

# **GEOLOGY**

## **Departmental Profile**

### **1. Brief History**

The State of Chhattisgarh possesses rich mineral wealth of rock and mineral resources. A scientific and systematic exploration of available rocks and minerals require a centre of higher learning. With these aims and objectives the Department of Geology was established in 1956 under the founder head Dr Mukul Ghosh.

In its long journey of fifty-seven years, the department has flourished and is now self reliant. The department is indebted to late Dr W.N. Bansode, Late Dr T.P. Paikra and Dr G.S. Parashar. The department was initiated with meager means, but now the department has latest and sophisticated instruments, equipments, computers and software etc. Our department has unique geological museum having minerals rocks (including rare American collections), fossils (Ward's Collection) and crystal models etc. Departmental Library comprises of 4,000 books including rare Journals, memoirs and reports of Geological Survey of India etc. The Post Graduate classes initiated in 1967, and in 1984, the department is also registered as a recognized Research Centre of Pt Ravishankar Shukla University, Raipur. Presently many students are registered for Ph.D.

### **2. Vision of the Department:**

**To become an established department in the field of Earth sciences through advance curriculum and researches for optimum use of earth resources.**

### **3. Mission of the department:**

- **C.G. is a mineral rich state which provides a good field laboratory for geology student.**
- **Our department is the oldest department in the state and we bear the Responsibility to cater the students from whole of the state.**
- **The aim of our department is to provide an extra practical training based knowledge to the students.**
- **Our P.G. curriculum has been designed to fulfill the need of our vision.**
- **Our mission is to produce skilled professional to satisfy the need of the mineral based industries of the state.**
- **We also intend to do training and capacity building programme for student.**

## 4.

# SWOC ANALYSIS

	<p style="text-align: center;"><b>S</b> <b>STRENGTH</b></p> <p>S1. Well equipped labs. S2. Well established Geological Museum. S3. Enriched P.G. Departmental Library. S4. Consultancy by Experts</p>	<p style="text-align: center;"><b>W</b> <b>WEAKNESS</b></p> <p>W1. Shortage of teaching &amp; supporting staff. W2. Shortage of lecture room. W3. Underdeveloped research lab. W4. Internet facilities not provided</p>
<p style="text-align: center;"><b>O</b> <b>OPPORTUNITY</b></p> <ul style="list-style-type: none"> <li>• Funds can be generated through:</li> <li>• Consultancy.</li> <li>• Student fee.</li> <li>• Alumni.</li> <li>• Janbhagidari</li> <li>• Rusa</li> <li>• CSR</li> <li>• Mineral rich state.</li> </ul>	<p style="text-align: center;"><b>S-O</b></p> <ol style="list-style-type: none"> <li>1. With well equipped lab and well qualified staff, we can run Various courses.</li> <li>2. Training and coaching programme For students to get good jobs.</li> </ol>	<p style="text-align: center;"><b>W-O</b></p> <ol style="list-style-type: none"> <li>1. Enhancement of research lab to facilitate research students.</li> <li>2. Infrastructural development.</li> <li>3. Internet Facilities.</li> </ol>
<p style="text-align: center;"><b>C</b> <b>CHALLENGES</b></p> <ul style="list-style-type: none"> <li>• Lack of good students used in in P.G. Classes due to other PG departments in Raipur (NIT, with PT RSU) while feeding geology is Department is our deptt.</li> <li>• Geology does not taught at school level, so the students are unaware of the subject</li> </ul>	<p style="text-align: center;"><b>S-C</b></p> <ol style="list-style-type: none"> <li>1. To inspire student's awareness programme in schools.</li> <li>2. Motivation of UG students to get admission in PG by staff and PG students.</li> </ol>	<p style="text-align: center;"><b>W-C</b></p> <ol style="list-style-type: none"> <li>1. Introduction of new technology Geology (Remote Sensing &amp; GIS and other geological software).</li> <li>2. Reframing of job-oriented courses  Maximum field exposure (as Field science) and less classroom teaching.</li> </ol>

## 5. Action plan for next five years (Based on SWAC ANALYSIS):

1. To meet out the shortage of research lab and lecture rooms it is essential to provide two class rooms for UG and PG Students and a research lab for research scholars.
2. For strengthening the knowledge of geology, expert lecture will be invited from alumni.
3. Recruitment of teaching and supporting staff is essential. It should be brought into the notice of the state Govt
4. Available facilities of qualified staff equipped lab; instruments would be utilized for consultancy.
5. Funds for various activities would be generated by consultancy student fee collection, alumni, Jan bhagidari samiti Rusa and ISR.
6. There are several mineral based industries, and mineral resources present in the Chhattisgarh state so there are lot of opportunity to get the job for our students.

## 6. Thrust areas of Research:

The research projects and PhD thesis submitted in the department are mainly in following thrust area:

- 1) Sedimentology and 2) Hydrogeology.

## 7. Faculty Profile

1. **Name** - **Dr. S.S. Bhadauria (Professor) Attached**  
DOB - 10/12/1959  
Qualification - M. Tech, Ph. D  
Specialization - Hydro Geology  
Teaching Experience - UG. 34 year  
PG 22 year
2. **Name** - **Dr. R. Guhey (Professor) Attached**
3. **Name** - **Pradeep Thakur (Asst. Professor)**  
DOB - 28/10/1958  
Qualification - M.Sc.  
Specialization - Stratigraphy, Physical Geology  
Teaching Experience - UG 37  
PG 30
4. **Name** - **Dr. Sandeep Vansutre (Asst.Professor) Attached**

## Department at a Glance

- Year of Establishment - UG – 1948  
PG – 1956
- Number of Teaching staff - Professor – 02  
Asst. Professor – 02
- No. of Supp staff - Lab Technician – 01  
Lab Attendant – 01  
Farrash – 01
- No. of Students - B.Sc. 1 – 107  
B.Sc. 2 – 72  
B.Sc. 3 – 64  
M.Sc. – 42  
Ph D – 03
- Results - B.Sc. 1 – 83.10  
B.Sc. 2 – 98.70  
B.Sc. 3 – 83.92  
M.Sc. – 100%
- Publication – List enclosed
- Ph. D. Awarded - 04
- Research Project Completed – 08
- Project / Dissertation/ Field Training – Compulsory for M.Sc. Students

## Infrastructure (Photographs Attached)

- I. Laboratory Facilities - UG Lab One
- II. Geological Museum - 01
- III. P.G. Library - 4165 Books
- IV. P.G. Class Room - 02

## ICT Facilities

Three Rooms are fitted with LCD Projector, Two P.G. Class Room – F-17, F-20 and U.G. Classroom F-18

**M.O.U. –**

Department of Geology has MOU / collaboration with two National Institutes:

I. **N.I.T. Raipur.**            II. **I.S.I. Calcutta.**

**Standard operating practices for lab –**

Geology practical is mostly related to identification of minerals, rocks fossils, crystals by physical and optical methods. Emphasis is given to field-based studies.

**Waste disposal policy for lab –** There is no waste produced during routine practical practice.

**Departmental Proposed Plan for 2019-20**

**Skill development programme –**

P.G. Students of our department are regularly attending training program as per schedule given by C.G.W.B. This year also the students will be attending the program.

**Project work-**

As per syllables students of IInd & Ivth sem M.Sc. visit different mines/plants / institutes for project/ Dissertation work for the period of 2 to 4 weeks.

**Updation of geological museum -**

The department has intended to update the geological museum which has collection of national and international minerals fossils rocks and models

## STUDENT ACHIEVEMENTS /PLACEMENTS

**Following students have been qualified / selected in different competitive exams**

- |                           |   |
|---------------------------|---|
| 1. Mr. Pramod Kumar nayak | Qualified NET Exam 2014<br>Selected in GSI (2015) (GEOLOGICAL SURVEY OF INDIA)<br>Selected as MINING OFFICER through CG PSC |
| 2. Deepak Mishra-         | Selected as MINING OFFICER through CG PSC   |
| 3. Triveni Dewangan-      | Selected as MINING INSPECTOR through CG PSC<br>Selected as MINING OFFICER through CG PSC                                    |
| 4. Babloo Pandey -        | Selected as MINING INSPECTOR through CG PSC   |
| 5. Subhash Chandra Sahu   | Selected as MINING INSPECTOR through CG PSC   |
| 6. Helendra Kumar         | Selected as MINING INSPECTOR through CG PSC   |
| 7. Ashwin Jhadi           | Selected as MINING INSPECTOR through CG PSC   |



As per the photograph  
1st row (Mining officer) (Sitting from left to right)

1. Triveni Dewangan
- [2.NA](#)
3. Deepak Mishra
- [4.NA](#)
5. Pramod Kumar

2nd row (Mining inspector)

- [1.NA](#)
- [2.NA](#)
- [3.NA](#)
4. Deepak Tiwari
5. Rakesh Verma

[6.NA](#)

[7.NA](#)

8.Subhash Chandra Sahu  
Last row - (Mining inspector)

1. Rohit Sahu
- 2.Jagrit Gayakavad
- 3.Bablu Pandey

[4.NA](#)

5.Neeraj Sharma

## **PHOTOGRAPH -- INFRASTRUCTURE OF THE DEPARTMENT**

**PG CLASSROOM (PREVIOUS)**



**PG CLASSROOM(FINAL)**

**UG LAB**



**STAFF ROOM**



**UG CLASSROOM**



**P G LIBRARY**



**GEOLOGICAL MUSEUM**



**GEOLOGICAL MUSEUM**





**MUSEUM SPECIMENS**

**FOSSIL OF AMMONITE**



**PETRIFIED WOOD**



**EGG & HATCHERY OF DIANOSAURS**



**CRYSTALS OF FLUORITE MINERAL**

**PETROLOGICAL & ORE MICROSCOPE**



**INSTRUMENTS-**

**RESISTIVITY METER**



**WATER ANALYSIS KIT**



. Clinometer, Brunton compass, hammer Hardness testing kit & contact goniometer



**PHOTOGRAPH OF FACULTY MEMBERS**



DR S.S. BHADAURIA  
PROFESSOR & HEAD



DR RAJEEV GUHEY  
PROFESSOR



PRADEEP THAKUR  
ASST PROFESSOR