

Curriculum Vitae



Name: Nagendra Kumar Chandrawanshi
Date of Birth: July 11, 1984
Status: Married
Designation: Assistant Professor
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Pt. Ravishankar Shukla University
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Academic Records:

- 1) Ph.D. Biotechnology** (2014): from S.o.S in Biotechnology; Pt. Ravishankar Shukla University, Raipur (C.G.)
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- JRF (June) 2009

Positions Held:

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

Honors/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. **N.C.C. (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 University Grant Commission (UGC) New Delhi.
6. **UGC SRF** (Senior Research Fellowship, May 01, 2012 to November 7, 2012) awarded by 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 (C.G.) (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 2nd International Conference on Fostering Interdisciplinary Research in Health Sciences 2019 (ICFIRHS 2019), Bedong, Kedah Darul Aman, Malaysia (Sept. 14-15, 2019).

Other Qualification:

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

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 10 year research experienced 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)

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** (January 29, 2018).
3. Member of Asian Federation of Biotechnology (AFBO)

Administrative Responsibility:

1. Secretary, Staff Council, SoS in Biotechnology, Pt. RSU, Raipur (2014 –till date)
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)

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 Tracccing Team (COVID-19);** (July 22, 2020, to June 04, 2021), and an acted role as per the direction 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. Food processing and
5. Drug Discovery

Research Guidance:

Ph.D.

SN	Name of the Student	Thesis Title	Session
1	Ms Anjali Kosre University Research Fellow	Bioaccumulation of Minerals and their Impact on Productivity, Bioactivity and Metabolites contents of <i>Pleurotus florida</i>	2018 (Pursuing)
2	Ms Deepali DBT JRF Fellow	Mineral Fortification and its impact on yield, Metabolites and Bioactivity of <i>Calocybe indica</i> (P&C)	2018 (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 <i>In Vitro</i> Evaluation of Antifungal Activity of <i>Ganoderma lucidum</i> Against Human Pathogenic Fungus (<i>Aspergillus niger</i>)	2018
4	Ms. Ayesha Fatima	MATS University, Raipur	Antibacterial activity of <i>Ganoderma lucidum</i>	2018
5	Mr. Kirit Chanap	MATS University, Raipur	Standardization of protocol for DNA isolation of <i>Termitomyces heimii</i>	2018
6	Ms. Sarita Waradkar	Dept. of Biotechnology, Govt.V.Y.T. Post Graduate Atonomous College, Durg (C.G)	Static and Non-Static Submerged Cultivation of <i>Pleurotus ostreatus</i> 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. N.P.G. 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
9	Mr. Subir Kumar Parey	Amity Institute of Biotechnology, Amity University Gwalior, M.P.	Evaluation of Antibacterial Activity of Inorganic and Organic Solvents Extract <i>P. ostreatus</i> , against Human Pathogenic and Non-Pathogenic Bacteria	2019
10	Ms.Pingla Sen	SoS in Biotechnology, Pt RSU	Review on Nutrients and Bioactive Compounds of <i>Pleurotus ostreatus</i>	2020
11	Ms. Jaswantee Pujari	Dept. of Biotechnology Govt. N.P.G. 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 Nutritional Status and Bioactive Compounds of <i>Calocybe indica</i> (P&C)	2020
13	Ms. P. Deepti Rani	Amity Institute of Biotechnology, Amity University Chhattisgarh, Raipur	Mineral fortification of <i>Calocybe indica</i> by using Submerged fermentation and its impact on production of biomass and exopolysaccharides	2021

Grant Support Received:

Project Title	Funding Agency	Sanctioned Amount (INR in Lakhs)	Duration
Morphological, Biochemical and Molecular Characterization of poisonous and nonpoisonous mushroom	CCOST, Raipur	3.60=00	2015-17

TRAINING

SN	Training Program	Place	Place/ Agency	Duration
1	4 th INSPIRE Internship Program/ Science Conclave: “A Congregation of Nobel Laureates and Eminent Scientists	IIIT-A (Indian Institute of Information Technology, Allahabad)	MHRD-DST initiative at IIIT-A (Indian Institute of Information Technology, Allahabad)	07 Days 26.11.2011 - 02.12.2011
2	Scientific/Research Paper Writing	Central Institute of Fisheries Education –CIFE, Mumbai	The National Academy of Sciences, India (NASI)	08.06.2012 - 10.06.2012
3	Workshop/Short Term Course on “E-Learning”	Academic Staff College, Raipur	Academic Staff College, Pt. Ravishankar Shukla University, Raipur, India	03 Days 28.01.2013 - 30.01.2013
4	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: 13.10.2014 - 14.10.2014
5	National Workshop on “Operation and Maintenance of Laboratory Equipment’s”	School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur	School of Studies in Electronics & Photonics, Pt. Ravishankar Shukla University, Raipur, & Western Regional Instrumentation Centre, Mumbai, India,	05 Days 19.01.2015 - 23.01.2015
6	Orientation Program under the theme “Quality of Higher Education : Learning Process”	Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG	UGC-Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG	04 weeks: 03.06.2015 - 30.06.2015
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.	04 Days 06.10.2017 - 09.10.2017

			Ravishankar Shukla University, Raipur. [Conducted by a team of experts from the Centre for Science Education, Sheffield Hallam University, UK.]	
12	<p>“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</p>	Department of Biotechnology, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) India	Global Initiative For Academic Networks (Gian), association with Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) India and Ministry of Human Resources Development (MHRD), Govt. of India	05 Days 18.12.2017 - 22.12.2017
13	<p>The Importance of technical terminology in writing of Academic book (शैक्षणिक पुस्तक के लेखन में तकनीकी शब्दावली का महत्व)</p>	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 Shukla University, Raipur CG	UGC-Human Resource Development Center, Pt. Ravishankar Shukla University, Raipur CG	01 weeks: 03.02.2020 - 08.02.2020
18	Learning Advanced E-tools for MOOCs Development & Research	TLC, Ramanujan College and Motilal Nehru College (E), University of Delhi	TLC, Ramanujan College and Motilal Nehru College (E), University of Delhi	02 weeks: 01.09.2020 - 14.09.2020
19	The Role of ICT in the Development of Massive Open Online Course (MOOCs) in Higher Education” (online mode)	TLC, Ramanujan College, University of Delhi	Teaching Learning Centre, Ramanujan College, University of Delhi	02 weeks: 14.08.2020 - 28.08.2020

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)

Guest/Invited Lectures Delivered:

1. 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.

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 7th International Science Congress, CST, Royal University of Bhutan, Bhutan, (ISCA-ISC-2017-3BS-06-Oral). December 8th-9th, 2017. Pg. 42-43. (Oral Presentation)

Gene Data Submission in NCBI

1. <https://www.ncbi.nlm.nih.gov/nucore/MT159466>

Research Publications:

Papers in National and International Journals:

1. Tiwari, K.L., Jadhav, S.K. 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. DOI: [10.3923/biotech.2015.142.147](https://doi.org/10.3923/biotech.2015.142.147). {SCOPUS/ Thompson Indexed Journal} [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.
7. **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. {SCOPUS Indexed Journal} DOI No: 10.5958/0974-360X.2018.01020.X
8. **Chandrawanshi, Nagendra Kumar** (2019) Determination of Anti-Diabetic Property of organic and nonorganic solvent extracts of *Schizophyllum commune*. *NewBioWorld*, **1(1)**:5-8.
9. Chouhan, P., Deepali, Anjali, Chauhan R, Jadhav, S.K. and **Chandrawanshi, N.K.** (2020) Production and Assessment of Stick-Shaped Spawns of Oyster Mushroom from Banana Leaf-Midribs. Accepted for publication in Proceedings of the National Academy of Sciences, Biological Sciences (NASB).

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.
2. **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 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), 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. **Accepted** for publication in Proceeding

of International Conference (online) on “Sustainable Water Management and Ecosystem Restoration” organized jointly with National Institute of Technology, Calicut & Karunya Institute of Technology and Sciences, Coimbatore on 23rd & 24th June, 2021.

Book Chapter:

1. **Chandrawanshi, Nagendra Kumar** (2016) Traditional Ethnopharmacological Analysis of Traditional Medicinal Systems of Dandakaryana. Published by Print World, Varanasi (ISBN: 978-93-5300-222-0). Pg. 110-120.
2. **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** (2020) Sustainable development and Tribal Livelihood in North-East India: Mushroom cultivation promise Issues and Challenges. TRIBAL DEVELOPMENT IN INDIA. Edited by Sharma, VP, Kolay, SA, Deb, MK and Chouhan, P), Published by Delton Publishing House, New Delhi, India (**accepted**).
4. **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.
5. 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.
6. Mahish, P.K., **Chandrawanshi Nagendra Kumar** and Jadhav, S.K. (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>.
7. Tiwari, S., Deepali, Kosre, A., Mahish, P.K., Jadhav, S.K. 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>.
8. 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: <https://doi.org/10.1002/9781119741503.ch15>
9. **Chandrawanshi, Nagendra Kumar**, Kosre, A., Deepali, and Mahish, P.K. (2021) Mushroom Derived Bioactive Based Nanoemulsion Current Status and Challenges for Cancer Therapy Edited by K. Ramalingam, Published by IGI Global, USA, ISBN13: 9781799883784 (Ch22, **accepted**).
10. Kosre, A., Deepali and **Chandrawanshi, Nagendra Kumar** (2021) Nanoemulsion based on Mushroom Bioactive compounds and its Application in Food Preservation. (Edited by K. Ramalingam, Published by IGI Global, USA, ISBN13: 9781799883784 (Ch14, **accepted**).

11. Deepali, Kosre, A., and **Chandrawanshi, Nagendra Kumar** (2021) Mushrooms Bioactive Compounds: Potential Source for the Development of Antibacterial Nanoemulsion. (Edited by K. Ramalingam, Published by IGI Global, USA, ISBN13: 9781799883784 (Ch10, **accepted**).
12. 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

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, S.K. 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 during 19th-21st November (**Oral Presentation**).
- (3) Tiwari, K. L., Jadhav, S.K. 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 S.K. 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 (C.G.), 23-24 November (**Oral Presentation**).
- (7) **Chandrawanshi Nagendra Kumar, Jadhav S.K., Tiwari K. L., and Quraishi Afaque** (2016) Micropropagation technique developed for endangered medicinal plant of *Gloriosa superba* L.. Pg. 93, National Seminar on “Innovations & Prospects in Biotechnology”, organized by School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur (C.G.), January 2-4. (**Oral Presentation**).
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Brief Review of the Research Contributions and Future Prospect:

My initial research work was based on the conservation of highly pharmaceutical valued important endangered medical plant of *Gloriosa superba* L. In the sequence, developed in vitro conservation and microtuberization methods for gaining to high valued microtubers through in vitro approaches, analyzing of 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 dealt, subject alike, Genetics, Molecular Biology, Immunology & Animal Biotechnology in M.Sc. theory as well practical class's 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 are 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.