



## INNOVATIONS AND BEST PRACTICES

### **Environment Consciousness**

- The institution has a system for green-auditing of its facilities which is carried out informally by the National Service Scheme and Nature Club.
- The use of plastic bags is avoided in the campus and the authority is planning to declare the entire campus as “No Plastic Zone”.
- Students and staff are motivated to use jute bags or cotton bags
- The students and staff have planted several tree saplings during various tree plantation programmes organized by the institution through the NSS wing and all these trees are taken care of and maintained by the gardeners of the institution.
- Care is taken to ensure that the college environment has low levels of carbon emission and low pollution levels so that the campus is healthy for all.
- The college is declared as ‘No Tobacco Zone AND No Plastic Zone’

What are the initiatives taken by the college to make the campus eco-friendly?

### \* **Energy conservation**

- The College conducts awareness programmes on energy conservation and adopts measures to ensure that energy is conserved wherever possible.
- Every department follows a policy of switching on power only when required and switching off when not in use.

- Class rooms in the old block have very wide and long windows with a high roof of almost 12.5 ft which ensures that the use of lights and fans would be minimum as ventilation is naturally enhanced.
- Many classrooms, departments, administrative office and the Principal Chamber of the college are airy and well illuminated for the maximum use of natural lighting during the day time. Tube lights are used instead of incandescent bulbs wherever the natural lighting is insufficient to minimize power consumption. The institution strictly observes to see that no electric equipments run unnecessarily. Thus enough measures are taken to use electricity carefully.
- Almost all the computer monitors in use are either LED, LCD or TFT types to ensure minimum usage of electricity and also to reduce the level of radiation.

#### \* Renewable energy

- Presently no renewable energy sources are present in the campus
- Bio – gas plant will be installed for use in the girls' hostel of the campus. The initiative to install this was taken by the department of Botany.
- Solar lights are available in the campus , but wide Plans are ahead to install roof top solar panels

#### Water harvesting

- Rain water harvesting project has been implemented in the college. The water thus harvested is being used for watering the plants and gardens since 2003.

#### \*Efforts for Carbon neutrality

- Plantation of trees and green grass in the college quadrangle and in the front end.
- Potted plants dot the corridors of the college with more than 50 different samples.
- The College has made arrangements for the parking of the vehicles of the students and staff near the entrance. This helps in keeping the campus as much clean as possible.

- The campus is also smoke free. The dead leaves and waste papers are not allowed to be put on fire. The dead leaves and waste papers are scientifically decomposed off by burying them in the soil.

### \*Plantation

Tree plantation drives are organized regularly to create clean and green campus. The NSS and NCC wings of the college take up planting saplings regularly. The Botany department of the college maintains a green house which houses a large variety of medicinal plants and wide variety of plant species.

It is the tradition of the Institution-Planting of tree saplings by chief guests during their visits to the college for various functions.

### Hazardous waste management

The college generally does not generate any hazardous waste in any manner. However, the college strives to generate minimal waste and tries to reduce the use of plastics whenever possible. Moreover, from 2017-18, the college has been declared as plastic free Zone

- Waste is segregated as biodegradable and non-biodegradable.
- The college has built a solid waste disposal bin at the rear end of the basket ball stadium. Solid wastes like broken glass beakers, test tubes, rubber tubes, etc. are collected from the entire campus and stored here. This solid waste is then collected by NSS volunteers in every alternate day and is then disposed off.
- Use of pesticides and other harmful chemicals in the garden is replaced by adopting organic methods of gardening wherever possible.
- In order to dispose the acid fumes, chemistry labs are equipped with exhaust fans and fume hoods.
- Mild chemicals are used for cleaning and maintaining the campus.
- Sterilization is performed by autoclaving and then the remaining wastes are properly disposed off, in accordance with standard waste disposal norms.

- Vermicomposting is also in practice for disposing the wet waste from canteen and also other biodegradable wastes.

### e-waste management

- Printer Cartridges are generally refilled and not disposed. Wherever refilling is not possible, the cartridge is returned to the manufacturer
- Paper waste is sold off to vendors who send it for recycling.
- Computers in satisfactory working condition, but are obsolete for the system, are usually used for teaching – learning purposes of Computer Architecture and Hardware courses. Similarly, computer parts and peripherals are reused in other systems.
- All damaged or non-functional electronic materials (e-waste) is returned to the manufacturer.
- UPS batteries are exchanged for a nominal cost (buy back offers) with the vendor of the new batteries.
- The management has evolved a procedure for e – waste wherein the individual departments in the college store the waste and once in six months it is collected by a designated person from the management. It is later sent for recycling units.

## INNOVATIONS

Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

- a. **Pre-placement training:** Students are imparted pre-placement training so as to prepare them for interviews. The college placement record itself speaks volumes and the placement records show impact of pre-placement training.
- b. **SAFETY:**
  - **INFRASTRUCTURE:**
    - The main building has multiple entry and exit points with wide staircases.

- Fire extinguishers are strategically placed at multiple locations including the departments, laboratories, office, Principal's chamber, auditorium, library, etc.
- CCTV is installed at strategic locations in the campus and the monitoring unit is housed in the Principal's chamber to get a quick review of the activities in the college at different locations. This enhances the security system in the college as it also has recording facility.
- **DISASTER MANAGEMENT:** NCC cadets and NSS volunteers have participated in Disaster Management exercises.

### **c. Academic**

- Seven class rooms are made ICT ready
- The College has two Smart interactive board to enhance the teaching – learning methods with latest technology
- Several departments have LCD/LED projectors useful for preparing and delivering the lectures through multimedia presentations
- Every department equipped with a computer and internet connectivity
- Library has a separate e – library which allows access for e – resources
- Question bank made ready in many subjects.
- Lending 3 books per student to SC/ST/OBC from Book Bank for 1 year

### **Feedback system**

Technology enabled learning environment is ensured. The basic computer knowledge has been made compulsory for all the students and the teachers. All the teachers have been instructed to have an email ID, so that important information could be shared instantly. This practice has enabled the teaching faculty to use computers and internet to improve their teaching practices.

## **BEST PRACTICES**

Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

### **1. Madhusudan Memorial Lecturer**

Every year the College organizes Madhusudan Memorial talk in its foundation day i.e. 9<sup>th</sup> July. The objective of this programme is to instill the values and the works of Barrister Madhusudan Das, son of the soil and the person responsible for Odisha as a state & Odia pride, to students, teachers and public. A person of National repute and contributed for the society is awarded with Madhusamman each year. A published book of the Memorial lecture of each year is circulated in the function.

### **2. Blood Donation Drive**

'Save a Life' through annual blood donation camp. The Blood Donation camps have been organized from the past 25 years and contributing about 120-150 pints of blood collected and given to Blood Bank SCB Medical College Hospital, Cuttack. Besides, whenever there is an SOS call from any hospital, students generously donate blood to save lives. Red Cross and SCB College & hospital has recognized this noble cause and awarded a certificate of appreciation for donating blood continuously for the past years.

### **3. Mandatory Project Work/Internship**

Students get an exposure to basic research and opportunities for internship and turn out to be independent thinkers with augmented job opportunities. In the Curriculum one paper of 100 marks is mandated for a 6<sup>th</sup> semester student to go for a Project work and submit a dissertation. In consideration to Project Dissertation and Viva voce marks are awarded to the student by External and Internal examiner.

### **4. Sunday Science School**

To move beyond academics and develop scientific temper, the department of Chemistry has taken up Sunday Science School Project for Higher Secondary students, a concept promoted by Retired Chemistry Teachers Forum in collaboration with Odisha Chemical Society. The aim is to give hands-on experience and develop scientific literacy.

### **5. ODISHA Day Celebration**

On 1<sup>st</sup> April 1936, Orissa got its entity at state basing on its language and culture. In order to commemorate day the College observes of the day and organizes rallies, meetings and symposiums to popularize Odia as the national language, creates awareness on career opportunities in Odia literature and taps the creative talent in Odia.

### **6. Public Address System**

Every department takes the responsibility to conduct 'Plan for the Day' session every morning before the commencement of class. The session includes breathing exercise, message on a particular theme for the week with anecdotal references, thought for the day, news headlines and important notices.

### **7. Student Cabinet**

Student leaders are vibrant carrying out responsible tasks with conscientiousness. In addition to conducting various competitions/activities/celebrations, they offer

their services to maintain discipline/cleanliness, to serve food at the canteen during peak hours and train the juniors for intercollegiate competitions. The stamp of excellence of these leaders is recognized on the Annual Day with trophies and certificates.

### **8. The College Band**

The college band, trained by an external expert, rises to every important occasion of the college with Guard of Honour, making the campus come alive with music and rhythm. On the Merit Certificate Day, the members get certified for their contributions throughout the year.

### **9. Training Centre for promising Athletes**

The Athletic Club of Salipur College has been offering Training for the local youths and promising athletes. The gym of the College is open for 6 hours daily for the use of students and local Athletes. During Puja Vacation and Summer Vacation the Athletic Club set up temporary Training Centers to train the athletes. Many groomed Athletes of Odisha have been trained from this centre.

### **10. Shop Without Shop keeper**

In order to sensitize the students about honesty, integrity and to develop a spirit of entrepreneurship, the Department of Chemistry has initiated a small organisation 'Shop without shop keeper'. The seed money of the event was Rs.5000 in the year 2017-18 and now its turnover is Rs15000p.a. The shop is managed by the Final year students of Chemistry and is selling Note Books, Pen, Pencil, Erasers, and other essential study materials.

### **11. No Tuition fees from Girls and poor students**

The In obedience to State government guideline the college is not collecting any tuition fees from the Girls students and also from the ST/SC and Economically backward students.

### **12. Bikalananda Scholarship to Meritorious students**

With the patronization of Bikalananda Trust the college is facilitating the merit list for the meritorious and needy students for awarding scholarship to 100 students. The trust is providing books, Note books etc with financial help of Rs 5000 each.

### **13. Laptops to Meritorious students**

Laptops are provided each year to the more than 100 meritorious students, by the Government of Odisha. The College authority prepares the merit list and recommend for the disposal of the laptops in a ceremony.

### **14. The Alumni Association**

The Alumni Association is a registered body and has a strong global network. The executive members conduct social service activities for the underprivileged and meritorious students and organizes a function each year

### **15. Planting Saplings**

When Principals/faculty reach superannuation, saplings are planted to enhance greenery on the campus. Moreover the Department of Botany has taken care of to

implant saplings of medicinal plants.

### **16. Counselling Cell**

Students counselling cell is working here efficiently and effectively. The cell is organizing entry in services classes and soft skill classes for the student. The cell is also responsible to provide information on job opportunities to the students

### **17. Celebration of International Women's Day**

International Day for Women in association with the Women's Cell and the alumni of the College is celebrating every year and four student achievers are honoured.

### **18. Scholarship for meritorious and poor students.**

The college provides free ship and financial assistance to the meritorious students through SSG and SAF. The National Scholarships and state Government scholarships are also provided to the economically backward students.

### **19. Awards by the staff members to Best Graduates**

Awards instituted by the staff members of the College to the best graduates of different departments in the memories of their family members.

### **20. Awards instituted by staff members of the College to best athlete in the memories of their family members.**

Awards instituted by staff members of the College to the best athlete in the memories of their family members.

### **21. The Annual Academic Audit**

Every year in March/April the Internal Quality Assurance Cell conducts the Annual Academic Audit of all UG/PG departments and student support systems such as office, library, sports and canteen. Each IQAC member scrutinises the profile of two departments and offers suggestions for improvements. Official records such as attendance registers, work diaries,

## **PRACTICES.**

### **1. Title of the Practice**

#### **I. Improving Teaching – Learning Process**

### **2. Goal**

- To ensure the completion of syllabus according to the academic planner of each department
- To encourage teachers to adapt to technological advancements including ICT adoption in class room teaching
- To improve pass percentage and enhance the number of ranks bagged by the college at the university level examinations



### 3. The context

- The syllabus coverage in some cases is being hurried and towards the end of the semester where information are being crammed at once. This sluggish coverage initially and hurried coverage later should be avoided giving enough time to student in comprehending the topics and assimilating the facts.
- The teachers find it difficult to keep pace with the techno – savvy student learners. It has become essential for some of the teachers to adopt to the latest pedagogic styles and include ICT in class room teaching. The mismatch between the student learner and the teacher in the use and comfort of handling varieties of tools available for teaching – learning needs to be bridged.

### 4. The practice

- Academic planner along with the calendar of events is uploaded on the website for information to students.
- The teaching – learning committee along with the heads of different departments monitor the pace of coverage of the syllabus.
- Informal feedback is obtained from students regarding the content delivery by different teachers. The teaching – learning committee members and the class teachers hold frequent informal meetings and cull out the information needed.
- Frequent assignments, tests and evaluation are conducted to improve performance in the semester – end examinations
- Seven class rooms are made ICT ready and many departments have the necessary tools for handling the class room teaching with the help of ICT.
- Computer science department staff and programmers train the teachers in the use of Power Point Presentations, browsing the internet for useful resources, uploading content on the college website, use of google docs for information sharing, etc.

### 5. Evidence of Success

- Some of the teachers have adopted modern pedagogic styles and

ICT in their classes.

- Some of the notes are uploaded on the college website.
- Appropriately paced and timely completion of syllabus
- Increased attendance in the classes
- Improvement in results.

#### **6. Problems encountered and Resources required.**

- Development of animation based power point presentations in teaching, particularly in science subjects, has been hindered due to the want of in – house technical expertise.
- The demand for ICT resources is increasing and paucity of funds has been the biggest impediment which may dampen the spirit of technology adoption by teachers.

#### **1. Title of the Practice.**

### **II. Enhance performance in Chemistry**

- Attract talented students to Chemistry course
- Encourage science students to pursue higher education in Chemistry
- Instill healthy competition amongst students to outperform the other

#### **2. The Context**

- Admission to basic science courses is declining in general due to the proliferation of professional colleges and courses. There is a need to attract students to these science courses
- Input to higher education institutes and research institutions is witnessing lack of highly meritorious students and declining trend of enrolment of talented students . It is deemed that it is the responsibility of institutions like ours, to prepare and send many talented students the higher education institutes(HEIs like NISER, IIT,IIM and KIITs etc).

#### **3. The practice**

- Prize amount of Rs.500 to Rs.1000 is provided to students securing highest marks in each of the semesters. This would be distributed during the annual college day to boost the pride of the recipient students.

- At the very beginning of the semester the students are informed about the incentives provided by the department for best performing students which inculcates a spirit of competitive attitude amongst the students
- Students are also informed about the various avenues available after completing the B.Sc. course and still pursue higher education with fund support from DST, UGC and CSIR. The nature of the competitive examinations to be taken is also made clear to them. Awareness about the NGCE examination conducted by Indian Association of Chemistry Teachers' and its specific advantages are also described.
- Question Bank and assignments are made available to all the students so that every student has the same edge to compete. Learning support is provided by academic counseling by the individual teachers and the head of the department.

#### 4. Evidence of Success

- Increase in the number of students securing high marks. Sometimes, the prize is shared by three students with the same highest score.
- Increase in the enrolment to higher education institutes (students going to NISER, IIT & NALCO) from the college
- Increase in the quality of results (number of distinctions, number of first classes, etc.)

#### 5. Problems encountered and Resources required

- The practice was initiated in the year 2000. Since then the number of high scoring students has been on the rise. The fixed deposit of Rs.15,000=00 kept on that day is not sufficient to meet the expenditure in the present day due to more number of students scoring high marks. The expenses are borne annually by the staff of the department of Chemistry in addition to the proceeds of the FD amount.
- It is essential to enhance the FD amount to at least Rs.50,000=00 immediately so that the practice may sustain.

**CONTACT DETAILS**

- Name of the Principal : **Dr Umesh Chandra Pati**
- Name of the institution : **Salipur Autonomous College, Salipur, Odisha**
- Address: Balisahi, Salipur Dist Cuttack-753202
- Name of the IQAC Co-ordinator: **Dr D.N.Patri**
- Accredited Status : **'B' Grade**
- Website : [salipurcollege@org.in](mailto:salipurcollege@org.in)
- Email – id : [principalsalipurcollege@gmail.com](mailto:principalsalipurcollege@gmail.com)

\*\*\*\*\*