

**SCHOOL OF STUDIES**  
**IN**  
**PHYSICS AND ASTROPHYSICS**  
**DST-FIST Funded Department**



**Pt. Ravishankar Shukla University, Raipur (C. G.)**

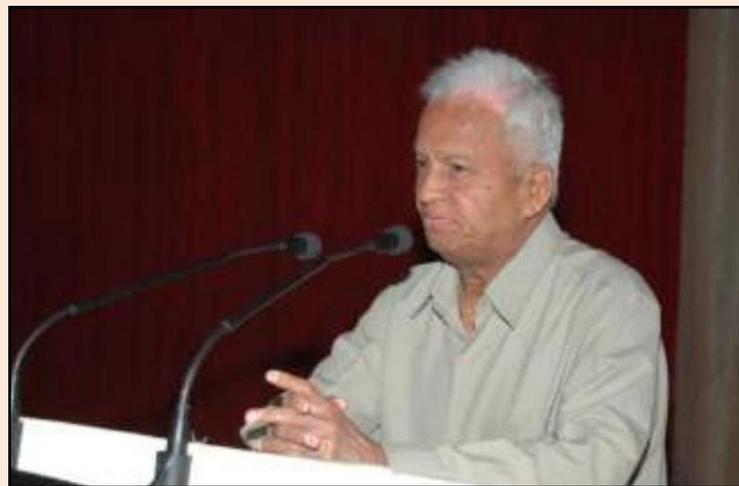
- **“If we have seen further, it is by standing on the shoulders of Giants”**

Isaac Newton



**Late Prof. Suresh Chandra**  
An eminent Materials Scientist and  
founder Head of the Department

**Late Prof. R. K. Thakur**  
A renowned Astrophysicist and  
founder Faculty Member



**Prof. S. K. Pandey**  
A renowned Astrophysicist and former  
Vice Chancellor Pt. RSU, Raipur

The department of Physics was established in the year 1972 under the dynamic leadership of **Late Prof. Suresh Chandra**, an eminent Materials Scientist and founder head of the department; **Late Prof. R. K. Thakur**, a renowned Astrophysicist; **Late Dr. S. Guha**, a renowned Plasma Physicist. The department was renamed as School of Studies in Physics & Astrophysics in the year 2009 during International year of Astronomy (IYA- 2009), by the **Prof. S. K. Pandey**, former Vice Chancellor Pt. RSU, Raipur. Under his dynamic leadership our University has achieved an accreditation of ‘A’ grade University by National Assessment and Accreditation Council (NAAC) in year 2016.

## School of Studies in Physics and Astrophysics

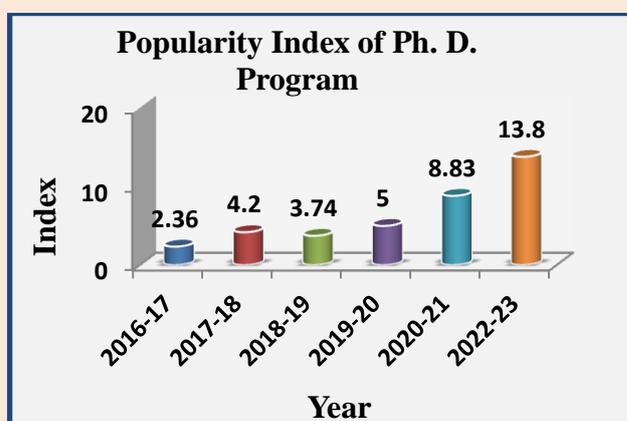
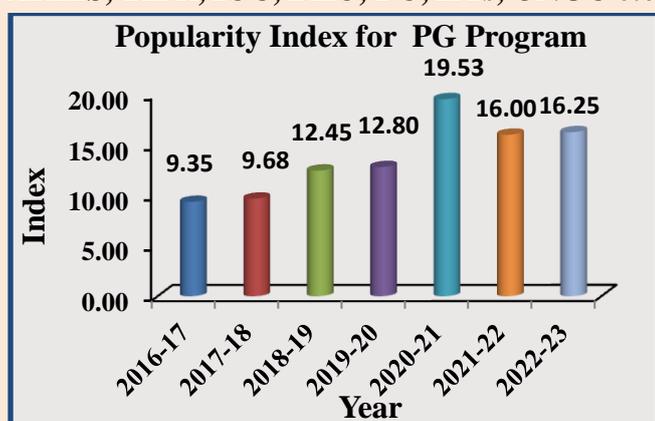
Since its inception, the department earned world-wide reputation for carrying out research in front line areas of Physics namely Materials Science and Astronomy & Astrophysics. In Material Science, the Department covered fields such as Nano Materials, Photo Conducting Materials, Luminescent Materials and Solid State Ionic Materials etc. and in Astronomy & Astrophysics (A&A) the research fields have been Observational Astronomy, Surface Photometry of Galaxies, Dynamics/Modelling of Galaxies, Supernovae and Variable stars etc. Within 15 years of the inception of this department, **Madhya Pradesh Uchcha Shiksha Anudhan Aoyog recognized this department as the Center of Excellence (1987).**

The Department offers Post-graduate (M. Sc.), M. Phil and Ph. D. programs in Physics as par with National/International level. M. Sc. Course includes specialization in: Solid State Physics, Astronomy & Astrophysics and Physics of Nano-Materials.

**The department has been awarded DST support under FIST program for two levels i.e. for the duration: 2003 to 2008 with a grant of rupees 35 lac (completed) and for 2013 to 2018 with a grant of rupees 97 lac (completed).** The second DST FIST program was approved to initiate two-semester specialization course on **Physics of Nanomaterials** for M.Sc. student. This specialization has been commenced from the academic session 2016-2017.

In recognition of the significant contributions made by this department in the field of Astronomy & Astrophysics, the Inter University Center for Astronomy and Astrophysics (IUCAA), Pune established its IUCAA Resource Center (IRC) in 1999 for the promotion of teaching and research in A&A in this region. The IRC is running successfully since then and now reframed as IUCAA Centre for Astronomy Research & Development (ICARD).

The students passed out of this department in the past hold prestigious positions Nationally/Internationally in various sectors namely academic, research, defence, bureaucratic, banking, railway etc. **Number of Inter-Institutional research collaborations/ MOUs have been signed namely with IUCAA, IIA, ARIES, TIFR, IUC, BHU, DU, IITs, ONGC etc.**



# The Profile of Our Dynamic and Versatile Teaching Faculty



Name: **Prof. Nameeta Brahme**  
 Designation: **Professor and Head**  
 Qualification: **M. Sc., M. Phil., Ph. D.**  
 Specialization: **Optical Properties of Nano/ Bulk Phosphors**  
 No. of Ph. D. Produced: **17**  
 Teaching Experience: **27Years**, Research Experience: **20Years**

## Member in Different Committees:

- i. **Coordinator, Centre for Nano-Science and Nano-Technology, PRSU**
- ii. **Chairman, Internal Complaint Committee Redressal Cell for Sexual Harassment of Women at Workplace, PRSU**
- iii. **Member in Editorial Board in SDC Journal of Theoretical and Experimental Research**
- iv. **Treasurer, Srijansheel Vidushi Mahila Samiti, PRSU**
- v. **Incharge, University Guest House & HRDC Guest House, PRSU**
- vi. **Member, Board of Studies, PRSU**

**Research Publications in Scopus: 124 (Total Document) (2016-23): 75 (Documents); 1412 (Citations)**

Sr. No.	Year	Documents	Citations	
1	2016	21	246	<b>h-index 24</b>
2	2017	06	141	
3	2018	06	140	
4	2019	05	133	
5	2020	12	164	<b>Total Citations 1617</b>
6	2021	08	209	
7	2022	10	228	
8	2023	07	151	

## Achievements:

- **Patent Published: The Patent office Journal No. 16/2022 dt. 24.04.2022**
- **Felicitated by Governor of Chhattisgarh for the work done in the field of education on 8th March 2022.**
- **Awarded Fellow of Luminescence Society of India by the LSI General Body held at Durg on 9.12.2021.**
- **CG Young Scientist Award – 2004.**



Name: **Prof. D. P. Bisen**  
 Designation: **Professor and Ex-Head**  
 Qualification: **M. Sc., M. Phil., Ph. D.**  
 Specialization: **Optical Properties of Nano/ Bulk Phosphors**  
 No. of Ph. D. Produced: **12**  
 Teaching Experience: **29Years**, Research Experience: **31Years**

## Member in Different Committees:

- i. **Chairman, Board of Studies, PRSU**
- ii. **Secretary, Luminescence Society of India**

**Research Publications in Scopus: 152 (Total Document) (2016-23): 86 (Documents); 1754 (Citations)**

Sr. No.	Year	Documents	Citations	
1	2016	33	288	<b>h-index 22</b>
2	2017	11	198	
3	2018	04	190	
4	2019	05	176	
5	2020	10	216	<b>Total Citations 2025</b>
6	2021	08	257	
7	2022	09	260	
8	2023	6	169	

## Achievements:

- **Awarded Fellow of Luminescence Society of India by the LSI General Body held at Durg on 9.12.2021.**
- **Secretary, Luminescence Society of India (LSI)- 2016 to till today.**
- **Prof. B.P. Chandra Research Award – 2015-16**
- **Professor of the year by Pt. R. S. University, Raipur, CG**
- **Executive Member (LSI- 2013-15)**



Name: **Dr. (Mrs.) A. S. Gour**  
 Designation: **Professor**  
 Qualification: **M. Sc., M. Phil., Ph. D., LLB, M. Sc. in Maths**  
 Specialization: **Optical Properties of Nano/ Bulk Phosphors**  
 No. of Ph. D. Produced: **04**  
 Teaching Experience: **26Years**, Research Experience: **23Years**

**Member in Different Committees:**

- i. Member, Board of Studies, PRSU

**Research Publications in Scopus: 13 (Total Document)  
 (2016-23): 09 (Documents); 20 (Citations)**

Sr. No.	Year	Documents	Citations	
1	2016	01	01	<b>h-index 04</b>
2	2017	02	-	
3	2018	01	01	
4	2019	01	03	
5	2020	01	03	<b>Total Citations 34</b>
6	2021	00	03	
7	2022	01	05	
8	2023	02	04	

**Achievements:**

- **Bharat Ratna Mother Teresa Gold Medal Award by Global Economics Progress and Research Association, Chennai on 18<sup>th</sup> March 2023.**
- **CG Young Scientist Award- 2002.**



Name: **Dr. N. K. Chakradhari**  
 Designation: **Senior Assistant Professor**  
 Qualification: **M. Sc.(Gold Medallist), UGC-CSIR NET, JEST, Ph. D.**  
 Specialization: **Astronomy and Astrophysics**  
 No. of Ph. D. Produced: **01**  
 Teaching Experience: **14Years**, Research Experience: **09Years**

**Member in Different Committees:**

- i. **Coordinator, Center for Mega Projects in Multi-wavelength in Astronomy, PRSU, Raipur.**  
 ii. **Coordinator, IUCAA Pune -ICARD.**  
 iii. Member, Astronomical Society of India.

**Research Publications in Scopus: 24 (Total Document)  
 (2016-23): 13 (Documents); 203 (Citations)**

Sr. No.	Year	Documents	Citations	
1	2016	02	18	<b>h-index 11</b>
2	2017	00	20	
3	2018	03	30	
4	2019	03	34	
5	2020	00	29	<b>Total Citations 314</b>
6	2021	01	31	
7	2022	03	30	
8	2023	01	11	

**Achievements:**

- **Awarded INSA Visiting Scientist 2020-21.**
- **CG Young Scientist Award – 2013**
- **INSA Visiting Scientist Fellowship 2013-14**
- **INSA Summer Fellowship Award- 2015**
- **UGC Teacher Fellowship Award- 2015-16**
- **Coordinator - IUCAA centre for Astronomy Research & Development( ICARD)**
- **Coordinator – Centre for Mega Projects in A&A**
- **Life member – Astronomical Society of India**
- **Popularly known for astronomical outreach & sky watch.**



Name: **Dr. Y. K. Mahipal**  
 Designation: **Assistant Professor**  
 Qualification: **M. Sc., Ph. D.**  
 Specialization: **Solid State Ionics**  
 No. of Ph. D. Produced: **01**  
 Teaching Experience: **06Years**, Research Experience: **09Years**

**Member in Different Committees:**

- i. Member, Board of Studies, PRSU

**Research Publications in Scopus: 25 (Total Document)**  
**(2016-23): 16 (Documents); 465 (Citations)**

Sr. No.	Year	Documents	Citations	h-index 13
1	2016	03	17	
2	2017	05	41	
3	2018	01	63	
4	2019	01	46	
5	2020	01	90	Total Citations 541
6	2021	0	65	
7	2022	02	95	
8	2023	03	50	

**Achievements:**

- CG Young Scientist Award- 2008
- ICTP-TRIL fellow, ENEA Rome, Italy, June 25, 2012 to December 24, 2012
- Post Doctoral Fellow University of Malaya, Kualalumpur Malaysia from 20 March 2014 to 20 September 2015.



Name: **Mr. Chitrkant Belodhiya**  
 Designation: **Assistant Professor**  
 Qualification: **M. Sc., UGC-CSIR NET-JRF, SET, GATE, JEST**  
 Specialization: **Optical Properties of Nano/ Bulk Phosphors**  
 Teaching Experience: **06Years**

**Member in Different Committees:**

- i. Assistant Superintendent, Annual Exam PRSU  
 ii. Life member of Luminescence Society of India (LSI)

**Research Publications in Scopus: 04 (Total Document)**  
**(2016-23): 04 (Documents); 21 (Citation)**

Sr. No.	Year	Documents	Citations	h-index 03
1	2016	-	-	
2	2017	-	-	
3	2018	-	-	
4	2019	-	-	
5	2020	02	-	Total Citations 21
6	2021	01	03	
7	2022	01	05	
8	2023	-	13	

**Achievements:**

- Qualified different exams viz. UGC-CSIR NET-JRF, SET, GATE, JEST
- Secured Merit list in CG PSC Assistant Professor Examination 2015 (Department of Technical Education Govt. of Chhattisgarh)

## We are fortunate to have renowned and highly experienced superannuated visiting faculty



Name: Prof. S. K. Pandey  
 Designation: Former Vice-Chancellor; Pt. RSU  
 Qualification: M. Sc., Ph. D.  
 Specialization: Astronomy & Astrophysics  
 No. of Ph. D. Produced: 09  
 Teaching Experience: 45 Years, Research Experience: 40Years

### Achievements:

- President- Astronomical Society of India (ASI-2016)



Name: Prof. R. C. Agrawal  
 Designation: Professor  
 Qualification: M. Sc., Ph. D.  
 Specialization: Solid State Ionic Materials  
 No. of Ph. D. Produced: 15  
 Teaching Experience: 40 Years, Research Experience: 41Years

### Achievements:

- Sectional President, Materials Science Section, ISCA 2007, Annamalai University.
- Vice-President Indian Solid Ionics Society (ISSIS) 2007-09



Name: Prof. R. N. Baghel  
 Designation: Professor  
 Qualification: M. Sc., Ph. D., M. C. A., Diploma in English  
 Specialization: Solid State Physics  
 No. of Ph. D. Produced: 07  
 Teaching Experience: 36 Years, Research Experience: 23 Years

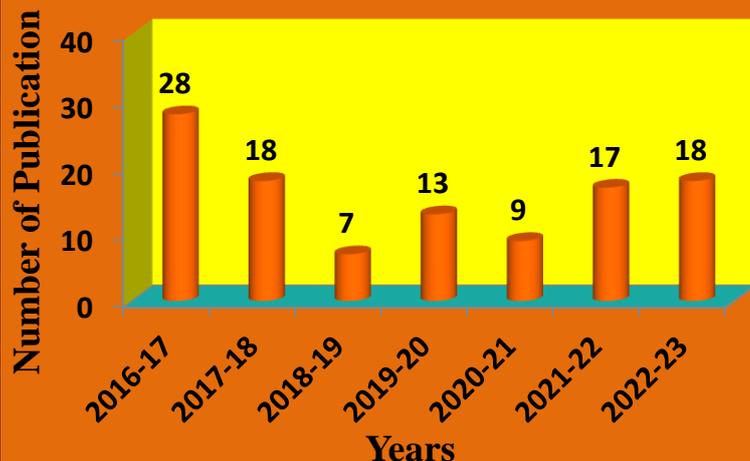
### Achievements:

- Executive Member (2010-13) Luminescence Society of India (LSI).

## Administrative Staff

	Mr. A. K. Yadav Lab Technician Higher Secondary		Mrs. Manju Sahu Technical Assistant M. Sc., M. Phil		Mrs. Khemlata Mandavi Technical Assistant M. A., PGDCA, SET
	Mr. Baba Nayak UDC-I 12 <sup>th</sup>		Mr. Manish Soni Technician USIC B. Sc., IT		Mr. Nand Kishor Yadav LDC 12 <sup>th</sup>
	Mr. Jitendra Kumar Dhruw Lab Attendant B. Sc.		Mr. Kamal Sahu Peon 12 <sup>th</sup>		

## Publications of the Department from 2016-2023



Total Publications of the department since inception

**544**

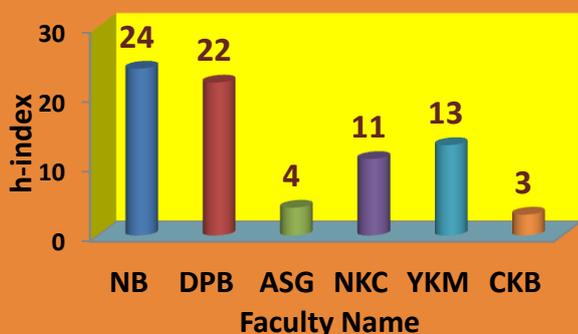
Total Publications of Current Faculties

**331**

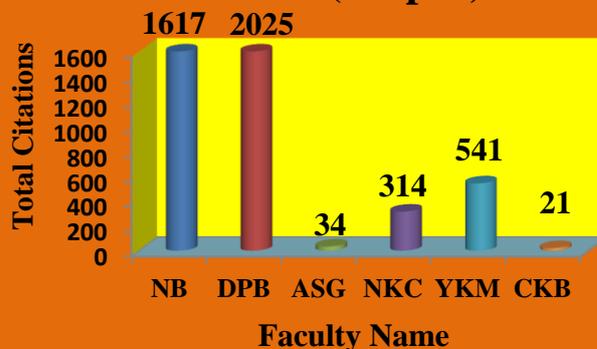
Total Publications of the Department from 2016-23

**110**

## h-index (Scopus)



## Citation (Scopus)



NB- Nameeta Brahme, DPB- Durga Prasad Bisen, ASG- Anubha Singh Gour

NKC- Nand Kumar Chakradhari, YKM- Yugal Kishor Mahipal, CKB- Chitrkant Belodhiya

## Some highlights of the department

### • Major Departmental Projects

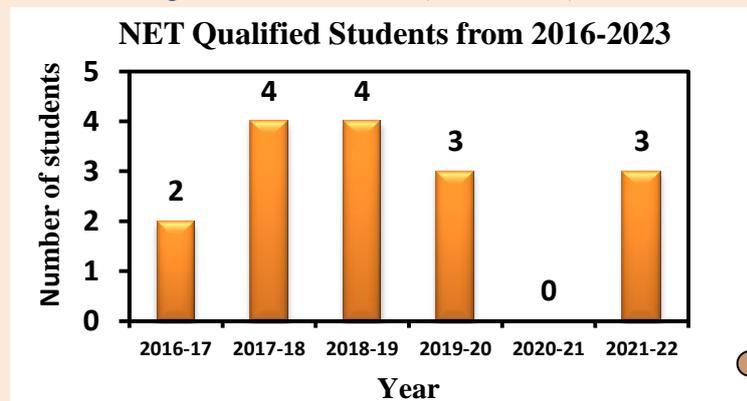
S. No.	Title	Funding Agency	Amount	Period
1.	Departmental Project (For Development of Research and Computing Facilities)	DST-FIST	37.0 Lakh	2004-2008
2.	Departmental Project (For Development of Physics of Nano Material Course)	DST-FIST	97.0 Lakh	2013-2018
3.	Integrative Approach towards developing Sensing, Measurement Devices and Mitigation Methods for Environmental Pollutants known for Potential Impact on Health and Climate Change	DST-PURSE Promotion of University Research and Excellence	10.0 Crore	2023-2026
			PI- Prof. Manas Kanti Dev Co-PI –Prof. Shamsh Parvez Prof. D. P. Bisen	

## • Individual Projects by Faculty Members

S. No.	PI/Co-PI	Title	Funding Agency	Amount (Lac)	Period
1.	Prof. R. C. Agrawal	Effect of High Energy Ball-milling and Study of Nano-Ionic Effects in Dry Polymers Electrolytes.	CCOST	5.0	2014-16
2.	Prof. Nameeta Brahme Prof. D. P. Bisen	Rare earth doped $\text{Ca}_2\text{Al}_2\text{SiO}_7$ nano / micro Phosphors: Synthesis, Characterization and Device Prospects”	CCOST	5.0	2014-16
3.	Dr. A. S. Gour	Studies on the Persistent Luminescence Behaviour of Rare Earth Doped Strontium Aluminosilicate Phosphors	CCOST	5.0	2014-16
4.	Dr. Y. K. Mahipal	UGC-BSR Startup Grant for newly recruited faculty at Assistant Professor level in Science Department.	UGC, New Delhi	10.0	2018-19
5.	Prof. Nameeta Brahme	Development of rare earth doped inorganic phosphors for Forensic Investigations and Smart Agriculture based applications	DST-SERB	50	Submitted 12.06.2023
6.	Dr. Y. K. Mahipal	Investigation on Solid State Electrolytes and their Electro Chemical Device Application	DST-SERB	50	Submitted 14.06.2023

## Achievements of Students:

- **Ph.D. Degree Recipient: 144 (Since inception)**
- **Ph. D. Degree Recipient (2016-2023): 59**
- **NET-JRF Qualified Students (2016-2023): 16**



**Since 2010**

**NET QUALIFIED --- 32**

**SET QUALIFIED -- - 41**

**GATE QUALIFIED --- 27**

S. No.	Name of Students	Batch	Qualified Year
1	Tokeshwar Dewangan	2011	Net-JRF-2016
2	Virendra Kumar Dhruw	2016	NET-2018
3	Amos Tirkey	2017	NER-JRF-2019
4	Sukhraj Nureti	2017	NET-JRF-2019
5	Subhradeep Majumdar	2018	NET-JRF-2018
6	Jagdish Satyam	2018	NET-JRF-2019
7	Jay Mehra	2018	NET-2018
8	Yogita Sahu	2019	NET-2022
9	Khushboo Soni	2019	NET-2020
10	Bindu Janghel	2019	NET-2020
11	Tarak Chand	2019	NET-JRF-2020
12	Tameshwari Bhuwary	2020	NET-2019
13	Moolchand	2020	NET-2022
14	Anurag Chandrakar	2021	NET-2022
15	Ekta Chandrawanshi	2022	NET-JRF-2016
16	Tripti Richhariya	2022	NET-JRF2018

- **34 Students selected from SoS in Physics & Astrophysics in CG PSC Exam for the post of Assistant Professor in Physics:**

S. No.	Name of the Candidate	Course	Batch
1	Bharat Kumar	M. Sc.	2013-15
2	Sanjay Parghaniya	Ph. D.	2018
3	Varsha Verma	M. Sc.	2013-15
4	Shahishta	M. Sc.	2016-18
5	Shubra Mishra	M. Sc.	1997-99
6	Kishor Kumar	M. Sc.	2013-15
7	Ritesh Golchha	M. Sc.	2009-2011
8	Yugbodh Patle	Ph.D.	2017 (Pursuing)
9	Chuleshwar Sahu	M. Sc.	2012-14
10	Jagdish Kumar Satyam	M. Sc.	2016-18
11	Arti Verma	M. Sc.	1997-99
12	Angesh Chandra	Ph.D.	2009
13	Suman Patel	M. Sc.	2016-18
14	Leena Dilli	M. Sc.	2016-18
15	Juhee Dewangan	M. Sc.	2013-15
16	Arun Kumar Diwakar	Ph.D.	2011
17	Virendra Kumar Dhruw	M. Sc.	2014-16
18	Jay Kumar Mehra	M. Sc.	2016-18
19	Vineet Kumar Mannaday	M. Sc.	2012-14
20	Shukhraj Nureti	Ph.D.	2019 (Pursuing)
21	Jyoti Kaushal	M. Sc.	2016-18
22	Kamal Narayan	M. Sc.	2016-18
23	Nikita Shah	Ph.D.	2019 (Pursuing)
24	Jitendra Kumar Satnami	M. Sc.	2012-14
25	Sanjay Kumar Baghel	Ph.D.	2018 (Pursuing)
26	Nandita Jangde	M. Sc.	2013-15
27	Yuvraj Singh Jagat	Ph.D.	2019 (Pursuing)
28	Amos Tirkey	M. Sc.	2015-17
29	Chhaya Sidar	M. Phil.	2009-10
30	Khileshwar	M. Sc.	2009-11
31	Arvind Kumar Bhediya	M. Sc.	2015-17
32	Deepak Kumar	M. Sc.	2015-17
33	Vaishnavi Markam	M. Sc.	2010-12
34	Hitesh Kumar Netam	M. Sc.	2016-18

- **List of Students placed in different fields (From 2016-2021)**

S. No.	Student Name	Class/ Batch	Designation	Institute / Organization	Selection Year
01	Sanjay Kumar Sao	Ph.D./	Lecturer	Govt. Polytechnic College, Jashpur	2016
02	Hemant Kumar Verma	M.Sc./2013	Lecturer	Govt. Polytechnic College Korba	2016
03	Sandeep Kumar Soni	M.Sc./2010	Lecturer	Govt. Polytechnic College, Khairagarh	2016
04	Bharat Kumar Dewangan	M.Sc./2015	Lecturer	Govt. Polytechnic College, Bijapur	2016
05	Umesh Kumar Sinha	M.Sc./2011	Lecturer	Govt. Polytechnic College, Narayanpur	2016
06	Tokeneswar Dewangan	M.Sc./2011	Assistant Professor	Govt. Eng. College, Bilaspur	2016
07	Mordhwaj Singh Thakur	M.Sc./2013	Lecturer	Govt. Polytechnic College, Gariyaband	2016
08	Ganesh Ram Banjare	M.Phil./2013	Assistant Professor	Govt. Engineering college Raipur	2016
09	Shradha Sahu	M.Sc./2012	Lecturer	Govt. Polytech. College, Mahasamund	2016
10	Dr. Dinesh Kumar Sahu	Ph.D./2013	Senior Scientific Officer	State Forensic Science Laboratory, Raipur	2016
11	Litesh Singh	M. Sc.	DSP, 2016	Police Department, CG Govt.	2016

12	Dr. Y.K. Mahipal	Ph.D./2011	Assistant Professor	SoS in Physics and Astrophysics, Pt. R.S. U. Raipur	2017
13	Mr. C. K. Belodhiya	M.Sc./ 2012	Assistant Professor	SoS in Physics and Astrophysics, Pt. R.S. U. Raipur	2017
14	Kriparam Sahu	M.Sc./ 2013	Assistant Professor	Govt. College, Kurud	2017
15	Chanda Kurrey	M.Sc./2017	Lecturer	School Education, CG Govt.	2017
16	Monisha Marai	M.Sc./2017	Lecturer	School Education, CG Govt.	2017
17	Tankeshwar Dewangan	M.Sc./2012	Asstt. Director	CSIDC, Raipur, CG	2018
18	Ram Kumar Gupta	M.Sc./	Asstt. Director	Industrial Department, CG Govt.	2018
19	Kanchan Bhuary	M.Sc./2015	Account Officer	State Finance Department, CG Govt.	2018
20	Jaiprakash Thakur	M.SC./2017	Lecturer	School Education, CG Govt.	2018
21	Deepak Pareshwar	M.SC./2017	Lecturer	School Education, CG Govt.	2018
22	Arvind Bhediya	M.SC./2017	Lecturer	School Education, CG Govt.	2018
23	Shweta Markande	M.SC./2017	Lecturer	School Education, CG Govt.	2018
24	Prembati Netam	M.SC./2017	Lecturer	School Education, CG Govt.	2018
25	Deepika Sahu	M.SC./2017	Lecturer	School Education, CG Govt.	2018
26	Neha Kujur	M.SC./2017	Lecturer	School Education, CG Govt.	2018
27	Bindeshwari Dhruw	M.SC./2017	Lecturer	School Education, CG Govt.	2018
28	Akriti Tirkey	M.SC./2017	Lecturer	School Education, CG Govt.	2018
29	Payal Verma	M.SC./2017	ADEO	Agriculture Department, CG Govt.	2018
30	Shubha Gupta	M.Sc./2015	Food Inspector	Food and Civil Supplier, CG Govt.	2018
31	Varsha Yadav	M.Sc./2012	Lecturer	School Education, CG Govt.	2018
32	Dr. Shalinta Tigga	Ph.D/2018	Assistant Professor	GGCU Bilaspur, CG	2019
33	Dr. Ishwar Prasad Sahu	Ph.D/	Assistant Professor	IGNTU, Amarkantak, M.P	2019
34	Govind Dhruw	M.Sc./	Sub. Inspector	Service and Excise Tax Dept., C.G. Govt.	2020
35	Anil kumar Patel	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
36	Bhushan Kumar Patel	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
37	Nand lal Verma	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
38	Ranjana Kosre	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
39	Santoshi Sahu	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
40	Shweta Gajendra	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
41	Khemlata Sahu	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
42	Menaka Sahu	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
43	Damin Sahu	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
44	Virendra Dhruw	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
45	Pawan Sahu	M.Sc./2013	Lecturer	School Education, CG Govt.	2021
46	Gourav Dalal	M.Sc./2016	Lecturer	School Education, CG Govt.	2021
47	Mohan Khubchandani	M.Sc./2013	Lecturer	School Education, CG Govt.	2021
48	Manisha Tirkey	M.Sc./2019	Lecturer	School Education, CG Govt.	2021
49	Bhushan Yadav	M.Sc./2013	Lecturer	School Education, CG Govt.	2021
50	Prem Raj Barik	M.Sc./2012	Lecturer	School Education, CG Govt.	2021
51	Uma Shankar Patel	M.Sc./2017	Lecturer	School Education, CG Govt.	2021
52	Rashmi Verma	M.Sc./2017	Lecturer	School Education, CG Govt.	2021
53	Neha Banjare	M.Sc./2017	Lecturer	School Education, CG Govt.	2021
54	Kishan Janghel	M.Sc./2017	Lecturer	School Education, CG Govt.	2021
55	Leena Sahu	M.Sc./2013	Lecturer	School Education, CG Govt.	2021
56	Yogita Verma	M.Sc./2013	Lecturer	School Education, CG Govt.	2021
57	Damyanti Sahu	M.Sc./2013	Lecturer	School Education, CG Govt.	2021

• List of some Distinguished Alumni

S. No.	Alumni	Course	Batch	Current Position
01	 Prof. R. K. Pandey	M. Sc. Ph. D.	1974 1980	Ex-Vice-chancellor, AMITY University Raipur
02	 Dr. Ashok Ambastha	M. Sc.	1974	Director, Solar Observatory, Udaipur (Retd.)
03	 Prof. S. K. Pandey	M. Sc.	1975	Ex Vice chancellor, Pt. Ravishankar Shukla University, Raipur
04	 Dr. Asim Gangopadhyaya	M. Sc.	1976	Professor, Dept. of Physics, Loyola Univ. Chicago, USA
05	 Prof. Nandita Shrivastava	M. Sc.	1982	Udaipur Solar Observatory (PRL)
06	 Ms. Reeta Shandilya	M. Sc. M. Phil.	1985, 1986	IAS, Govt. of Chhattisgarh
07	 Mr. Nand Lal Choudhary	M. Sc.	1985	Joint Director, WCD
08	 Dr. Nandani Garg	M. Sc.	1989	Sr. Scientist, BARC, Mumbai
09	 Dr. Niharika Thakur	M. Sc.	1991	NASA, USA

10		<b>Prof. Padmakar S. Parihar</b>	<b>M. Sc., Ph. D.</b>	<b>1993- 2001</b>	<b>IIA, Bangalore</b>
11		<b>Prof. Gulab Dewangan</b>	<b>M. Sc.</b>	<b>1995</b>	<b>IUCAA, Pune</b>
12		<b>Mr. Ajay Yadav</b>	<b>M. Sc.</b>	<b>1998</b>	<b>IG, Intelligence Chhattisgarh Police</b>
13		<b>Mr. Kirtiman Singh Rathore</b>	<b>M.Sc.</b>	<b>1999</b>	<b>Commissioner, Nagar Nigam, Birgaon, Raipur</b>
14		<b>Rajesh Singh</b>	<b>M. Sc.</b>	<b>2003</b>	<b>Lt. COL, Indian Army</b>
15		<b>Dr. Vivek Agrawal</b>	<b>Ph. D.</b>	<b>2005</b>	<b>Scientist, ISRO Bangalore</b>

#### • **Inter-institutional Collaboration/MoU's:**

**SoS in Physics & Astrophysics, Pt. RSU has signed Memorandum of Understanding (MoU) with the following Reputed Institutes.**

- 1. Aryabhata Research Institute of Observational Science (ARIES), Nainital (signed on June 11, 2011):**
  - To provide advanced astronomical observational facilities to Faculty/students of Pt RSU.
  - To provide training to PG/Research students of Pt RSU.
- 2. Inter University Centre for Astronomy & Astrophysics (IUCAA), Pune (signed on Dec. 19, 2012).**
  - To provide research facilities to the teachers/students of University through sky watch and outreach activities in the field of Astronomy & Astrophysics. Popularization of A & A in general Public.
- 3. Oil and Natural Gas Corporation Limited (ONGC), Dehradun (signed on April 5, 2011):**
  - To strengthen Industry academia linkage by Instituting ONGC Scholarship @5000/month for one year duration to topper student in M. Sc. Prev.

#### **Admission Procedure**

Admission for M.Sc., M.Phil. and Ph. D course are accomplished on the basis of the marks obtained in the entrance examination including sports achievements, NCC/NSS marks as per the policy of the University/UGC/State Government.

#### **Master of Science (M.Sc.)**

##### **Eligibility:-**

- Bachelor of Science (B.Sc.) in PCM with a score of at least 50 % marks.
- The reservation in seats and relaxation in the qualifying marks for SC/ST/OBC/PWD and other categories shall be as per the rules of the Central/State Government policy whichever is applicable.

## Master of Philosophy (M.Phil.) / Doctor of Philosophy (Ph.D.)

### Eligibility:-

01. Master of Science (M.Sc.) in Physics with a score of at least 50% marks.
02. The reservation in seats and relaxation in the qualifying marks for SC/ST/OBC/PWD and other categories shall be as per the rules of the Central/State Government policy whichever is applicable.

## Infrastructure

All the Classroom/Seminar Halls are fully air-conditioned and equipped with ICT facilities. Research Laboratories are also air-conditioned with all the necessary facilities available for synthesis of materials and the equipments for their characterizations. A & A laboratory has facilities including 8" and 14" Telescopes with back-end instruments which can be installed in the (Late) Prof. R. K. Thakur memorial Observational Dome and a computer lab with high end PCs for astronomical data reduction and analysis. Some world class instrumental facilities such as XRD (Bruker), FTIR (Shimadzu), DSC/TGA (Mettler), High Vacuum Coating Units (Indigenous), Spectrofluorimeter (Shimadzu) etc. are available for the teaching and research. A new space has been created for classroom teaching and laboratory experiments related to Physics of Nano-materials under DST-FIST Programme which has been named as Prof. Suresh Chandra Memorial Laboratory to honour the founder head of the department (late) Prof. Suresh Chandra. The Premise of the School enjoys a green/eco-friendly environment which provides the conducive ambience for learning.

M. Sc. Laboratories	Research Facilities
1. Astrophysics Research Laboratory	1. Telescope (6", 8" & 14")
2. Computer Laboratory	2. Mobile Planetarium
3. IUCAA centre for Astronomy Research & Development (ICARD)	3. Impedance Spectroscopy Analyzer
4. Materials Science Research Laboratory	4. X-Ray Diffraction (XRD)
5. Nano-Physics Research Laboratory	5. Fourier Transform Infra-Red (FTIR)
6. Optics Laboratory (General)	6. Differential Scanning Calorimetry (DCS)
7. Electronics Laboratory (General)	7. Thermal Gravimetric Analysis (TGA)
8. Luminescent Materials Research Laboratory	8. UV Spectrophotometer/ Spectrofluorometer
	9. High Vacuum Coating Unit
	10. Ball Mill

### M. Sc. Laboratories



Electronics Laboratory



Optics Laboratory



Solid State Laboratory



Computer and Networking Laboratory



ICARD



Astrophysics Laboratory

## Physics of Nano materials Lab: (Prof. Suresh Chandra Memorial Laboratory)



**Class Room**



**Library**

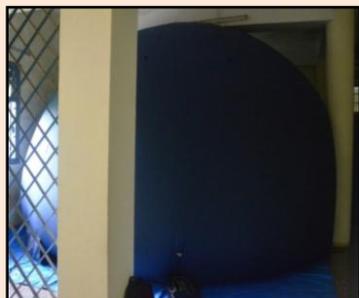


**Computer Lab**



**High Vacuum Coating Unit**

## Astrophysics Laboratory



**Mobile Planetarium**



**Dome**



**Telescope: 6 inch**



**8 inch**



**14 inch**

## Research Facilities



**X-Ray Diffraction (XRD)**



**Infrared Spectroscopy (FTIR)**



**Thermal Gravimetric Analysis (TGA)**



**Differential Scanning Calorimetry (DCS)**



**Spectrofluoriphotometer**



**UV-Visible Spectrometer**



**TLD Reader**

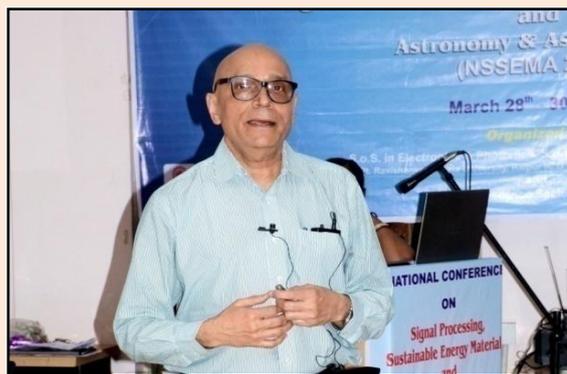


**Planetary Ball Mil**

**National/Int. Conferences/Workshop/Symposium Organized by Department [2016-2021]**

S. No.	Title	Convener	Duration
1.	National Conference on Signal Processing, Sustainable Energy Materials and Astronomy And Astrophysics (NSSEMA -2017)	Prof. Nameeta Brahme Prof. Kavita Thakur	28-30 <sup>th</sup> March 2017
2.	Refresher Course in Physics for College/University Teachers	Prof. D. P. Bisen	24 October to 13 November 2019
3.	One Day Workshop on Nano Science & Nano Technology	Prof. Nameeta Brahme	26 <sup>th</sup> August 2017
4.	Two Days National Workshop on Zero Shadow Day	Prof. Nameeta Brahme Dr. N. K. Chakradhari	21-22 <sup>nd</sup> April 2018
5.	Southampton IUCAA Training for Astronomical Research & Education (SITARE)	Prof. Nameeta Brahme Dr. N. K. Chakradhari	17 <sup>th</sup> – 19 <sup>th</sup> August 2018
6.	6 <sup>th</sup> International Conference on Luminescence and its Applications (ICLA-2019)	Prof. Nameeta Brahme Prof. D.P. Bisen	7 <sup>th</sup> -10 <sup>th</sup> January 2019
7.	Refresher Course in Physics for College/University Teachers	Prof. Nameeta Brahme	16-28 <sup>th</sup> August 2021
8.	1 <sup>st</sup> International Conference on Functional Materials (ICFM-2022)	Dr. Y. K. Mahipal	24 <sup>th</sup> -26 <sup>th</sup> August 2022
9.	International Workshop on Science and Technology in Astronomy Research (STAR)	Dr. N. K. Chakradhari	15 <sup>th</sup> -18 <sup>th</sup> October 2022
10.	One Day Seminar on Nobel Prize 2022 in Physics	Dr. Y. K. Mahipal Mr. C. K. Belodhiya	26 <sup>th</sup> November 2022
11.	Refresher Course in Physics for College/University Teachers	Prof. Nameeta Brahme	12-26 <sup>th</sup> December 2022
12.	2 <sup>nd</sup> National Conference on Signal Processing, Sustainable Energy Materials and Astronomy & Astrophysics NSSEMA-2023	Prof. N. Brahme Prof. Kavita Thakur	16 <sup>th</sup> -18 <sup>th</sup> March 2023

**National Conference on Signal Processing, Sustainable Energy Materials and Astronomy and Astrophysics (NSSEMA -2017), March 28-30, 2017**



**One Day workshop on Nano Science and Nano Technology, 26<sup>th</sup> August 2017.**



## Two Days National Workshop on Zero Shadow Day, 21-22 April 2018.



## SITARE Workshop, 17<sup>th</sup> August 2018.



**6<sup>th</sup> International Conference on Luminescence and its Applications (ICLA-2019),  
7-10 January 2019**



**1<sup>st</sup> International Conference on Functional Materials (ICFM-2022), 24-26 August 2022.**



**इंटरनेशनल कॉन्फेंस रविवार में अमरीकी साइटस्ट प्रो. केवीआर चॉरि ने कहा**  
**हाइड्रोजन के जरिए ईंधन की आपूर्ति पर आत्मनिर्भरता हासिल कर सकता है भारत**

**एक विचार से बदलवा**  
 प्रो. केवीआर चॉरि ने बताया, उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है।

**विद्युत के लिए अग्रिम**  
**मदद की जरूरत**  
 उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है।

**कार्यों को पूरा करने में सक्षम होगा**  
 उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है।

**ऊर्जा की खपत कम करने पर है फोकस**  
 उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है। उन्होंने कहा कि भारत को आत्मनिर्भरता हासिल कर सकना है।



**International Workshop on Science and Technology in Astronomy Research (STAR-2022),  
15-18 October 2022**



**One Day Seminar on Noble Prize 2022 in Physics, 26<sup>th</sup> November 2022**



**2<sup>nd</sup> National Conference on Signal Processing, Sustainable Energy Materials and Astronomy & Astrophysics NSSEMA-2023, 16-18<sup>th</sup> March 2023.**



**Extra Curricular Activities**



**Cleanliness Drive**



**Plantation 02.08.2017**



**Dikshaarambh 21.09.2019**





**150<sup>th</sup> Birthday Celebration of Mahatma Gandhi 30.09.2019**



**Parent teacher's meet 17.08.2019**



**Online Alumni Meet-2021 on 14.08.2021**



**Induction Program organised for M. Sc. First Students on 16.08 .2022**



**Constitution Day celebration on 26<sup>th</sup> November 2022**



**Annual Sports Meet organized during 24-25<sup>th</sup> January 2023**



**Training Program in USIC Workshop under skill development**

**Extension Activities**



**Organized Public Awareness Program of Naturopathy on Mahatma Gandhi evam Swasth Swavlamban in collaboration with Chhattisgrah Naturopathy Association on 07.10.2021.**



- Distribution of Kadha on 12.10.2021.
- Free camp for corona testing on 06.11.2021
- Starts Vaccination Center in collaboration with Ayurvedic College from 26.03.21.
- Adopted 7TB Patient and provide nutritious diet for seven months.
- Donation of furniture for Akanskha School of Specially-abled children 16.02.2023.
- Donation of Water Cooler for Banjari mandir PRSU Raipur on 07.10.2021.

**Faculty engagement in social services**





रविवि में छात्रों ने देर रात शुरू किया चंद्र ग्रहण को देखना,  
16 की रात 1.31तक हुआ शुरु, 17 जुलाई की सुबह 4.30 तक रहा  
**ग्रहण काल का अनोखा नज़ारा,  
पल-पल बदलता रहा चांद**

आधी रात ऐसे हुआ चांद का दीवार



राजपुर। राहुग्रहणी की विलक्षण को देर रात 1.31 तक देखा जा सका। छात्रों ने देर रात शुरू किया चंद्र ग्रहण को देखना, 16 की रात 1.31 तक हुआ शुरु, 17 जुलाई की सुबह 4.30 तक रहा ग्रहण काल का अनोखा नज़ारा, पल-पल बदलता रहा चांद।

राजपुर। राहुग्रहणी की विलक्षण को देर रात 1.31 तक देखा जा सका। छात्रों ने देर रात शुरू किया चंद्र ग्रहण को देखना, 16 की रात 1.31 तक हुआ शुरु, 17 जुलाई की सुबह 4.30 तक रहा ग्रहण काल का अनोखा नज़ारा, पल-पल बदलता रहा चांद।

**दो घंटे पहले ही चंद्रग्रहण देखने पहुंच गए थे बच्चे**

पं. रविशंकर शुक्ल विश्वविद्यालय परिसर में टेलीस्कोप से देखा नजारा



149 साल बाद 16 जुलाई, मंगलवार को गुरु पूर्णिमा के दिन पड़ने वाले ख़ास चंद्रग्रहण का नजारा दिखाने में डी.ए.ए. विश्वविद्यालय परिसर में टेलीस्कोप की व्यवस्था की गई है। इसे देखने दो घंटे पहले ही बच्चे विश्वविद्यालय परिसर पहुंच गए थे। इस संबंध में प्राइम रियरिबर शुक्ल विश्वविद्यालय के डॉ. पंडित चक्रधारी ने बताया कि करीब 10 बच्चे से ही बच्चों का आना शुरू हो गया था। इसके अलावा प्राइम रियरिबर शुक्ल विश्वविद्यालय के फिजिक्स विभाग के विद्यार्थी भी मौजूद थे, बच्चों ने टेलीस्कोप पर बृहस्पति व उसके चार चंद्रमा, शनि ग्रह को रिंग, चंद्रमा के गट्टे आदि देखे, आसमान पर आंशिक बादल छाए रहने के बावजूद चंद्रमा

सुबह 4.30 बजे शुरू हुआ और 4.20 मिनट पर ग्रहण समाप्त होगा, लेकिन प्रतिछाया चंद्रमा के अस्त होने तक नजर आएगी, समाचार लिखे जाने तक ग्रहण शुरू नहीं हुआ था।

**17.07.2019 Lunar Eclipse**

**हरिभूमि**  
रायपुर - रायपुर भूमि  
22 Dec 2020

**17वीं शताब्दी के बाद हुआ यहाँ का 'महान संयोजन' अब 15 मार्च 2080 को बनेगी बिल्कुल यही स्थिति**

संयोजनीय भाषा में इस स्थिति को कहा जाता है महान संयोजन या दि. जो. कर्जजतन

संयोजन की नज़र में चंद्र ग्रहण



**22.12.2020 Jupiter-Saturn Conjunction Event**

**Lunar Eclipse 08 Nov 2022**



**Dharswa College 28 Nov 2022**

**Govt. College Rajim 27 Feb 2023**

**SPC Rajim 17 Feb 2023**



**Naveen Girls college, Raipur, 21 Feb 2023**

**Seth Phool chand College, Rajim 27 Feb 2023**



06. **One Patent Published by Prof. N. Brahme; The Patent office Journal No. 16/2022 dt. 24.04.2022**

07. **Awards and Honour received by the Students**

01. Miss Yojaswi Dewangan has awarded achievers of the SoS in PRSU, Raipur in the field of academy in National Workshop on DigitALL “Innovation and Technology for Gender Equality” organized by Centre for Women’s Studies, Pt. RSU Raipur on 2<sup>nd</sup> March 2023.
02. Miss Unnati Pandey secured second position for debate competition organized by Bank of Baroda on 21<sup>st</sup> March 2023.
03. (a) Mr. Yugbodh Patle- awarded best oral in ICFM-2022.  
(b) Ms. Manju Sahu- awarded best poster in ICFM-2022.  
(c) Mr. Niranjana Kumar- awarded best oral in NSSEMA-2023.  
(d) Ms. Neekita Shah- awarded best poster in NSSEMA-2023.  
(e) Ms. Deepti Sahu and Ms. Shrutika Tiwari – awarded II prize for poster presentation in NSSEMA-2023.

## School of Studies in Physics & Astrophysics

**Total Publications of the department since inception**  
**544**

**Total Publications of Current Faculties**  
**331**

**Total Publications of the Department from 2016-2023**  
**110**

**Received DST-PURSE project of Rs 10 crore, Co-PI: Prof. D. P. Bisen**

**DST-FIST Project Level 0- 37 Lakh  
DST-FIST Project Level 1- 97 Lakh**

**Popularity Index  
650/40  
(16.25)**

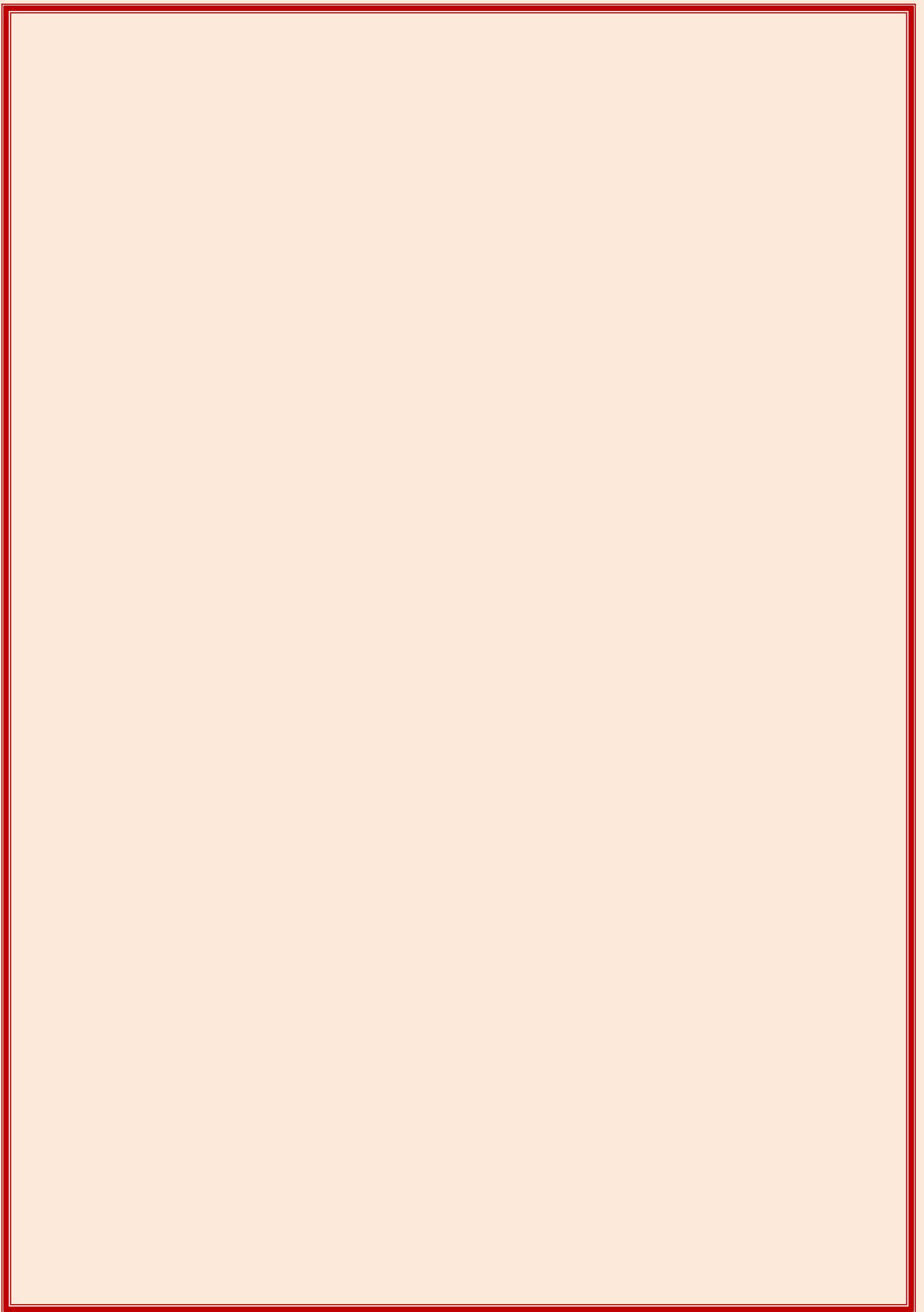
**One Patent published by Prof. N. Brahme, The Patent office Journal No. 16/2022 dt. 24.04.2022**

**National /International Conferences/ Workshops Organized**  
**Since 2016-----09**  
**Since inception-----27**

**Year of Establishment: 1972**

**Founder Head: Prof. S. Chandra**







**School of Studies in Physics & Astrophysics**  
**Pt. Ravishankar Shukla University, Raipur (C. G.), 492010**  
**Email Id: [hodphysics98@gmail.com](mailto:hodphysics98@gmail.com),**  
**Contact number: 0771-2262864**