P.G. DEPARTMENT OF ENVIRONMENTAL SCIENCES
SAMBALPUR UNIVERSITY

A. Year of Establishment: 1989
b. Head of the Department: Dr. Sanjaya Kumar Pattanayak
   Position: Reader & Head
   Office: P.G. Department of Environmental Sciences
   Office hours: 9.00 AM to 5.00 PM
   Address: Sambalpur University
            Jyoti-Vihar, Burla-768019
   Phone: +91 0663-2430313 (o), 0 9439809787 (cell)
   Fax: +91 0663-2431033
   Email: skp.envsu@gmail.com

Message of the H.O.D. limited to ten lines about the Department

The Department of Environmental Sciences in Sambalpur University was approved by the University Grants Commission during seventh plan period and was established in 1989 as the only Post Graduate Department of its kind in the state of Orissa and one of the few in the country. The Department started M.Phil. Programme from the academic session 1990-1991 and M.Sc. programme from the session 1994-95. At present the student intake is ten at M.Sc. level and six at M.Phil. level. In addition to this eight seats at M.Sc. and three seats at M.Phil. are filled up as self-financing seats. The Department is now highly acclaimed for a M.Tech. programme in Environmental Science and Engineering which runs on self-financing basis from the session 2007-08. Besides these, the Department is offering two P.G. Diploma courses of one year duration, namely, P.G. Diploma in Environmental Education and Management (PGDEEM) and P.G. Diploma in Industrial Safety and Health (PGDISH) through Distance Education mode. Based on its academic excellence, the Department is granted academic autonomy from the session 2006-2007.
c. **Courses offered:**

<table>
<thead>
<tr>
<th>SL.No.</th>
<th>Name of the course</th>
<th>Year of commencement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>P.G.Diploma in Environmental Education &amp; Management</td>
<td>1998</td>
</tr>
<tr>
<td></td>
<td>Studies</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>P.G.Diploma in Industrial Safety &amp; Health</td>
<td>2009</td>
</tr>
<tr>
<td>3.</td>
<td>M.Sc in Environmental Sciences</td>
<td>1994</td>
</tr>
<tr>
<td>4.</td>
<td>M.Phil in Environmental Sciences</td>
<td>1990</td>
</tr>
<tr>
<td>6.</td>
<td>Ph.D. in Environmental Sciences</td>
<td>1990</td>
</tr>
</tbody>
</table>

d. **Specialisation offered degree-wise**

**M.Sc.:**
1. Pollution Control and Management
2. Soil Biology & Ecology

**M.Tech.:**
1. Pollution control and Management in Mining Industries.
2. Hydrology, watershed management and waste water engineering
3. Environmental Geology
4. Green Technology and Management

d. **Infrastructure facilities available**

<table>
<thead>
<tr>
<th>SL NO.</th>
<th>Facilities</th>
<th>Major Equipments available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Building</td>
<td>Well furnished</td>
</tr>
<tr>
<td>2.</td>
<td>Teaching Laboratory</td>
<td>Two well furnished Teaching laboratory</td>
</tr>
<tr>
<td>3.</td>
<td>Research laboratory</td>
<td>Three well equipped research Laboratory</td>
</tr>
<tr>
<td>4.</td>
<td>Computer laboratory</td>
<td>One well furnished Computer laboratory</td>
</tr>
<tr>
<td>5.</td>
<td>Any other</td>
<td>Central Instrumentation room and well furnished seminar hall; One seminar library</td>
</tr>
</tbody>
</table>
### Faculty Profile

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Name</th>
<th>Designation</th>
<th>Qualification</th>
<th>Specialisation</th>
<th>Total teaching Exp.</th>
<th>E-mail Id</th>
<th>Contact No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P.C. Mishra</td>
<td>Professor</td>
<td>Ph.D., D.Sc.</td>
<td>Biological treatment of waste water and Waste Management Environmental Monitoring and Eco-Toxicology, Environmental Management</td>
<td>29.5</td>
<td><a href="mailto:pcm_envsu@rediffmail.com">pcm_envsu@rediffmail.com</a></td>
<td>09437052301</td>
</tr>
<tr>
<td>2</td>
<td>S.K. Sahu</td>
<td>Professor</td>
<td>M.Phil, Ph.D.</td>
<td>(1) Ecotoxicology &amp; Env Monitoring (2) Soil biology &amp; Ecology (3) Solid waste management</td>
<td>20</td>
<td><a href="mailto:sahusanjat@rediffmail.com">sahusanjat@rediffmail.com</a></td>
<td>09437052301</td>
</tr>
<tr>
<td>3</td>
<td>S.K. Pattanayak</td>
<td>Reader</td>
<td>M.Sc., Ph.D.</td>
<td>Remote Sensing and GIS, EIA, Geochemistry</td>
<td>3</td>
<td><a href="mailto:skp.envsu2009@gmail.com">skp.envsu2009@gmail.com</a></td>
<td>09439809787</td>
</tr>
<tr>
<td>4</td>
<td>M.R. Mahananda</td>
<td>Lecturer</td>
<td>M.Phil., Ph.D.</td>
<td>Ecotoxicogenomics, Genetic toxicology, Reproductive health</td>
<td>8</td>
<td><a href="mailto:malaya_env@rediffmail.com">malaya_env@rediffmail.com</a></td>
<td>09439536915</td>
</tr>
<tr>
<td>5</td>
<td>R. Panda</td>
<td>Lecturer (Contractual)</td>
<td>M.Sc., Ph.D.</td>
<td>Environmental and Industrial Biotechnology</td>
<td>2</td>
<td><a href="mailto:ranjita_panda@yahoo.in">ranjita_panda@yahoo.in</a></td>
<td>09439464090</td>
</tr>
<tr>
<td>6</td>
<td>A.K. Bhadra</td>
<td>Lecturer (Contractual)</td>
<td>M.Sc., M.Phil.</td>
<td>Plant Ecology, Biodiversity conservation, Natural Resource conservation and Management</td>
<td>2</td>
<td><a href="mailto:abanibhadra@gmail.com">abanibhadra@gmail.com</a> <a href="mailto:abanibhadra@yahoo.co.in">abanibhadra@yahoo.co.in</a></td>
<td>09438559825</td>
</tr>
</tbody>
</table>
g. **Placement record of the students if any:**
1. Dr. P.K. Behera, Mr. B.K. Jena as scientist in CPCB, New Delhi.
2. Dr. S.S. Pati as scientist in SPCB, BBSR.
3. A.K. Dash as Scientist in NHPC, Dehradun
4. Dr. (Mrs) R. Panda as regional director, IGNOU, Gangtok.
5. Dr. A.K. Dash & Dr. (Mrs) A. Pradhan as Asst. Professor, ITER, BBSR.

1. Mr. Partha Sarathi Panda, Ms. Sangha Mitra Mishra, Ms. Sangita Chand, Ms. Manaswani Das and Mr. Sanjaya Burman joined Vedanta Aluminium Ltd. Jharsuguda
2. Mr. Khageswar Pradhan joined as Environmental Engineer in NTPC, Kaniha
3. Ms. Chitra lekha Sen Gupta and Ms. S. Ekka joined CPCB Kolkata as Environmental Officer.
4. Mr. Suraj Tondon and Mr. P.K. Behera joined Bhusan Sponge Iron Ltd. Jharsuguda as Environmental Officer.
5. Mr. Jitendra Prasad Sahu joined as Environmental Officer in RAMKI, Hyderabad.
6. Mr. Asok Kumar Bhoi joined as Environmental Officer in Basundhara Coal Mines.
7. Mr. Nihar Ranjan Behera joined as RA in CPCB, Kolkata.

h. **MOU AND SPECIAL INFORMATION (IF ANY)**

i. **Research Project undertaken by the Faculty members during the last five years**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Name of the Project</th>
<th>Period</th>
<th>Name of the investigator</th>
<th>Funding agencies</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Occupational exposure of coal dust and its effect on male fertility status.</td>
<td>Three Years (2009-2012)</td>
<td>Dr. M.R. Mahananda (PI) Prof. P.C. Mishra (Co-PI) Dr. P.K. Chaturvedy (Co-PI)</td>
<td>ICMR, New Delhi</td>
<td>Rs. 9.75 Lakhs</td>
</tr>
<tr>
<td>3.</td>
<td>Effect of Fluoride on locally available crops in and around Vedanta Aluminium Ltd. Jharsuguda</td>
<td>1.6 years (2009-2011)</td>
<td>Prof. S.K. Sahu (PI)</td>
<td>Vedanta Aluminium Ltd. Jharsuguda</td>
<td>Rs. 4 Lakhs</td>
</tr>
<tr>
<td>Sl.No.</td>
<td>Name of the Author(s)</td>
<td>Title of the paper</td>
<td>Journal Volume issue Page &amp; Year of Publication</td>
<td>Year of Publication</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>P.C. Mishra, A.S.P. Mishra and Khageswar Pradhan</td>
<td>Biochemical Characteristics of Crop field soils exposed to industrial activities.</td>
<td>Ecoscan 2(1); 63-68</td>
<td>2008</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Title</td>
<td>Journal/Proceedings</td>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Raha Debashis and Mishra, P.C.</td>
<td>.42&lt;sup&gt;nd&lt;/sup&gt; Engineers Day issue (Souvenir) of Institution of Engineers (India), Qatar Chapter.</td>
<td>Engineering Solution to Climate Change impact on water Resources</td>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Title</td>
<td>Journal/Publication Details</td>
<td>Year</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Title</td>
<td>Journal/Book Details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>-------</td>
<td>----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Das, B and Sahu, S.K.</td>
<td>Generation, composition and disposal practice of solid waste in Burla N. A. C., Orissa,</td>
<td>The Bioscan, (Special Issue; 3rd volume)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Title</td>
<td>Journal</td>
<td>Year</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>-------</td>
<td>---------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Mohanty, B.P., Mahananda, M.R. and Tripathy, N.K.</td>
<td>Antimutagenic effects of Ascorbic acid against the genotoxicity of dimethyl Sulphate in Drosophila</td>
<td>Universal journal of environmental Research and Technology. 2(1): 77-84.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Mahananda MR, Mohanty BP and Behera NR</td>
<td>Physico-chemical analysis of surface and ground water of Bargarh district, Orissa, India.</td>
<td>International Journal of Research and Review in applied Sciences. 2(3): 272-</td>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Title</td>
<td>Journal/Proceedings</td>
<td>Year</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td>-------</td>
<td>---------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Ranjita Panda, Rabi N. Kar, Chitta R. Panda and Siba P.Panda</td>
<td>Solubilisation Of Low Grade Rock Phosphate By <em>Aspergillus niger</em></td>
<td>Proceeding, International Conference on Technological Challenges and Management Issues for Sustainability of Mining Industries, Organised by Department of Mining Engineering, NIT Rourkela, from 4-6th August, 2011, pp 193-199</td>
<td>2011</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Ranjita Panda, Rabi N. Kar, Chitta R. Panda.</td>
<td>Microbial leaching of Phosphorous from LD Slag by Heterotrophic Bacteria</td>
<td>Proceeding, International Conference on Technological Challenges and Management Issues for Sustainability of Mining Industries, Organised by Department of Mining Engineering, NIT Rourkela from 4-6th August, 2011, pp 125-129</td>
<td>2011</td>
<td></td>
</tr>
</tbody>
</table>
Bhadra, A.K. | hill ranges, Eastern ghats, India; An approach to sustainable biodiversity conservation.


47 | Bhadra, A.K., and Dhal, N.K. | Tree seedling diversity in the protected natural forest of Gandhamardan hill ranges. | The Bioscan. (Special Vol.2): 451-459 | 2010


**k. Overseas Countries visited by the faculty members during the last five years**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Country visited</th>
<th>Purpose</th>
<th>Period of visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Port Dickson, Malaysia</td>
<td>Presenting Research paper in International congress of Chemistry and environment</td>
<td>2011</td>
</tr>
</tbody>
</table>
1. SELF-FINANCING COURSES OFFERED BY THE DEPARTMENT

1. M. Tech in environmental Science and engineering

About the Self-financing Course:

m. **Contact person/ Course Coordinator of SF Course**

<table>
<thead>
<tr>
<th>Name of the Course Coordinator</th>
<th>Contact Number</th>
<th>Email Id &amp; Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof. P. C. Mishra</td>
<td>91-(0) 9437052301</td>
<td>pcm_envsu_rediffmail.com</td>
</tr>
</tbody>
</table>

Signature of the Head of the Department

Date