CURCULAM-VITAE

Dr. R. SAHAY (M.Sc. Ph.D.)

Research Interest Score466 Citations938 h-index18

Department of Chemistry Maharana Pratap Mahavidyalaya Jungle Dhusan Gorakhpur-273014, U.P. India

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CAREER OBJECTIVE:

To establish global career which offers challenges and growth with the opportunities to enrich my knowledge, skills while contributing best to the organization.

At Present : Working as Assistant Professor, Department of Chemistry

Maharana Pratap Mahavidyalaya J. D. Gorakhpur, Uttar Pradesh, India

Award: Best Teachers Award in 2023 by DDU Gorakhpur University Gorakhpur

Research Experience: 14-Years in the field of Synthetic Applications of Laccase Enzyme

(Enzymology), 05 Years in the Chemistry Department, DDU

Gorakhpur University Gorakhpur.

Teaching Experience: 14- Year teaching Experience in UG & PG Classes.

Number of E-content uploaded in Uttar Pradesh Higher Education Digital Library: 155

Number of E-content uploaded in teacher's blog at MPPG College J. D. Gorakhpur: 186

Technological skills: Purification, Characterization and Synthetic applications of laccase

Enzyme.

Conferences / Symposia / Webinars : 63

Educational Training : 03

Academic Profile:

Ph. D. (Chemistry) Research Title: "Studies on purification, characterization and biotechnological applications of laccase from a few fungal strains" in year 2010 (from DDU Gorakhpur University, Gorakhpur.

M. Sc. (Physical Chemistry) From DDU Gorakhpur University, Gorakhpur in Year: 2005.

B. Sc. From DDU Gorakhpur University, Gorakhpur in Year: 2003.

Intermediate (10+2) From U.P. Board in Year: 1999.

High School (10th) From U.P. Board in Year: 1997.

* Personal Details:

Name : Dr. R. Sahay

Fathers Name : Shri Lakhraj

Marital Status : Married

Sex : Male

Nationality : Indian

Mailing Address : Department of Chemistry, M. P. M. Jungle

Dhusan, Gorakhpur, Pin-273014, Uttar Pradesh, India.

Languages known : Hindi & English

Others : [i] ADCST Computer Course one Year certificate,

[ii] Qualified RET (Research Eligibility Test)-2006

[iii] Working knowledge of computer like MS- word,

Power point, Excel, Chem Draw etc.

Member of Academic Bodies : [i] Life Member of the Indian Science Congress

Association Kolkata, Membership No.: L33218

Subject : Chemical Sciences

[ii] IARDO Silver Membership under the Academician

Category membership no. : 950

(Annexure)-I

Book

- 1. One Chapter Entitled "Fungal laccase a versatile enzyme for biotechnological applications" ISBN: 978-81-955557-2-7, Emerging Trends in life Sciences, Vol. I Chapter-6, Scieng Publications India. (2022).
- 2. One Chapter Entitled "Biological activities of Neem and its compounds. ISBN: 978-93-94766-25-9, Emerging Trends in life Sciences, Scieng Publications India. (2022).

List of Publications [Total Citation-466]

1. R. Sahay, R. S. S. Yadav, and K. D. S. Yadav. Purification and Characterization of Extracellular Laccase Secreted by *Pleurotus sajor-caju* MTCC 141. Chin J

- Biotech. (2008), 25; 24(12): 2068-2073. (ISSN / ISBN No. Print 1872-2075 Online 1000-3061) Impact Factor: 1.73
- R. Sahay & R. S. S. Yadav & K. D. S. Yadav. Purification and Characterization of Laccase Secreted by *L. lividus*. Appl Biochem Biotechnol (2009) 157: 311-320.
 (ISSN / ISBN No. Print 0273-2289 Online 1559-0291) Impact Factor: 2.277
- 3. R. Sahay, R. S. S. Yadav, Sudha Yadava & K. D. S. Yadav. A Laccase of *Fomes durissimus* MTCC-1173 and Its Role in the Conversion of Methylbenzene to Benzaldehyde. Appl Biochem Biotechnol (2012) 166:563-575. (ISSN/ISBN No. Print 0273-2289 Online 1559-0291) Impact Factor: 2,277
- 4. R. Sahay. Fungal Laccase as a Green Catalyst. International Journal of Environment, Agriculture and Biotechnology. (2021), 6: (3), 45-58. (ISSN/ISBN No. 2456-1878) Impact Factor: 3.118
- 5. Sahay R. Fungal laccase use in organic synthesis and their biotechnological applications. International Journal of Science Technology and Management. (2021) 10: (6). 47-59. (ISSN/ISBN No. Print 2394-1529 Online 2394-1537) Impact Factor: 6.3
- 6. Sahay R. Industrial and biotechnological applications of lignolytic enzymes. International Journal of Advanced Research in Science and Engineering. (2021) 10:(6), 57-73. (ISSN/ISBN No. Print 2319-8346 Online 2319-8354) Impact Factor: 6.1
- 7. **R Sahay**. Microbial enzymes: current features and potential applications laccase in nanobiotechnology. International Journal of Advanced Technology in Engineering and Science. (2021) 9:(6), 21-38. (ISSN/ISBN No. 2348-7550) Impact Factor: 5-.8
- 8. R. Sahay. Selective Biotransformation of aromatic methyl groups to aldehyde groups using laccase of *Gloephyllum stratum* MTCC-1117. International Journal of Applied and Pure Science and Agriculture. (2021) 7: (6).1-14 (ISSN/ISBN No. Print 2394-823X Online 2394-5532) Impact Factor: 5.295
- R Sahay. Synthetic applications of Laccase and its Catalytic Potentials.
 International Journal of Advanced Engineering Research and Science. (2021) 8:

 (6), 112-120. (ISSN/ISBN No. Print 2349-6495 Online 2456-1908) Impact Factor: 4.912

- 10. Ram Sahay. Fungal Laccase Mediator and its Biocatalytic Potential Applications.
 A Review. Biotechnologia Applicada. (2021). 38, 1100-1109. (ISSN/ISBN No. Online 1027-2852) Impact Factor: 0.222
- 11. **R. Sahay**. Properties of laccase, physiological functions and their industrial applications. International Journal of Recent Scientific Research. 2021. 12: (6), 24023-24030. (ISSN/ISBN No. 0976-3031) Impact Factor: 7.383
- 12. R. Sahay. Introduction to laccase enzymes and their applications. International Journal of Current Advance Research. 10(6), 24668-24681, 2021, (ISSN/ISBN No. Print 2319-6505 Online 2319-6475) Impact Factor: 6.614
- 13. R. Sahay. Multicopper oxidase enzymes use and its characteristics. International Journal of Advanced Engineering Research and Science. (2022), (9):3, 18-25. (ISSN/ISBN No. Print 2349-6495 Online 2456-1908) Impact Factor: 4.912
- 14. R. Sahay, Fungal laccases as tools for biodegradation of industrial dyes. International Journal of Recent Scientific Research. (2022) 13:07(A) 1692-1697. (ISSN/ISBN No. Print 0976-3031) DOI: 10.24327/IJRSR, Impact Factor: 6.86
- **15. National Seminar** on "Recent Advances in Chemical Science" Organized by Chemistry Department D.D.U. Gorakhpur University, Gorakhpur under UGC-DSA Program. March 28 & 29, 2007.
- National Seminar on "Chemical Science" Organized by Chemistry Department D.D.U. Gorakhpur University, Gorakhpur 2007-2008 under UGC-DSA Program March 13 & 14, 2008.
- 17. National Seminar on "Emerging Trends in Chemical Science" Organized by Chemistry Department D.D.U. Gorakhpur University, Gorakhpur under UGC-DSA Program, September 26 & 27, 2008.
- 18. International Seminar on 3rd International Congress on Bioprocesses food Industries. Nov, 6th to 8th 2008 & 5th Convention of The Biotech Research Society of India Osmania University, Hyderabad India.
- 19. National Seminar on Emerging Trend in Advance Chemical Research Organized by Department of Chemistry, Allahabad University Allahabad. Feb 8 to 10-2009.

- 20. International Seminar on 4th International Congress on "Emerzing Trends in Biotechnology December 4th to 6th, 2009 & 6th convention of The Biotech Research Society of India Organized by Department of Biotechnology Banaras Hindu University Varansi, India. National Seminar on "Thermodynamics of Living and Non-Living Systems" Organized by Chemistry Department D.D.U. Gorakhpur University, Gorakhpur under UGC-DSA Program, December 17 & 18, 2009.
- 21. National Seminar on Frontier Areas of Chemical Sciences during March 20 & 21-2010. Organized by Chemistry Department St. Andrew's College, Gorakhpur.
- **22. National Seminar** on "Computational Chemistry", Organized by Chemistry Department D.D.U. Gorakhpur University, Gorakhpur under UGC-DSA Program, March 14 & 15-2011.
- 23. National Seminar on Biotechnology for Sustainable Development DBT Consused-11, Organized by Department of Biotechnology D.D.U. Gorakhpur University, Gorakhpur under DBT Program. Nov 15th & 16th -2011.
- 24. 1st Uttar Pradesh Science Congress Theme: Science For Shaping the Future of Uttar Pradesh Organized by D.D.U. Gorakhpur University Gorakhpur on March 2nd to 4th -2013.
- 25. Workshop on Vartman Shischan Pravidhi Awam Anubhav Aadharit Sudhar" during March 02-08-2014, Organized by Maharana Pratap P.G. College, Jungle Dhushan, Gorakhpur-273014.
- 26. National Seminar on "Organic/Inorganic Functional Material: A Current Perspective (NCOIFM)" organized by Chemistry Department D.D.U. Gorakhpur University, Gorakhpur, March 1st & 2nd -2014.
- 27. National Seminar on Current Trends in Chemical Science" during July 12 & 13-2014. Organized by Chemistry Department, St. Andrew's College, Gorakhpur.
- 28. Rashtriya Sangosthi 21th Shatabdi Me Bharat-Nepal Sambhandh: Chunautian Awam Vikalp. February 14-15-2015. Organized by Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- **29.** National Seminar **Dwivarshya Pathyakram Avom Samiksha** on 21-27 May, 2016. Organized by Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.

- 30. National Seminar Nath Panth Sadhana Avom Darshan, 273014 on July 02-03, 2016, organized by Guru Shri Gorakhnath Mandir Gorakhnath Gorakhpur Avom Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- 31. Workshop Shaikshik Prashasan Avon Gunwatta: Kuchh Naye Prayog 22-28 Aug-2016, Organised by Swavittposhit Mahavidyalaya Pracharya Parishad, Gorakhpur & Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- 32. National Seminar Scientific paper Writing and effective communication. Sept. 17-18, 2016 organized by Department of Biotechnology DDU Gorakhpur University Gorakhpur Biozone Research Foundation Gorakhpur.
- **33.** Workshop Akadamik Unnay Avom Shaikshik Gunwatta. 21-27 October-2016, organized by IQAC Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- **34.** Workshop **Science on Comics**, 3- 7 February 2017, NCST-DST- GOI, ISCOS, Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur Venue: Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- **35.** Workshop **Varshik Rapate avom Anubhav Aadharit Sudhar** 5-11 Mar-2017, organized by Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- **36.** Workshop **Mahavidyalaya Work Planing** 21-27 March-2017, organized by Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- **37.** Workshop **Varshik Rapat avom Anubhav Aadharit Sudhar**. 5-11, March-2017, organized by Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- 38. Rashtriya Sangosthi attended **Bhartiya Ithas Sankalan Samitii Gorakhprant**Avom Prachin Ithas Puratatva avom Sanskrit tatha Ithas Vibhage MPPG College
 Jungle Dhushan, Gorakhpur 16 Sept-2017 organized by Maharana Pratap P.G.
 College Jungle Dhushan, Gorakhpur.
- **39.** International conference **Green Chemistry & Environmental Helth**: 25-26 September- 2017, organized by Marwar Business School Gorakhpur.
- 40. Workshop Uttar Pradesh Hindi Sansthan, Lucknow Avom MPPG College Jungle Dhushan, Gorakhpur, Swatantra Bharat Me-Hindi Ki Vikas Yatra, 03-04 Feb-2018, organized by Maharana Pratap P.G. College Jungle Dhushan, Gorakhpur.
- **41.** International Conference on **Emerging Trends in Chemical Sciences**, 24-25 Feb- 2018 organized by Department of Chemistry DDU Gorakhpur University Gorakhpur.

- **42.** Workshop on **Mahavidyalyee Varshik Karyyojana** organized by IQAC-MPPG College Jungle Dhushan, Gorakhpur on on 4- 6 July, 2018.
- **43.** Workshop on **Shaiksha Star ka Unnayan: Shikshko ki sakreey sahbhagita** organized by IQAC-MPPG College Jungle Dhushan, Gorakhpur on on 21 Aug, 2018.
- **44.** Workshop on **Varshik Yojana Kriyanvayan: Trimashik Sameeksha** organized by IQAC-MPPG College Jungle Dhushan, Gorakhpur on 02 Oct, 2018.
- **45.** National Conference on **Emerging Trends in Sciences** organized by MPPG College Jungle Dhushan, Gorakhpur on 01- 02 Feb, 2019.
- **46.** National Conference on **Commission for Scientific and Technical Terminology**. Department of Chemistry M.G.P.G. College Gorakhpur on 08-09 Feb, 2019.
- **47.** Workshop on **Mahavidyalyee Varshik Karyyojana** organized by IQAC-MPPG College Jungle Dhushan, Gorakhpur on 01-08 July, 2019.
- **48.** National Conference on **Food Chemistry**, **Processed Food & Toxicology** organized by Dept. of Chemistry D.A.V. P.G. College Kanpur on 25th -26th Sept.-2019.
- 49. National Conference on World Energy Scenario & Indian-Subcontinent: Challenges and Opportunities organized by Department of Geography M.P.P.G. College J. D. Gorakhpur 05-06 October, 2019.
- 50. National Webinar on Tissue Engineering using stem cell and Biotechnology organized by Sri Jai Narayan Mishra P. G. College KKC Lucknow on 16 -20, June-2020.
- 51. National Webinar on **Quiz on Awareness of Covid-19** organized by Rotract Club of Gorakhpur on 21 June 2020.
- 52. International Webinar on **Trends on Sustainability: Regenerative Agriculture** organized by MPPG College Jungle Dhushan, Gkp on 26th & 27th June-2020.
- 53. National Webinar on Vartmann Samazik Pariprakshya aur Mahatama Gandhi organized by MPPG College Jungle Dhushan, Gkp on 27th -28th July-2020.
- 54. National Webinar on Ram Mandir Nirman Sarvooch Nayayalaya Ka Niranya Avom Itehasik Pariprakshya organized by MPPG College Jungle Dhushan, Gkp on 01 Aug-2020.

- 55. National Webinar on Covid-19 and Environmental Pollution organized by Acharya Narendra Dev Kisan P.G. College Babhnan Gonda. UP on 9th Sept-2020.
- 56. International Webinar on Neighbourhood Policy of India Contemporary Diplomatic Discovere organized by MPPG College Jungle Dhushan, Gorakhpur on 29-30 Sept-2020.
- 57. Faculty Development Program Future Scope of Chemical Sciences and Research Methodology organized by Chemistry and Environmental Science Department Madan Mohan Malaviya University of Technology Gorakhpur on 21-25 Sept -2020.
- National Webinar on Recent Advances in Reneuable Energy Technology organized by Department of Mechanical Engineering North Eastern Reggional Institute of Science and Technology (NERIST) Nirjuli, Itanagar Arunachal Pradesh held during September `17-18,2021.
- 59. International Conference on **Technological Emerging Challenges in**Computer Science and Engineering organized by Tirumala Engineering

 College Jonnalagadda, Narasaraopt, Andhra Pradesh held during 20th -21th

 October-2021.
- 60. Coordinated in conducting the Intellectual Property Program under National Intellectual Property Awareness Mission Organized by Department for Promotion of Industry and Internal Trade Office of the Controller General of Patents, Designs and Trade Marks, Ministry of Commerce and Industry Government of India during 20 Feb-2022.
- 61. Lecture delivered in the birthday Occasion of Acharya Prafull Chandra Ray on the 02 August- 2024 in the Department of Chemistry, Maharana Pratap Mahavidyalaya Jungle Dhusan Gorakhpur.
- 62. National Conference on BhartiyaVidesh Niti Ke Badelete Aayam 2019 Se Ab Tak organized by ICWA & Maharana Pratap Mahavidyalaya Gorakhpur 07-08 Sept-2024.
- 63. International Conference on Mahakumbh 2025 Parampara, Anusthan Avom Mahatav Organized by Maharana Pratap Mahavidyalaya Jungle Dhusan Gorakhpur 22 Feb-2025.

Equipments handling -

- ➤ UV/VIS Spectrophotometer, Hitachi (Japan), Model U-2000.
- Refrigerated Centrifuges, Sigma (Germany) Model 3K-30 and IBC (India), Model IBC-25.
- ➤ Amicon Hollow Fiber Concentrator with Accessories, Amicon (USA), Model CH-2A.
- Freeze Dryer, SICO (India), Model 80 MP.
- Fluorescence Spectrophotometer, Hitachi (Japan), Model F-2500.
- ➤ UV-VIS Spectrophotometer, SPECORD (Germany), Model-200.
- ➤ Ultrasonic Disintegrator, Mesonix, Model XL-2020.
- Fraction Collector, Frac-100 and a few columns, Pharmacia (Sweden).
- > pH meter and Conductivity meter

EDUCATIONAL TRAINING

- ➤ 86th **Orientation Course** from March 14, 2012 to April 10, 2012 Organised by U.G.C. Academic Staff College, D.D.U. Gorakhpur University, Gorakhpur with Grade 'A'.
- Short Term Course in Chemistry on the topic "Analytical Chemistry and Measurement Science" during October 09-15, 2014, Organized by Department of Chemistry and U.G.C. Academic Staff College, D.D.U. Gorakhpur University, Gorakhpur with Grade 'A'.
- 3rd Refresher Course on Information Technology 25th June 2015- 15th July 2015, Organised by UGC-Human Resource Development Centre D.D.U. Gorakhpur University, Gorakhpur with Grade 'A'.

ADMINISTRATIVE EXPERIENCE:

- Laboratory In charge (2011 to 2012).
- Assistant Proctor (2012 to 2013, 2015 to 2016).
- Secretary Shikshek Abhibhawak Samitee (2015-2018).
- Coordinator Computer Free classes (2018-2021)
- Coordinator Teaching and Learning Program (2021-22)
- > DSW Adhishthata Chatra Kalayan (2021- Till date)

Teaching Methods Adopted:

- Pre-Declared Teaching Plans.
- ❖ Abstract & Lectures According to Teaching Plan.
- ❖ Power Point Presentation.
- Use of Chart and Molecular Models
- * Remedial Classes.
- Class Teaching by Students.
- Group Discussion.
- Monthly Test.

Strength:

- > Target Oriented
- ➤ High Level of Energy and Enthusiasm
- > Positive Attitude

Hobbies and Activities:

- ➤ Listening News
- > Playing Football and Tennis
- ➤ Reading Books and News Paper

(Dr. R. Sahay)