

# Curriculum-Vitae



**School of Studies of Interdisciplinary Education and Research**  
**Department of Rural Technology and Social Development**  
**Guru Ghasidas University**  
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**DR. SATENDRA KUMAR NIRALA**  
**Assistant Professor, Selection Grade (Level-12)**

## **Qualification/ Academic Profile:**

<b>Degrees</b>	<b>Name of University</b>	<b>Year of Passing</b>	<b>Division / Class</b>	<b>Marks secured and Max. Marks</b>	<b>% of Marks</b>	<b>Subjects Taken</b>
<b>B. Sc.</b>	Bundel Khand University INDIA	1997	First Div.	838/1350	62.07%	<b>Zoology, Chemistry</b>
<b>M. Sc.</b>	Bundel Khand University INDIA	1999	First Div.	765/1200	63.75%	<b>Zoology (Specialization-Parasitology)</b>
<b>M. Phil.</b>	Jiwaji University INDIA	2000-2002	-----	277/400	69.25% <b>First Position</b>	<b>Zoology (Specialization-Environmental Toxicology)</b>
<b>Ph.D. Zoology</b>	Jiwaji University INDIA	<b>July 2005</b>				<b>Zoology (Field of research-Toxicology &amp; Pharmacology)</b>

## **Research areas of interest:**

### **Occupational health and safety:**

- Assessment of awareness and perception of occupational health hazards among workers in various industrial settings.

### **Silicosis:**

- Cellular mechanisms for detoxification and therapeutic efficacy of natural products in experimentally induced silicosis.

### **Intercellular communication (in vitro studies):**

- Evaluation of certain natural products for anti-cancerous activity by hampering intercellular communication through tunneling nano tubes (TNTs).

### **Metal toxicology:**

- Acute, Sub-chronic and Chronic Metal Poisoning with special reference to Beryllium, Lead, Mercury, Cadmium and Aluminum.
- Cellular and molecular mechanisms of detoxification by chelation therapy with and without antioxidants/adjuvants/trace elements supplementation; Quantitative determination of metal concentration and various biochemical variables in biological samples.

### **Hepato and nephro protection:**

- Biological evaluation of herbal and natural products and active principles for the treatment of liver and kidney diseases against model hepatotoxicants (CCl<sub>4</sub>, Acetaminophen, Lipo-polysaccharides, D-Galactosamine, Alcohol & Acrylamide).
- Protective effects of herbal and natural products against Alcohol and high fat diet induced hepato-renal dysfunctions.

### **Details of Employment:**

<b>Organization</b>	<b>Designation of the post held</b>	<b>Duration From - To</b>	<b>Salaries/ Remuneration</b>	<b>Nature of work done</b>
Department of Rural Technology, Guru Ghasidas University, Bilaspur (CG) India	<b>Assistant Professor (Selection Grade) Level 12</b>	01-06-2020 To Till date	As per UGC rules for Central Universities	Teaching UG, PG & PhD classes, research, extracurricular activities and administrative responsibilities
Department of Rural Technology, Guru Ghasidas University, Bilaspur (CG) India	<b>Assistant Professor (Senior Scale) Level 11</b>	01-06-2015 To 31-05-2020	As per UGC rules for Central Universities	Teaching UG, PG & PhD classes, research, extracurricular activities and administrative responsibilities
Department of Rural Technology, Guru Ghasidas University, Bilaspur (CG) India	<b>Assistant Professor (Level 10)</b>	01-06-2011 To 31-05-2015	As per UGC rules for Central Universities	Teaching UG, PG & PhD classes, research, extracurricular activities and administrative responsibilities
SOS in Zoology, Jiwaji University, Gwalior (MP) India	<b>Research Associate</b>	05-05-2008 To 04-05-2011	INR 23,000/- PM+ HRA 20% + Contingency 20,000/-PA	Doing Experiments and compilation of data as per proposal sanctioned by ICMR
Lanzhou University Lanzhou (Gansu Province)	<b>Senior Visiting Scholar</b>	1-09-2005 To 30-03-2008	Chinese Yuan 2570=00 PM + To & Fro	Doing Experiments and compilation of data as per proposal sanctioned

PR CHINA			Air fare + Free Accommodation, Tuition fee and Medical	by China Scholarship Council
Boston College for Professional Studies, Gwalior (MP) India	<b>Visiting Lecturer</b>	1-02-2005 To 30-04-2005	INR 150/-- Per Lecture	Taught Industrial Biotechnology to undergraduates
SOS in Zoology, Jiwaji University, Gwalior (MP) India	<b>Project Fellow</b>	29-08-2001 To 28-08-2004	INR 6000/-- PM	Doing Experiments and compilation of data as per proposal sanctioned by UGC

## Awards and Honors:

### Fellowships awarded:

#### International:

- ❖ Conferred **ICT-XI Junior Fellowship - 2007** from **International Union of Toxicology, USA (IUTOX)**.
- ❖ Availed **Chinese Government Scholarship-2005** (for Advanced Research Training) from 01-09-2005 to 31-03-2008 under **Indo-China Cultural Exchange Program** through Ministry of Human Resource & Development (Department of Secondary and Higher Education), Government of India.

#### National:

- ❖ Availed **Research Associate** position from 05-05-2008 to 04-05-2011, awarded from **Indian Council of Medical Research**, New Delhi, India (No. 45/03/2004/PHA/BMS) for the research project entitled **“Effects of some natural products against toxicological consequences of beryllium exposure: *in vitro* and *in vivo* approach”**
- ❖ Awarded **Senior Research Fellowship (SRF)** from **Indian Council of Medical Research**, New Delhi, India (Iris Cell No. 2003-05300).
- ❖ Availed **Project Fellowship** from 29-08-2001 to 28-08-2004 from **University Grants Commission**, New Delhi-India, under Major Research Project (No. F-3/70/2001, SR-ii) entitled **"Role of Adjuvants in Chelation Therapy against Beryllium Toxicity"**.

## Scientific Recognitions/ Awards / Honors:

#### International:

- Conferred **Outstanding Scientist Award-2015** for contribution and achievement in the field of Environmental Toxicology from **Venus International Foundation** (VIF) - Chennai (T.N.) India.

- Conferred **Bursary-2009 Award** for research paper entitled “**Intercellular communication through tunneling nanotubes: a possible target for anti-cancer therapies**” from **European Association for Studies on Liver (EASL)** to attend its 44<sup>th</sup> annual meeting held in Copenhagen, Denmark during 22<sup>nd</sup> - 26<sup>th</sup> April, 2009.
- Conferred **Student Recognition Award-2008** from **International Society of Zoological Sciences (PR China) & XX<sup>th</sup> International Congress of Zoology** held in Paris, France during 26<sup>th</sup> - 29<sup>th</sup> August, 2008.
- Conferred **International Congress of Toxicology Junior Fellowship Award-2007** from **International Union of Toxicology, USA (IUTOX)** to attend the ICT-XI conference held at Montreal, Canada during 15<sup>th</sup> -19<sup>th</sup> July, 2007.

### **National:**

- Awarded **Young Scientists Research Project** (SERC/LS-0424/2010; dated August 9, 2011) under SERC Fast Track Scheme of **DST, Ministry of Science and Technology**, New Delhi – India.
- Conferred **Outstanding Young Person (OYP) Award-2006** for personal achievements in the Science and Technological Development from **JCI-Gwalior** (M.P.) India.
- Conferred **Junior Scientist of the Year-2005 Award** from **National Environmental Science Academy** (NESA), New Delhi – India.
- Conferred Best Research Presentation Medal (**BRPM Gold Medal-2003**) for oral presentation on “Amelioration of beryllium induced biochemical alterations by combined treatment of propolis and chelator” in 23<sup>rd</sup> annual session of the **Academy of Environmental Biology - Lucknow**, 9<sup>th</sup> -11<sup>th</sup> October 2003 at Department of Zoology, Shivaji University, Kolhapur (Maharashtra) India.
- Conferred "**Third Prize**" for oral presentation of research paper entitled “**Effectiveness of Tiron over DTPA along with  $\alpha$ - tocopherol against beryllium induced toxicity**” in **Jiwaji University Research Seminar**, 25<sup>th</sup> -26<sup>th</sup> March 2003 held at Jiwaji University, Gwalior (M.P.) India.
- **Honored** by “Shaheed Shashindra Memorial Women-Wisdom Society (Reg.)” on 13<sup>th</sup> June 2004 at Govt. K.R.G. Post Graduate College, Gwalior, for social activities performed in Shaheed Shashindra Memorial Sports Coaching Camp.

## Research Projects handled:

Designation	Funding Agency & Sanction No.	Grants Sanctioned	Duration	Title of the Project
Principal Investigator	<b>University Grants Commission, INDIA</b> (42-550/2013 - SR), 22March, 2013	INR <b>13,29,700/-</b>	01-04-2013 To 31-03-2017	Influence of Phytochemicals on resurgence of acrylamide induced hepato, nephro and encephalopathy
Principal Investigator	<b>University Grants Commission, INDIA</b> [No: F.20-1/2012 (BSR)/20-11(3)/2012(BSR)] 30 Oct, 2012	INR <b>6,00,000/-</b>	05-12-2012 To 04-12-2014	Chemical characterization of few indigenous plants of Chhattisgarh state and their evaluation for therapeutic potential and safety against experimental hepatitis
Principal Investigator	<b>Department of Science and Technology, INDIA</b> (DST-SERB) SR/FT/LS-166/2010, 13 <sup>th</sup> Aug, 2012	INR <b>17,08,000/-</b>	01-09-2012 To 31-08-2015	Tunneling nanotubes: Exploration of possible target for anti-cancer therapies
Research Associate (Awarded)	<b>Indian Council of Medical Research, INDIA</b> (45/03/2004/PHA/BMS)	INR <b>10,53,600/</b>  Fellowship, HRA and Contingency expenditures	05-05-2008 to 04-05-2011	“Effects of some natural products against toxicological consequences of beryllium exposure: <i>in vitro</i> and <i>in vivo</i> approach”

## Publications:

### Publication matrix as updated on 20-12-2022

<b>Cumulative Impact Factor:</b>	<b>122.863</b>	<b>(As per JCR/SCIE 2022)</b>
<b>Total citations:</b>	<b>1007</b>	<b>(As per Google Scholar)</b>
<b>h-index:</b>	<b>17</b>	<b>(As per Google Scholar)</b>
<b>i10-index:</b>	<b>25</b>	<b>(As per Google Scholar)</b>

## Patents:

- ❖ Indian patent filed and published with title of the invention: **“A method of value addition by transforming Indian propolis into its silver nanoparticles and their therapeutic uses”**.

**Name of Applicant:** **Monika Bhadauria**  
**Name of inventors:** Monika Bhadauria, Shubham Singh, **Satendra Kumar Nirala**, Dhiraj Kumar, Sangeeta Shukla, Sadhana Shrivastava, Om Prakash Agrawal, and Prashant Singh  
**Ref./Application No:** **202221056592**  
**Appl Number:** **TEMP/E-1/64908/2022-MUM**  
**Date of filing:** **02/10/2022**

- ❖ Indian patent filed and published with title of the invention: **“Value addition of chicken eggs: A method to sustain external and internal quality and to enhance shelf life of eggs by external coating of combination of a solution of shellac and propolis thereof”**.

**Name of Applicants:** **1) Satendra Kumar Nirala & Monika Bhadauria**  
**Name of inventors:** Hem Prabha, Chhaya Nanda, Nidhi Lohitkar, Pratima Dutta, **Satendra Kumar Nirala** and Monika Bhadauria

**Ref./Application No:** **202221052604**  
**Appl Number:** **TEMP/E-1/60403/2022 - MUM**  
**Date of filing:** **15/09/2022**

- ❖ Filed Indian patent with title of the invention: **“Administration of *trans*-resveratrol and caffeic acid phenethyl ester as a method to treat acrylamide induced sub chronic toxicity in multiple organs”**.

**Name of Applicants:** **1) Satendra Kumar Nirala**  
**Name of inventors:** Piyush Shukla, Monika Bhadauria and **Satendra Kumar Nirala**

**Ref./Application No:** **202221047531**  
**Appl Number:** **TEMP/E-1/54239/2022- MUM**  
**Date of filing:** **21/08/2022**

- ❖ Filed Indian patent with title of the invention: **“A novel process of remedy of acrylamide induced acute impairments in liver, kidney, brain and spleen by therapeutic use of resveratrol”**.

**Name of Applicants:** **1) Piyush Shukla & 2) Satendra Kumar Nirala**  
**Name of inventors:** Piyush Shukla, **Satendra Kumar Nirala**, Monika Bhadauria, Sadhana Shrivastava and Sangeeta Shukla

**Ref./Application No:** **202121056442**  
**Appl Number:** **TEMP/E-1/64061/2021-MUM**  
**Date of filing:** **06/12/2021**

- ❖ Filed Indian patent with title of the invention: **“Prospective of caffeic acid phenethyl ester as novel therapeutic process against acrylamide induced acute injury in liver, kidney, brain and spleen”**.

**Name of Applicants:** **1) Satendra Kumar Nirala & 2) Piyush Shukla**  
**Name of inventors:** Monika Bhadauria, Sangeeta Shukla, Sadhana Shrivastava, **Satendra Kumar Nirala** and Piyush Shukla.

**Ref./Application No:** 202121054941  
**Appl Number:** TEMP/E-1/61566/2021-MUM  
**Date of filing:** 27/11/2021

- ❖ Indian patent filed and published with title of the invention: **“Propolis extract: a potent antioxidant and hepatoprotective agent and the process for preparation thereof”**.

**Name of Applicants:** 1) CCRUM, NEW DELHI &  
2) JIWAJI UNIVERSITY, GWALIOR

**Name of inventors:** Sangeeta Shukla, Monika Bhadauria, **Satendra Kumar Nirala**, Sadhana Shrivastava and Shamshad Ahemad.

**Application No:** 1827/DEL/2009

**Date of filing:** 03/09/2009

**Date of publication:** 23/04/2010

**International classification:** A61K 35/64

### **Research papers accepted/published:**

**(Impact Factors as per InCites Journal Citation Reports/ Science Citation Index Expanded (SCIE)/ Clarivate Analytics)**

#### 2022

1. Shukla P, Sahu NK, Kumar R, Dhalla DK, Bhadauria M, Agrawal ND, Shrivastava S, Shukla S and **Nirala SK\*** (December, 2022) **Quercetin ameliorates acrylamide induced acute spleen injury.** (*Biotechnic and Histochemistry*; Accepted & in press; **Impact Factor: 1.742/2021**)
2. Sahu N, Rakshit S, **Nirala SK**, Bhadauria M\* (2022) **Naringenin protects hepato-renal tissues against antituberculosis drugs induced toxic manifestations by modulating interleukin-6, insulin like growth factor-1, biochemical and ultra-structural integrity.** (*Molecular Biology Reports*; <https://doi.org/10.1007/s11033-022-07799-y>; **Impact Factor: 2.742/2021**)
3. Rakshit S, Sahu N, **Nirala SK**, Bhadauria M\* (2022) **Protective activity of purpurin against d-galactosamine and lipopolysaccharide-induced hepatorenal injury by upregulation of heme oxygenase-1 in the RBC degradation cycle.** (*Journal of Biochemical and Molecular Toxicology*; 36: e23168; DOI: <https://doi.org/10.1002/jbt.23168>; **Impact Factor: 3.642/2021**)
4. Shakya A\*, Sharma N, Bhadauria M, **Nirala SK**, Shrivastava S, Shukla S (2022) **Ameliorative impact of herbal formulations-Majoon-Dabeed-ulward and Sharbat-e-Deenar against CCl<sub>4</sub> induced liver toxicity via regulation of antioxidant enzymes and oxidative stress.** (*Toxicology Research*; 1-12 DOI: <https://doi.org/10.1093/toxres/tfac052>; **Impact Factor: 2.680/2021**)
5. Gupte SS, Rathour A, Gupta D, Soni R, Shrivastava S, Bhadauria M, **Nirala SK**, Singh S, Sharma A, Yadav D, Rakshit S and Shukla S (2022) **Tephrosia purpurea ameliorates oxidative and histological**

**alterations induced by Aflatoxin B1 in rats.** (*International Journal of Pharmaceutical Investigation*; 12: 340-345, [Indexed in Web of Science](#))

### 2021

6. Rakshit S, Shukla P, Verma A, **Nirala SK** and Bhadauria M\* (2021) **Protective role of rutin against combined exposure to lipopolysaccharide and D-galactosamine induced dysfunctions in liver, kidney and brain: Hematological, biochemical and histological evidences.** (*Journal of Food Biochemistry*; 45 (2): e13605, DOI: 10.1111/jfbc.13605; [Impact Factor: 3.654/2021](#))

### 2020

7. Rakshit S, Verma A, **Nirala SK** and Bhadauria M\* (2020) **Gallic acid protects from acute multiorgan injury induced by lipopolysaccharide and D-galactosamine.** (*Current Pharmaceutical Biotechnology*; 21: 1489-1504, [Impact Factor: 2.829/2021](#))
8. Shukla P, Sahu NK, Kumar R, Bhadauria M, **Nirala SK\*** (2020) **Hydro-ethanolic extract of *Gloriosa superba* Linn. protecting acute splenic injury by modulating endogenous antioxidants pool in rats.** (*Flora and Fauna*; 26: (2) 295-303, [Indexed in Web of Science](#))
9. Sahu N, Mishra G, Chandra HK, **Nirala SK**, Bhadauria M\* (2020): **Naringenin mitigate antituberculosis drugs induced hepatic and renal injury in rats.** (*Journal of Traditional and Complementary Medicine*; 10: 26-35, [Impact Factor: 4.221/2021](#))

### 2019

10. Verma A, Rakshit S, **Nirala SK**, Bhadauria M\* (2019): **Beryllium driven hematological and serological alterations that cured by chelation via naringenin in albino rats.** (*Asian Journal of Pharmaceutical and Clinical Research*; 12: Issue 09; 116-119, [Indexed in Scopus](#))
11. Rakshit S, Verma A, **Nirala SK**, Bhadauria M\* (2019): **Protective Effect of rotenone against lipopolysaccharide and D-galactosamine induced hematotoxicity.** (*Asian Journal of Pharmaceutical and Clinical Research*; 12: Issue 08; 01-04, [Indexed in Scopus](#))
12. Shrivastava S\*, **Nirala SK**, Reshi MS, Shukla S, Sharma A, Uthra C (2019): **Protective Efficacy of Vitamin F against Acrylamide Induced Toxicity: Studies on Oxidative Stress Biomarkers.** (*The Open Biomarkers Journal*; 9: 1-9; [Indexed in Scopus](#))
13. Agrawal ND\*, **Nirala SK**, Bhadauria M, Shrivastava S, Shukla S (2019): **Protective potential of *Moringa oleifera* Lam. along with curcumin and piperine against beryllium- induced alterations in hepatorenal biochemistry and ultra-morphology in rats.** (*Indian Journal of Biochemistry and Biophysics*; 56: 70-80, [Impact Factor: 1.476/2021](#))

### 2018

14. Sahu N, Mishra G, Chandra HK, **Nirala SK**, Bhadauria M\* (2018): **Propolis modulates cellular biochemistry, antioxidants, cytokine profile, histological and ultra morphological status against antituberculosis**



- drugs induced hepatic injury.** (*Asian Pacific Journal of Tropical Medicine*; 11: 609-620, **Impact Factor: 3.041/2021**)
15. Mishra G, Chandra HK, Sahu N, **Nirala SK**, Bhadauria M\* (2018): **Ameliorative effect of *Pergularia daemia* (Forssk.) Chiov. leaves extract against anti-tuberculosis drugs induced liver injury in rats.** (*Asian Pacific Journal of Tropical Medicine*; 11: 518-525, **Impact Factor: 3.041/2021**)
  16. Mishra G, Chandra HK, Sahu N, Nirala SK, Bhadauria M\* (2018): **Preliminary phytochemical screening and *in vivo* safety evaluation of ethanolic extract of *Hemidesmus indicus* (Linn.)** *Journal of (Applied Pharmaceutical Science*; 8: 072-079, **Indexed in Scopus**)
  17. Mishra G, Chandra HK, Sahu N, Nirala SK, Bhadauria M\* (2018): ***In vivo* safety evaluation and choloretic activity of ethanolic extract of *Pergularia daemia* (Forsk.).** (*Asian Journal of Pharmacy and Pharmacology*; 4: 462-466)
  18. Chandra HK, Mishra G, Sahu N, Nirala SK, Bhadauria M\* (2018): **Toxicological implications of combined consumption of high fat diet and alcohol in rats.** (*Flora and Fauna* 24: 345-349, **Indexed in Web of Science**).
  19. Sahu N, Mishra G, Chandra HK, Nirala SK, Bhadauria M\* (2018): **Ameliorative effect of naringenin against antituberculosis drugs induced alterations in haematological parameters of rats.** (*Asian Journal of Pharmaceutical and Clinical Research*; 11: 253-255, **Indexed in Scopus**)
  20. Mishra G, Chandra HK, Sahu N, Nirala SK, Bhadauria M\* (2018): **Qualitative and quantitative phytochemical screening and *in vitro* antioxidant evaluation of *Pergularia daemia*.** (*Flora and Fauna*; 24: 350-354, **Indexed in Web of Science**).
  21. Chandra HK, Mishra G, Sahu N, Nirala SK, Bhadauria M\* (2018): **Effect of rutin against high-fat diet and alcohol-induced alterations in hematological variables of rats.** (*Asian Journal of Pharmaceutical and Clinical Research*; 11: 186-189, **Indexed in Scopus**)
  22. Sahu N, Mishra G, Chandra HK, Nirala SK, Bhadauria M\* (2018): **Hematological profile of rats administered with propolis following antituberculosis drugs induced toxicity.** (*Flora and Fauna*; 24: 371-374, **Indexed in Web of Science**)
- 2017**
23. Suman KS, Nirala SK, Bhadauria M\* (2017): **Naringenin mitigates beryllium induced behavioural alterations in rats.** (*Flora and Fauna*; 23: 245-251, **Indexed in Web of Science**)
  24. Malik JA, Nirala SK, Bhadauria M\* (2017): **Phytochemical and antibacterial evaluation of *Tephrosia purpuria* and its active**

**constituent gallic acid.** (*Flora and Flora*; 23: 252-256, **Indexed in Web of Science**)

#### 2015

25. Agrawal ND, **Nirala SK**, Shukla S, Mathur R\* (2015): **Co-administration of adjuvants along with *Moringa oleifera* attenuates beryllium induced oxidative stress and histopathological alterations.** (*Pharmaceutical Biology*; 53: 1465-1473 , **Impact Factor: 3.503/2020**)

#### 2013

26. Wen YF, Zhao JQ, Bhadauria M, **Nirala SK\*** (2013): **Baicalin prevents cadmium induced hepatic cytotoxicity, oxidative stress and histomorphometric alterations.** (*Experimental and Toxicologic Pathology*; 65: 189–196, **Impact Factor: 2.023/2020**)

#### 2012

27. Wen YF, Zhao JQ, **Nirala SK**, Bhadauria M\* (2012): **Aluminum induced toxicity and its response to combined treatment of HEDTA and propolis in rats.** (*Polish Journal of Environmental Studies*; 21: 1437-1444, **Impact Factor: 1.699/2020**)

#### 2010

28. Wen YF, Zhao JQ, Bhadauria M, **Nirala SK\*** (2010): **Pyridoxine mitigates cadmium induced hepatic cytotoxicity and oxidative stress.** (*Environmental toxicology and Pharmacology*; 30: 169-174, **Impact Factor: 4.860/2020**)
29. Joshi D\*, Mittal DK, **Nirala SK**, Shrivastava S, Bhadauria M, Shukla S (2010): **Role of micronutrients against dimethylmercury intoxication in male rats.** (*Environmental Toxicology and Pharmacology*; 29: 97-103, **Impact Factor: 4.860/2020**).

#### 2009

30. **Nirala SK**, Bhadauria M\*, Upadhyay AK, Mathur R, Mathur A (2009): **Reversal of effects of intra peritoneally administered beryllium nitrate by tiron and CaNa<sub>3</sub>DTPA alone or in combination with  $\alpha$ -tocopherol.** (*Indian Journal of Experimental Biology*; 47: 955-963, **Impact Factor: 0.944/2021**)
31. Upadhyay AK, Mathur R, Bhadauria M, **Nirala SK\*** (2009): **Therapeutic influence of zinc and ascorbic acid against lead induced biochemical alterations.** (*Therapie*; 64, 383-388, **Impact Factor: 3.367/2021**)
32. Fan GJ, Tang JJ, Bhadauria M\*, **Nirala SK**, Dai F, Zhou B, Li Y, Liu ZL (2009). **Resveratrol ameliorates carbon tetrachloride induced acute liver injury in mice.** (*Environmental Toxicology and Pharmacology*; 28, 350-356, **Impact Factor: 5.785/2021**).
33. Zhao JQ, Wen YF, Bhadauria M\*, **Nirala SK**, Sharma A, Shrivastava S, Shukla S, Agrawal OP, Mathur R (2009). **Protective effects of propolis**

**on inorganic mercury induced oxidative stress in mice.** (*Indian Journal of Experimental Biology*; 47: 264-269, **Impact Factor: 0.944/2021**)

34. Bhadauria M\*, **Nirala SK**, Shrivastava S, Sharma A, Johri S, Chandan BK, Singh B, Saxena AK, Shukla S (2009): **Emodin reverses CCl<sub>4</sub> induced hepatic CYP enzymatic and ultra structural changes: the *in vivo* evidence.** (*Hepatology Research*; 39: 290-300, **Impact Factor: 4.942/2021**)
35. Bhadauria M\* and **Nirala SK** (2009): **Reversal of acetaminophen induced subchronic hepatorenal injury by propolis extract in rats.** (*Environmental Toxicology and Pharmacology*; 27: 17-25, **Impact Factor: 5.785/2021**)

#### 2008

36. **Nirala SK\***, Bhadauria M (2008): **Synergistic effects of ferritin and propolis in modulation of beryllium induced toxicogenic alterations.** (*Food and Chemical Toxicology*; 46: 3069-3079, **Impact Factor: 5.572/2021**)
37. Bhadauria M\*, **Nirala SK**, Shukla S (2008): **Multiple treatment of propolis extract ameliorates carbon tetrachloride induced liver injury in rats.** (*Food and Chemical Toxicology*; 46: 2703-2712, **Impact Factor: 5.572/2021**)
38. Bhadauria M, Shukla S, Mathur R, Agrawal OP, Shrivastava S, Johri S, Joshi D, Singh V and Mittal DK, **Nirala SK** (2008): **Hepatic endogenous defense potential of propolis after mercury intoxication.** (*Integrative Zoology*; 4: 311-321, **Impact Factor: 2.083/2021**)
39. **Nirala SK\***, Li PQ, Bhadauria M, Guo GQ (2008): **Combined effects of gallic acid and propolis on beryllium-induced hepatorenal toxicity.** (*Integrative Zoology*; 4: 195-208, **Impact Factor: 2.083/2021**)
40. **Nirala SK\***, Bhadauria M, Shukla S, Agrawal OP, Mathur A, Li PQ, Mathur R\* (2008): **Pharmacological intervention of tiferron and propolis to alleviate beryllium induced hepatorenal toxicity.** (*Fundamental and Clinical Pharmacology*; 22: 403-415, **Impact Factor: 2.747/2021**)
41. **Nirala SK**, Bhadauria M\* (2008): **Propolis reverses acetaminophen induced hepatorenal biochemical and histopathological alterations.** (*Archives of Pharmacal Research*; 31: 451-461, **Impact Factor: 6.010/2021**)
42. **Nirala SK\***, Bhadauria M, Mathur R, Mathur A (2008): **Influence of  $\alpha$ -tocopherol, propolis and piperine on therapeutic potential of tiferron against beryllium induced toxic manifestations** (*Journal of Applied Toxicology*; 28: 44-54, **Impact Factor: 3.628/2021**).

#### 2007

43. Zhao JQ, Du GZ, Xiong YC, Yi-Fu Wen, Monika Bhadauria, **Nirala SK\*** (2007): **Attenuation of beryllium induced hepatorenal dysfunction and oxidative stress in rodents by combined effect of Gallic acid and**

**piperine.** (*Archives of Pharmacal Research*; 30: 1575-1583, **Impact Factor: 6.010/2021**)

44. Bhadauria M\*, **Nirala SK**, Shukla S (2007). **Duration dependent hepatoprotective effect of propolis extract against carbon tetrachloride induced acute damage in rats.** (*Advances in Therapy*; 24: 1134-1143, **Impact Factor: 3.845/2020**)
45. Bhadauria M\*, **Nirala SK**, Shukla S (2007): **Propolis protects CYP2E1 enzymatic activities and oxidative stress induced by carbon tetrachloride.** (*Molecular and Cellular Biochemistry*; 302: 215-24, **Impact Factor: 3.842/2021**).
46. **Nirala SK\***, Bhadauria M, Mathur R, Mathur A (2007): **Amelioration of beryllium induced alterations in hepatorenal biochemistry and ultramorphology by co-administration of tiferron and adjuvants.** (*Journal of Biomedical Science*; 14: 331-345, **Impact Factor: 12.771/2021**).
47. Bhadauria M\*, **Nirala SK**, Shukla S (2007): **Hepatoprotective efficacy of propolis extract: A biochemical and histopathological approach** (*Iranian Journal of Pharmacology and Therapeutics*, 6: 145-154).

#### 2004

48. **Nirala SK**, Mathur R\*, Mathur A (2004): **Amelioration of beryllium induced biochemical alterations by combined treatment of propolis and chelator.** *Journal of Ecophysiology & Occupational Health*, 4, PP 45-54.
49. Mathur R\*, **Nirala SK**, Mathur A (2004): **Comparative effectiveness of CaNa<sub>3</sub>DTPA and Tiron along with  $\alpha$ -Tocopherol against beryllium induced biochemical alterations in rats.** (*Indian Journal of Experimental Biology*, 42, 570-574. **Impact Factor: 0.944/2021**).

#### 2003

50. Mathur R\*, **Nirala SK**, Mathur A (2003): **Toxicological effects of beryllium and its prevention by combined therapy of HEDTA and  $\alpha$ -Tocopherol;** Proceedings of National Symposium on *Biochemical Sciences: Health and Environmental Aspects*. Oct. 2- 4, PP 504-506.
51. Mathur R\*, **Nirala SK**, Mathur A (2003): **Suppression of hepatic lipid peroxidation by HEDTA along with piperine after beryllium intoxication in rats;** *Journal of Current Sciences*, 3 (1): PP 67-70.

#### 2002

52. **Nirala SK**, Mathur R\* (2002): **Role of antioxidant in chelation against beryllium induced toxicity in female albino rats;** *Flora and Fauna*, 8 (1): 23-26, **Indexed in Web of Science**).

## Key Note/Invited Lectures/Talks in Conferences, Seminars, Workshops

### International:

- **“Propolis: a worldwide folklore medicine and scope for rural entrepreneurship and agribusiness”** delivered Key Note lecture in *The Ancient Indian Knowledge System for Holistic Development* (CVRUCON- 2022); 28-29, January 2022; Dr. C. V. Raman University, Kargi Road, Kota- Bilaspur, **(CG) India**.
- **“Zinc and magnesium augment protective potential of caffeic acid phenethyl ester (CAPE) against acrylamide induced chronic injury in multiple organs”** delivered lecture in *International Conference on Breakthroughs in Toxicology and 39<sup>th</sup> Annual Meeting of Society of Toxicology*; 27-29, Dec 2019; Jiwaji University, **Gwalior (MP) India**.
- **“Therapeutic potential of ferritin in combination of epigallocatechin gallate and piperine against beryllium induced chronic toxicity in liver and kidney”** delivered lecture in *International Conference on Emerging Researches in Bioscience* (ICERB-2018); 28<sup>th</sup> - 30<sup>th</sup> October, 2018; Guru Ghasidas University, **Bilaspur (CG) India**.
- **“Toxic consequences of acrylamide on liver and kidney: Therapeutic prospective of curcumin”** delivered invited lecture in *International Symposia on Water, Energy and Environment for Sustainable Development Goals*, 25<sup>th</sup> - 26<sup>th</sup> September, 2018; Dr. C.V. Raman University, **Bilaspur (CG) India**.
- **“Indian Culture and historical monuments”** delivered lecture in the seminar entitled *“Cut Across the Himalaya: A Seminar on the Peoples and Culture of India”*; 9<sup>th</sup> & 10<sup>th</sup> November, 2005; Lanzhou University, **Lanzhou (Gansu Province) PR China**.

### National:

- **“Histotechniques as a diagnostic tool in disease: Why and How?”** delivered invited talk and wet lab demonstration on histological procedures for students in National Workshop on Molecular Diagnostics: Advances and Applications, 03<sup>rd</sup> – 09<sup>th</sup> November, 2022, Department of Biotechnology, Guru Ghasidas University, **Bilaspur (CG)**.
- **“Histochemical Techniques: Why and How”** delivered invited talk in National Workshop on Animal Cell Culture: Techniques and Applications, 16<sup>th</sup> – 22<sup>nd</sup> February, 2022, Department of Biotechnology, Guru Ghasidas University, **Bilaspur (CG)**.
- **“Animal based industries: Lucrative entrepreneurship for livelihood in rural areas”** delivered invited lecture in Women’s Entrepreneurship Development Program on 07<sup>th</sup> December, 2021, Jiwaji University, **Gwalior (MP)**.
- **“Histochemical Techniques: Why and How”** delivered invited talk in National Workshop on Animal Cell Culture: Techniques and Applications, 18<sup>th</sup> – 24<sup>th</sup> January, 2018, Department of Biotechnology, Guru Ghasidas University, **Bilaspur (CG)**.
- **“Interruption in cell to cell communication: An *in vitro* evidence for novel anti-cancer mechanism”** delivered invited lecture in 3<sup>rd</sup> National Conference of

Zoological Society of Chhattisgarh on Prospects of Innovations in Life Sciences and Socio-Economic Challenges, 02<sup>nd</sup> - 03<sup>rd</sup> December, 2017, Department of Zoology, CMD College, **Bilaspur (CG)**.

- **“Propolis: a world-wide folklore medicine”** delivered invited lecture in National Lecture Series; 12-03-2016; Department of Rural Technology, Bastar University, **Jagadapur (CG)**
- **“Animal based industries for rural development”** delivered invited lecture in National Lecture Series; 12-03-2016; Department of Rural Technology, Bastar University, **Jagadapur (CG)**.

## **Scientific presentations in seminars, symposia & conferences:**

(Title of the paper presented, name of conference, year & venue):

### **International:**

- Zinc and magnesium augment protective potential of caffeic acid phenethyl ester (CAPE) against acrylamide induced chronic injury in multiple organs: *International Conference on Breakthroughs in Toxicology and 39<sup>th</sup> Annual Meeting of Society of Toxicology*; 27-29, Dec 2019; Jiwaji University, **Gwalior (MP) India**.
- Protective role of resveratrol against acrylamide mediated hepatic and renal pathophysiology in rats: *17<sup>th</sup> International Conference on Sustainable Research in Engineering, Technology, Pharmacy and Management (IC-SRETPM-2019)*, 25<sup>th</sup> - 26<sup>th</sup> May, 2019; Babulal Tarabai Institute of Research and Technology, **Sagar, (MP) India**.
- Therapeutic potential of ferritin in combination of epigallocatechin gallate and piperine against beryllium induced chronic toxicity in liver and kidney: *International Conference on Emerging Researches in Bioscience (ICERB-2018)*, 28<sup>th</sup> - 30<sup>th</sup> October, 2018; Guru Ghasidas University, **Bilaspur (CG) India**.
- Toxic Consequences of Acrylamide on Liver and Kidney: Therapeutic Prospective of Curcumin: *International Symposia on Water, Energy and Environment for Sustainable Development Goals*, 25<sup>th</sup> - 26<sup>th</sup> September, 2018; Dr. C.V. Raman University, **Bilaspur (CG) India**.
- Acrylamide mediated inequity in homeostasis: Amelioration by a traditional molecule, the Curcumin: *International Conference on Bharat Rejuvenation (From Glorious Past to the Modern Era) - 2017*, 15<sup>th</sup> - 17<sup>th</sup> October, 2017; Guru Ghasidas University, **Bilaspur (CG) India**.
- Sanative sequel of CAPE (Caffeic Acid Phenethyl Ester) against acrylamide arbitrated toxic illustrations: *2<sup>nd</sup> International Conference “Frontiers in Pharmaceutical Sciences”*, 23<sup>rd</sup> - 24<sup>th</sup> September, 2017; Columbia Institute of Pharmacy, **Raipur (CG) India**.
- Disruption in intercellular communication may be a novel anti-cancer mechanism: An *in vitro* evidence: *40<sup>th</sup> All India Cell Biology Conference and International Symposium on Functional Genomics and Epigenomics*, 17<sup>th</sup> - 19<sup>th</sup> November, 2016; SOS in Zoology, Jiwaji University, **Gwalior (MP) India**
- Resveratrol: A promising therapeutic agent against acrylamide induced hepatic and renal dysfunction: *3<sup>rd</sup> International Congress of Society for Ethnopharmacology on Ethnopharmacology and Evaluation of Medicinal Plants- Global Perspective*, 19<sup>th</sup> - 21<sup>st</sup> February, 2016; Pt Ravi Shankar Shukla University, **Raipur (CG) India**.

- Curcumin: A potent therapeutic agent to cope with acrylamide induced hepatic and renal dysfunction: 6<sup>th</sup> *International Conference on Technology Innovation and Management for Sustainable Development*, 11<sup>th</sup> - 13<sup>th</sup> February, 2016; ITM University, **Gwalior (MP) India**.
- Intercellular communication through tunneling nanotubes: a possible target for anti-cancer therapies: 44<sup>th</sup> *meeting of European Association for the Studies on the Liver (EASL)* 22<sup>nd</sup> - 26<sup>th</sup> April, 2009; **Copenhagen, Denmark**.
- Combined effects of gallic acid and propolis on beryllium-induced hepatorenal toxicity: XX<sup>th</sup> *International Congress of Zoology*, 26<sup>th</sup> - 29<sup>th</sup> August, 2008; **Paris, France**.
- Cut across the wall: cell to cell communication through intercellular bridges: *International Conference of Toxicology, Toxicogenomics and Occupational Health*, 9<sup>th</sup>-11<sup>th</sup> October, 2006; SOS in Zoology, Jiwaji University, **Gwalior (MP) India**.
- Toxicological consequences upon beryllium exposure and its therapeutics by supplementation of antioxidants along with chelator: An *in vivo* study: *International Symposium on Recent Advances in Pharmacology*, 7<sup>th</sup>- 8<sup>th</sup> January, 2004; All India Institute of Medical Sciences, **New Delhi, India**.
- Attenuation of beryllium induced toxicity through Tiferron along with Propolis as nutritional supplementation in rats: 7<sup>th</sup> *Conference of the International Society for Trace Element Research in Humans (ISTERH)*, 7<sup>th</sup>-12<sup>th</sup> November, 2004; Institute of Nutrition, Mahidol University, **Bangkok, Thailand**.

### **National:**

- Epigallocatechin gallate and piperine exhibit better therapeutic effects in presence of S-allyl-L-cystein against beryllium induced hepato-renal injury: *National Seminar on Recent Trends in Drug Discovery, Development and Delivery Systems*, 12<sup>th</sup> February, 2018, SLT Institute of Pharmaceutical Sciences, Guru Ghasidas University, **Bilaspur (CG)**.
- Interruption in cell to cell communication: An *in vitro* evidence for novel anti-cancer mechanism: 3<sup>rd</sup> *National Conference of Zoological Society of Chhattisgarh on Prospects of Innovations in Life Sciences and Socio-Economic Challenges*, 02-03<sup>rd</sup> December, 2017, Department of Zoology, CMD (PG) College, **Bilaspur (CG)**.
- Therapeutic potential of naringenin against acrylamide induced hepatic and renal injury in rats: *National Conference on Recent Advances in Biotechnology and Biofuels*, 12-13<sup>th</sup> September, 2016, Department of Microbiology and Bioinformatics, Bilaspur University, **Bilaspur (CG)**.
- Combined effect of S-allyl-L-cystein along with piperine and epigallocatechin gallate against beryllium induced toxicity: *National Conference on Herbal Drug research: Current status with reference to institute-industry interaction, opportunities and challenges in Chhattisgarh*, 16<sup>th</sup> February, 2016, Siddhi Vinayak Institute of Science and Technology, **Bilaspur (CG)**.
- Piperine and Epigallocatechin gallate mediated therapeutic potential of S-allyl-L-cystein against beryllium induced hepato- renal toxicity: *National Conference on Monitoring and Management of Drinking Water Quality* and Annual Conference of National Environmental Science Academy, 21<sup>st</sup> -23<sup>rd</sup> December, 2015, Uttarakhand State Council for Science and Technology, **Dehradun (UK)**

- Combination of propolis extract and chelating agents ameliorates beryllium induced chronic toxicity in rat liver and kidney: *National Conference on Scientific Developments in 21<sup>st</sup> Century*, 12-13<sup>th</sup> March, 2015, Jiwaji University, **Gwalior** (MP)
- Propolis mediated therapeutic potential of ferritin, tiferron and HEDTA in resurgence from beryllium induced chronic hepatic abnormality: *33<sup>rd</sup> Annual conference of Society of Toxicology & National Symposia on Toxicogenomic Technologies in predictive toxicology, Alternatives to use of animals for modern toxicity testing*, 23<sup>rd</sup> – 25<sup>th</sup> Oct, 2013, DUVASU, **Mathura** (UP).
- Propolis extract ameliorates lead-induced peroxidative damages in rat liver, kidney and brain: *97<sup>th</sup> Session of Indian Science Congress Association*, 3<sup>rd</sup> -7<sup>th</sup> Jan, 2010; Kerala University, **Thiruvananthapuram** (Kerala).
- Antioxidants dependent therapeutic potential of Tiferron against beryllium induced toxic manifestations: *93<sup>rd</sup> Session of Indian Science Congress Association*, 3<sup>rd</sup> -7<sup>th</sup> Jan, 2006; N.G. Ranga Agricultural University, **Hyderabad** (Andhra Pradesh).
- Adjuvants mediated therapeutic efficacy of chelating agent against toxicological consequences of beryllium exposure: *92<sup>nd</sup> Session of Indian Science Congress Association*, 3<sup>rd</sup> -7<sup>th</sup> Jan, 2005; Nirma University, **Ahmedabad** (Gujrat).
- Therapeutic efficacy of Tiferron in combination with Propolis or Piperine against beryllium induced toxicity in rats: *Society of Toxicology*, 28<sup>th</sup> – 30<sup>th</sup> October, 2004; SCTIMT, **Thiruvananthapuram** (Kerala).
- Therapeutic approach against beryllium induced toxicity through  $\alpha$ - Tocopherol and Propolis supplementation along with HEDTA: An *in vivo* study: *19<sup>th</sup> M.P. Young Scientist Congress*, 12<sup>th</sup> -13<sup>th</sup> April, 2004; Dr Hari Singh Gaur University, **Saugar** (MP).
- Piperine mediated efficacy of chelator against beryllium induced toxicity: *National Seminar and Training Workshop on Impact of Changing Climate on Biodiversity Conservation and Ecofunctional Status*, 15<sup>th</sup>-17<sup>th</sup> January, 2004; School of Studies in Botany, Jiwaji University, **Gwalior** (MP).
- Influence of piperine on chelation against beryllium induced biochemical alterations: An *in vivo* study: *91<sup>st</sup> Session of Indian Science Congress Association*, 3<sup>rd</sup> -7<sup>th</sup> January, 2004; Punjab University, **Chandigarh**.
- Amelioration of beryllium induced biochemical alterations by combined treatment of propolis and chelator: *National Symposium on Recent Trends in Biology and Biotechnology and 23<sup>rd</sup> annual session of the Academy of Environmental Biology*, 9<sup>th</sup> -11<sup>th</sup> October, 2003; Deptt of Zoology, Shivaji University, **Kolhapur** (Maharashtra).
- Effectiveness of Tiron over DTPA along with  $\alpha$ - tocopherol against beryllium induced toxicity: *Jiwaji University Research Seminar*, 25<sup>th</sup>-26<sup>th</sup> March, 2003; Jiwaji University, **Gwalior** (MP).
- Comparative study of effectiveness of chelating agents along with antioxidant against beryllium induced toxicity: An *in vivo* study: "*18<sup>th</sup> M. P. Young Scientist Congress*", 3<sup>rd</sup>-4<sup>th</sup> March, 2003; Madhya Pradesh Bhoj (Open) University, **Bhopal** (MP).
- Toxicological effects of Beryllium and its reversal by HEDTA along with adjuvant in rats: National Seminar on "*Emerging Chemical Technologies in Industries*", 14<sup>th</sup> -15<sup>th</sup> February, 2003; VRG (PG) College, **Gwalior** (MP).
- Piperine enhances chelating efficacy of HEDTA against beryllium induced toxicity in albino rats: *National Symposium on "Environmental Biotechnology & Biodiversity*



*Conservation*", 31<sup>st</sup> January and 1<sup>st</sup> February 2003; Sardar Patel University, **Anand** (Gujrat).

- Chelation of beryllium with Tiron and vitamin E in female rats: *35<sup>th</sup> Annual Conference of Indian Pharmacological Society*, 26<sup>th</sup> -29<sup>th</sup> November, 2002; Defence Research Development Establishment **Gwalior** (M.P.).
- Effectiveness of Tiron and vitamin E against beryllium induced toxicity in female rats: National Conference on Environmental Biology, 17<sup>th</sup> -18<sup>th</sup> October, 2002; Saurashtra University, **Rajkot** (Gujrat).
- Toxicological effects of Beryllium and its treatment: National Seminar on Biodiversity Conservation: Challenges for 21<sup>st</sup> Century, 26<sup>th</sup> -28<sup>th</sup> November, 2001; Jiwaji University, **Gwalior** (MP).
- ❖ Attended 89<sup>th</sup> Session of Indian Science Congress Association, 3<sup>rd</sup> -7<sup>th</sup> January, 2002; Lucknow University, **Lucknow** (UP).
- ❖ Attended National Conference on Recent Trends in Life Management, 22<sup>nd</sup>-23<sup>rd</sup> October, 2000; Bipin Bihari (PG) College, **Jhansi** (UP).

### **Book chapters contributed**

1. **Nirala SK\*** (2017): **Naringenin abrogates aluminum induced alterations in liver and kidney**. In: Role of Animal Sciences in National Development Vol-5: Recent Trends in Animal Sciences, pp 73-87; Eds: Kaliwal BB, Sanakal, Sadashiv SO; Today and Tomorrow's Printers and Publishers, Darya Ganj, New Delhi India [ISBN-81-7019-562-5 (INDIA); 1-55528-417-5 (USA)].
2. Shukla P and **Nirala SK\*** (2017): **Predominant toxicity of acrylamide and therapeutic role of naringenin against acrylamide in rats**. In: Role of Animal Sciences in National Development Vol-2: Biotechnology for Human Welfare, pp 335-341; Eds: Kaliwal BB, Kulkarni GK, Kaliwal RB, Sadashiv SO; Today and Tomorrow's Printers and Publishers, Darya Ganj, New Delhi India [ISBN-81-7019-559-0 (INDIA); 1-55528-414-9 (USA)].
3. **Nirala SK\***, Bhadauria M, Shukla S, Mathur A and Mathur R (2012): **Propolis mediated therapeutic potential of HEDTA against beryllium induced toxicological consequences**. In: Beneficial Effects of Propolis on Human Health and Chronic Diseases- Vol 1, pp 209-232; Eds: Tahira Farooqui & Akhlaq A Farooqui; Nova Science Publishers, USA (ISBN-978-1-62081-456-7).
4. Bhadauria M\*, **Nirala SK**, Jaswal A, Raghuvanshi S, Bhatt R and Shukla S (2012): **Propolis: therapeutic perspectives against silica induced toxic manifestations**. In: Beneficial Effects of Propolis on Human Health and Chronic Diseases- Vol 2, pp 155-172; Eds: Tahira Farooqui & Akhlaq A Farooqui; Nova Science Publishers, USA (ISBN-978-1-62081-483-3).

## Research Supervision: Supervision of Ph.D. Scholars

- ❖ **Ms. Pratima Dutta:** “Appraisal of therapeutic efficacy of naringenin loaded silver nanoparticles against combined exposure to beryllium and aluminum induced toxic manifestations in rats” **(Pursuing)**.
- ❖ **Mr. Piyush Shukla:** “Therapeutic influence of resveratrol and caffeic acid phenethyl ester along with micronutrients on resurgence of acrylamide induced hepatic and renal pathophysiology” **(Degree awarded on 17-12-2021)**.
- ❖ **Dr. Anjani Verma:** “Therapeutic potential of caffeic acid and naringenin along with iron supplementation against beryllium induced toxic manifestations in rats” **(Degree awarded on 10-03-2021)**.
- ❖ **Dr. Samrat Rakshit:** “Preclinical evaluation of *Tephrosia purpurea* and its major bioactive components against experimental hepatitis in rats” **(Degree awarded on 08-10-2020)**.
- ❖ **Dr. Naresh Kumar Sahu:** “Therapeutic potential of *Curculigo orchioides* and *Gloriosa superba* against experimentally induced hepatitis and nephritis in rats” **(Degree awarded on 15-09-2020)**.
- ❖ **Dr. Raj Kumar:** “Healing prospective of *Justicia gendarussa* and *Curcuma caesia* against combined exposure to alcohol and endotoxin induced hepatic and renal injury in rats” **(Degree awarded on 15-09-2020)**.

## Supervision of M. Sc. Dissertations:

1. **Mr. Rishabh Kumar (M. Sc. Zoology, 2022):** “Assessment on awareness among poultry workers regarding occupational health hazards in poultry farms located in countryside of Bilaspur district in Chhattisgarh state”.
2. **Ms. Amita Bhoi (M. Sc. Zoology, 2022):** “Therapeutic potential of naringenin against acrylamide induced kidney damage in rats”.
3. **Ms. Megha Dahire (M. Sc. Zoology, 2022):** “Therapeutic role of naringenin against acrylamide induced biochemical alterations in microsomal compartment of liver in rats”.
4. **Ms. Monisha Bhardwaj (M. Sc. Zoology, 2022):** “Hepatoprotective potential of naringenin against acrylamide induced liver injury in rats”.
5. **Ms. Priyanshi Kurre (M. Sc. Zoology, 2022):** “Curative role of naringenin against acrylamide induced toxic manifestations in brain of rats”.
6. **Mr. Ravikant Chandra (M. Sc. Zoology, 2022):** “Therapeutic potential of naringenin against acrylamide induced oxidative stress in spleen in rats”.
7. **Ms. Hem Prabha (M. Sc. Rural Technology, 2022):** “Value addition of chicken eggs by external coating of combination of shellac and propolis to enhance external and internal quality and shelf life of eggs”.

8. **Ms. Chhaya Nanda (M. Sc. Rural Technology, 2022):** “Evaluation of influence of external coating of combination of shellac and propolis on quality of chicken eggs for extending storage period”.
9. **Ms. Nidhi Lohitkar (M. Sc. Rural Technology, 2022):** “A study on combined effect of shellac and propolis as an external coating material on quality of chicken eggs for extending storage period”.
10. **Ms. Reena Bhardwaj (M. Sc. Rural Technology, 2022):** “A study on rearing practices and management of Japanese quail in poultry farm”.
11. **Mr. Shimaluddin Sheikh (M. Sc. Rural Technology, 2021):** “A study on awareness of occupational health hazards among workers in a few poultry farms located in rural areas of Bilaspur district in Chhattisgarh”
12. **Mr. Balram Sahu (M. Sc. Rural Technology, 2021):** “A study on biofloc system for inland culture: An emerging technique for fish production in rural areas”
13. **Mr. Akash Kumar Bharti (M. Sc. Zoology, 2021):** “Ethnomedicinal, phytochemical and pharmacological information on *Indigofera tinctoria* Linn”
14. **Ms. Anjali Koram (M. Sc. Zoology, 2021):** “Ethnomedicinal use and pharmacological properties of *Oxalis griffithii* Edgew.: A systematic review”
15. **Mr. Darwin Dahire (M. Sc. Zoology, 2021):** “Literature survey based predictions on occupational health hazards in education institutions”
16. **Ms. Hemlata (M. Sc. Zoology, 2021):** “Literature survey based on pharmacological compendium on *Tridax procumbens* Linn.”
17. **Ms. Nikita Rai (M. Sc. Zoology, 2021):** “Pharmacological activities and therapeutic description of *Cassia alata* Linn.”
18. **Mr. Purandar Choudhary (M. Sc. Zoology, 2021):** “Morphological, medicinal and pharmacological information on *Fumaria parviflora* Lam.: A literature survey”
19. **Ms. Yagya Trivedi (M. Sc. Zoology, 2021):** “Literature survey based study on impact of COVID-19 on the human”
20. **Mr. Nilay Das (M.Sc. Zoology, 2020):** “Hepatoprotective prospective of propolis against D-galactosamine and lipopolysaccharide induced acute hepatitis”
21. **Ms. Ganga Samrat (M. Sc. Zoology, 2020):** “Protective action of *Hemidesmus indicus* (Linn.) against renal damage induced by combined exposure to D-galactosamine and lipopolysaccharide”
22. **Ms. Indu Singh (M. Sc. Zoology, 2020):** “Protective role of propolis against acute splenic injury induced by combined exposure to D-galactosamine and lipopolysaccharide”
23. **Ms. Mamta Kathle (M. Sc. Zoology, 2020):** “*Hemidesmus indicus* (Linn.) protects neuronal injury induced by combined exposure to lipopolysaccharide and D-galactosamine”
24. **Ms. Jyoti Sahu (M.Sc. Zoology, 2020):** “Propolis protects testes from toxic effects of combined exposure to D-galactosamine and lipopolysaccharide”
25. **Mrs Anisha Dhruve (M. Sc. Rural Technology, 2018):** “Evaluation of adulteration in milk collected from few standard and local dairies in Bilaspur”.

26. **Mr. Sunil Nag (M. Sc. Zoology, 2018):** “Therapeutic effects of *Tephrosia purpurea* Linn. and its active components against LPS/Gal induced nephrotoxicity”.
27. **Mr. Anil Jogivansh (M. Sc. Zoology, 2018):** “Therapeutic effects of *Tephrosia purpurea* Linn. and its major components against combined consumption of LPS and D-GalN induced toxicity in spleen”.
28. **Ms. Akanksha Paul (M. Sc. Zoology, 2018):** “Assessment of free radical scavenging activity of *Cassia tora* Linn. flower extract and its safety evaluation in female albino rats”.
29. **Ms. Smriti Saraf (M. Sc. Zoology, 2018):** “Phytochemical screening and antioxidant activity of leaf and stem extract of *Aristolochia indica*”.
30. **Ms. Padmini Sahu (M. Sc. Zoology, 2018):** “Assessment of phytochemical constituents and antioxidant potential of extract of flower and pod of *Cassia tora* Linn”.
31. **Mr. Yogesh Sahu (M. Sc. Rural Technology, 2017):** “Protective effect of *Justicia gendarussa* (Burm) against alcohol and LPS induced inflammation in rat spleen”.
32. **Ms. Priya Tiwari (M. Sc. Rural Technology, 2017):** “Ameliorative effect of *Curcuma caesia* against oxidative stress in rat spleen”.
33. **Mr. Raj Kumar (M. Sc. Rural Technology, 2014):** “Evaluation of phytochemical properties of *Justicia gendarussa* Burm”.
34. **Mr. Naresh Sahu (M. Sc. Rural Technology, 2014):** “Evaluation of phytochemical properties of *Curculigo orchioides* Gaertn”.
35. **Ms. Priyanka Vishwakarma (M. Sc. Rural Technology, 2013):** “Nephroprotective potential of few plants: A Literature Survey”.
36. **Ms. Tina Jaiswal (M. Sc. Rural Technology, 2013):** “A review on few hepatoprotective plants”.
37. **Ms. Khushboo Singh Dhundhel (M. Sc. Rural Technology, 2013):** “Antifertility potential of few plants: A Review of Literature”.

### **Concurrent administrative responsibilities performed as:**

- Assistant Dean, Students Welfare (ADSW), Guru Ghasidas University, from 01-06-2017 to 06-11-2022.
- Vice-Chancellor’s nominee in *Ad hoc* appointments of Assistant Professors in various departments of Guru Ghasidas Vishwavidyalaya, Bilaspur.
- Assistant Centre Superintendent, GGU End Semester Examination session 2018-19; 2017-18 (Odd and Even semesters).
- School-Coordinator for NAAC (Collection and compilation of data from School of Natural Resources for NAAC evaluation of GGU; year 2018-21
- School-Coordinator at IQAC to prepare AQAR of GGU (Collection and compilation of data at School level); year 2015, 2016, 2017, 2018, 2019, 2020, 2021
- Observer for Vishwavidyalaya Entrance Test (VET) of Guru Ghasidas University for year 2014 and 2015.
- Observer for SSC Exam 2014.
- Polling Officer in GGU Students Council Elections- year 2014, 2015, 2016, 2019.

- Member, Board of Studies (BoS) of the Department of Rural Technology and Social Development, GGU.
- Member, Departmental Research Committee (DRC).
- Member, Research Advisory Committees (RACs).
- Member, Various Screening/Scrutiny as well as document verification Committees for regular appointments of faculties in different departments of GGU.
- Member, Project Purchase Committee (PPC) for various research projects.
- Member, Departmental Purchase Committee (DPC).
- Member, Alumni Association Committee of Guru Ghasidas University.
- Member, Admission Committee of Department of Rural Technology and Social Development, GGU for year 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022.
- Member, Admission Committee of Department of Biotechnology, GGU for 2014 and 2015.
- Member, Documents Verification Committee for *Ad-hoc* appointments of Assistant Professors in the Department of Rural Technology; year 2012, 2013, 2014, 2015, 2016, 2017
- Coordinator, Collection and compilation of departmental information for NAAC ranking of GGU; year 2014
- Coordinator, Collection and compilation of departmental information for NIRF ranking of GGU; year 2015, 2016, 2017
- Member, Disciplinary Committee of School of Studies in Natural Resources.
- Member, Departmental Anti-ragging Committee.
- Member, Team of control room to conduct UGC-NET exam Dec 2013, June 2014 and Dec 2014.
- Member, Seating arrangement Committee for celebration of Foundation Day of the University.
- Member, Committee for celebration of Guru Ghasidas Jayanti, 2011 to till date.
- Member, Pay Fixation Committee for teachers, 2019, 2022
- Question paper setter and external examiner for
  - Shaheed Nand Kumar Patel Vishwavidyalaya, Raigarh (CG)
  - Bastar University, Jagdalpur (CG)
  - Behrampur University, (Odisha)
  - Atal Bihari Vajpayee University, Bilaspur (CG)
  - Bundelkhand University, Jhansi (UP)
  - Guru Ghasidas University, Bilaspur (CG)
  - Jiwaji University, Gwalior (MP)

## Additional Information:

### Professional updates through online “Continuing Professional Education”

Name of Course	Modules covered	Name of Educator	Date of completion
<b>Web of Science Academy Course</b>	An introduction to peer review	Web of Science Academy  Website: <a href="https://webofscienceacademy.clarivate.com/learn/course/">https://webofscienceacademy.clarivate.com/learn/course/</a>	05-02-2022
<b>Technical Writing Skills</b>  (07 modules)	<ol style="list-style-type: none"> <li>1. How to design effective figures for review articles</li> <li>2. An editor’s guide to writing a review article</li> <li>3. Make the most of your research: publish your data &amp; methods</li> <li>4. Systematic reviews 101</li> <li>5. How to write case reports</li> <li>6. How to write for an interdisciplinary audience</li> <li>7. Beginners’ guide to writing a manuscript in LaTeX</li> </ol>	Elsevier Researcher Academy  Website: <a href="https://researcheracademy.elsevier.com/">https://researcheracademy.elsevier.com/</a>	10-09-2021
<b>Book Writing</b>  (03 modules)	<ol style="list-style-type: none"> <li>1. Why write a book?</li> <li>2. How to get your book published?</li> <li>3. Discoverability: top tips to get your book out there</li> </ol>	Elsevier Researcher Academy  Website: <a href="https://researcheracademy.elsevier.com/">https://researcheracademy.elsevier.com/</a>	13-10-2020
<b>Fundamentals of Manuscript Preparation</b>  (04 Modules)	<ol style="list-style-type: none"> <li>1. Structuring your article correctly</li> <li>2. Guide to reference managers: How to effectively manage your references</li> <li>3. How to prepare your manuscript</li> <li>4. How to write an abstract and improve your article</li> </ol>	Elsevier Researcher Academy  Website: <a href="https://researcheracademy.elsevier.com/">https://researcheracademy.elsevier.com/</a>	11-06-2020

## Augmentation of Scientific Skill through Advanced Trainings & Workshops:

Organization	Period From - To	Details of Training/ workshop
<b>INTERNATIONAL:</b>		
Department of Veterinary Microbiology, <b>College of Veterinary Science &amp; Animal Husbandry</b> , Mhow (MP) India	<b>11-10-2021 To 31-10-2021</b>	21 Days Online International Training cum Orientation Program on <b>Immunology – A Tool for Disease Management</b>
44 <sup>th</sup> Annual Meeting of the <b>European Association for the Study of the Liver (EASL)</b> , Copenhagen, Denmark	<b>22-04-2009 To 23-04-2009</b>	<b>Post Graduate Course for Hepatologists</b>
Lanzhou Institute of Animal Sciences and Veterinary Pharmaceutics, <b>Chinese Academy of Agricultural Sciences</b> , Lanzhou - P.R. China.	<b>26-06-2006 To 12-07- 2006</b>	2 <sup>nd</sup> International Training Workshop on <b>Traditional Chinese Veterinary Medicine and Techniques (ITWTCVMT)</b>
Indian Institute of Integrative Medicine (Formerly <b>R.R.L., CSIR</b> ), Jammu - India.	<b>15-09-2003 To 19-09-2003</b>	3 <sup>rd</sup> Indo-US workshop on <b>Applications of Flow- cytometry in Drug Mechanistics</b>
<b>NATIONAL:</b>		
Guru Ghasidas University, Bilaspur (CG)	<b>18-12-2021</b>	One Day Workshop on <b>Multiple Entry/Exit for Professional Courses as a Step towards National education policy Implementation</b>
Department of Zoology, Guru Ghasidas University, Bilaspur (CG)	<b>27-11-2021</b>	Satellite Conference of <b>Society for Alternatives to Animal - India</b>
Internal Quality Assurance Cell, Guru Ghasidas University, Bilaspur (CG)	<b>26-11-2021</b>	NAAC Sponsored Interactive One Day Workshop on <b>Revised Framework of NAAC Accreditation: An Awareness Program</b>
InPods India Private Limited, Pune (MH)	<b>19-07-2021 To 21-07-2021</b>	Training Seminar for <b>NAAC Accreditation</b>
UGC-Human Resource Development Centre, Guru Ghasidas University, Bilaspur (CG)	<b>11-06-2018 To 30-06-2018</b>	Refresher Course on <b>Synthetic and Natural Products: Chemical and Medicinal Aspects (Interdisciplinary)</b>
SOS in Zoology, Jiwaji University, Gwalior (MP)	<b>16-11-2016</b>	<b>Science Communication and Career Workshop</b>

UGC-Human Resource Development Centre, Guru Ghasidas University, Bilaspur (CG)	<b>13-06-2016 To 02-07-2016</b>	Refresher Course on <b>Research Methodology (Interdisciplinary)</b>
Jointly organized by Chhattisgarh Council of Science and Technology and Guru Ghasidas University, Bilaspur (CG)	<b>26-02-2016 To 27-02-2016</b>	Workshop on <b>Intellectual Property Rights, IP Commercialization and Prevention of Plagiarism</b>
Department of Library and Information Science, Guru Ghasidas University, Bilaspur (CG)	<b>16-12-2014</b>	<b>“Author Workshop”</b>
Department of Zoology Guru Ghasidas University, Bilaspur (CG)	<b>25-01-2014</b>	National Workshop on <b>Molecular Updates in Biological Sciences</b>
UGC-Academic Staff College, Guru Ghasidas University, Bilaspur (CG)	<b>10-01-2014 To 12-01-2014</b>	Short term course on <b>E-Learning and E-Content Development</b>
Department of Zoology Guru Ghasidas University, Bilaspur (CG)	<b>24-08-2013 To 25-08-2013</b>	National Workshop on <b>Alternatives to Use of Animal Sacrifice in Life Science Education for Teachers</b>
UGC-Academic Staff College, Guru Ghasidas University, Bilaspur (CG)	<b>22-11-2012 To 26-12-2012</b>	<b>4<sup>th</sup> Orientation Program for Teachers</b>
SOS in Zoology, Jiwaji University, Gwalior (MP)	<b>05-03-2010</b>	<b>Intellectual property rights awareness workshop</b>
SOS in Zoology, Jiwaji University, Gwalior (MP)	<b>04-11-2009 To 05-11-2009</b>	<b>“Intellectual property and Innovation management in knowledge era”</b>
SCTIMT, Thiruvananthapuram (Kerala)	<b>29-10-2004</b>	<b>Continuing education course on good laboratory practices</b>
Madhya Pradesh Council of Science and Technology, Bhopal (MP)	<b>29-12-2003 To 30-12-2003</b>	Training on <b>Preparation of sample and detection of elements by Atomic Absorption Spectrophotometer</b>
Indian Institute of Integrative Medicine (Formerly <b>R.R.L., CSIR</b> ), Jammu (J&K)	<b>20-09-2003 To 25-09-2003</b>	<i>In vitro</i> training on <b>Primary monolayer culture of rat hepatocytes</b>
SOS in Botany Jiwaji University, Gwalior (MP)	<b>21-02-2003</b>	Workshop on <b>Teaching and Research in Ethno-biology in New Millennium</b>



## **Foreign visits for academic or professional purposes:**

- ❖ Visited Denmark (**Copenhagen**) for attending 44<sup>th</sup> meeting of European Association for the Studies on the Liver (**EASL**) during 22<sup>nd</sup> – 27<sup>th</sup> April, 2009.
- ❖ Visited France (**Paris**) for attending XX<sup>th</sup> International Congress of Zoology during 25<sup>th</sup> - 30<sup>th</sup> August, 2008.
- ❖ Spent 2 years and 7 months in P.R. China (**Lanzhou**) for holding Chinese Government Scholarship since 01-09-2005 to 31-03-2008.
- ❖ Visited Kingdom of Thailand (**Bangkok**) for attending International Conference of International Society for Trace Elements Research in Humans (ISTERH-2004) during 5<sup>th</sup> -13<sup>th</sup> November, 2004.

## **Foreign travel grants awarded from various funding agencies:**

- ❖ Availed foreign travel grant to attend international conference at Copenhagen (Denmark) from Department of Science & Technology (DST), Government of India, New Delhi, through letter No. SR/ITS/03155/2009-2010, dated 27-03-2009.
- ❖ Selected for foreign travel grant sanctioned from Council of Scientific and Industrial Research (CSIR), New Delhi, INDIA through letter No. TG/3912/09-HRD, dated 08-04-2009.
- ❖ Availed foreign travel grant sanctioned from M.P. Council of Science and Technology, Bhopal, INDIA through letter No. 2242/CST/PD/TG/2008, dated 7-11-2008.
- ❖ Availed the Student Recognition Award to attend the XX<sup>th</sup> International Congress of Zoology held in Paris, France during 26<sup>th</sup> - 29<sup>th</sup> August, 2008.
- ❖ Selected for ICT-XI Junior Fellowship from International Union of Toxicology, USA (IUTOX) to attend the ICT-XI conference held at Montreal, Canada during 15-19<sup>th</sup> July, 2007.
- ❖ Availed foreign travel grant sanctioned from Council of Scientific and Industrial Research (CSIR), New Delhi, INDIA through letter No. TG/1510/04-HRD, dated 12-10-2004.
- ❖ Selected for foreign travel grant to attend international conference at Bangkok (Thailand) from Department of Science & Technology (DST), Government of India, New Delhi, through letter No. SR/PF/997-B/2004-2005, dated 9-10-2004.
- ❖ Selected for foreign travel grant to attend international conference at Monastir (Tunisia) from Department of Science & Technology (DST), Government of India, New Delhi, through letter No. SR/PF/59/ 2005-2006, dated 15-03-2005.

## **Seminars/Workshops/Trainings organized:**

- ❖ **Co-Convenor** of Hybrid Mode National Seminar on **“Strengthening Environmental Health: Role of Society, Science and Technology”** Organized by Department of Rural Technology and Social Development, Guru Ghasidas University from 26-09-2022 to 27-09-2022.
- ❖ **Co-Convenor** of **“Interactive One Day Workshop on Assessment and Accreditation of Higher Education Institutions”** Organized by Internal Quality Assurance Cell, Guru Ghasidas University on 09-12-2019.
- ❖ **Organized** training program on **“Instrumentation and Techniques for Biomedical Research”** under joint venture of Skill Development Cell, Guru Ghasidas University and Department of Rural Technology and Social Development from 25-08-2019 to 27-08-2019.
- ❖ **Organized** training program on **“Training on Instrumentation and Techniques for Biomedical Research”** at the Department of Rural Technology and Social Development, Guru Ghasidas University from 02-09-2016 to 03-09-2016.

**Scientific contribution as reviewer:** Active reviewer of the manuscripts offered from:

- ❖ **Journal of Biochemical and Molecular Toxicology (John Wiley), Kansas City, USA.**
- ❖ **Environmental Toxicology (John Wiley), Jackson MS, USA.**
- ❖ **Toxicology and Environmental Health Sciences (Springer), Incheon, Korea.**
- ❖ **Indian Journal of Experimental Biology, CSIR, India**
- ❖ **Iranian Journal of Pharmacology and Therapeutics, Iran.**
- ❖ **Evidence based Complementary and Alternative Medicine (eCAM), Oxford University Press, UK.**
- ❖ **Journal of Veterinary Sciences, Seol, Korea.**
- ❖ **African Journal of Microbiology Research, South Africa.**
- ❖ **Pharmaceutical Biology (Taylor & Francis), Springfield, MA, USA**
- ❖ **Histology and Pathology, Spain**
- ❖ **Journal of Renal and Hepatic Disorders, USA**

## **Affiliation to Academic/ Scientific Societies:**

- International Society of Zoological Sciences (ISZS) Beijing, PR China.
- Indian Society of Cell Biology (ISCB) Mumbai, India.
- Indian Science Congress Association (ISCA) Kolkata, India.
- Academy of Environmental Biology (AEB) Lucknow, India.
- National Environmental Sciences Academy (NESA) New Delhi, India.
- Society of Toxicology (STOX) Lucknow, India.

## **Declaration:**

I hereby declare that the above mentioned information are true and correct to the best of my knowledge and nothing has been concealed or distorted.

**Date:** .....

**Place:** Bilaspur

*Satendra Kumar Nirala*