



SOS IN LIFESCIENCE



**Best Department Award
2012-13**

UGC DRS-SAP and DST FIST-funded Department

Year of Establishment

1977

Founder Professor and Head

Late Dr. S.M. Agarwal



CURRICULAR ASPECTS

Academic Programs Offered

Name	Subject	Seats	Date of Initiation
Ph.D.	Bioscience	44	1977
	Microbiology		1993
	Biochemistry		2004
M.Sc.	Bioscience	16	1977
	Microbiology	14	1991
	Biochemistry	12	2004



Curriculum Design and Development

- Programme outcomes (Pos)
- Programme Specific Outcomes(PSOs)
- Course Outcomes(COs)

Bioscience
Biochemistry
Microbiology

- ✓ Syllabus based on UGC guidelines.
- ✓ Regular revision of curricula, befitting with the syllabi of both state and national levels competitive examinations.
- ✓ Syllabus of MSc Bioscience befits the NET syllabus.
- ✓ ICT enabled teaching and learning.



CBCS: What we offer for others....

Name of System	Description
CBCS	Elective Courses

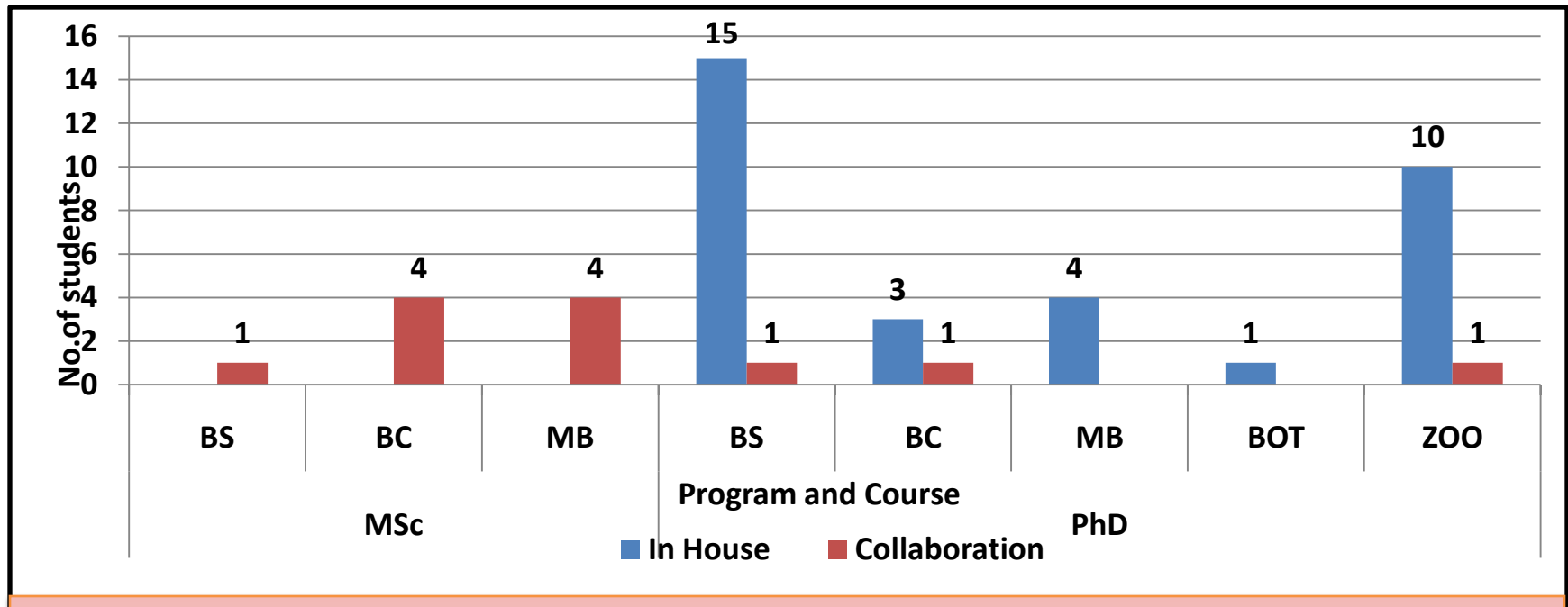
S. No.	Paper	Course Coordinator	Credit Proposed	Date of Implementation
1	Rhythms in Life	Arti Parganiha	3	2015-16
2	Economic Zoology	S.K. Prasad	3	2015-16
3	Vector borne diseases	AK Gupta /Aditi Poddar	3	2015-16
4	Environmental Toxicity	Aditi Poddar	3	2018-19
5	Applied Biology	Labya Prabhas	3	2022-23

- ✓ Courses are for students of both biology and non biology streams



Student Projects

(In-house & Inter departmental/Institutional Collaborations
(2016-21))



- ✓ To keep a check on quality , meritorious students possessing marks 75% and above are allowed to opt for projects only in governmental institutions.
- ✓ To promote exposure outside there are no “In house” projects for MSc students.



Feedback System

Students/ Stakeholders

How does the department utilize the feedback?

- | | |
|---|--|
| <p>a) Students- Feedback on</p> <ol style="list-style-type: none">1. Curriculum2. Staff and Teaching-learning-evaluation. <p>Online feedback is being taken through Google forms after the Covid pandemic.</p> | <ul style="list-style-type: none">✓ The feedback collected from students (Questionnaire 1-2) is <u>analyzed</u> using MS Excel.✓ It is further shared and discussed in detail in the staff council and remedial measures are taken.✓ An Action Taken Report is generated. Mentoring of the students is also done by the faculty.✓ https://forms.gle/4wst7xZKuHqKSBiL7✓ https://forms.gle/utwvGBNMwNFSC77r7 |
| <p>b) Stakeholders (Alumni, Parents, Peers) on the programmes offered/other issues.</p> | <ul style="list-style-type: none">✓ Through teacher parent meet✓ Through Alumni meet✓ Through Visitors diary (Peers) |



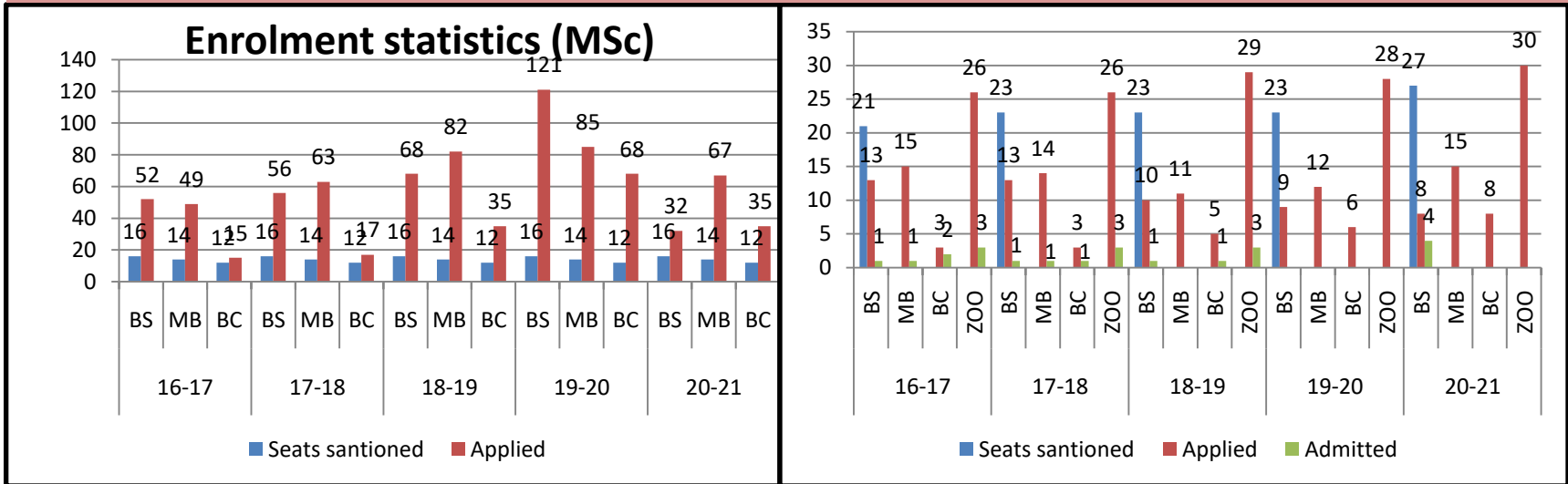
TEACHING LEARNING AND EVALUATION

1. Special emphasis on **tutorial , remedial classes, language classes** (in the form of CBCS courses) for slow learners.
2. The individual or **group counseling** is carried out to boost the confidence of the students.
3. A glimpse of current research scenario in different fields is given to students through **special lectures by invited faculties** of reputed organizations.
4. Students are encouraged to make PowerPoint presentations, deliver seminars, and participate in workshops to improve their abilities and communication skills.



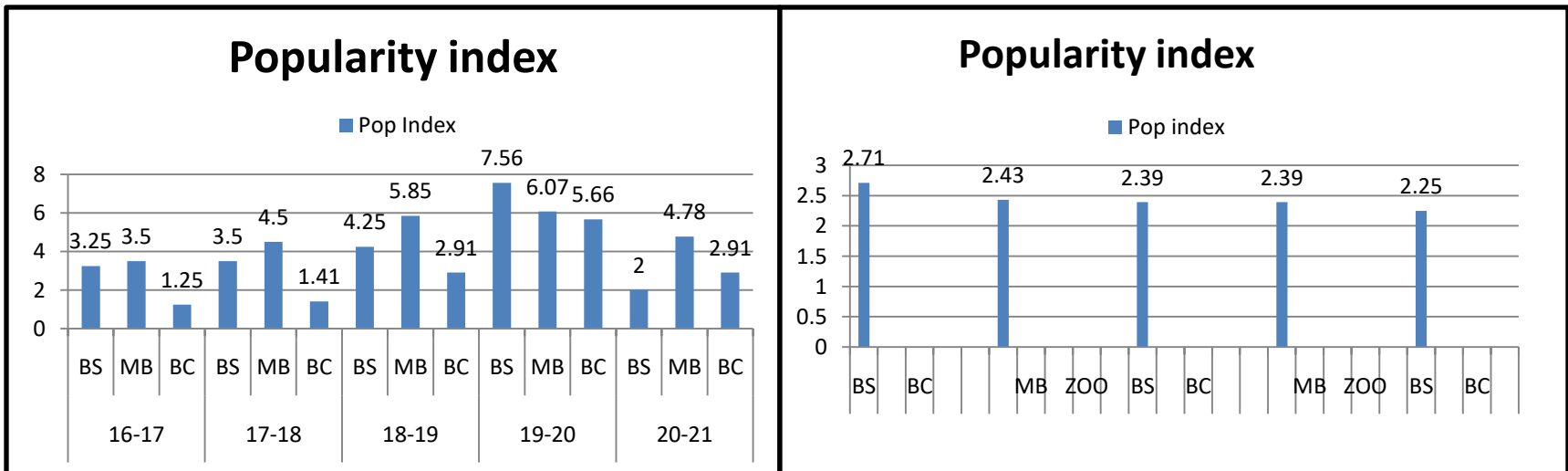
Enrolment Statistics and Popularity index

Bioscience (BS) , Microbiology(MB) and Biochemistry(BC) and Zoology(ZOO)



M.Sc.

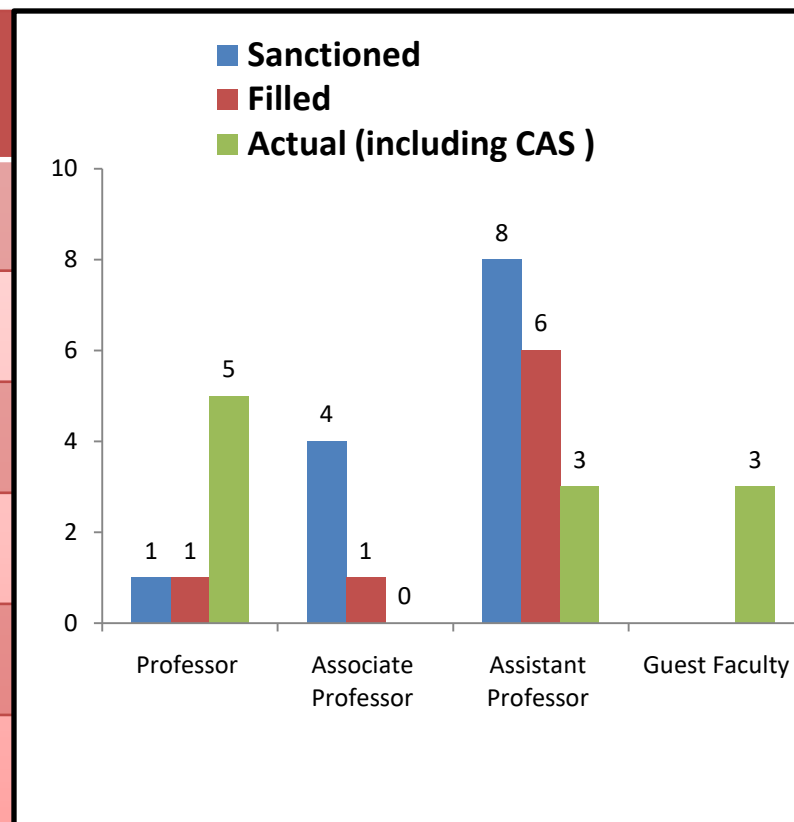
Ph.D.





Student Teacher Ratio and current Faculty status

Name of Program	Year	STR (%)
Median STR [M.Sc.]		6.2:1
M.Sc. Bioscience Microbiology Biochemistry	2016-2017	6.3:1
	2017-2018	6.1:1
	2018-2019	6.1:1
	2019-2020	6.2:1
	2020-2021	6.3:1





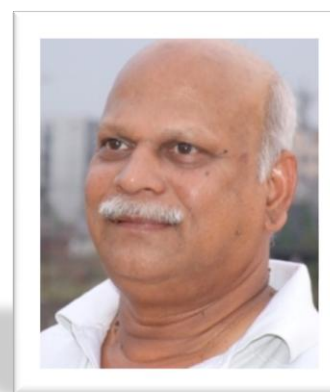
Former Faculty: Profile



V. Koche
(1990-2020)



S.C. Naithani
(1990-2020)



A.K. Pati
(1983-2021)



R.K. Pradhan
(2003-2022)

Name	Qualification	Designation	Specialization/ Research Area
V. Koche	M.Phil., Ph.D. Bioscience	Professor	Plant Tissue Culture
S.C. Naithani	Ph.D. Life Science	Professor	Germplasm Conservation, Oxidative Stress, Seed Biology
A.K.Pati , FNASc, FAMS	Ph.D. Zoology, Diploma in Chronobiology (Paris)	Professor	Chronobiology, Shift work optimization, Animal Behavior, Subterranean Biology, Biodiversity, and Biostatistics
R.K. Pradhan	Ph.D. Bioscience	Professor	Biochemistry, Chronophysiology



Faculty Members



**A.K. Gupta
(1984)**



**S.K. Prasad
(2009)**



**A. Poddar
(1984)**



**A. Parganiha
(2003)**



**A. Ekka
(2003)**



**L. Prabhas
(2013)**



**S.S. Dewhare
(2017)**



**M.K. Patel
(2017)**



Faculty Profile

Name	Qualification	Designation	Specialization/ Research Area
A.K. Gupta, FZS	Ph.D. Bioscience	Professor	Parasitology & Immunology, Vector Biology, Developmental Biology, Medical Microbiology
S.K. Prasad	Ph.D. Zoology	Professor	Endocrinology, Reproductive Physiology
A. Poddar	Ph.D. Bioscience	Professor and Head	Parasitology, Immunology and Environmental toxicology
A. Parganiha, ISCA YS	Ph.D. Bioscience	Professor	Chronobiology, Animal Physiology, Animal Behavior
A. Ekka, FES	Ph.D. Botany	Professor	Plant Pathology, Ethnobotany
L. Prabhas	M.Phil., NET	Assistant Professor	Biotechnology
S. S. Dewhare	Ph.D. Biotechnology, NET	Assistant Professor	Biotechnology, Proteomics
M.K. Patel	Ph.D. Biotechnology, NET	Assistant Professor	Biotechnology, Nanobiology



Faculty: Prestigious Awards/ Honors received

Name	Honors/Awards/Recognition	Year
Former Faculty		
Prof. S.M. Agrawal	Fellow of Indian Society of Parasitology, Former Vice Chancellor, PRSU	1987
Prof. S.S. Ali	Fellow of Botanical Society of India	1988
Prof. A.K. Pati	Fellow of National Academy of Sciences Fellow of Academy of Medical Sciences Former Vice Chancellor, Gangadhar Meher University	2003 2018 2017
Prof. S.C. Naithani	INSA Fellowship [03 months] - Institute of Forest Genetics & Tree Breeding, Hamburg, Germany	1991
Current Faculty		
Prof. A.K. Gupta	Fellow of Zoological Society of India	2003
Dr. A. Parganiha	ISCA Young Scientist Fellow of Indian Society of Chronomedicine	2001 2017
Dr. A. Ekka	Fellow of Ethnobotanist	2010



RESEARCH, INNOVATIONS AND EXTENSIONS

National/ International Recognitions in Research

Name	Period
UGC DRS-SAP Phase-I*	2002-2009
UGC DRS-SAP Phase-II*	2010-2015
DST-FIST Level-I	2012-2017
WHO International Project on BIOSphere and COSmos (BIOCOS), Minnesota, USA	2005-2015
International Association for Research on Time in Biology and Chronotherapy (ARTBC), Paris, France	2007-2015
UGC DRS-SAP Phase-III*	2016-2021
*Thrust Area: Chronobiology	



Grants (Total 209.24 lacs)

Under FIST and DRS-SAP

Scheme	Period	Amount (INR in Lac)
DST-FIST Level-I	2012-2017	57.0
UGC DRS-SAP Phase-III*	2016-2021	125.0
*Thrust Area: Chronobiology		

Major Research Projects

PI/ Co-PI	Title of the Project	Funding agency	Year	Amount (INR in Lac)
Manoj Kumar Patel	Development of Nanomaterials Based Nanobiosensors for Pathogen Detection	SERB, New Delhi	2019-21	27.24



Minor Research Projects

(Total 24.9 lacs)

PI/ Co-PI	Title of the Project	Funding agency	Year	Amount (INR in Lacs)
A.K. Pati	Inventory on earthworm biodiversity database of Raipur district of Chhattisgarh agro-ecosystems cultivating scented rice	CCOST, Raipur	2014-17	4.9
Arti Parganiha	Salivary alpha-amylase and rest-activity rhythms in patients with breast cancer	CCOST, Raipur	2014-17	5.0
Aditi Poddar	Environmental pathway and human response studies on impact of water borne fluoride amongst inhabitants of Korba, C.G.	CCOST, Raipur	2014-17	5.0
R.K. Pradhan	A study on the impact of school timing on sleep behavior and cognitive ability of higher secondary school studies	CCOST, Raipur	2014-17	5.0
A.K. Gupta	Exploration of Endophytic Actinomycetes for Antibiotic Potential from some Medicinal Plants of Raipur District	CCOST, Raipur	2015-18	5.0



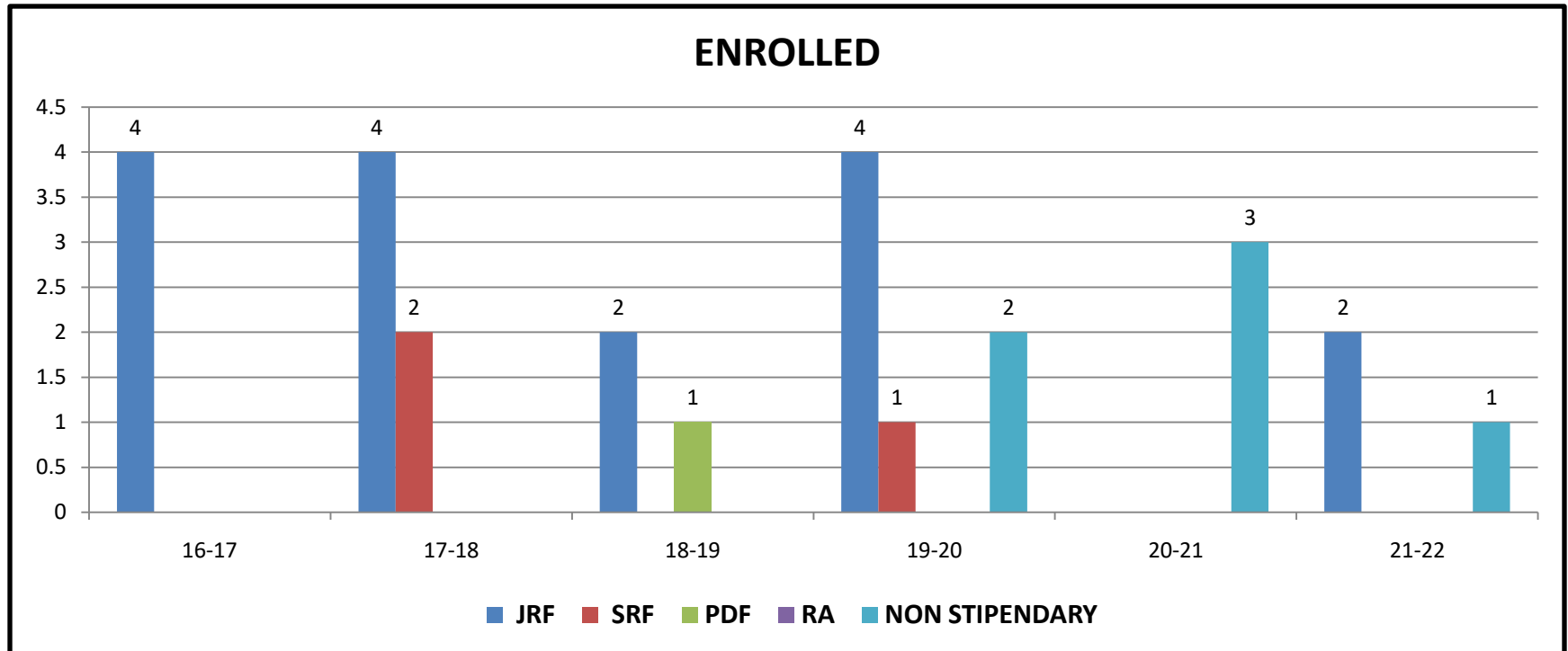
National/ International/interdepartmental collaborations

S. No.	Title of the collaborative activity	Collaborating agency	Participant	Year of collaboration
1	Cancer Chronobiology	Regional Cancer Centre, Dr. B.R. Ambedkar Memorial Hospital, Raipur	AKPati Arti Parganiha	Since 2005 (Ongoing)
2	Chronobiology and Reproductive Endocrinology	Fish Endocrinology Laboratory, Department of Zoology ,BHU, Varanasi	AKPati	Since 2009 (Ongoing)
3	Animal Behavior	University of Tuebingen, Tuebingen, Germany	AK Pati	Since 2016 (Ongoing)
4	Psychological Science Accelerator (PSA) - Face Perception Worldwide Project	Ashland University, Ohio, United States of America	AKPati Arti Parganiha	Since 2017 (Ongoing)
5	Chronobiology	Department of Physiology,AIIMS, Raipur	AKPati Arti Parganiha	Since 2017(Ongoing)
6	Environmental Toxicity	Pollution Laboratory, SOS in Chemistry, PRSU	Aditi Poddar	Since 2013 (Ongoing)



Doctoral Students

ENROLLED



PHDs AWARDED (31)

2016	2017	2018	2019	2020	2021	2022	2023
2	5	3	3	3	12	2	1

Awards/ recognitions for research Innovations

National and International Levels [2016-2021]

SN	Name	Awards/ Recognitions	National/ International	Year
1	Shivani Gupta	Best Poster Presentation Award	National Conference on Prospects in Life Sciences: Paradigm Shift in	2016
2	Gamini Sahu	Best Poster Presentation Award	Teaching and Research in Zoological Sciences and the Second	2016
3	Purva Mishra	Best Poster Presentation Award	Chhattisgarh Congress of the Zoological Society of Chhattisgarh	2016
4	Dr. Babita Pande	First Prize in Poster Presentation	(ZSC), Raipur, Department of Zoology, Govt. Nagarjuna P.G. College of Science, Raipur, Chhattisgarh	2016
5	Shivani Gupta	Nilofer Chenoy Award (3rd prize) for Best Oral Presentation	23 rd conference of the International Society of Flouride Research, Hyderabad	2016
6	Armiya Sultan	Best Oral Presentation	International Symposium on Integrative Physiology and Comparative Endocrinology, Department of Zoology, Institute of Science, Banaras Hindu University, Varanasi	2016

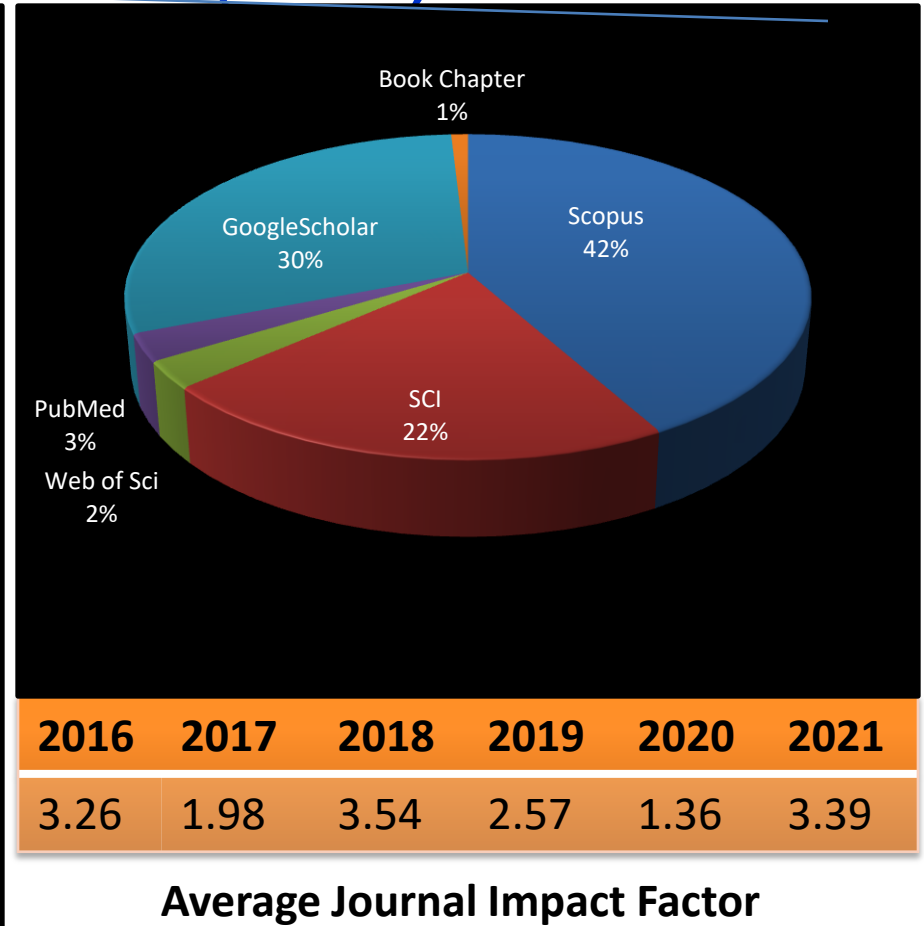
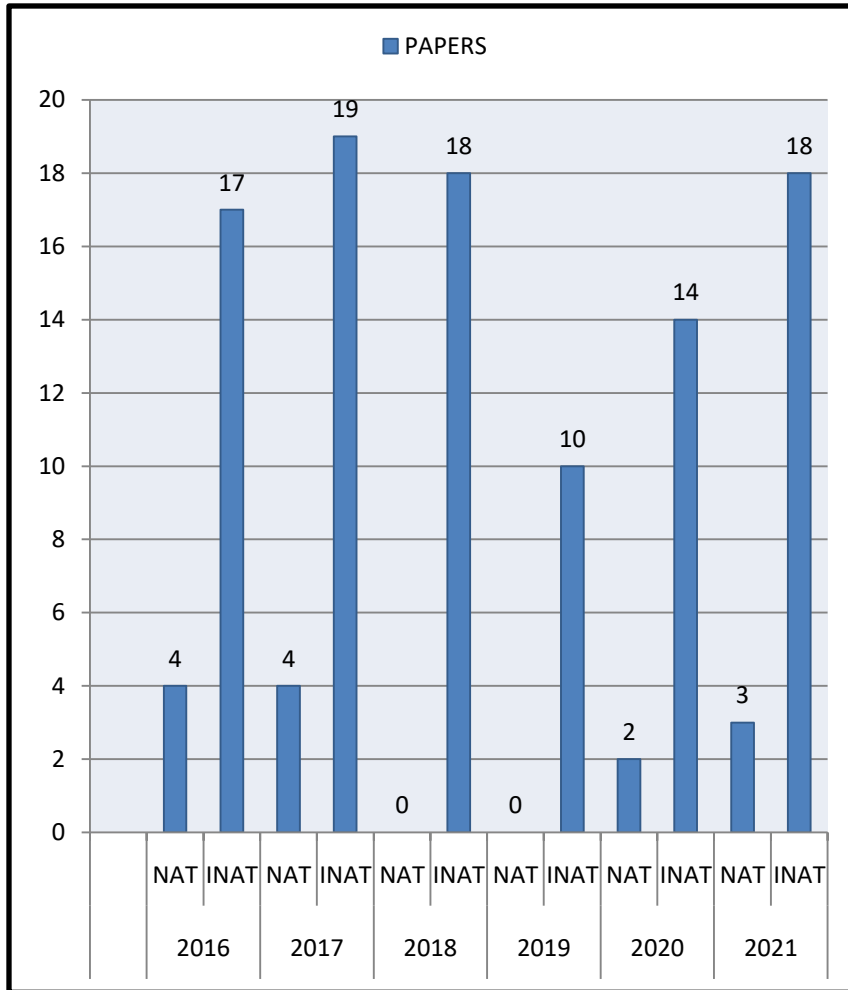
Awards/ recognitions for research Innovations

National and International Levels [2016-2021]

SN	Name	Awards/ Recognitions	National/ International	
1	Priyanka Chakradhari	Third Prize in Poster Presentation	42 Annual Conference of ESI; Department of Zoology, University of Calicut and Ethological Society of India	2018
2	Priyanka Chandel	International Travel Grant	SERB, Department of Science and Technology, New Delhi; CCOST, Raipur; and UGC Unassigned Grants	2018
3	Margaret Messiah Singh		CCOST, Raipur and UGC Unassigned Grants	2018
4	Shraddha Pradhan	First Prize in Poster Presentation	International Conference on Emerging Researches in Bioscience (ICERB-2018), Department of Zoology, Guru Ghasidas Vishwavidyalaya, Bilaspur	2018



Publications (110)



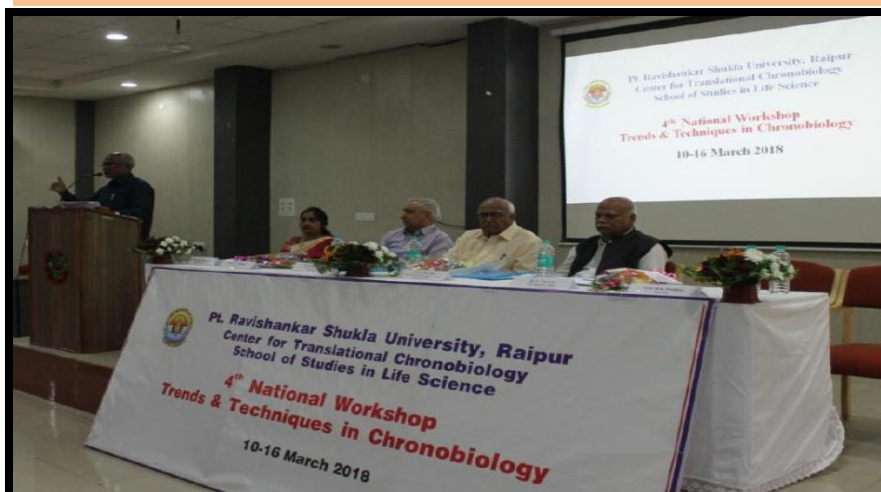
Conference/ Symposium/ Workshops Organized



3rd National Workshop: Trends & Techniques in Chronobiology, March 21-27, 2017



4th National Workshop: Trends & Techniques in Chronobiology, March 10-16, 2018



5th National Workshop: Trends & Techniques in Chronobiology, March 2-8, 2019

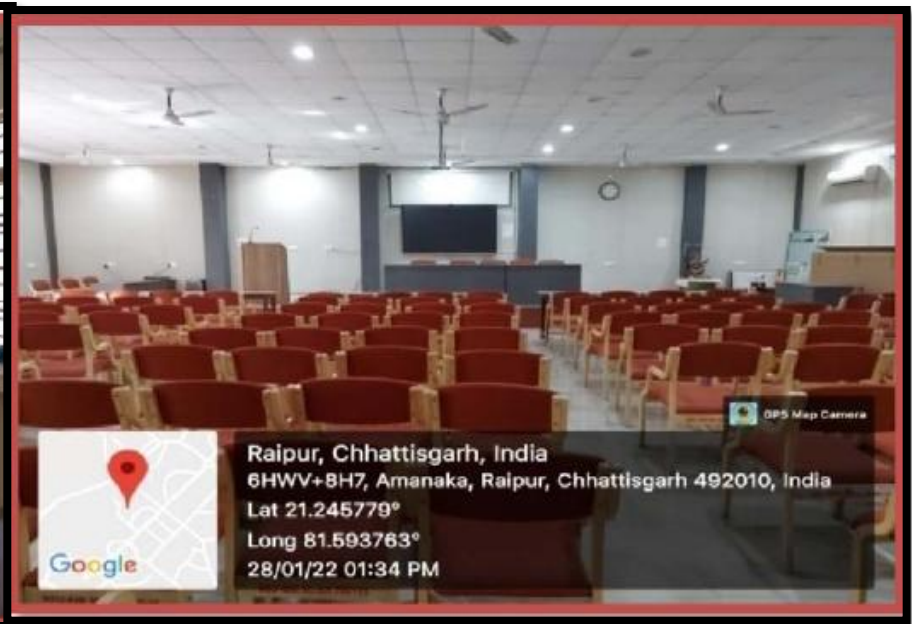


6th National Workshop: Trends & Techniques in Chronobiology, March 21-27, 2023



INFRASTRUCTURE AND LEARNING RESOURCES

S.N	Infrastructure	Nos.
1	Total number of class rooms	6
2.	Class rooms/ Res. Lab. with ICT facility	15
3.	Students' laboratories	6
4.	Research laboratories	9



Smart boards and Wifi Facilities available



Infrastructural Facilities



Sir JC Bose Hall



Herbal Garden



Computer lab



Lawn



Animal House



Infrastructural Facilities



Microbiology, Chronobiology, Ethnobotany ,Parasitology and Environmental Toxicity ,Reproductive physiology and Nanobiology labs .Sleep physiology, seed biology and tissue culture labs have been closed in the last 3 years due to superannuation of faculty



Infrastructural Facilities



TM-2430

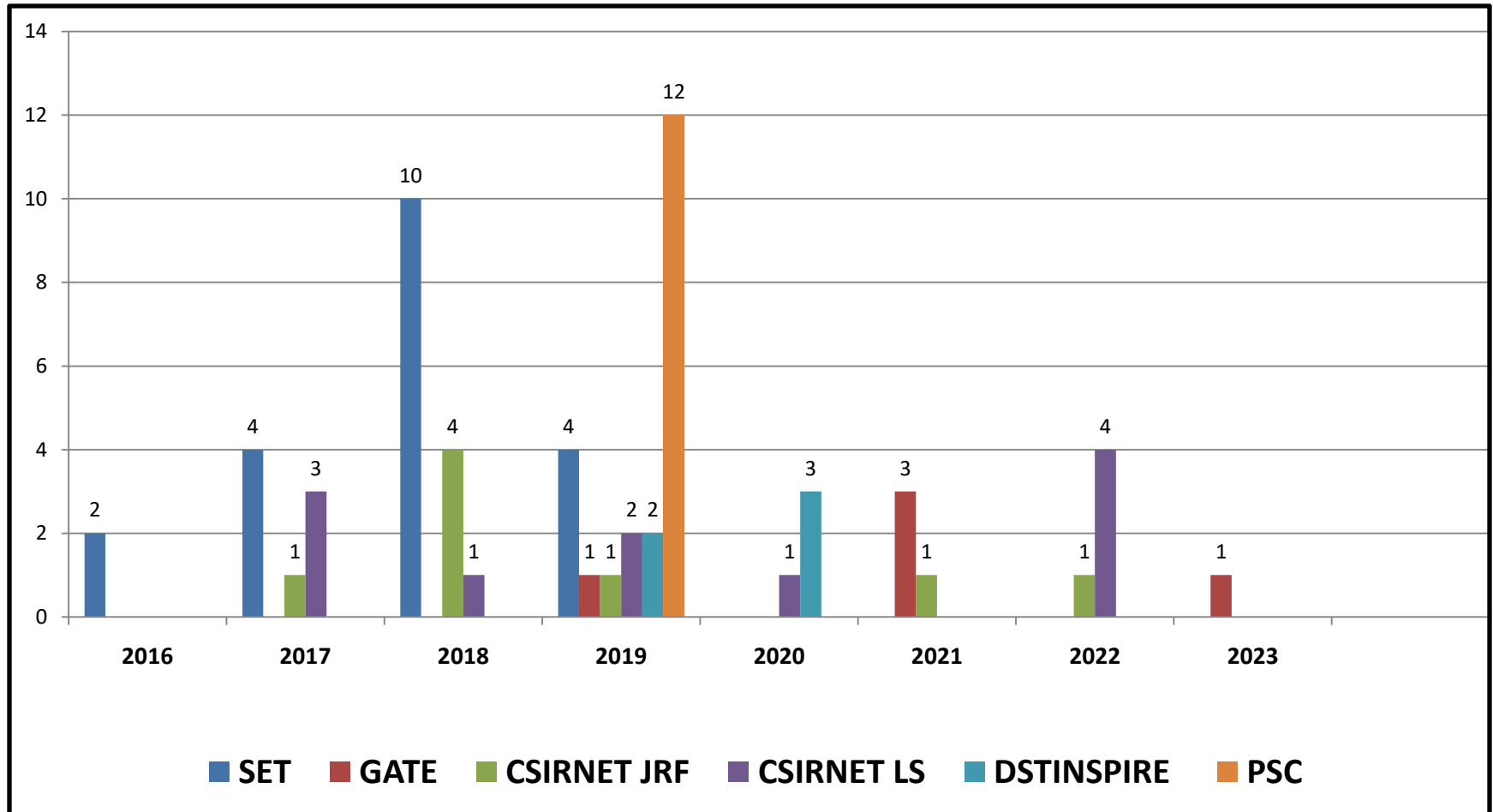


PG students getting financial assistance (From Government)

Year	Number of Students		
	ST	SC	OBC
2016-17	07	08	19
2017-18	05	07	23
2018-19	06	06	26
2019-20	10	05	26
2020-21	07	02	26
2021-22	08	03	36
2022-23	07	06	37

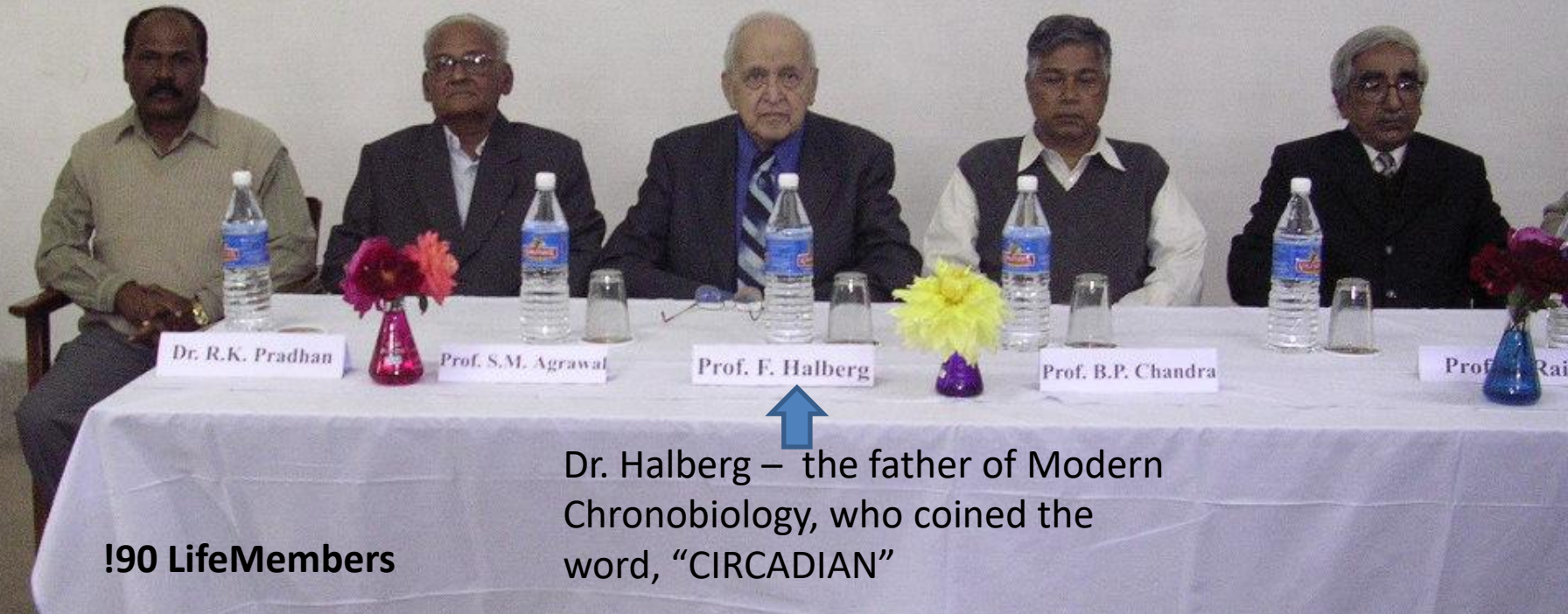


STUDENTS QUALIFYING COMPETETIVE EXAMINATIONS (SET,GATE,CSIRNET LS/JRF,DST INSPIRE and CGPSC)



Inaugural Ceremony Life Science Alumni Association (23.01.2005)

Registration No.: 2960 dated 28.01.2005





Distinguished Alumni

SN	Name	Subject	Year	Current Position Held
1	Dr. Sandhya Rani (Chetty) Gaur	Bioscience	1984	Prof and Former Head, Dept of Fisheries, IGKVV, Raipur
2	Dr. Anand Ramchandrula	Bioscience	1986	Director, Division of Rheumatology, Department of Medicine, University of Medicine and Dentistry of New Jersey, USA
3	Dr. Nibha (Gupta) Basak	Bioscience	1989	Sr. Scientist, Regional Plant Resource Centre, Bhubaneswar, Odisha
4	Dr. Prasad Wadegaonkar	Bioscience	1994	Pro Vice Chancellor, Sant Gadge Baba Amravati University, Amravati
6	Sanjita Gupta	Bioscience	1996	Chief Conservator of Forests, CG Government
7	Dr. Elizabeth Thomas	Bioscience	1997	Principal Scientist, Pfizer, Pearl River, New York, USA
8	Dr. Bobby Varghese	Bioscience	2000	Professor, School of Conservation and Biological Sciences, University of Kwa Zulu Natal, Durban, South Africa
9	Dr. Pratibha Shrivastava	Bioscience	2000	Biological Scientist 3, Dept of Agriculture, Florida, USA



Alumni holding important positions in PRSU

SN	Name	Subject	Year	Current Position Held
1	Dr. Ashwini Kumar Gupta	Bioscience	1984	Prof and Former Head, SLS Ex Dean Lifescience, College Development Council and Students Welfare
2	Dr RK Pradhan	Bioscience	1984	Professor and Ex Head ,SLS
3	Dr. Aditi Niyogi Poddar	Bioscience	1984	Prof and Head and Dean Life Science
4	Dr Arti Parganiha	Bioscience	1997	Prof Lifescience and Director IQAC
5	Dr Afaque Quraishi	Bioscience	1998	Assoc Prof., Biotechnology
6	Dr Keshav Kant Sahu	Bioscience	2000	Prof and Head, Biotechnology,
6	Dr Babita Pande	Bioscience	2013	Asst Prof ,CBS
7	Dr Pervez Ahmad Khan	Bioscience		Research Assistant

The Life Science Alumni Association actively participates in academic and cultural activities and often acts as a co-sponsor in conferences and symposia.



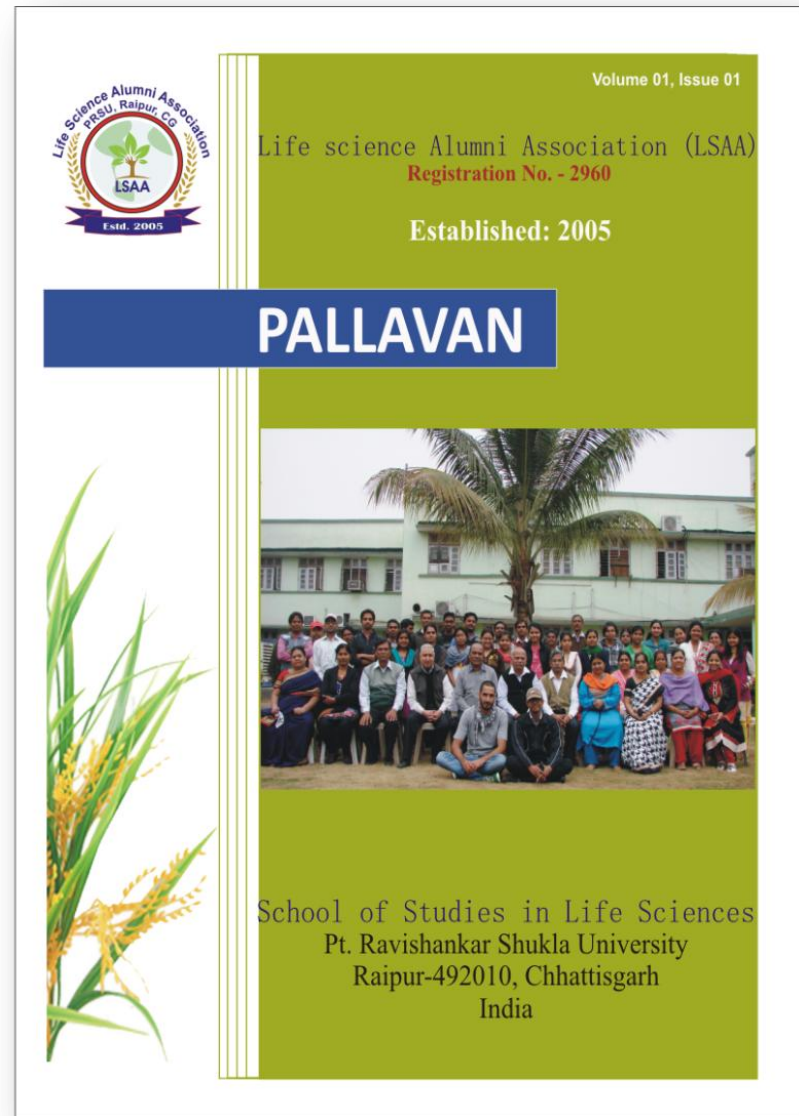
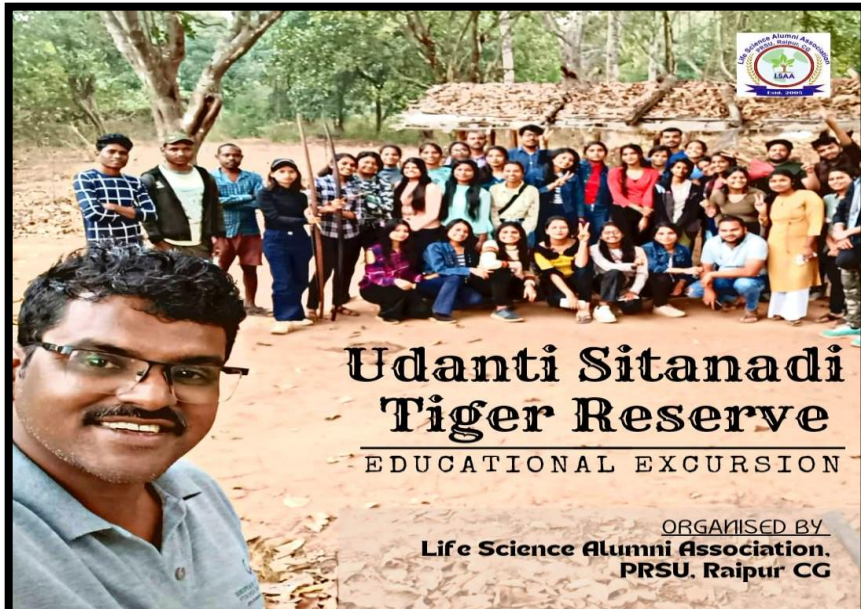
Activities of the Alumni



Cultural meets



Activities of the Alumni





Extracurricular Activities of Department

The Wall Magazine
Myna
School of Life Sciences, Vol. 1(1)

FROM THE EDITOR'S DESK
The editor of the magazine has expressed his views on the theme of the magazine...

The Death of Handwritten
In Indian culture when the child is talking and understanding the handwriting...

EDITORIAL BOARD
President: Dr. Anil Neeraj Prasad
Members: Anand Kishore, Anshu Singh, Arpit Singh, Arun Singh, Ashish Singh, Ashish Singh, Arpit Singh, Arun Singh, Arun Singh, Arun Singh...

The Wall Magazine
Myna
School of Life Sciences, Vol. 1(2)

"Fremontland"
Fremontland is a beautiful place where the sun is always smiling...

"Chakras"
Chakras are the energy centers in the human body...

What do you doer?
What do you doer? What do you doer? What do you doer?

Letter box: a retrospection
The letter box is a place where we can express our feelings...

MOTHER
Mother is the one who gives us life and love...

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The Wall Magazine
Myna
School of Life Sciences, Vol. 1(3)

Amazing Facts
The amazing facts about the world are many...

EDITORIAL BOARD
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The Wall Magazine
Myna
School of Life Sciences, Vol. 1(4)

I BELIEVE IN ME
I believe in me, I believe in me, I believe in me...

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Members: Anand Kishore, Anshu Singh, Arpit Singh, Arun Singh, Ashish Singh, Ashish Singh, Arpit Singh, Arun Singh, Arun Singh, Arun Singh...

National Science day '23





Extracurricular activities



WEEKEND BEST PRACTICES

(Activities on Capacity building)

In search of
your dreams



Know your
department



Magic of
Cracking UPSC
and PSC



Vocabulary
enhancement



Entrepreneurship
development



Placement
opportunities



Women
Empowerment



Sports





FDP/ Faculty Development Strategies

Programs Attended by Faculty

Faculty	Name of the Program	Date & Year
Mr Labya Prabhas	RC in Biological Science	2016
	RC in Biological Science	2022
	7days program in Research Publication Ethics	2022
Dr Shivendra Singh Dewhare	Orientation Program in Quality in Higher Education Learning Process	2019
	RC in Lifescience: Synthetic Biology	2020
Dr Manoj Patel	MOOCs in Lifescience	2019
	Orientation Course in Lifescience	2021
	Refresher Course in Lifescience	2022



Monitoring of Program Objectivity and Learning Outcomes

Strategy	Methodology
• Staff Council	Monthly meeting and interaction
• DRC	Progress of research activity
• Feedback	Feedback analyzed and discussed in Staff Council meeting
• Attendance	Monitored twice in the semester
• Internal Assessment	Continuous evaluation by class test and presentations

SWOC ANALYSIS

STRENGTHS

- Dedicated skilled faculty
- ✓ Research citations/ documentations in well known and reputed Databases
- ✓ Publications in Journals with good impact factor
- ✓ DST-FIST, UGC DRS-SAP & FYP support

WEAKNESSES

- ✓ Continuous superannuation of many senior faculties
- ✓ Gradually declining Faculty strength
- ✓ Unskilled supporting staff
- ✓ Lack of Linkages with Industries
- ✓ Limited Consultancy
- ✓ No Patents in research areas

OPPORTUNITIES

- ✓ Scope for research activities in Tribal areas
- ✓ Scope for Patenting ,Collaboration/ MoUs and Consultancy in the diverse fields of Life Sciences

CHALLENGES

- ✓ Implementation of NEP syllabus
- ✓ Provision of fellowships to all PG students
- ✓ Linkage/ Consultancy/ MoU



Future Plans

1. Appointment of more teaching and skilled non teaching staff
2. Expansion of infrastructure, animal house, instrumentation facility.
3. Initiating consultation services
4. International collaboration for funding from agencies, like WHO, NIH, Ford Foundation



THANK YOU