

**Dr. Suruchi Parkhey**

**Assistant Professor**

**P.G. Department of Botany**

**Area of Specialization**

- Seed Physiology
- Germplasm conservation
- Salinity stress
- Heavy metal stress

**Achievements**

- Project Fellow in **Chhattisgarh Council of Science & Technology**. Project entitled **Molecular Markers for Characterization of Dieback in Sal (*Shorea robusta*) Seedlings: Protein and Antioxidation Enzymes Profile**. (November 2006- August 2008).
- Project Fellow in sponsored project from Department of Science & Technology entitled “**AOS Signaling in Regulation of Defense Enzyme during Germination in Neem (*Azadirachta indica*) Seeds**” as **Junior Research Fellow** (August 2008- September 2009).
- Recipient of **UCG-BSR (RFSMS) Fellowship Scheme of University Grants Commission New Delhi** from 2010-2012 as **Junior Research Fellow** and 2012-2013 as **Senior Research Fellow**.
- **Research Associate** in **REENA Sterilize Pvt. Ltd**, Hyderabad, Telangana from 2016-2017

**Faculty Development Programme**

Attended Faculty Development Programme on ICT uses in Education for better Teaching and Learning, Organised by MATS School of Information, MATS University, Raipur, Sept. 11 to 15 Sept. 2017.

**Programmes Conducted**

- Co-convener- Three Days National Level seminar on Recent Trends in Biological Sciences, Organised by MATS School of Biological & Chemical Sciences, MATS University, Raipur, August 2017. Sponsored by CCOST, Raipur.
- Co-coordinator - 15 Day Online Certificate Programme on Soil Analysis. May 17<sup>th</sup> to May 31<sup>st</sup>. Organised by P. G. Department of Botany, St. Thomas College, Bhilai

- Programme Co-ordinator- 15 Days Online Certificate Programme on Seed Science Technology. July 5<sup>th</sup> – July 21<sup>st</sup> organised by P. G. Department of Botany, St. Thomas College, Bhilai

## Additional Responsibilities

- Mid – Semester Exam In-charge, MATS School of Biological & Chemical Sciences, MATS University, Raipur,
- Time- Table In-charge, MATS School of Biological & Chemical Sciences, MATS University, Raipur.
- In-charge of various Departmental Activities, MATS School of Biological & Chemical Sciences, MATS University, Raipur.
- In-charge Prize Distribution Committee (MATSUTSAV' 19, MATSUTSAV'20), MATS University, Raipur
- Member IQAC and Department In-charge of Criteria 5 for NAAC, MATS University, Raipur
- Member IQAC, Criteria 4 for NAAC, St. Thomas College, Bhilai

## Publications

- J Chandra, **S Parkhey**, D Varghese, Serphen, B Varghese and S keshavkant (2020) Aluminium rhizotoxicity in *Cicer arietinum* Russian Journal of Plant Physiology 1-7. Impact Factor 1.
- Vibhuti Chandrakar, **Suruchi Parkhey**, Amit Dubey & S Keshavkant (2017) Modulation in arsenic- induced lipid catabolism in *Glycine max* L. using proline, 24-epibrassinolide and diphenylene iodonium, *Biologia* 72(3) 292-299. Impact Factor 0.827.
- Jispi Chandra, **Suruchi Parkhey**, S Keshavkant (2017) Ageing-regulated changes in genetic integrity of two recalcitrant seeded species having contrasting longevity. *Trees*
- **Suruchi Parkhey**, Vibhuti Chandrakar, SC Naithani and S Keshavkant (2015) Efficient extraction of proteins recalcitrant plant tissue for subsequent analysis by two-dimensional gel electrophoresis. *Journal of Separation Science* 38: 3622-3628 (SCI, JIF: 2.7)
- **Suruchi Parkhey**, Mamta Tandon and S Keshavkant (2014) Salicylic acid and acquisition of desiccation tolerance in *Pisum sativum* seeds. *Biotechnology* 13(5) 217-225.
- **Suruchi Parkhey**, SC Naithani and S Keshavkant (2014) Protein metabolism during natural ageing in desiccating recalcitrant seeds of *Shorea robusta*. *Acta Physiologiae Plantarum*.(SCI, JIF 1.3) Five Yr Impact Factor 1.5
- Keshavkant S, Sahu B, **Parkhey S** (2013) Artificial ageing induced metabolic changes in *Cicer arietinum* seeds. ROS catabolism, Lipid peroxidation, Protein carbonylation, Nucleic acid integrity and Antioxidants. Lambert Academic Publishing, Germany, Pp.1-117.

- **Suruchi Parkhey**, SC Naithani and S Keshavkant (2012) ROS production and lipid catabolism in desiccating *Shorea robusta* seeds during ageing. Plant Physiology & Biochemistry **57**: 261-267. (SCI, JIF 2.5) Five Yr Impact Factor 3
- S. Keshavkant, J. Padhan, **S. Parkhey**, and S. C. Naithani (2012) Physiological and Antioxidant Responses of Germinating *Cicer arietinum* Seeds to Salt Stress. Russian Journal of Plant Physiology Vol. 59, No. 2, 206–21. (SCI, JIF: 0.9)

### Conferences (Paper Presented)

<b>1</b>	<b>Parkhey Suruchi</b> , S Keshavkant and Naithani SC (2008). Protein Extraction Protocol for SDS-PAGE from <i>Shorea robusta</i> Leaves: A Plant Tissue with rich Phenolic and Other Interfering Compounds.	January 29-30, 2008	National seminar on Botanical Researches: Present Scenario and Future Prospect Govt. College of Science, Raipur
<b>2</b>	<b>Parkhey Suruchi</b> , S KeshavKant and Naithani SC (2008). Isolation and Purification of Protein from Leaf of <i>Shorea robusta</i> for SDS-PAGE: A Plant Tissue Having rich Phenolics and Other Interfering compounds.	November 12 -14, 2008	Indian Society for Plant Physiology, Golden Jubilee Conference, Challenges and Emerging Strategies for Improving Plant Productivity, IARI, New Delhi
<b>3</b>	<b>Parkhey Suruchi</b> (2010). Oxidative Stress Induced Protein Oxidation as a Basis of Seed Deterioration During Desiccation of <i>Shorea robusta</i> Seeds.	April 9 - 10, 2010	8 <sup>th</sup> Chhattisgarh Young Scientist Congress, Pt. Ravishankar Shukla University, Raipur
<b>4</b>	<b>Parkhey Suruchi</b> (2011). Oxidative Stress Mediated Changed in Lipids And its Oxidative Products in Dehydrating Recalcitrant Seeds of <i>Shorea robusta</i> .	February 28 - March 1, 2011	9 <sup>th</sup> Chhattisgarh Young Scientist Congress, Bastar Vishwavidyalaya, (Dharampura) Jagdalpur
<b>5</b>	<b>Parkhey Suruchi</b> , S Keshavkant and Naithani SC (2011). Oxidative Stress Mediated Changed in Lipids And its Oxidative Products in Dehydrating Recalcitrant Seeds of <i>Shorea robusta</i> .	February 17-19, 2011.	International Conference on Plant Science in Post Genomic Era (ICPSPGE-2011), School of Life Sciences, Sambalpur University, Jyoti Vihar, Orissa

## Resource Person

Resource Person: Guest Lecture on Dormancy Causes & Breakage	30 <sup>th</sup> November, 2009	P. G. Department of Botany, St. Thomas College, Bhilai
Resource Person: Guest Lecture On Cell Signalling	08 <sup>th</sup> October, 2010	P. G. Department of Botany, St. Thomas College, Bhilai
Resource Person: Instrumentation Workshop Calibration & Uses of Basics Instruments	10 <sup>th</sup> -14 <sup>th</sup> August, 2015	P. G. Department of Botany, St. Thomas College, Bhilai
Resource Person: Study of various Instruments required in soil analysis	17 <sup>th</sup> -31 <sup>st</sup> May, 2021	P. G. Department of Botany, St. Thomas College, Bhilai

## Teaching Experience

- Lecturer in Department of Microbiology & Biotechnology, St. Thomas College Ruabandha, Bhilai (B+ NAAC accredited Post-Graduate College) from 2005-2006.
- Assistant Professor in Rungta College of Science & Technology, Durg from (2014-2015).
- Guest Faculty in Department of Biotechnology, Govt Science College Durg, from 2015-2017
- Assistant Professor in MATS School of Biological & Chemical Sciences, MATS University, Raipur (2017- 2020).
- Guest Faculty in School of Sciences, Shri Rawatpura Sarkar University, Dhaneli, Raipur.
- Along with PhD work also assigned theory and practical class for Post-graduate students in School of Life Science, Pt. Ravishankar Shukla University, Raipur from (2009-2013).