# Curriculum Vitae



Name: Nagendra Kumar Chandra wanshi

Designation: Assistant Professor (Senior Scale)

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Pt. Ravishankar Shukla University

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Research GATE: <a href="https://www.researchgate.net/profile/Nagendra-Chandrawanshi/researchgoogle-Scholar:https://scholar.google.co.in/citations?user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAAAAJ&hl=engoogle.co.in/citations.user=ICJ35fgAA

Vidwan Profile: <a href="https://vidwan.inflibnet.ac.in/profile/328400">https://vidwan.inflibnet.ac.in/profile/328400</a>

#### Academic Records:

1) Ph.D. Biotechnology (2014): from S.o.S in Biotechnology; Pt. Ravishankar Shukla University, Raipur

(CG.)

Title of the Thesis: Micropropagation of an Endangered Medicinal Plant Glory Lily

(Gloriosa superba L.)

2) M. Phil. Biotechnology (2009): 76.67 % from S.o.S in Biotechnology; Pt. Ravishankar Shukla

University, Raipur.

Title of the Dissertation: Studies of the Minimum Inhibitory Concentration (MIC) of Penicillium

**species** 

3) M.Sc. Biotechnology (2008): 67.71 % from S.o.S in Biotechnology; Pt. Ravishankar Shukla University,

Raipur

Title of the Project: Production and effect of antibiotic by certain species of Penicillium fungi

## **Academic Qualification:**

1. CGSET (Life Science) 2013

2. GATE (Biotechnology) 2012

3. UGC-NET- J.R.F. (June) 2009

# Other Qualification:

NCC (Army Wing, B and C) Certificate with "B" grade.

## **Positions Held:**

- Assistant Professor, School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur, November 8<sup>th</sup> 2012 - till date.
- 2. Senior Research Fellow, School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (CG), May 1<sup>st</sup> 2012 –November 7<sup>th</sup> 2012.
- **3.** Contractual Lecturer, School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (CG), 29<sup>th</sup> July 2010– April 2011.
- **4.** Junior Research Fellow, School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (CG), May 1<sup>st</sup> 2010- April 30<sup>th</sup> 2012.
- **5.** Contractual Lecturer, School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (CG), November 3<sup>rd</sup> 2009 April 30 2010.
- **6.** Research Scholar, School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (CG), July 2009 October 2009.

# Honours/Award:

- 1. **Girajashankar Sharma Gold Medal** for Merit in B.Sc.-I Biology (2003-04) awarded by Govt. Digvijay Postgraduate College, Rajnandgaon (Chhattisgarh).
- 2. **Gopilal Lohiya Gold Medal** for merit in B.Sc.-III Biology (2005-06) awarded by Govt. Digvijay Postgraduate College, Rajnandgaon (Chhattisgarh).
- 3. NCC (National Cadet Corps) Merit Sahara India Scholarship for the year 2004-05 awarded by Sahara India Pariwar.
- 4. **Rajiv Gandhi National Fellowship (Doctoral fellowship)** 2010-2011 awarded by University Grant Commission (UGC.) New Delhi.
- 5. **UGC JRF** (Junior Research Fellowship, May 1, 2010, to April 30, 2012) awarded by the University Grant Commission (UGC.) New Delhi.
- 6. **UGC SRF** (Senior Research Fellowship, May 01, 2012 to November 7, 2012) was awarded by the University Grant Commission (UGC.) New Delhi.
- 7. **International Travel Grant** received from UGC Unassigned Travel Grant for oral paper presentation at 7th International Science Congress (ISC-2017)", Chukka, Bhutan. (Ref: 2767/Grant Cell/Order/2018, dated 12/02/2018).
- 8. **Best Presentation Award** in International Conference on Fostering Interdisciplinary Research in Medicines University Institute of Pharmacy, Pt. RSU Raipur (CG) (Jan.19-21, 2019).

- 9. **National Travel Grant** received from UGC Unassigned Travel Grant, for oral paper presentation at XXI National Conference on Aerobiology-2019, Dept. of Botany, Visva-Bharati, Santiniketan (WB), India, (Ref: 2417/Grant Cell /2019, dated 04/11/2019).
- 10. **Best Oral Presentation award** in 2<sup>nd</sup> International Conference on Fostering Interdisciplinary Research in Health Sciences 2019 (ICFIRHS 2019), Bedong, Kedah Darul Aman, Malaysia (Sept. 14-15, 2019).

# Teaching Experience:

UG teaching: 2 years (2010-12).

PG teaching: more than 10 years (2010 - till date)

### Dealt/ Dealing with;

Cell Biology M. Sc. Biotechnology (2011 - 2012) Genetics M.Sc. Biotechnology (2014- till date)

Bio-molecules M. Sc. Biotechnology (2015)

Molecular Biology
M.Sc. Biotechnology (2010-till date)
Biology of Immune System
M. Sc. Biotechnology (2011-till date)
Animal Biotechnology
M. Sc. Biotechnology (2013 – till date)

**Research experience:** I have achieved more than 12 years of research experience from M.Sc. (2008) to till date.

#### Member in Academic Bodies:

- 1. Member, Board of Studies in Biotechnology, Pt. RSU, Raipur (2014-till date)
- 2. Member, Board of Central Studies in Biotechnology, Higher Education Department, CG (2017-till date)
- 3. Member, Board of Studies in Biotechnology, Shaheed Mahendra Karma Vishwavidyalaya, Baster (2023-till date)
- 4. Member, Board of Studies in Microbiology, Govt. Digvijay Postgraduate College, Rajnandgaon (Chhattisgarh) (2022-till date)

# Life Membership of Scientific Society

- 1. The Indian Science Congress Association, Kolkata, India, Membership No. L30681 (September 2016).
- 2. The Indian Aerobiological Society (Regd.), India, Reg.no. S/32742/81-82 (29 January 2018).
- 3. Member of the Asian Federation of Biotechnology (AFBO).
- 4. Fellow Member of World Researchers Associations (FWRA), Reg. no. FM/2023/0026, (02 October 2023).
- 5. Association of Fungal Biologist, Mumbai, India, Life Membership No. LM24003, (18 March 2024).

# **Administrative Responsibility:**

- 1. Secretary, Staff Council, SoS in Biotechnology, Pt. RSU, Raipur (2014 –2022)
- 2. Secretary, Alumni Association of Biotechnology, SoS in Biotechnology, Pt. RSU, Raipur (2014 –till date)
- 3. Assistant Coordinator, Central Valuation Unit, Pt. RSU, Raipur (2016)
- 4. Assistant Coordinator, Digital Valuation Unit, Pt. RSU, Raipur (February, 2017)
- 5. Assistant Coordinator, Central Valuation Unit, Pt. RSU, Raipur (October, 2018)
- 6. Member, Self Study Report (SSR), IQAC, Pt. RSU, Raipur (November, 2019–till date)
- 7. Coordinator, Institutional Development Plan Cell (IDP), Pt. RSU, Raipur (April, 2024)
- 8. Member, Placement Cell, Pt. RSU, Raipur (April, 2024)
- 9. Member, NEP Implementation Committee, Pt. RSU, Raipur (April, 2024)

#### Member in Professional Bodies:

- 1. Alumni Association, School of Studies in Biotechnology, Pt. RSU, Raipur (2011-till date)
- 2. Secretary, Alumni Association, School of Studies in Biotechnology, Pt. RSU, Raipur (October, 2014)
- 3. Teachers Association, Pt. RSU, Raipur (2012- till date)

# Additional Responsibility:

1. Member of Contact Tracing Team (COVID-19); (July 22, 2020, to June 04, 2021),

Role acted as per the direction of time-to-time according to guidelines of District Administration, Raipur (Chhattisgarh).

# Areas of Research Interest:

- 1. Propagation and conservation of medicinal plants and mushrooms
- 2. Mushroom Biotechnology
- 3. Mushroom Biofortification & Functional Foods
- 4. Bioremediation
- 5. Food processing and
- 6. Drug Discovery

# **Editorial Responsibilities**

- 1. Reviewer, Journal of Applied Pharmacy (OMICS International)
- 2. Reviewer, European Journal of Biotechnology and Bioscience, India
- 3. Reviewer, International Journal of Food Science and Biotechnology (IJFSB), USA.
- 4. Reviewer, Jordan Journal of Biological Sciences, Jordan
- 5. Reviewer, Food Science and Human Wellness, Elsevier
- 6. Reviewer, MYCOPATH
- 7. Reviewer, Environmental Science, and Pollution Research, Springer Nature

- 8. Reviewer, Proceedings of the National Academy of Sciences, India Section B: Biological Sciences, Springer Nature
- 9. Editor, NewBioWorld, A Journal of Alumni Association of Biotechnology
- 10. Reviewer, Studies in Fungi, Maximum Academic Press
- 11. Reviewer, World Journal of Microbiology and Biotechnology, Springer Nature

# Research Guidance:

# Ph.D.

SN	Name of the Student	Registration	Thesis Title	Session
•				
1	Ms Anjali Kosre University Research Fellow, Letter wide no. Sr./623/Fin.Sch./2021,Dated 19/07/2021	2018	Bioaccumulation of Minerals and their Impact on Productivity, Bioactivity and Metabolites contents of <i>Pleurotus florida</i>	Pursuing
2	Ms Deepali CSIR- NET DBT JRF Fellow	2018	Mineral Fortification and its impact on yield, Metabolites and Bioactivity of <i>Calocybe indica</i> (P&C)	Feb 2024, Submitted
3	Ms Varsha Meshram CSIR- NET UGC-JRF June, 2020; GATE-2021 (Life Sciences)	DRC,12-07- 2022/ Ph.D./22/BIT/ 02	Intergeneric Hybridization between Cordyceps militaris (Linn.) Link and Pleurotus florida (Jacq.) P. Kumm: Characterization of its Constituents	Pursuing
3	Mr. Khemraj University Research Fellow, Letter wide no. Sr./623/Fin.Sch./2021,Dated 19/07/2021	DRC,12-07- 2022/ Ph.D./22/BIT/ 04	To Examine the Edibility and Vulnerability of <i>Chlorophyllum</i> species and related species using Morphological, Biochemical, and Molecular techniques	Pursuing

# B.Sc. /M. Sc. Dissertation:

SN.	Name of the Student	Institute	Title	Session
1	Mr. Devendra Kumar Tandiya	SoS in Biotechnology, Pt RSU.	Nutraceutical Properties Evaluation of Some Polypore Mushrooms	2016
2	Ms. Mausmi Dhangar	SoS in Biotechnology, Pt RSU.	Evaluation of Antioxidant Properties of Polar and Non-Polar Solvents Extract of Wild Mushroom	2017
3	Ms. Shivangi Shukla	MATS University, Raipur	Rapid In Vitro Evaluation of Antifungal Activity of Ganoderma lucidum Against Human Pathogenic Fungus (Aspergillus niger)	2018
4	Ms. Ayesha Fatima	MATS University, Raipur	Antibacterial activity of Ganoderma lucidum	2018
5	Mr. Kirit Chanap	MATS University, Raipur	Standardization of protocol for DNA isolation of Termitomyces heimii	2018
6	Ms. Sarita Waradkar	Dept. of Biotechnology, Govt. VYT Post Graduate Autonomous College, Durg (CG)	Static and Non-Static Submerged Cultivation of Pleurotus ostreatus and Their Impact on Production of Biomass and Exopolysaccharide	2019
7	Ms. Priyanka Chouhan	SoS in Biotechnology, Pt RSU.	To Study the Effect of Solid and Liquid Spawn Substrates on Growth, Yielding and Biological Efficacy of <i>Pleurotus ostreatus</i> (Jacq.) P. Kumm. 1871	2019
8	Mr. Dharmendra Kumar Verma	Dept. of Biotechnology Govt. NPG College of Science, Raipur	Evaluation of Biological Efficacy of the Various Agro Waste Products Used as Substrate for the Cultivation of <i>Pleurotus ostreatus</i>	2019

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9	Mr. Subir Kumar Parey	Amity Institute of Biotechnology, Amity University Gwalior, M.P.	Evaluation of Antibacterial Activity of Inorganic and Organic Solvents Extract P. ostreatus, against Human Pathogenic and Non-Pathogenic Bacteria	2019
10	Ms. Pingla Sen	SoS in Biotechnology, Pt RSU.	Review on Nutrients and Bioactive Compounds of Pleurotus ostreatus	2020
11	Ms. Jaswantee Pujari	Dept. of Biotechnology Govt. NPG College of Science, Raipur	Study of the effect of Carbon sources on the production of exopolysaccharides and Antioxidants activity by submerged culture of <i>Pleurotus florida</i>	2020
12	Ms. Sharon Khalkho	SoS in Biotechnology, Pt RSU.	Review on Nutriental Status and Bioactive Compounds of <i>Calocybe</i> indica (P&C)	2020
13	Ms. P. Deepti Rani	Amity Institute of Biotechnology, Amity University Chhattisgarh, Raipur	Mineral fortification of Calocybe indica by using Submerged fermentation and its impact on production of biomass and exopolysaccharides	2021
14	Mr. Jatish Patel	SoS in Biotechnology, Pt RSU.	Study on the Impact of Zinc Oxide Nanoparticles Fortification on Submerged Batch Cultivation of Calocybe indica (P&C) and its Nutraceuticals Assessment	2022
15	Ms. Bhawana Chandrasen	SoS in Biotechnology, Pt RSU.	Study of Mycoremediation Potency of Spent Mushroom Substrates of <i>Pleurotus florida</i> and <i>Calocybe indica</i> for Heavy Metals	2022
16	Ms. Shradha Joshi	SoS in Biotechnology, Pt RSU.	Study on the Bioadsorption Capacity of Spent Mushroom Substrates of <i>Calocybe indica</i> and <i>Pleurotus florida</i> on the Potential Application of Biosorbent on Some Synthetic Dyes	2022
17	Mr. Jhameshwar Pradad , DST Inspire (SHE)	Govt. Digvijay Autonomous PG College, Rajnandgaon (CG.)	Evaluation of Bioadsorption Efficiency of the Spent Mushroom Substrate of Calocybe indica for Removing Iron from some Contaminated Water Samples	2022
18	Mr. Sandeep Sahu	Dept. of Biotechnology Govt. NPG College of Science, Raipur	Study of Magnesium Salt (MgSO <sub>4</sub> ) Accumulation Influential Impact in Batch Submerged and Solid- State Cultivation of <i>Pleurotus florida</i> and Proximate Analysis of its Bio-Products	2023
19	Ms. Prachi Thakur	Dept. of Biotechnology, St. Thomas College Ruabandha, Bhilai	Comprehensive Evaluation of β-glucan Content and Bioactivity in the Fusant Derived from the Hybridization of <i>Pleurotus florida</i> and <i>Cordyceps militaris</i>	2023
20	Ms. Pritika Pradhan	SoS in Biotechnology, Pt RSU.	Morpho-Molecular and Biochemical Characterization of Poisonous mushroom Chlorophyllum molybdites	2023
21	Ms. Prachi Katre	Dept. of Biotechnology, Govt. VYT Post Graduate Autonomous College, Durg (CG)	Sustainable Cultivation of <i>Pleurotus florida</i> : Harnessing Waste Resources for Mushroom Production and Eco - Friendly Contaminated Ground Water Remediation	2024
22	Ms. Payal A mariya	Dept. of Biotechnology, Govt. VYT Post Graduate Autonomous College, Durg (CG)	Nutritious Value Analysis of <i>Pleurotus florida</i> Cultivated on Different Locally Available Substrates	2024
23	Ms. Richa Sahu	SoS in Biotechnology, Pt RSU.	Exploring Alternate Nitrogen Sources for Cultivating Lovastatin Rich <i>Pleurotus florida</i> (Jacq.) P. Kumm: A Comparitive Study	2024

# **GRANT SUPPORT RECEIVED:**

SN.	Project Title	Funding	Sanctione d	Duration	Status
		Agency	Amount		
			(INR in Lakhs)		
1	Morphological, Biochemical and Molecular Characterization of poisonous and nonpoisonous mushroom (Endt. No. 722/CCOST/)	CCOST, Raipur	3.60=00	2015-17	Completed
2	Morphological, Biochemical and Molecular Characterization of Edible and Poisonous Mushroom of the Forest of Mahasamund district, Chhattisgarh (Endt. No. Sr./SBB/2040, dated 08/11/2023)	State Biodiversity Board, CG Govt.	3.00=00	2023-25 (18 months)	Sanctioned
3	Traditional knowledge of medicinal plants consumed by primitive tribes of Bastar Chhattisgarh: Development of database and strategy for value addition and sustainable livelihood <i>via</i> Fin-tech. (Endt. No. IBITF/Note/TSP/SanctionLetter /2023-24/0254, dated 14/11/2023)	IBITF, Bhilai (DST funded)	44.23=00	2023-25	Sanctioned

# **TRAINING**

SN.	Training Program	Place	Place/ Agency	Duration
1	4 <sup>th</sup> INSPIRE Internship Program/	IIIT-A (Indian	MHRD-DST initiative at IIIT-A	07 Days
	Science Conclave: "A	Institute of	(Indian Institute of Information	26.11.2011
	Congregation of Nobel Laureates	Information	Technology, Allahabad	-
	and Eminent Scientists	Technology,		02.12.2011
		Allahabad)		
2	Scientific/Research Paper Writing	Central Institute of	The National Academy of Sciences,	08.06.2012
		Fisheries Education	India (NASI)	-
		–CIFE, Mumbai		10.06.2012
3	Workshop/Short Term Course on	Academic Staff	Academic Staff College, Pt.	03 Days
	"E-Learning"	College, Raipur	Ravishankar Shukla University,	28.01.2013
			Raipur, India	-
				30.01.2013
4	The Workshop on Molecular	School of Studies in	HiMedia Laboratories Pvt. Ltd.	02 Days:
	Biology	Biotechnology, Pt.	Mumbai, India &	13.10.2014
		Ravishankar Shukla	School of Studies in Biotechnology,	-
		University, Raipur	Pt. Ravishankar Shukla University,	14.10.2014
		CG	Raipur CG.	
5	National Workshop on	School of Studies in	School of Studies in Electronics &	05 Days
	"Operation and Maintenance of	Electronics &	Photonics, Pt. Ravishankar Shukla	19.01.2015
	Laboratory Equipment's"	Photonics, Pt.	University, Raipur, & Western	-
		Ravishankar Shukla	Regional Instrumentation Centre,	23.01.2015
		University, Raipur	Mumbai, India,	
6	Orientation Program under the	Human Resource	UGC-Human Resource Development	04 weeks:
	theme "Quality of Higher	Development	Center, Pt. Ravishankar Shukla	03.06.2015
	Education: Learning Process"	Center, Pt.	University, Raipur CG.	-
		Ravishankar Shukla		30.06.2015
		University, Raipur		
		CG		

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7	One-Day Workshop-Cum- Training on SYSTAT 13	Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG	IQAC, Pt. Ravishankar Shukla University, Raipur CG.	01 Day 27.08.2015
8	The Workshop on Molecular Biology	School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur CG	HiMedia Laboratories Pvt. Ltd. Mumbai, India & School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur CG.	02 Days: 30.10.2015 - 31.10.2015
9	"Special Winter School' on "Innovation Teaching and Research"	Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG	UGC-Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG.	03 weeks: 12.01.2016 - 01.02.2016
10	Workshop on Statistical Skills	International Science Community Association	International Science Community Association www.isca.in	06 Days 05.08.2017 - 10.08.2017
11	The STEM Teacher Training Workshop on Research Based Pedagogical Tools	Pt. Ravishankar Shukla University, Raipur	Jointly sponsored by DBT, Govt. of India; Newton Bhabha fund of the British Council; Centre of Excellence in Science and Mathematics Education, IISER Pune and Pt. Ravishankar Shukla University, Raipur. [Conducted by a team of experts from the Centre for Science Education, Sheffield Hallam University, UK.]	04 Days 06.10.2017 - 09.10.2017
12	"Cancer Health Disparity" Short Term Course work, Mentor Manoj K. Mishra, Ph.D. Director, Cancer Biology Research and Training Director, Freshmen BIO Program Associate Professor of Biology Department of Biological Sciences Alabama State University 915 S Jackson Street Montgomery AL 36101-0271	Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Bilaspur (CG.) India	Global Initiative For Academic Networks (Gian), association with Guru Ghasidas Vishwavidyalaya, Bilaspur (CG.) India and Ministry of Human Resources Development (MHRD), Govt. of India	05 Days 18.12.2017 - 22.12.2017
13	The Importance of technical terminology in writting of Academic book (शैक्षणिक पुस्तक के लेखन में तकनीकी शब्दावली का महत्व)	Chhattisgarh Rajya Hindi Granth Academy, Raipur	Commission for Scientific and Technical Terminology, Govt. of India	02 Days 20.01.2018 - 21.01.2018
14	Workshop on Personality Development	International Science Community Association	International Science Community Association www.isca.in	06 Days 05.08.2018 - 10.08.2018
15	Short-term course in "Developing the Communication Skills"	Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG	UGC-Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG.	01 weeks: 22.12.2018 - 27.12.2018
16	Workshop on Communication Skills	International Science Community Association	International Science Community Association www.isca.in	06 Days 05.08.2019 - 10.08.2019
17	Short-term course on "ARPIT" (Annual Refresher Program in Teaching) UGC-SPONSORED SHORT TERM COURSE	Human Resource Development Center, Pt. Ravishankar	UGC-Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG.	01 weeks: 03.02.2020 - 08.02.2020

		Shukla University, Raipur CG		
18	Learning Advanced E-tools for MOOCs Development &	T.L.C., Ramanujan College and Motilal	T.L.C., Ramanujan College and Motilal Nehru College (E),	02 weeks: 01.09.2020
	Research	Nehru College (E), University of Delhi	University of Delhi	14.09.2020
19	The Role of ICT in the Development of Massive Open Online Course (MOOCs) in Higher Education" (online mode)	T.L.C., Ramanujan College, University of Delhi	Teaching Learning Centre, Ramanujan College, University of Delhi	02 weeks: 14.08.2020 - 28.08.2020
20	Online Refresher Course in Basic Sciences	HRDC, (RTM) University, Nagpur (MH)	UGC-Human Resource Development Center, Rashtrasant Tukadoji Maharaj Nagpur (RTM) University, Nagpur (MH)	02 weeks: 21.08.2023 - 02.09.2023

# Conference/Symposia Organized:

- 1. National Conference on Traditional Knowledge and Biotechnology, November 22 24, 2013 (Joint Secretary)
- 2. National Seminar on "Innovations & Prospects in Biotechnology", January 2-4, 2016 (Joint Secretary)
- 3. National Seminar on "Recent Advances & Trends in Biotechnology", January 10-12, 2020 (Treasure)
- 4. International *e*-Conference on Recent Advances in Biological Sciences & Opportunities in Entrepreneurship", January 7<sup>th</sup> 8<sup>th</sup>, 2022 (Organizing Secretary)
- 5. Hands-on Training *cum* Workshop on Molecular Techniques, November 18-19, 2022 (Program Coordinator)
- 6. Five Days Hands-on-Training *cum* Workshop on Advance Techniques in Biotechnology & Yeast Genome Engineering, 25-29 August and 02 September, 2023 (Program Coordinator)
- 7. National Conference on Science & Technology for Women Empowerment and Rural Development, jointly organized by The National Academy of Sciences, India (NASI) & PtRSU, Raipur, 13-14 October 2023(Executive Secretary)
- 8. Three Days Hands-on-Training *cum* Workshop on Techniques in Biotechnology, 18-20 April, 2024 (Program Coordinator)
- 9. Two Days Workshop on "Integration of Indigenous Knowledge: Sustainable Cultivation of Traditional Medicinal Plants and Health Benefits", jointly organized by Pt. Ravishankar Shukla University, Raipur (C.G.) and IIT Bhilai Innovation and Technology Foundation (IBITF), Bhilai (C.G.) at Govt. Indaru Kenwat Girls College, Kanker (C.G.), on 9<sup>th</sup> and 10<sup>th</sup> May 2024 (Organizing Secretary).

## Guest/Invited Lectures Delivered and Chaired a technical session in various activities:

- 1. Lectures delivered on **the Importance of NET & Other JRF Exam**. Department of Biotechnology and Zoology, Govt. Digvijay College, Rajnandgaon, February 19, 2016.
- 2. Delivered lecture on "CSIR NET Life Sciences, Preparation" UGC Coaching Center, Pt. Ravishankar Shukla University Raipur (Chhattisgarh), April 2018.
- 3. Delivered lecture on "CSIR NET Life Sciences, Preparation" UGC Coaching Center, Pt. Ravishankar Shukla University Raipur (Chhattisgarh), October 2019.
- 4. Delivered lecture on "CSIR NET Life Sciences, Preparation" UGC Coaching Center, Pt. Ravishankar Shukla University Raipur (Chhattisgarh), January 2020.
- 5. Delivered lecture as a subject expert on "Basic of Immunology" organized by IQAC cell associated with Department of Zoology, Dept of Botany, Govt Kunj Bihari Choube College, Lal Bahadur Nagar, Dist Rajnandgaon, on 19<sup>th</sup> December 2022.
- 6. **Chaired a technical session as a subject expert** (OP-2, oral presentation) in the 22<sup>nd</sup> National Conference on Aerobiology (NCIAS-2022) and its Impact on Plant, Animal and Human Health, organized by Narayanrao Waghmare Mahavidyalaya, Akhada, MH on 21<sup>st</sup> to 23<sup>rd</sup> December 2022.
- 7. Chaired a technical session as a subject expert in a poster presentation at the National Conference on "Innovation and Emerging Novel Research in Plant Sciences" (IENRPS-2023) organized by Govt. VYT PG Autonomous College, Durg, Chhattisgarh, India, on 17<sup>th</sup> & 18<sup>th</sup> January 2023.
- 8. Delivered lecture as a subject expert titled "Environment and Health: A Vital Indication" on a Two-Day National Seminar on Environment and Health: Opportunities and Challenges, organized by Govt Kamla Nehru Girls College, Balaghat, MP on 25 to 26 March 2023.
- 9. Delivered lecture as a subject expert titled "Antibody and their types" organized by Department of Biotechnology, Govt Veer Surendra Say P.G. College, Gariaband, Dist Gariaband, on 21<sup>st</sup> February 2024.
- 10. Delivered lecture as a subject expert titled "Guidance on Career Paths: Post-Graduation Opportunities in the Field of Biology" organized by IQAC cell associated with Department of Botany, Govt Naveen College, Pirda, Dist Mahasamund, on 24<sup>th</sup> February 2024.
- 11. Delivered invited lecture as a subject expert titled "Exploration of Remedial Effects of Traditional Medicinal Plants: Tribal Healers of Kanker District" on Seminar, organized Department of Bioscience and Biomedical Engineering, IIT Bhilai, , on 22<sup>nd</sup> May 2024.

### **Event Attended in Abroad:**

- (1) **Chandrawanshi, N. K.,** Dhangar, M. and Jadhav, S. K. (2019) Polar and Non-Polar Solvent Extracts Posses of Differential Antioxidant Activity of Medicinal Mushroom (*Pleurotus florida*). Published in Proceeding of 2nd International Conference on Fostering Interdisciplinary Research in Health Sciences 2019 (ICFIRHS 2019), Sept. 14-15, 2019, 08100 Bedong, Kedah Darul Aman, Malaysia. Published by A and V Publication, Raipur, India, ISBN: 978-93-85525-55-1, Paper ID: BS-121219212. (Oral Presentation).
- (2) Chandrawanshi, Nagendra Kumar, Tandia, D. K. and Jadhav, S. K. (2017) *In vitro* evaluation of the antioxidant and antidiabetic activity of the polar solvent extract of *Laetiporus sulphureus* (Bull.) Murrill. Souvenir of 7<sup>th</sup> International Science Congress, C.S.T., Royal University of Bhutan, Bhutan, (ISCA-ISC-2017-3BS-06-Oral). December 8<sup>th</sup>-9<sup>th</sup>, 2017. Pg. 42-43. (Oral Presentation).

## **Gene Data Submission in NCBI**

- 1. https://www.ncbi.nlm.nih.gov/nuccore/MT159466 (Retrieved date 20 March 2020)
- 2. https://www.ncbi.nlm.nih.gov/nuccore/2500090875 (Retrieved date 06 June 2023)

#### **Research Publications:**

# Papers in National and International Journals:

- 1. Tiwari, K.L., Jadhav, SK and **Chandrawanshi, N. K.** (2010) Studies of the Minimum Inhibitory Concentration (MIC) of *Penicillium* species. *Deccan Current Science*. 3 (II): Pg. 151-154.
- 2. **Nagendra K. Chandrawanshi**, K.L. Tiwari, S.K. Jadhav and Afaque Quraishi (2013) Threats Facing by The Critically vulnerable medicinal plant *Gloriosa superba* L. at natural habitat: Major Insect Pest and Human Interference. *Deccan Current Science*. 9(2): Pg. 221-228.
- 3. Chandrawanshi Nagendra Kumar, S. K. Jadhav, K. L. Tiwari and Quraishi Afaque (2015) *In vitro* Tuberization and Colchicine Content Analysis of *Gloriosa superba* L. *Biotechnology*, 14(3): Pg. 142-147. <a href="https://doi.org/10.3923/biotech.2015.142.147">https://doi.org/10.3923/biotech.2015.142.147</a>. <a href="https://doi.org/10.3923/biotech.2015.142.147">SCOPUS/ Thompson Indexed Journal</a> *[NAAS: National Academy of Agricultural Sciences, IARI, New Delhi, India]*
- 4. **Chandrawanshi, N. K.**, S. K. Jadhav, K. L. Tiwari and Quraishi Afaque (2016) Assessment on threatened classification of *Gloriosa superba* L. *Deccan Current Science*. 15(1): Pg. 140-150.
- 5. **Chandrawanshi, Nagendra Kumar** (2016) Mushroom Toxins and Human Manifestation. *NewBioWorld*, 1(1):4-7.
- 6. **Chandrawanshi, N. K.,** Tandia, D. K., and Jadhav, S. K. (2017) Nutraceutical Properties Evaluation of *Schizophyllum commune*. *Indian J. Sci. Res.*, 13(2): 57-62. UGC Approved Journal No: 20876 Published 2017.
- 7. Fatima, A. and **Chandrawanshi, N. K.** (2017) Antibacterial Activity Determination of Polar and Non-Polar Solvent Extracts of *Ganoderma lucidum* Against Human Pathogenic Bacteria. *International Journal of Creative Research Thoughts (IJCRT)*, 5 (3): 576-580, UGC Approved Journal No: 49023 (18), <a href="http://doi.one/10.1729/Journal.31469">http://doi.one/10.1729/Journal.31469</a>, Published July 2017.
- 8. **Chandrawanshi, N. K.,** Tandia, D. K., and Jadhav, S. K. (2018) Determination of Antioxidant and Antidiabetic Activities of Polar Solvent Extracts of *Daedaleopsis confragosa* (Bolton) J. Schröt. *Research J. Pharm. and Tech*; 11(12): 5623-5630.https://doi.org/10.5958/0974-360X.2018.01020.X.{SCOPUS Indexed Journal}
- 9. **Chandrawanshi, N. K.**, Tandia, D. K., and Jadhav, S. K. (2019) Determination of Anti-Diabetic Property of organic and nonorganic solvent extracts of *Schizophyllum commune*. *NewBioWorld A Journal of Alumni Association of Biotechnology*, 1(1): 5-8. <a href="https://doi.org/10.52228/NBW-JAAB.2019-1-1-2">https://doi.org/10.52228/NBW-JAAB.2019-1-1-2</a>
- 10. **Chandrawanshi, N. K.** and Shukla, S. (2019) Rapid *In Vitro* Antifungal Property Assessment of Organic and Aqueous Extracts of *Ganoderma lucidum* Against Human Pathogenic Fungus of *Aspergillus niger. International Journal of Emerging Technologies and Innovative Research*, 6(5): 473-477, UGC Approved Journal, No: 63975, as of June 14, 2019. https://doi.org/10.5281/zenodo.7080772, Published May 2019.
- 11. Khalkho, S., Koreti, D., Kosre, A., Jadhav, SK, and **Chandrawanshi, Nagendra Kumar** (2021) Review on production technique and nutritional status of *Calocybe indica* (P&C). *NewBioWorld A Journal of Alumni Association of Biotechnology*, 3(1):1-7, published 1 July 2021. https://doi.org/10.52228/NBW-JAAB.2021-3-1-2
- 12. Sen, Pingla, Kosre, A., Deepali and **Chandrawanshi, Nagendra Kumar** and Jadhav, SK (2021) Nutrients and Bioactive compounds of *Pleurotus ostreatus* mushroom. *NewBioWorld A Journal of Alumni Association of Biotechnology* 3(2):8-12.published 31 Dec 2021. https://doi.org/10.52228/NBW-JAAB.2021-3-2-2.

- Chouhan, P., Koreti, D., Kosre, A., Chauhan, R., Jadhav, SK and Chandrawanshi, N.K. (2022)
   Production and Assessment of Stick-Shaped Spawns of Oyster Mushroom from Banana Leaf-Midribs. Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci. 92, 405–414.
   <a href="https://doi.org/10.1007/s40011-021-01327-x">https://doi.org/10.1007/s40011-021-01327-x</a>{SCOPUS Indexed Journal, IF 0.95} published 15April 2022.
- 14. Koreti, D., Kosre, A., Jadhav, SK, and **Chandrawanshi, N.K.** (2022) A comprehensive review on oleaginous bacteria: an alternative source for biodiesel production. *Bioresour. Bioprocess.*9, 47. <a href="https://doi.org/10.1186/s40643-022-00527-1">https://doi.org/10.1186/s40643-022-00527-1</a> {SCOPUS Indexed Journal, IF 4.5} published 22 April 2022.
- 15. Meshram, V. and **Chandrawanshi, N.K.** (2022) Bioactive Compounds and Pharmacological Activities of the Genus *Cordyceps*: A Review. *NewBioWorld A Journal of Alumni Association of Biotechnology*,4(1):13-19.DOI: <a href="https://doi.org/10.52228/NBW-JAAB.2022-4-1-4">https://doi.org/10.52228/NBW-JAAB.2022-4-1-4</a>
- 16. Sahu, K., Pradhan, P. and **Chandrawanshi, N.K.** (2022) Revaluation of Mushroom Edibility Based on Differences in Morphological Characteristic. *NewBioWorld A Journal of Alumni Association of Biotechnology*,4(2):15-17.DOI: https://doi.org/10.52228/NBW-JAAB.2022-4-2-3
- 17. Kosre, A., Koreti, D., Jadhav, SK and **Chandrawanshi, N.K.** (2022) Comprehensive Review on Potential Bioactive Compounds of Mushrooms and Their Role in Immunomodulatory Functions. Phytochemistry Reviews (*Communicated*).
- 18. Koreti, D., Jadhav, SK and **Chandrawanshi, N.K.** (2023) Mineral Fortification of *Calocybe indica* (P&C) and its Impact on Colony Morphology and Metabolites Production. *Ind. J. Aerobiol.*; 36(1): 9-17. UGC Approved Journal, published 30 June 2023.
- 19. **Chandrawanshi, N. K. and** Tandia, D. K. (2024) Determination of Antioxidant and Antidiabetic Potency of Polar solvent extracts of *Laetiporus sulphureus* (Bull.) Murrill. *Research Journal of Biotechnology*, 19(7): 69-77, DOI: https://doi.org/10.25303/1907rjbt064068 (SCOPUS and UGC Indexed Journal, IF 0.138), published
- 20. Sahu, Prasad J. and **Chandrawanshi, N. K.** (2023) Evaluation of Bioadsorption Efficiency of the Spent Mushroom Substrate of *Calocybe indica* for Removing Iron from some Contaminated Water Samples. *Research Journal of Chemistry and Environment*.(*Accepted*). (SCOPUS and UGC Indexed Journal).
- 21. Koreti, D., Jadhav, SK and **Chandrawanshi, N.K.** (2023) Zn Fortification Influential Impact on the Productivity of *Calocybe indica* Mycellium . *Journal of Ravishankar University Part -B*; 36(2): 158-165, DOI: 10.52228/JRUB.2023-36-2-11, published 02 January 2024.

## Papers in Conference/Symposia Proceedings:

- 1. **N. K. Chandrawanshi**, K. L. Tiwari, A. Quraishi and S. K. Jadhav (2013) Effect of antibacterial activities and comparison the values of two types of Tulsi leaves (*Ocimum*). Published in National Conference Proceeding in Biotechnology and Traditional Knowledge. Published by Biotech Books, New Delhi (ISBN: 978-81-7622-330-0). Pg. 55-62.
- Nagendra Kumar Chandrawanshi (2017) Strategies, Encounters and Tools for Biological Researchers: - through E-content Information Platform. Published in National Workshop on Proceeding in Capacity Building in Higher Education: Use of Library Resources. (ISBN: 978-81-89545-99-4). Pg. 60-66.
- 3. **Chandrawanshi N. K.,** Dhangar, M. and Jadhav SK (2019) Polar and Non-Polar Solvent Extracts Posses of Differential Antioxidant Activity of Medicinal Mushroom (*Pleurotus florida*). Published in Proceeding of 2<sup>nd</sup> International Conference on Fostering Interdisciplinary Research in Health Sciences 2019 (ICFIRHS 2019), 14-15 Sept. 2019, 08100 Bedong, Kedah Darul Aman, Malaysia. Published by A and V Publication, Raipur, India, ISBN: 978-93-85525-55-1.

4. Chandrawanshi N. K. (2021) Ecological Diversity and Edibility Characteristics of the Mushrooms in the Kanker Forest Region, Chhattisgarh. Title of Book "Sustainable Water Management and Ecosystem Restoration & World Environment Day Celebration" Proceeding of International Conference (online) on "Sustainable Water Management and Ecosystem Restoration", 23rd & 24 June 2021. Edited by Dr. Marykutty Abraham, Dr. S. K. Pramada, Dr. P. Jegathambal, Dr. P. Mohana, Ms. B. Priyadarshini, Published by Cape Comorin Publisher Kanyakumari, Tamilnadu, India E-ISBN: 978-93-91553-42-5.

# Book Chapter:

- 1. **Chandrawanshi, Nagendra Kumar** (2018) Traditional Ethnopharacological Analysis of Traditional Medicinal Systems of Dandakaryana. Published by Anakhar, Print World, Varanasi (ISBN: 978-93-5300-222-0). Pg. 110-120.
- Chandrawanshi, Nagendra Kumar (2020) Study on the impact of Sustainable agriculture practices on food security. Financial Inclusion and Economic Growth, Edited by AN Shaikh and Ana Matten. Published by International Publications, Kanpur, India (ISBN: 978-81-945988-3-1). Pg. 121-135.
- 3. **Chandrawanshi, Nagendra Kumar** and Verma, Shekhar (2020) Recent Research and Development in Stem Cell Therapy for Cancer Treatment: Future Promising and Challenges. Edited by Kumar, S. Rizvi, MA, and Verma. Published by IGI. Global, USA. Pg. 514-533. ISBN: 9781799865308, **DOI:** 10.4018/978-1-7998-6530-8.ch018, published November 2020.
- 4. Verma, Shekhar, Jain, V. and **ChandrawanshI, Nagendra Kumar** (2020) Surfactant Based Anhydrous Nano Carrier System for Poorly Aqueous Soluble Anti-Cancer Drugs. Edited by Kumar, S. Rizvi, MA, and Verma. Published by IGI. Global, USA. Pg. 413-432. ISBN: 9781799865308, **DOI:** 10.4018/978-1-7998-6530-8.ch014, published November 2020.
- 5. Mahish, P.K., Chandrawanshi Nagendra Kumar and Jadhav, SK (2021) Opportunities in the Living Lights: Special reference to Bioluminescent Fungi. Energy: Crisis, Challenges and Solutions, Publisher, WILEY Book. Pg. 191-207. ISBN: 9781119741442, DOI: https://doi.org/10.1002/9781119741503.ch11, published 10 September 2021.
- 6. Tiwari, S., Deepali, Kosre, A., Mahish, P.K., Jadhav, SK and **Chandrawanshi Nagendra Kumar** (2021) Fungal Microbial Fuel Cells, An Opportunity For Energy Sources: Current Perspective And Future Challenges. Energy: Crisis, Challenges and Solutions, Publisher, WILEY Book. Pg. 250-272. ISBN: 9781119741442, **DOI:** https://doi.org/10.1002/9781119741503.ch14, published 10 September 2021.
- Kosre, A., Deepali, Mahish, P.K. and Chandrawanshi Nagendra Kumar (2021) Current Perspective of Sustainable Utilization of Agro-Waste and Biotransformation of Energy in Mushroom. Energy: Crisis, Challenges and Solutions, Publisher, WILEY Book. Pg. 274-302. ISBN: 9781119741442, DOI: <a href="https://doi.org/10.1002/9781119741503.ch15">https://doi.org/10.1002/9781119741503.ch15</a>, published 10 September 2021.
- 8. Deepali, Kosre, A., and **ChandrawanshI, Nagendra Kumar** (2021) Mushrooms Bioactive Compounds: Potential Source for the Development of Antibacterial Nanoemulsion. Nanoemulsion Based on Mushroom Bioactive Compounds and Its Application in Food Preservation, edited by K. Ramalingam, Published by IGI. Global, U.S.A., ISBN13: 9781799883784. **DOI:** 10.4018/978-1-7998-8378-4.ch010, published Dec 2021.
- Chandrawanshi, Nagendra Kumar, Kosre, A., Deepali, and Mahish, P.K. (2021) Mushroom Derived Bioactive Based Nanoemulsion Status and Challenges for Cancer Therapy. Nanoemulsion Based on Mushroom Bioactive Compounds and Its Application in Food Preservation, edited by K. Ramalingam, Published by IGI. Global, USA, ISBN13: 9781799883784, DOI: 10.4018/978-1-7998-8378-4.ch016, published Dec 2021.

- 10. Kosre, A., Deepali and Chandrawanshi, Nagendra Kumar (2021) Nanoemulsion based on Mushroom Bioactive compounds and it's Application in Food Preservation. Nanoemulsion Based on Mushroom Bioactive Compounds and Its Application in Food Preservation, edited by K. Ramalingam, Published by IGI. Global, U.S.A., ISBN13: 9781799883784. DOI: 10.4018/978-1-7998-8378-4.CH019, published Dec 2021.
- 11. Kumar, A., **Chandrawanshi, N.K.** and Joshi, P. (2021) DNA Fingerprinting Recent Development Forensic Applications and Future Challenges, Vol. no. I (Edited by A. Kumar, Published AkiNik Publications, India, ISBN13: 978-93-91538-42-2 (Ch06, Pg 119-139.
- 12. **Chandrawanshi, Nagendra Kumar** (2022) Sustainable development and Tribal Livelihood in North-East India: Mushroom cultivation promise Issues and Challenges. Rural Development in Northeast India. Edited by Debajit Bhuyan and MK Deb), Chpt 1, ISBN 978-93-90692-14-9 Published by Mittal Publications, New Delhi, India, published March 2022.
- 13. **Chandrawanshi, N. K.**, Koreti, D., Kosre, A., & Kumar, A. (2022). Proteolytic Enzymes Derived from a Macro Fungus and Their Industrial Application. In D. S. Haider, A. P. Adnan, & P. A. Catala (Eds.), Hydrolases. IntechOpen. <a href="https://doi.org/10.5772/intechopen.102385">https://doi.org/10.5772/intechopen.102385</a>, published 7 February 2022.
- 14. Koreti, D., Kosre, A., Kumar, A., Jadhav, SK & **Chandrawanshi, N.K.** (2022). Potential Application of Edible Mushrooms in Nutrition-Medical Sector and Baking Industries. In: Shukla, A.C. (eds) Applied Mycology. Fungal Biology. Springer, Cham. https://doi.org/10.1007/978-3-030-90649-8\_10, published 27 April 2022.
- 15. Kosre, A., Deepali, Kumar, A. & Chandrawanshi, N. K. (2022) Production of Microbial enzymes using Spent Mushroom Compost (SMC) and its application. Microbial Products Applications and Translational Trends. <a href="https://www.taylorfrancis.com/chapters/edit/10.1201/9781003306931-10/production-microbial-enzyme">https://www.taylorfrancis.com/chapters/edit/10.1201/9781003306931-10/production-microbial-enzyme</a>. Published by CRC, EISBN: 9781003306931. (Ch09, Pg 109-118), published 22 October 2022.
- 16. Kumar, A. Banjara, R.A., Aneshwari, R.K. & **Chandrawanshi, N. K**. (2022) Microbial Endophytes of Medicinal Plants as an Emerging Bioresource for Novel Therapeutic Compounds. Microbial Products Applications and Translational Trends. <a href="https://www.taylorfrancis.com/chapters/edit/10.1201/9781003306931-17/microbial-endophytes-medicinal-plants-emerging-bioresource-novel-therapeutic-compounds.Published by CRC, EISBN: 9781003306931. (Ch15, Pg 235-248), published 22 October 2022.
- 17. Verma, S., Soni, S., **Chandrawanshi, N. K**. and Dewhare, S.S. (2023) Sources and Raw Materials of Essential Oils: Sources, Production and Applications. Published by Walter de Gruyter GmbH & Co KG DE-GRUYTER. <a href="https://doi.org/10.1515/9783110791600-003">https://doi.org/10.1515/9783110791600-003</a>, (Ch 3, Pg 47-64), published 07 February 2023.
- 18. Dewhare, S.S., Chandrawanshi, N. K., Verma, S., Soni, S. and Mahish, P.K. (2023) Extraction, production and encapsulation of essential oils. Essential Oils: Sources, Production and Applications. Published by Walter de Gruyter GmbH & Co KG DE-GRUYTER. <a href="https://doi.org/10.1515/9783110791600-006">https://doi.org/10.1515/9783110791600-006</a>, (Ch 6, Pg 121-131), published 07 February 2023.
- 19. Chandrawanshi, N. K., Deepali, Kosre, A., Dewhare, S.S., Verma, S., Mahish, P.K & Kumar, A. (2023) Bioactivity of Essential oils -anti-cancer, anti-HIV, anti-parasitic, anti-inflammatory and other activity. Essential Oils: Sources, Production and Applications. Published by Walter de Gruyter GmbH & Co KG DE-GRUYTER. <a href="https://doi.org/10.1515/9783110791600-006">https://doi.org/10.1515/9783110791600-006</a>, (Ch 7, Pg 133-153), published 07 February 2023.
- 20. Koreti, D., Kosre, A., Mahish, P.K, **Chandrawanshi, N.K.** & Kunjam, S.R. (2023). Application of essential oils in alternative medicine. Essential Oils: Sources, Production and Applications Published by Walter de Gruyter GmbH & Co KG DE-GRUYTER. https://doi.org/10.1515/9783110791600-011, (Ch 11, Pg 237-252), published 07 February 2023.
- 21. Madhariya, G., Diwan, S., Chauhan, R., Chandrawanshi, N.K. & Mahish, P.K (2023) Current applications of biomolecules in biotechnology. Handbook of Biomolecules, Fundamentals,

- Properties and Applications. Published by Elsevier, Edited by Verma, C. & Verma, D.K. (https://doi.org/10.1016/B978-0-323-91684-4.00027-X. Ch 12, Pg 397-418), 29 May 2023.
- 22. Chauhan, S.S., Chauhan, R., **Chandrawanshi, N.K.** & Mahish, P.K (2023) Bioactivity of nanoparticles synthesized from medicinal plants. Phytochemicals in Medicinal Plants: Biodiversity, Bioactivity and Drug Discovery. Published by Walter de Gruyter GmbH & Co KG DE-GRUYTER. (https://doi.org/10.1515/9783110791891-014) Ch 14, Pg 315-330), 30 May 2023.
- 23. Kosre, A., Sahu, K., Meshram, V., Koreti, D., Mahish, P. K., & Chandrawanshi, N. K. Pretreatment of Spent Mushroom Substrate for the Enhancement of Biosorption capacity. In *Biosorbents* (pp. 154-164). CRC Press.
- 24. Meshram, V., Sahu, K., Kosre, A., Koreti, D., Mahish, P. K., & Chandrawanshi, N. K. Mushroom Biosorbent. In *Biosorbents* (pp. 42-53). CRC Press.
- 25. Meshram, V., Mahish, P. K., & Chandrawanshi, N. K. Mushroom Cultivation and Application in Green Technology. In *Microbial Approaches for Sustainable Green Technologies* (pp. 304-317). CRC Press.
- 26. Kumar, A., Dutta, J., Chandrawanshi, N. K., Ekka, A. & Sethi, S. K. (2024). Arbuscular mycorrhizal fungi in alleviation of biotic stress tolerance in plants: A new direction in sustainable agriculture. In Developments in Applied Microbiology and Biotechnology, Entrepreneurship with Microorganisms, Academic Press. (https://doi.org/10.1016/B978-0-443-19049-0.00006-2.). Ch 17, Pg 355-369), 04 January 2024.
- 27. Kumar, A., Banjara, R. A., Chandrawanshi, N. K., & Aneshwari, R. K. (2024). Endophytic bacteria: Bioactive compounds and their therapeutic importance. In *Biotechnology of Emerging Microbes* (pp. 351-365). Academic Press. (https://doi.org/10.1016/B978-0-443-15397-6.00017-6) Ch 16, Pg 351-365), 01 January 2024.
- 28. Kumar, A., Karabulut, F., & **Chandrawanshi**, N. (2024). Genetic and physiological mechanism of nanoparticle-based salt stress tolerance in plants. In *Nanotechnology for Abiotic Stress Tolerance and Management in Crop Plants*. Academic Press. (https://doi.org/10.1016/B978-0-443-18500-7.00014-4). Ch 14, Pg 215-228), 04 April 2024.

# **Book Edited:**

Jadhav SK, Sahu KK, Quraishi A, Shukla KK & **Chandrawanshi NK** (2014) Biotechnology and traditional knowledge. Biotech Books, New Delhi (ISBN: 978-81-7622-330-0)

## Abstracts Published in National Conferences/Symposia:

- (1) **Chandrawanshi, N. K.** (2010) Studies of the minimum inhibitory concentration (MIC) of *Penicillium* species. Pg. 77. 8th Chhattisgarh Young Scientist Congress, April 9-10th. Organized by Pt. Ravishankar Shukla University, Raipur (Oral Presentation).
- (2) Tiwari, K. L., Jadhav, SK and **Chandrawanshi, N.** (2010) Production and effects of antibiotics by some species of *Penicillium*. Pg. 57. 16th National Conference on Aerobiology & National Symposium on Applications of Biotechnology in Environment Management & Medicine held at Bapuji Institute of Engineering and Technology, Davangere, Karnataka from 19th-21st November (Oral Presentation).
- (3) Tiwari, K. L., Jadhav, SK and **Chandrawanshi, N. K**. (2011) *In vitro* propagation of endangered medicinal plant *Gloriosa superba* L. Pg. 111.National Conference on Advances in Biological Sciences, November 5-7 (Poster Presentation).
- (4) Chandrawanshi, N. K. (2012) Effect of antibacterial actives and compare the value of two species of Tulsi leaves (*Ocimum*). Pg. 42. 10th C.G. Young Scientist Congress Organized at

- Sarguja Vishwavidyalaya, Ambikapur, Sponsored By Chhattisgarh Council of Science & Technology (CCOST), Raipur (Chhattisgarh) during 28th and 29th February (Oral Presentation).
- (5) **Nagendra Kumar Chandrawanshi**, K. L. Tiwari, S.K. Jadhav and A. Quraishi (2012) Ecofriendly management of *Gloriosa superba* L. by *Ocimum* herbs against *Polytela gloriosae*. Pg. 32, National Seminar on Changing Environment and its Impact on Biodiversity, sponsored by UCC-CRO, Bhopal and CGCOST, Raipur, 11-12 October (Oral Presentation).
- (6) Chandrawanshi Nagendra Kumar, Tiwari K. L., Jadhav SK and Quraishi Afaque (2013) Habitat study of *Gloriosa superba* L. at district of Rajnandgaon forest area. Pg. 54, "National Conference on Traditional Knowledge & Biotechnology" organized by School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (CG), 23-24 November (Oral Presentation).
- (7) Chandrawanshi Nagendra Kumar, Jadhav S.K., Tiwari K. L., and Quraishi Afaque (2016) Micropropagation technique developed for an endangered medicinal plant of *Gloriosa superba* L.. Pg. 93, National Seminar on "Innovations & Prospects in Biotechnology", organized by the School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (CG), January 2-4. (Oral Presentation).
- (8) Chandrawanshi Nagendra Kumar, Jadhav S.K., Tiwari K. L., and Quraishi Afaque (2016) Microtuberization a Novel Techniques for Conservation of Threated *Gloriosa superba* L. 3<sup>rd</sup> International Congress of the Society for Ethnopharmacology, India, on "Ethnopharmacology & Evaluation of Medicinal Plants-Global Perspectives". Organized by The National Centre for Natural Resources (NCNR), Pt. Ravishankar Shukla University, Raipur (CG), India and The Society for Ethnopharmacology, India (S.F.E., India), February 19-21. Published in Peer Reviewed Journal of Ravishankar University, Part –B (Science), 29(1) Special Issues); Pg.69. ISSN 0970-5910 (Oral Présentation).
- (9) **Chandrawanshi Nagendra Kumar**, Tandia, D. K. and Jadhav, S. K. (2016) Nutraceutical properties evaluation of *Schizophyllum commune*. Pg.33. National Seminar on "Innovations and Entrepreneurship in Biotechnology", organized by Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Bilaspur, (CG) India, December 26-27 (Oral Presentation).
- (10) **Chandra wans hi Nagendra Kumar**, Tandia, D. K. and Jadhav, S. K. (2017) *In vitro* therapeutic validation of *Daedaleopsis confragosa*. Pg. 79. National Seminar on "ADVANCES IN ENVIRONMENTAL SCIENCE & TECHNOLOGY", organized by Department of Botany, Govt. Digvijay Autonomous PG College, Rajnandgaon, (CG), January 23-24, 2017. (Oral Presentation).
- (11) **Chandrawanshi Nagendra Kumar** (2017) Antibacterial effectiveness determination of polar solvents extracts of *Schizophyllum commune*, against pathogen and non-pathogen bacteria in *in vitro* assay system. Souvenir of 4<sup>th</sup> International Virtual Congress. <u>www.isca.net.co</u>, August 5<sup>th</sup> 10<sup>th</sup>, 2017. Pg. 12. (Oral Presentation)
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## **Brief Review of the Research Contributions and Future Prospects:**

My initial research work was based on the conservation of pharmaceutical important endangered medical plant of *Gloriosa superba* L. In the sequence, developed in vitro

conservation and microtuberization methods for gaining highly valued micro tubers through in vitro approaches, analyzing colchicine content in different developing stages, and achieved significant success rate for in vitro conservation approaches, which is supported for essential steps for conservation of the plants. Persistently, Glory lily is a fascinating phytomedicine resource for anticancer drugs, thus huge demand in the world-level drug market. As a faculty of Biotechnology, I comprehend titles dealing with, subjects like Genetics, Molecular Biology, Immunology, and animal Biotechnology in M.Sc. theory as well as practical classes regularly. Presently, our laboratory is primarily engaged in the propagation and conservation of mushrooms, along with medicinal plants. Currently, work on the identification of alternative spawns and substrates for mushroom cultivation is underway. We are also attempting to develop protocols for enhanced production of metabolites and minerals fortification in edible varieties of mushrooms to make them alternate functional food items. Furthermore, this laboratory is also trying to screen potent bioactive components, which can later be used in pharmaceutical industries.

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