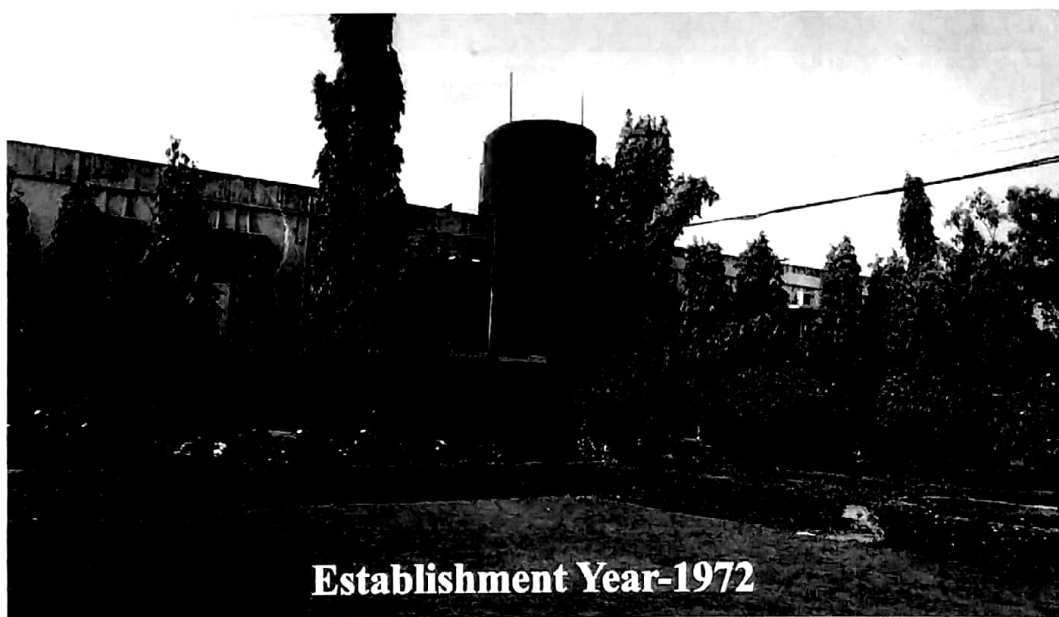




School of Studies in Chemistry

Pt. Ravishankar Shukla University

Amanaka, G. E. Road, Raipur (C.G.), India-492010



Establishment Year-1972

**DST FIST (Level-I) SPONSORED
&
UGC-SAP (DRS-II) ASSISTED DEPARTMENT**

www.prsu.ac.in

About the Department

School of Studies in Chemistry is one of the oldest and most prominent departments of the University. It was founded in 1972 under the dynamic leadership of Professor Shiv Gopal Tandon. This department earned significant popularity on national/international scenario under the able guidance and headship of Late Prof. R. K. Mishra, Prof V K Gupta, Late, Prof G L Mundhara, Prof Rama Pande, Prof K S Patel and Prof. K. K. Ghosh. The department is fortunate in having some distinguished teachers like Dr. G. S. Pandey and Dr J. S. Tiwari who have retired. The department offers postgraduate and research degree programs in Chemistry. This Department has been selected as FIST sponsored Department (2015-2020) under DST (Govt. of India), Ministry of Science & Technology for building up the infrastructure for postgraduate teaching and research. The UGC has also supported the department with the SAP-DRS programme since 2010. The major fields of research of the faculties of the department are :

- 1) Environmental Chemistry: Air quality monitoring and analysis, Characterization of wet and dry precipitation, Atmospheric organics including carbonaceous fractions, volatile organic compounds, polycyclic aromatic hydrocarbon etc. Organic acids and aerosol tracer. Air quality receptor modeling for source characterization of air pollution mass. ;*
- 2) Nanotechnology: nano particle synthesis and its applications,*
- 3) QSAR and Drug Designing for Anti-Tumor/Anti-Cancer Activity*
- 4) Surface Chemistry,*
- 5) Detoxification of pesticides and chemical warfare agents, Reactivation kinetics of acetylcholinesterases.*

22 Major and 15 minor individual/personal/collaborative research projects have been sanctioned from different national funding agencies, out of that nine are under progress and 12 have been completed. Funding agencies are CCOST, MPCOST, UGC, DST, ISRO-Bangalore, CSIR, DRDO Delhi, Ministry of Environment & Forests-NewDelhi. The department has produced eminent chemists, NET, GATE and SLET qualified candidates in addition to generation of trained human resources in different spheres of Chemical Sciences.



Head : Dr. Manas Kanti Deb
(Ph.D., INSA-JSPS Fellow)

Specialisation : Analytical Chemistry and Environmental Chemistry.

Email : debmanas@yahoo.com

Contact : 9425503750

VISION

- To make quality higher education accessible to all sections of society, including the tribal population of Chhattisgarh.
- To provide quality education in the disciplines of arts, humanities, social sciences, natural sciences and other disciplines of learning.
- To develop human resource with world class competence and skills in the respective disciplines.

MISSION

- To develop the university as a centre of excellence for higher education and knowledge resource
- To promote understanding the value of self-learning, creativity and competence building:
 - ◆ By providing world-class education through university-teaching departments and schools.
 - ◆ By promoting quality research in university schools and affiliated colleges.
 - ◆ By creating environment conducive to nurture creativity and scientific temper.










Academic Programs Offered

Course Name	Seats	Eligibility	Admission Procedure
Ph.D.	As per vacancy	M. Sc. Or M. Phil. Chemistry	Entrance Test
M. Phil.	10	M. Sc. Chemistry	Entrance Test
M.Sc.	35+15 (Payment Seat)	B. Sc.	Entrance Test
Choice Based Credit System in Master Course in Chemistry	As per university norms	As per university norms	As per university norms


MoUs/Scientific Collaboration

- Tri-Party MoU Between PRSU, DRDE Gwalior and CDRI Lucknow.
- MoU between PRSU and Univeristy STUDI DI BRESCIA, ITALY.
- Cancer Research Laboratory in Radiation, Biology and Health Division, Bhabha Atomic Research Centre, Trombay, Mumbai for in-vitro and in-vivo studies
- Institute of Science, Nagpur for Software Drug Designing
- Defence Research Development Organisation, Gwalior
- Central Drug Research Institute, Lucknow
- University degli Studi di Brescia, Italy
- Department of Environmental Engineering & Science, Chia Nan University, Taiwan
- National Metallurgical Laboratory, Jamshedpur
- Desert Research Institute, U.S.A.
- Indian Institute of Tropical Meteorology, New Delhi
- National Environmental and Engineering Research Institute, Nagpur
- Moscow University.
- Federal University of Santa Catarina, Brazil.
- University Hospital Biomedical Research Center, Sokolska, Hradec Kralove.
- University Degli Studi di Torino, Torino, Italy.

TEACHING FACULTY

S. No.	Name	Designation	Specialization
1.	Dr. K. S. Patel (Humboldt Research Fellow) patelks_55@hotmail.com	 Professor	Environmental, Analytical Chemistry
2.	Dr. Kallol K. Ghosh (INSA-JSPS & James Chair Visiting Fellow) kallolkghosh@yahoo.co.in	 Professor	Physical Chemistry, Physical Organic Chemistry and Surface Chemistry
3.	Dr. Manas Kanti Deb (INSA-JSPS Fellow) debmanas@yahoo.com	 Professor & Head	Analytical Chemistry and Environmental Chemistry
4.	Dr. Shamsh Pervez (Fulbright Research Fellow) shamshpervez@gmail.com shamshp@yahoo.co.in	 Professor	Physical Chemistry, Environmental Science, Inorganic Chemistry
5.	Dr. (Smt.) S. A. Bhoite sa.bhoite10@gmail.com	 Professor	Physical Chemistry, Nuclear Chemistry and Chemical Kinetics
6.	Dr. Manish Rai mkjkchem@gmail.com	 Associate Professor	Organic Chemistry and Environmental Chemistry
7.	Dr. Manmohan Lal Satnami (TWAS Fellow) manmohanchem@gmail.com	 Assistant Professor	Inorganic Chemistry, Physical Organic
8.	Mr. Bhupendra K. Sen senbk20@yahoo.in	 Assistant Professor (Contract)	Inorganic Chemistry, Organic Chemistry, Analytical Chemistry, Spectroscopy
9.	Bharati Verma bharati22july@gmail.com	 Assistant Professor (Contract)	Organic Chemistry, Bioinorganic Chemistry

SUPERANNUATED FACULTY

1.	Dr. (Mrs.) Rama Pande rama.pande@gmail.com	 UGC-BSR Fellow	Organic Chemistry, QSAR, Drug Design
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VISITS OF EMINENT SCIENTISTS AND PROFESSORS IN THE DEPARTMENT

S. No.	Name of Resource Person	Affiliation	Year
1.	Prof. John G Watson	Research Professor, Desert Research Institute, Reno, NV, USA and Expert, USEPA	2011
2.	Prof. Judith C Chow	Research Professor, Desert Research Institute, Reno, USA and Expert, USEPA	2011
3.	Prof. Barbara Zielinska	Research Professor, Desert Research Institute, Reno, USA	2012
4.	Prof. Robert Huber (Nobel Laureate)	Nobel Prize Chemistry-1988 Max Planck Institute of Biochemistry Martinsried, Germany, 25 Feb, 2014	2014
5.	Prof. Girjesh Govil	Department of Chemistry, TIFR, Mumbai	2015
6.	Prof. Goverdhan Mehta	School of Chemistry, University of Hyderabad	2015
7.	Prof. Saurav Pal	Director, National Chemical Laboratory, Pune	2014
8.	Prof. Tarashankar Pal	Indian Institute of Technology, Kharagpur	2014
9.	Prof. P. S. Kalsi	Department of Chemistry, Punjab Agriculture University, Ludhiana	2015
10.	Prof. Lallan Mishra	Department of Chemistry, Banaras Hindu University, Varanasi	2015
11.	Prof. N. Sathyamurthi	Indian Institute of Science and Education Research (IISER), Mohali	2015
12.	Prof. Uday Maitra	IISc, Bangalore	2015
13.	Dr. Ramakrishna G. Bhat	Department of Chemistry, IISER, Pune	2015
14.	Dr. Deepak Chopra	Department of Chemistry, IISER, Bhopal	2016
15.	Prof. Nahid Siddiqui	Department of Chemistry, King Fahad University of Petroleum & Minerals, Saudi Arabia delivered invited lecture in Chemistry Department	2016

Facilities (Major Equipment)

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|-----------------------------|-------------------------------|
| • F-AAS, CV -AAS, GF -AAS | • TD-GC/MS-MS* |
| • DRS/ATR -FTIR | • Ion Chromatography* |
| • HPLC | • C,H,S,N Analyzer* |
| • GC | • Automated Solvent Analyzer* |
| • Fluorescence Spectrometer | • Solid Phase Extractor* |
| • Fluorescence Microscope | • Tensiometer* |
| • UV-Vis Spectrometer | • Zeita Potential Analyzer* |
| | • Electrochemical Workstation |

*Under the process of procurement

CONFERENCES ORGANIZED

(A) INTERNATIONAL CONFERENCES

Type	Program	Date	Source of funding	Outstanding participants
Conferences	47th Annual Convention of Chemists & International Conference on Recent Advances in Chemical Sciences.	22-27, Dec. 2010	UGC, DST, DRDO, CCOST	Prof. M. Yamashita, Japan Prof. M.K. Jain, USA Prof. A.K. Singh, I.I.T. Mumbai Prof. K.V.R. Charry, TIFR, Mumbai Prof. K.N. Singh, BHU Prof. B.K. Patel I.I.T. Guwahati
Symposium	International Symposium on Novel Approaches to Air Quality Management and Improvement in India.	5-7, Sep. 2011	UGC, International Council of Clean Transportation (ICCT) California and DRI, NV, USA	Prof. J.G. Watson, USA Prof. Judith Chaw, USA Prof. Suresh Tiwari, IITM, New Delhi Prof. Ajay Taneja, Agra University
Symposium	International Symposium on Environmental, Analytical & Toxicological Issues of Speciation in Atmospheric Organic Pollutants	6-7, Dec. 2012	Desert Research Institute, Reno, NV and UGC	Prof. Barbara Zielinska, USA Prof. Anjali Srivastava, NEERI

(B) NATIONAL CONFERENCES

Type	Program	Date	Source of funding	Outstanding Speakers
Conference	National Conference on Recent Trends in Chemical Science	23-25, Jan. 2014	UGC	Prof. R.P. Tripathi CDRI Prof. Kabir-ud Din, Aligarh, Prof. Umesh Kulshrestha, JNU
Seminar	One Day National Seminar on Water, Waste Management and Energy Problems in Bastar	1 March 2013	CGCOST	Prof. S.K. Sahu, Sambalpur Prof. M.L. Naik, Raipur
Workshop	Workshop on "How to Write Research Project" (Under Joint Auspices with the HRDC)	12-19, Jan. 2012	UGC	
Celebration	International Year of Chemistry,	29, Nov. 2011	CGCOST	Prof. Girjesh Govil Prof. K.S. Siddique Prof. S.K. Srivastav
Workshop	Chemistry Teacher Training Workshop	6-8, Oct 2015	Jointly by RSC & Pt. RSU, Raipur	Prof. M.M. Sharma Prof. Girjesh Govil Prof. Sourav Pal Prof. R.V. Bhat
Conference	17th National Conference on Surfactants, Emulsions and Biocolloids (NATCOSEB -XVII)	4-6, Nov. 2015	UGC, DST, CCOST DRDO, MOES	Prof. S.P. Moullick Prof. A.B. Mandal Prof. V.K. Aswal Prof. D.V.S. Jain Prof. D.K. Chhatteraj

(C) STATE CONFERENCES

Type	Organized Program	Date	Source of funding	Outstanding Speakers
Conference	8th Chhattisgarh Young Scientists Congress	27-28, Feb. 2010	Jointly by CCOST & Pt. R.S.U.	Prof. A. Sharma Prof. R.K. Thakur
Conference	12th Chhattisgarh Young Scientists Congress	17-19, Feb. 2014	Jointly by CCOST & Pt. R.S.U.	Prof. R. Chidambaram Prof. M.M. Sharma Prof. R.A. Mashelkar Prof. Girjesh Govil
Seminar	National Science Day	10 March, 2014	CCOST Raipur	Prof. T. S. Pal Prof. Anjali Pal
Seminar	National Science Day	10 March, 2015	CCOST Raipur	Prof. P.S. Kalsi Prof. Lalan Mishra Ret. Prof. S.G. Tandon Prof. D.P. Quity
Seminar	National Science Day	12 March, 2016	CCOST Raipur	Dr. Deepak Chopra Prof. P.S. Kalsi