, Mothari, Bihar.

Member, WASC sub committee, Amity University Uttar Pradesh, Lucknow campus.

Member, NAAC sub Committee, Amity University Uttar Pradesh, Lucknow campus

**9. MEMBERSHIP OF SOCIETIES / PROFESSIONAL BODIES:**

Life member: Indian Science Congress Association

Life member: Society of Biological Chemists (I)

Founder member: Flora - Fauna Science Foundation

**10. PUBLICATIONS :**

**A. BOOKS/MONOGRAPHS:**

**1. Authored:**

- i. ....

- ii. ....
- iii. ....

## 2. Edited:

- i. Engineering Nanomaterials for Smart Drug Release: Recent Advances and Challenges AK Singh, TP Yadav, B Pandey, V Gupta, SP Singh (2019). In Applications of Targeted Nano Drugs and Delivery Systems (Elsevier), 411-449.
- ii. Nanoparticles Mediated Gene Knockout Through miRNA Replacement: Recent Progress and Challenges, B Pandey, AK Singh, SP Singh (2019). In Applications of Targeted Nano Drugs and Delivery Systems, (Elsevier) 469-497.
- iii. Recent Trends and Advancement towards Phyto-Mediated Fabrication of Noble Metallic Nanomaterials: Focus on Silver, Gold, Platinum and Palladium (Upcoming Chapter) SP Singh, MI Ansari, B Pandey, JK Srivastava, TP Yadav, H Rani, A Parveen, AK Singh (2019) in Nanomaterials and Environmental Biotechnology(Springer)
- iv. Recent Advancement in Nanomedicine and Nanosize Carriers for Drug and Vaccine Delivery (Upcoming Chapter), AK Singh, TP Yadav, G Singh, M Pritam, B Pandey, MI Ansari, JK Srivastava, SP Singh (2019) in Nanomaterials and Environmental Biotechnology (Springer).
- v. Recent Insights on Solubility and Stability of Biomolecules in Ionic Liquid, AK Singh, TP Yadav, B Pandey, SP Singh (2019) in Green Sustainable Process for Chemical and Environmental Engineering and Science: Ionic Liquids as Green Solvents, (ISBN:9780128173862) Elsevier.

## B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:

- i. Solvent based optimization for extraction and stability of thymoquinone from *Nigella sativa* Linn. and its quantification using RP- HPLC. Mohammed Shariq Iqbal, Ausaf Ahmad, **Brijesh Pandey** (2018), Physiology and Molecular Biology of Plants 24 (6), 1209-1219.
- ii. Expanding the global horizon of engineered crops: Miles ahead to go, **Brijesh Pandey**, R K Tiwari, Abhishek Kumar (2018), Scientific Research and Essays 13 (10), 105-110
- iii. Differential extraction and variation in substrate specificity in isoperoxidases of *Annona squamosa* L. Mohammed Shariq Iqbal, **Brijesh Pandey** (2018), European Journal of Biomedical and Pharmaceutical Sciences 5 (2), 742-745
- iv. Purification and Characterization of a Zinc-Dependent Cinnamyl Alcohol Dehydrogenase from *Leucaena leucocephala*, a Tree Legume. **Brijesh Pandey**, Veda P. Pandey, A. K. Shasany, U. N. Dwivedi (2014), Applied Biochemistry and Biotechnology.172 (7), 3414-3423. Springer, ISSN: 0273-2289, (Impact 1.687)
- v. Molecular dynamics simulated validation of anti-cancerous alkaloids as Topo II $\beta$  inhibitors screened by QSAR, pharmacophore and molecular docking approaches. Swati Singh, Manika Awasthi, Veda P. Pandey, **Brijesh Pandey**, Upendra N. Dwivedi (2015), Medicinal Chemistry Research; 24(7), 2972-2985, Publisher Springer US, Print ISSN 1054-2523,( Impact-1.612).

- vi. DNA topoisomerase directed anti-cancerous alkaloids: ADMET based screening, molecular docking and dynamics simulation. Swati Singh, Tamal das, Manika Awasthi, Veda P. Pandey, **Brijesh Pandey**, Upendra N. Dwivedi (2015), *Biotechnology and Applied Biochemistry*; 63(1); 125-37, Wiley online library, ISSN: 1470-8744 (Impact 1.322).
- vii. Morpho-physiological characterization of seeds and seedlings of *Nigella sativa* Linn.: Study on Indian germplasm. Mohammed Shariq Iqbal, Mohammad Israil Ansari, Iqbal Ahmad and **Brijesh Pandey** (2015). *International Research Journal of Biological Sciences* 4 (4), 38-42. International Science Congress Association, ISSN: 2278-3202, (Impact ).
- viii. Antioxidant potential of some medicinal plants (*Ocimum sanctum*, *Azadirachta indica* and *Nigella sativa*). Mohammed Shariq Iqbal, Mohammad Israil Ansari, Shehroz Jafri, Sudhakar Padmesh, Iqbal Ahmad, **Brijesh Pandey** (2014), *Pharmacophore*; 5:4, 631-637. ISSN: 2229-5402, (Impact 0.927).
- ix. Papaya fruit ripening: ROS metabolism, gene cloning, characterization and molecular docking of peroxidase. Veda P pandey, Swati Singh, Nivedita Jaiswal, Manika Awasthi, **Brijesh Pandey**, Upendra N Dwivedi. (2013) *Journal of Molecular catalysis B: Enzymatic*. 98, 98-105. Elsevier, ISSN: 1381-1177, (Impact 2.745).
- x. Cloning, expression, functional validation and modeling of cinnamyl alcohol dehydrogenase isolated from xylem of *Leucaena leucocephala*. **Brijesh Pandey**, Veda Prakash Pandey and Upendra Nath Dwivedi. (2011) *Protein Expression and Purification*. 79(2), 197-203. Elsevier, ISSN: 1046-5928, (Impact 1.508).

#### C. PAPERS IN CONFERENCES PROCEEDINGS:

- i. ....
- ii. ....
- iii. ....

#### 11. Patents/Copyrights /IPR (If Any)

A THERMOSTABLE PEROXIDASE FROM BAEL [AEGLE MARMELOS (LINN.) CORREA AND A METHOD OF ISOLATION THEREOF]. 2740/DEL/2012 ; Published in 2014. (FER submitted in 2019, In amended stage).

#### 12. INVITED TALKS:

Role of proctorial board, in Faculty induction program at Mahatma Gandhi Central University, Mothari, Bihar, January 2020.

Evolution in Biotechnology: at UGC-Academic staff college, Lucknow University, Lucknow, UP, India, March 30, 2012.

#### 13. RESEARCH PROJECTS (COMPLETED / ONGOING):

**Role of GABA transaminase during leaf Senescence and its regulatory mechanism',**

(As *CO-PI*) Funded by Department of Science and Technology, New Delhi, India (2013-2016)

**14. PARTICIPATION & PRESENTATIONS IN SEMINARS/SYMPOSIA/WORKSHOPS/CONFERENCES:**

- i. pH dependent enzymatic determination of catechol oxidase in *Annona squamosa* L., Mohammed Shariq Iqbal, Brijesh Pandey, in national Conference on Biological Applications of Nanomaterials, Amity University Uttar Pradesh, Lucknow campus, 2018.
- ii. Anticancer potential of *Nigella sativa*. Garima Gupta, Mohammed Shariq Iqbal, Brijesh Pandey, Janmejai K Srivastava. In national seminar on Women's health, Amity University Uttar Pradesh, Lucknow campus, 2017.
- iii. Multitier regulation of enzymatic function in cinnamyl alcohol dehydrogenase of *Leucaena leucocephala*: In vitro and in vivo studies. In 104<sup>th</sup> Indian Science Congress, Tirupati, 2017.
- iv. Antioxidant profiling in different growth and development stages of *Nigella sativa* and their in vitro elicitation, In 104<sup>th</sup> Indian Science Congress, Tirupati, 2017.
- v. Variable Ph mediated extraction of peroxidases from *Annona squamosa* L leaves reveal differential substrate specificity. In 104<sup>th</sup> Indian Science Congress, Tirupati, 2017.
- vi. Does Zn<sup>2+</sup> modulate structure and function of cinnamyl alcohol dehydrogenase from *Leucaena leucocephala*? **Brijesh Pandey**, Veda P. Pandey, U. N. Dwivedi. In Oral section, 103<sup>rd</sup> Indian Science Congress, Mysore, India, Jan 3-7, 2016, P-32-33.
- vii. Immobilization of thermostable peroxidase from *Aegle marmelos*: A potential enzyme for environmental monitoring. **Brijesh Pandey**, Divya Agarwal, Mohammed Shariq Iqbal. In Poster section, 103<sup>rd</sup> Indian Science Congress, Mysore, India, Jan 3-7, 2016, P-186-187.
- viii. Therapeutic potential of thymoquinone: An active phytochemical from *Nigella sativa*. Mohammed Shariq Iqbal, Mohammed Israil Ansari and **Brijesh Pandey**. In National Symposium on Interfacing Chemical Biology and Drug Design, Amity University Uttar Pradesh, Lucknow, India, Feb 24-25, 2015, p-79.
- ix. Dithiocarbamates of omega substituted (2-naphthoxy) alkanes: A novel class of antimicrobial agents. Sadaf Zaidi, Chandan Kumar, Mohammed Shariq Iqbal, **Brijesh Pandey**, Nitin Srivastava, Devdutt Chaturvedi. In National Symposium on Interfacing Chemical Biology and Drug Design, Amity University Uttar Pradesh, Lucknow, India, Feb 24-25, 2015, p-34.
- x. Spatio-Temporal Regulation in Expression of Lignin Specific Cinnamyl Alcohol Dehydrogenase in *Leucaena leucocephala*. **Brijesh Pandey**, Poonam Gupta, Upendra Nath Dwivedi, 102<sup>nd</sup> Indian Science Congress, Mumbai January 3-7, 2015, pp139.
- xi. Characterization of GABA transaminase during leaf senescence in *Arabidopsis thaliana*. Mohammad Israil Ansari, Sayed U. Jalil, **Brijesh Pandey** and Saba hasan. 5th Annual International Conferences on Advances in Biotechnology (Bio Tech 2015), GSTF and IIT Kanpur, India, March 13-15, 2015, pp28.
- xii. Olivacine derivatives as ant cancerous agents directed against DNA topoisomerase Ii $\beta$ : QSAR and Pharmacophore analysis. Swati Singh, Manika Awasthi, Veda P. pandey, **Brijesh Pandey**, U. N. Dwivedi. 102<sup>nd</sup> Indian Science Congress, Mumbai January 3-7, 2015 (Published as abstract), pp209.
- xiii. Role of Biotech Industries in Indian Economic Sector. National Conference on Bioengineering and Biotechnology: An Industrial Perspective, Amity University Uttar Pradesh, Lucknow campus, Lucknow, October 16-17, 2015, pp24.
- xiv. Germplasm diversity of *Nigella sativa*: A morphological, biochemical and genetic evaluation. Mohd. Shariq Iqbal, Divya, Mohd. Israil Ansari, Rajesh K Tiwari and **Brijesh Pandey**, in a national symposium on Recent Advances in Biochemistry and Biotechnology: Applications in Health, Environment and Agriculture, Department of Biochemistry, University of Lucknow, October 29-31, 2013: p 100.
- xv. Morphological, biochemical and genetic polymorphism in Mango. Sanyog Dwivedi, Deepender Kumar, Jyotsana Bommasamudra, Mohd. Shariq Iqbal and **Brijesh Pandey**, in a national symposium on Recent Advances in Biochemistry and Biotechnology:

- Applications in Health, Environment and Agriculture, Department of Biochemistry, University of Lucknow, October 29-31, 2013: p 101.
- xvi. Differential deposition of phenolics in *Mangifera indica* and fruit set. Divya, Deepika Kumari, Rajesh K. Tiwari and **Brijesh Pandey**, In National seminar on Stress Development and Adaptation: Biochemical Basis and Biotechnological Approaches, Department of Biochemistry, University of Lucknow, March 15-16, 2013:p-27.
- xvii. Terpenoids as DNA topoisomerase inhibitors: *In-silico* approach towards anticancerous drug designing. Swati Singh, Poonam Yadav, Veda P Pandey, **Brijesh Pandey**, Upendra Nath Dwivedi. In National seminar on Stress Development and Adaptation: Biochemical Basis and Biotechnological Approaches, Department of Biochemistry, University of Lucknow, March 15-16, 2013: p-48.
- xviii. Morphogenetic and biochemical perspective of *Nigella sativa*: A source of biopharmaceuticals. Mohd. Shariq Iqbal, Mohd. Israil Ansari and **Brijesh Pandey**. In National seminar on Stress Development and Adaptation: Biochemical Basis and Biotechnological Approaches, Department of Biochemistry, University of Lucknow, March 15-16, 2013: p-41.
- xix. Effect of salinity on germination of *Cajanus cajan* (Pigeon pea) seedlings with special reference to isoperoxidases. Jyonsana Bommasamudram, Deepender Kumar, Sanyog Dwivedi and Brijesh Pandey. In National seminar on Stress Development and Adaptation: Biochemical Basis and Biotechnological Approaches, Department of Biochemistry, University of Lucknow, March 15-16, 2013: p-28-29.
- xx. Molecular docking studies on Human DNA topoisomerase with selected terpenoids for their potential therapeutic application as anti cancer molecules. Swati Singh, P Yadav, Veda P Pandey, Brijesh Pandey and Upendra Nath Dwivedi. In National Conference at National Botanical Research Institute, Lucknow, February 2013: p-9.
- xxi. Isolation, purification and characterization of an EDTA activable cinnamyl alcohol dehydrogenase from *Leucaena leucocephala*. Brijesh Pandey and U. N. Dwivedi. In National Seminar on Advances in Wood Science and Technology Research: Recent Trends, Future Challenges and Opportunities at IARI-FRI, Dehradun, March, 9-11, 2011: p-52.
- xxii. A quick and simple method for isolation of RNA from a lignified tissue of a tree legume *Leucaena leucocephala*. **Brijesh Pandey** and Upendra Nath Dwivedi in a National conference on "Recent Advances in Biochemical Techniques" held at Department of Biochemistry, Bundelkhand University, Jhansi, India, May 13, 2004.
- xxiii. Biochemical and Molecular Analysis of Cinnamyl Alcohol Dehydrogenase from *Leucaena Leucocephala*. **Brijesh Pandey**, Poonam Gupta and Upendra Nath Dwivedi, Department of Biochemistry, Lucknow University, Lucknow-226007, India in 73rd Annual Meeting of Society of Biological Chemists (India), held at G.B. Pant University of Agriculture & Technology, Pantnagar, India, November 21-24, 2004.
- xxiv. Cloning of Caffeic acid *O*-methyltransferase, a key enzyme in Lignin biosynthetic pathway by PCR based screening of c-DNA library of *Leucaena leucocephala*. Poonam Gupta, **Brijesh Pandey** & Upendra Nath Dwivedi in 74th Annual Meeting of Society of Biological Chemists (India), held at Central Drug Research Institute, Lucknow, India 2005.
- xxv. Seasonal Variation in Lignin Specific Cinnamyl Alcohol Dehydrogenase Activity and Isozymes in *Leucaena Leucocephala*. **Brijesh Pandey**, Poonam Gupta and U. N. Dwivedi in 74th Annual Meeting of Society of Biological Chemists (India), held at Central Drug Research Institute, Lucknow, India 2005



- xxvi. Differential expression of enzymes of lignin biosynthetic pathway in response to salicylic acid in *Leucaena leucocephala*. **Brijesh Pandey**, Archana Gupta, Poonam Gupta and U. N. Dwivedi in International Symposium on **Current advances in molecular biochemistry: Applications in Health, environment and agriculture** organized by Department of Biochemistry, University of Lucknow, Lucknow, India December, 2007.
- xxvii. Purification and characterization of a lignin specific cinnamyl alcohol dehydrogenase from *Leucaena leucocephala*. **Brijesh Pandey** and U. N. Dwivedi in International Symposium on **Current advances in molecular biochemistry: Applications in Health, environment and agriculture** organized by Department of Biochemistry, University of Lucknow, Lucknow, India December, 2007

#### 15. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

UGC-CSIR (NET) Junior Research Fellowship

CSIR Senior Research Fellowship

Secured First Position in M.Sc. (Plant Science)

#### 16. ANY OTHER SIGNIFICANT INFORMATION:

- i. Attended 82<sup>nd</sup> Workshop on '**Radiochemistry and Applications of Radioisotopes**', organized by Amity University Haryana and Indian Association of Nuclear Chemists and Allied Scientists (IANCAS) and sponsored by **Board of Research in Nuclear Science (BRNS) Department of Atomic Energy, BARC** at Amity Education Valley, Manesar, from March 12 to March 20, 2013.
- ii. National Workshop on '**Hands on training on applications of polymerase chain reaction and DNA sequencing**' organized by Dolphin Institute of Biomedical and Natural Sciences, Dehradun, sponsored by Govt. of Uttaranchal, FRI and Wildlife Institute of India, Dehradun from October 3 to October 7, 2007 as **Instructor and Resource Person**.
- iii. Attended CIMAP Winter School on 'Recent techniques in gene cloning, DNA analysis and functional genomics', organized by Central Institute of Medicinal and Aromatic Plants, Lucknow and sponsored by CSIR, New Delhi, India from December 1 to December 10, 2003.
- iv. Member, Directorate of Academic Innovation, AUUP, Lucknow Campus. (2016-2017)
- v. Member of Academic Honour Society, Lucknow Christian Degree College, Lucknow, India (1994-95).

**(Brijesh Pandey)**