

CURRICULUM VITAE

Dr. Pankaj Kumar Sagar

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Academic qualification

- Ph.D. (Biotechnology) from Bundelkhand University, Jhansi (U.P.) in 2022.
- Completed M.Sc. (Biotechnology) from Dr. B. R. Ambedkar University, Agra (U.P.) in 2006.
- Completed B.Sc. (Bio-group) from Dr. B. R. Ambedkar University, Agra (U.P.) in 2003.

National/ State level exam qualified

- Qualified Common Entrance Test (CET) for Ph.D. conducted by Avadh University, Faizabad (U.P.) in June 2012.
- Qualified ARS- NET -2010 conducted by ASRB, (ICAR) New Delhi.
- Qualified GATE 2007 conducted by I.I.T. Kanpur (U.P.).

Professional experience

- Working as Assistant Professor, Department of Microbiology, Bundelkhand University, Jhansi (U.P.) since December 2011.
- Worked as Lecturer, School of Life Sciences, Jaipur National University, Jaipur (Rajasthan) from July 2011 to December 2011.
- Worked as Research Associate in the project “All India Network Programme on Bluetongue Disease (AINP- BTB)” in Animal Health Division, Central Sheep & Wool Research Institute (CSWRI), (ICAR) Avikanagar (Via Jaipur), Rajasthan from October 2008 to July 2011.

Research guidance: 04 (M.Sc. Dissertation work)

M.Sc. Dissertation	
“Biochemical characterization and antibiotic sensitivity of <i>Pseudomonas</i> Sp. isolated from clinical samples of M.L.B medical college Jhansi” January- June 2013.	Department of Microbiology, Bundelkhand University, Jhansi (U.P.)
“Antibiotic sensitivity and biochemical characterization of <i>Pseudomonas</i> Sp. isolated from soil and water samples from M.L.B medical college Jhansi”, January- June 2013.	Department of Microbiology, Bundelkhand University, Jhansi (U.P.)
“Antibacterial activity of <i>Eucalyptus umbellate</i> and <i>Ocimum sanctum</i> ” January- June 2016	Institute of Biomedical Sciences, Bundelkhand University, Jhansi (U.P.)
“Evaluation of antibacterial activity of <i>Eucalyptus umbellata</i> leaf extract against <i>E. coli</i> and <i>S. aureus</i> ” January – June 2016	Institute of Biomedical Sciences, Bundelkhand University, Jhansi (U.P.)

Conference organized

- Co-Joint Secretary in National Conference on “RECENT TRENDS IN APPLIED MICROBIOLOGY, HUMAN HEALTH & ENVIRONMENT” 27-28, March 2015 at Bundelkhand University, Jhansi (U.P).

Publication

1. **Sagar, P. K.**, Sharma, P., & Singh, R. (2022). Inhibition of Quorum Sensing Regulated Virulence Factors and Biofilm Formation by *Eucalyptus globulus* against Multidrug-Resistant *Pseudomonas aeruginosa*. *Journal of Pharmacopuncture*, 25(1), 37–45.
2. **Sagar P.K.**, Singh Rambir (2021). Anti-quorum sensing activity of clove (*Syzygium aromaticum*) bud extract and its combined efficacy with ceftazidime against multidrug-resistant *Pseudomonas aeruginosa*. *Research Journal of Biotechnology*, 16(3):75-82.

3. Sagar PK, Sharma P, Singh R. Antibacterial efficacy of different combinations of clove, eucalyptus, ginger, and selected antibiotics against clinical isolates of *Pseudomonas aeruginosa*. AYU 2020;41:123-9.
4. G. G. Sonawane, P. K. Sagar, B. N. Tripathi, R. Kumar, F. Singh, J. Kumar (2012) Detection of *Mycobacterium avium* subspecies *paratuberculosis* by 251 gene locus polymerase chain reaction in the tissue of naturally infected sheep . *Indian Journal of Small Ruminants*, 18 (1): 90-94.

Abstracts published in conference/ seminars

- Pankaj Kumar Sagar and Rambir Singh (2020). “Anti-quorum sensing activity of selected medicinal plants against clinical isolates of *Pseudomonas aeruginosa*” in Third National Conference on ‘Emerging Synergistic Trends in Ayurvedic and Biomedical Sciences’ organized by Institute of Biomedical Sciences and Vaidya Ram Narayan Sharma Institute of Ayurved and Alternate Medical Education and Research, Bundelkhand University, Jhansi on February 19-20, 2020.
- Pankaj Kumar Sagar and Rambir Singh (2019). “Screening of growth inhibitory activity and combined efficacy of plant extracts and antibiotics against *Pseudomonas aeruginosa*” in the National conference on “Frontiers in Environment, Health and Biosciences-2019” organized by Institute of Biosciences & Biotechnology, Chhatrapati Shahu Ji Maharaj University, Kanpur on 16 & 17 February, 2019.
- Pankaj Kumar Sagar and Rambir Singh (2019). *In vitro* antipseudomonal activity and combined efficacy of selected plant extracts and antibiotics” in “6th world congress on Nanomedical Sciences – ISNSCON 2018”, “Chemistry-Biology Interface: Synergistic in new frontiers (CBISNF- 2019)” and “Conference on “Science and Technology for the Future of Mankind” organized by Jamia Hamdard & University of Delhi from 7th to 9th January, 2019 at Vigyan Bhawan, New Delhi.
- Pankaj Kumar Sagar, Rishi Kumar Saxena and Sanjay Kumar (2015). Antibacterial activity of plant extract against antibiotic resistant pathogens. National Conference on RECENT TRENDS IN APPLIED MICROBIOLOGY, HUMAN HEALTH & ENVIRONMENT” 27-28, March 2015 at Bundelkhand University, Jhansi (U.P).

- Devendra Mani Tripathi, **Pankaj Kumar Sagar**, Rishi Kumar Saxena (2012). Distillery Spent Wash Colour & COD removal by an Indigenous Isolate. National Seminar on Application of Biotechnology to Improve Industrially Important Microbial Strain. March 28-29, 2012 Deptt. of Zoology and Biotechnology, Govt. P.G. College, Guna (M.P.), India
- Rishi Kumar Saxena, **Pankaj Kumar Sagar**, Devendra Mani Tripathi and Anuradha Rajput (2012). Spirulina Biotechnology- Exploitation of Algal Resources. National Seminar on Application of Biotechnology to Improve Industrially Important Microbial Strain. March 28-29, 2012 Deptt. of Zoology and Biotechnology, Govt. P.G. College, Guna (M.P.), India
- Tripathi B.N., Sonawane G. G., **Sagar P.K.**, Kumar J., Singh F. (2012). Seroprevalence of Paratuberculosis at an organized farm in semi arid region of Rajasthan, India. 11th International Colloquium on Paratuberculosis, 5-10 February 2012, Sydney, Australia.
- Dixit, S.K., Tripathi, B.N., Sonawane, G. G., Singh, F., Kumar, J. and **Sagar, P. K.** (2011). Clinical management of pneumonia in sheep. National Seminar on Prospects and Retrospect of Small Ruminant and Rabbit Production: Contribution to Socio-economic Security, Jaipur, 7th -9th December 2011.

Workshop/ Research training attended

- Participated in ‘Faculty Training Programme on Advance Scientific Research Equipments’ organized by Innovation centre, Bundelkhand University, Jhansi date 3 -6 October 2018.
- Participated in workshop on “Role of Biochemistry In Health, Medicine and Agriculture Sector” organized by Department of Biochemistry, Bundelkhand University, Jhansi at Bundelkhand University dated 6th November 2017.
- Participated in Author Workshop on “How to Write and Publish Scientific Articles and Manuscripts” organized by Springer Nature and Bundelkhand University, Jhansi at Central Library, Bundelkhand University Jhansi dated 25th April, 2017.
- Attended the Training course on “Sustainable Development and Management of Ground Water Resource” held at Department of Geology, Bundelkhand University, Jhansi (U.P.) organized by Central Ground Water Board, Northern Region, Lucknow (Under the aegis of Rajiv Gandhi National Ground Water Training & Research Institute, Raipur), Ministry

of Water Resources, River Development and Ganga Rejuvenation Govt. of India from 26.12.2016 to 30.12.2016.

- Attended a “National Workshop on Genomics and Proteomics in Biomedical Research” organized by the Innovation centre and the Institute of Biomedical Sciences, Bundelkhand University, Jhansi dated March 17-20, 2016.
- Participated in “Faculty Development Programme, (FDP)” organized by Internal Quality Assurance Cell (IQAC) at Bundelkhand University, Jhansi (U.P.) from 1st to 7th September, 2014
- A short term training program on *Production of Oral Polio Vaccine* at Bharat Immunologicals & Biologicals Corporation Limited (BIBCOL), Bulandshahar from 1st July to 31st July 2005.
- A summer training at National JALMA Institute for Leprosy and other Mycobacterial Diseases, Agra (Indian Council of Medical Research) from 1st June 2005 to 15th June 2005.

Presentation / Participation in conference/ seminar/webinar

- Attended a Webinar on “DISCOVERY SERVICES AND RELATED ASPECTS” held on 28th July 2020 organized by Society for the Advancement of Library and Information Science (SALIS) in collaboration with Springer Nature.
- Participated in International Webinar on “UNWINDING COMPLEXITY OF COVID-19: AN IN-SILICO ATTEMPT” organized by Department of Biotechnology, Institute of Engineering and Technology, Bundelkhand University, Jhansi on 3rd June 2020.
- Participated in National Webinar on “Global Lockdown-2020: Climate Change and Sustainable Environmental Solutions” organized by Department of Biotechnology, Institute of Engineering and Technology, Bundelkhand University, Jhansi on May 25, 2020.
- Participated and oral presentation on entitled “Anti-quorum sensing activity of selected medicinal plants against clinical isolates of *Pseudomonas aeruginosa*” in Third National Conference on ‘Emerging Synergistic Trends in Ayurvedic and Biomedical Sciences’ organized by Institute of Biomedical Sciences and Vaidya Ram Narayan Sharma Institute of Ayurved and Alternate Medical Education and Research, Bundelkhand University, Jhansi on February 19-20, 2020.

- Participated and given an oral presentation entitled “Screening of growth inhibitory activity and combined efficacy of plant extracts and antibiotics against *Pseudomonas aeruginosa*” in the National conference on “Frontiers in Environment, Health and Biosciences-2019” organized by Institute of Biosciences & Biotechnology, Chhatrapati Shahu Ji Maharaj University, Kanpur on 16 & 17 February, 2019.
- Participated and presented a poster paper titled “*In vitro* antipseudomonal activity and combined efficacy of selected plant extracts and antibiotics” in “6th world congress on Nanomedical Sciences – ISNSCON 2018”, “Chemistry-Biology Interface: Synergistic in new frontiers (CBISNF- 2019)” and “Conference on “Science and Technology for the Future of Mankind” organized by Jamia Hamdard & University of Delhi from 7th to 9th January, 2019 at Vigyan Bhawan, New Delhi.
- Participated in National Symposium on DNA Technology & Nanotechnology. Will it Change Medical Sciences in Future & NABL Accreditation Awareness Programme jointly organized by Innovation Centre & Institute of Biomedical Sciences, Bundelkhand University, Jhansi in collaboration with Smt. Vidyawati group of Institution, Jhansi on 1 October 2018.
- Participated in ‘Awareness Programme on Intellectual Property Rights’ organized by PHD Chamber of Commerce and Industry, New Delhi and Institute of Biomedical Sciences, Bundelkhand University, Jhansi dated September 13, 2018.
- Participate in Seminar on “Importance of Intellectual Property Rights in Innovation Management” jointly organized by Bundelkhand University, Jhansi and PHD Chamber of Commerce and Industry, New Delhi dated 04 May 2017.
- Participated in the “Brainstroming Session –Cum-Stakeholders Meeting on Medicinal and Aromatic Plants Initiatives in Bundelkhand Region and Awareness –Cum-Skill Development Programme on Cultivation, Processing and Marketing of Medicinal and Aromatic Plant organized by Government of India, Department of Biotechnology and CSIR- Indian Institute of Integrative Medicine, Jammu in collaboration with Bundelkhand University, Jhansi dated February 17-18 2017.
- Participated in the seminar on “Prevention and Control of Diabetes” organized by Regional Ayurveda Research Institute, Gwalior Road, Jhansi (U.P.) dated 28/10/2016.

- Participated in the National Seminar on “Current Challenges of Biodiversity” organized by Uttaranchal (P.G.) College of Technology & Bio-Medical Sciences, Dehradun U.K. dated 28th February 2014.
- Participated in the National Seminar on "Application of Biotechnology to Improve Industrially Important Microbial Strain” March 28-29, 2012 at Deptt. of Zoology and Biotechnology, Govt. P.G. College, Guna (M.P.), India.
- Participated in the National Seminar on "Stress Management in Small Ruminant Production and Product Processing “29th -31st January 2010 at Jaipur organized in the collaboration of CSWRI, Avikanagar (Rajasthan) and CIRG, Makhdoom (U.P.), India.
- Participated in the “National Symposium on Biotechnology in 21st Century” 23 - 24 December 2005 at Mahatma Gandhi Institute of Applied Sciences, Jaipur, India.
- Participated in the “24th Biennial Conference of the Indian Association of the Leprologist” 12th-14th November, 2005 at National JALMA Institute for Leprosy and other Mycobacterial Diseases, (Indian Council of Medical Research) Agra, India.

Award:

- “**Best Faculty Award**” in the “**10th International Scientist Awards on Engineering, Science and Medicine**” held on 26& 27-September-2020 in Hyderabad, India organized by **VDGOOD Professional Association, India.**

Member (In Board/ committee):

- Member of Board of Studies (BOS), J.C Bose Institute of Life Sciences, Department of Microbiology, Bundelkhand University Jhansi (U.P.) .

Visiting faculty in other University

- Rani Lakshmi Bai Central Agricultural University (RLB CAU), Jhansi (U.P.) during April - June, 2015.

Membership (In society/ association)

- Indian Society for Sheep and Goat Production and Utilization (Life Membership).
- The Indian Science Congress Association (Life Membership).

Area of Interest

- Molecular Biology.
- Genetic Engineering.
- Biotechnology.
- Study on Medicinal plants as antimicrobial agents.

Technical experience

- Nucleic acid Purification (DNA/RNA)
- Polymerase chain reaction
- RAPD, RFLP, MIRU-VNTR
- Gel electrophoresis
- Southern, Western and Northern hybridization
- Drug Susceptibility Testing
- Indirect, Competitive & Sandwich ELISA
- Agar Gel Immunodiffusion test (AGID)
- Isolation & Culture of Microorganisms
- Virus culture (Virus Culture Through Embryonated Chicken Egg/BHK -21 Cell Line).

(PANKAJ KUMAR SAGAR)