

# Centurion University of Technology and Management Minutes of IQAC Meeting Bhubaneswar Campus (October-December 2021)

Date: 5<sup>th</sup> Janauary, 2022

Time: 11.30 a.m.

Venue: Boardroom

#### Members Present:

- 1. Dr. Nibedita Nayak (IQAC Coordinator SoAS Physics)
- 2. Mr. Chittaranjan Routray (IQAC Coordinator SoAS Chemistry)
- 3. Mrs. Bhagyeswari Behera (IQAC Coordinator SoAS Botany)
- 4. Dr. Yashaswi Nayak (IQAC Coordinator SoAS Zoology)
- 5. Dr. Swarnalata Jena (IQAC Coordinator SoAS Mathematics)
- 6. Dr. Goutam Kumar Mahato (IQAC Coordinator SoAS Mathematics)
- 7. Prof. Debashree Behera (IQAC Coordinator SoET Mechanical)
- 8. Mr. Subrat Kumar Pradhan (IQAC Coordinator SoET ECE)
- 9. Prof. Rama Prasanna Dalai(IQAC Coordinator SoET EEE)
- 10. Dr. Saine Sikta Dash (IQAC Coordinator SoET CIVIL)
- 11. Dr. Shreela Dash (IQAC Coordinator SoET CSE)
- 12. Dr. Sabyasachi Dey (IQAC Coordinator SoM)
- 13. Dr. Ambika Sankar Mishra (IQAC Coordinator SoMC)
- 14. Mr. Himansu Bhusan Samal (IQAC Coordinator SoPLS)
- 15. Mr. Jitendra Gupta (IQAC Coordinator SoPAHS)
- 16. Mr. Kulabhusan Pradhan (IQAC Coordinator SoVET)

- 17. Mrs. Suchismita Nayak (IQAC Coordinator SoVET)
- 18. Ms. Shruti Rajwar (IQAC Coordinator SoFS)

# Agenda:

### Agenda & Action taken

- Dr. Sagarika Parida delivered the talk as a resource person on the topic entitled "Cyanobacteria: The Wonder of Nature" in the Seminar organized by Derabis College, Kendrapara.
- Dr Rukmini Mishra visited Forest Engineering College, Mulugu to discuss regarding signing of MoU and possible collaboration between CUTM and Forest Engineering college 29th to 1st December 2021
- Students are writing their review article and starting their project work.
- Hard copy for the assigned files of the department of the files for NAAC criteria has been updated.
- Students have started their project work.
- Hard copy for the 64 files of the department of the files for NAAC criteria has been compiled.
- Total 14 numbers of articles and 2 book chapters were published by faculties of the department of Botany associated with their respective research centers and other topics.
- New batch students' admission started from the month of October and courses for the 1st semester started in the month of November.
- The 3rd semester assessment of both M.Sc. and B.Sc programmes was completed in November 2021. Odd semester of both M.Sc. and B.Sc. completed in the months of November and December 2021.
- Webinars and one National virtual conference were organized.
- Weekly mentoring is conducted by the faculty members.
- IQAC work has to be prioritized as per meeting hosted by Dean Academics on 24<sup>th</sup> Sept. Work Initiated at urgent basis from 4<sup>th</sup> Oct 2021.
- Off-Line classes started from 15<sup>th</sup> Oct 2021.
- Various lab reports were collected from students for the previous sessions conduced.
- Old NAAC files need to be updated along with new NAAC Criterion.
- The second internal in presentation mode were conducted and evaluated and the marks for the same were submitted.
- EoD conducted during 25<sup>th</sup> Oct 2021.
- NAAC documentation process was re-evaluated for the current session.
- PO's, PSO's and CO's were updated and submitted on 27<sup>th</sup> Oct 2021
- Alumni Talk by Mr Saswat Kumar Pradhan 2008-12 batch was arranged on 28<sup>th</sup> Oct 2021.
- FDP on Ongoing projects on Polyhouse Automation by Dr. Ashis Das and Apparel tracking by Mr Subrat Kumar Pradhan and Mrs Swarna Prabha Jena on 30<sup>th</sup> Oct 2021.

- ANSYS Webinar by ANSYS coordinated by Dr. Harish Chandra Mohanta on 1<sup>st</sup> Nov 2021.
- Course Progress review conducted by HoD on 2<sup>nd</sup> Nov 2021.
- Students who have not reported to campus till date were warned and asked to report immediately 2<sup>nd</sup> Nov 2021.
- Workshop on CO analysis was conducted by Dean Academics on 5<sup>th</sup> Nov 2021.
- Maintaining Individual Course Profile was imposed on 6<sup>th</sup> Nov 2021.
- Course feedback (Offline) was collected by Dean Academics 9<sup>th</sup> Nov 2021.
- EoD result was published on 11<sup>th</sup> Nov 2021.
- Presented a talk at ATAL FDP on Digital Manufacturing by Mrs. Swarna Prabha Jena and Mr. Subrat Kumar Pradhan on 25<sup>th</sup> Nov 2021.
- Semester exam schedule was declared on 23<sup>rd</sup> Nov 2021.
- Tech Talk by Dr. Nagesh Kolagani on Satellite Inaging, AI&ML, Drone Imaging and NodeJS on 26<sup>th</sup> Nov 2021.
- Dr. Harish Ch. Mohanta attended an online workshop on Artificial Intelligence and Assistive Technologies for Enhancing Learning and Inclusive Education: Concepts, Recent Trends and Research Challenges by IIT BBS during 18<sup>th</sup> to 21<sup>st</sup> Nov 2021.
- ODD semester exam admitcards were distributed. 30<sup>th</sup> Nov 2021
- Odd Sem Exam Commenced 1st Dec 2021
- Exam on 4<sup>th</sup> Dec 2021 was postponed due to JAWAD Cyclone for a later day.
- Load Distribution for upcoming semester was Finalised. 6<sup>th</sup> Dec 2021
- NAAC documents updated to respective individuals. 13<sup>th</sup> Dec 2021.
- EVEN Sem Registered subject list was published by HoD. 13<sup>th</sup> Dec 2021.
- Celebration for 5000+ admissions by VC and Team. 15<sup>th</sup> Dec 2021.
- CO's attainment discussion for syllabus and result was done and submitted to HoD 20<sup>th</sup> Dec 2021.
- MATLAB access and demonstration organised b Dr. Harish Ch Mohanta. 21<sup>st</sup> Dec 2021
- Tentative course for 4<sup>th</sup>, 6<sup>th</sup> semester was circulated by HoD ECE. On 21<sup>st</sup> Dec 2021
- Skill Course was configured and registration was opened for students to register. 27<sup>th</sup> Dec 2021
- NAAC related documents were sent to Dr. Amit Sahoo for further processing.

# 1.1 Admission Related

- For the ongoing pandemic situation admission of the new upcoming batches were delayed.
- The University authorities advised to take proper measures to avoid physical contact during admission. It was advised to pursue maximum work through online. Admission coordinator of the department is working on the same.
- All faculty members were advised by the HoD as well as Dean to help in admission counselling when ever asked by the admission cell.
- The admission coordinator is responsible for all admission related issues and will
  guide the students in this regard. He can take help of any faculty member
  whenever required.

- B.Sc. Student Orientation Program was conducted on 25th October 2021 & M.Sc. Student Orientation Program was conducted on 17th November 2021 in physical mode for newly admitted students.
- Total number of students admitted under the school for the session 2021-22: MBA (General)-45, MBA (Pharma)-05, BBA-96 and BCoM-11. Admission for the upcoming academic session i.e., from 2022-2023 is under progress and the admission activities for School of Management is being conducted by Mr. G.K. Panda. 10 seminars have been conducted in different coaching institutes and along with it and around 60 meetings too have been held with the faculty members of the junior and undergraduate colleges as well as the faculty members from the coaching institutes.
- Reporting for 1<sup>st</sup> semester students of B.Sc. Forensic Science, M.Sc. Forensic Science and M.Sc. Cyber Security and Digital Forensics was on 21<sup>st</sup> Oct. 2021.
- Orientation Program for newly admitted students of B.Sc. Forensic Science, M.Sc. Forensic Science and M.Sc. Cyber Security and Digital Forensics was conducted at Seminar Hall of Madhusudan building on 22<sup>nd</sup>, 23<sup>rd</sup> and 25<sup>th</sup> October 2021 in physical mode.
- 264 students took admission in 1st year B.Tech CSE.
- 14 BSC IT. students taken admission in 1<sup>st</sup> Year
- 135 students got admission in 1st year MCA

# 2. Teaching and Learning

- Online presentation of lesson plan (for 1st semester classes) by faculty members completed for the assigned subjects in presence of Dean and HoD of the department.
- Physical classes conducted by faculty members strictly following the Covid Guidelines.
- Time-table prepared and circulated among faculty members and students for the even semester (existing batch) batch and for the odd semester.
- It was decided that Dr. Chinu Bohidar will manage the subjects assigned to Dr. Pasha. Skill Subject assigned to Dr. pasha will be taken care by Dr. Ambika Sankar Mishra
- It was suggested that Mr. Saban Maharana will deal with different issues of skill development
- It was suggested that remedial classes will be taken for weak student.

#### 2.1 Assessment

- Online Semester exams were completed for B.Sc. 3rd, 5th and M.Sc. 1st semester students
- All internal marks (Theory, project and practice) were uploaded in the ERP.
- The 3rd semester assessment of both M.Sc. and B.Sc. programmes was completed in November 2021.
- End- term external practices examination completed in the first week of July 2021 for both M.Sc. and B.Sc. 3rd Semester students and 5th and 1st semester of B.Sc. students. Odd semester of both the Programme was completed in the month of November 2021

- Load distribution, Lesson plan preparation and presentation by respective faculty members for the 1st semester of M.Sc. and 6th semester of B.Sc. were completed.
- The classes have been conducted by faculty members in classrooms strictly following the Covid Guidelines.
- The classes were conducted in physical mode strictly following the syllabus and lesson plan uploaded in the ERP of the University.
- Time table for the even semester (existing batch) and odd semester (newly admitted batch) is already circulated among faculty members and students.
- Subject depository plan prepared and finalized in the faculty meeting has further been hosted in ERP through the MIS cell.
- Students are accessed by internal and external examination, project, practice and
  assignment in online as well as offline mode, but the inter campus courses were
  handled in online mode. Lesson plans were modified in the courseware wherever
  it was required. All Faculty members of SoM recorded video lectures of their
  courses in order to upload them in the Swayam Portal of UGC.
- New skill course was designed and was placed for BOS approval.
- New valued added course has been introduced and students has been enrolled for the same.
- A new evaluation pattern was considered with the following changes:-
- TPP, ITH, IPR evaluation criteria were introduced
- For TP mode total marks were divided into two parts. Each having 50(ITH, IPR) where the internal assessment was being done by internal faculty and external assessment (ETH, EPR) was being done by external faculty.

# 2.2 Student Performance

- B.Sc. and M.Sc. students performed well. The pass percentile of B.Sc. 6<sup>th</sup> sem and M.Sc. 4<sup>th</sup> sem students were 93% and 100 % respectively.
- Result analysis for both B.Sc. and M.Sc. programs was done for all the batch of pass-out students and semester-wise result analysis was also done.
- Students of BSc 4<sup>th</sup>, B.Sc., 2<sup>nd</sup> and MSc 2<sup>nd</sup> semester students have performed well in both the campus have shown 100 percent, 98.7 percent, and 97.4 percent in their end.
- Only a few students in M.Sc. were identified as slow learners and needed extra attention for academic performance. Remedial classes and doubt clear classes were conducted for their improvement.
- All the final year students have completed domain projects and internships of the Automobile and CNC domain.
- Student performance remains satisfactory during the quarter. Result analysis of the students' performance has been done after and the required files are uploaded in the drive (MBA, BBA, and B.Com. 2<sup>nd</sup> semester result).
- D. pharm 1<sup>st</sup> and B. Pharm 2<sup>nd</sup> semester theory and practical results have been released and students have been performed well.

- End semester examination result of B.Sc. Forensic Science 5<sup>th</sup> semester was released on 8<sup>th</sup> October
- End semester examination result of M.Sc. Forensic Science 2<sup>nd</sup> semester, M.Sc. Cyber Security and Digital Forensics 2<sup>nd</sup> semester was released on 24<sup>th</sup> august & B.Sc. Forensic Science 2<sup>nd</sup> semester, theory and practical results were released on 29.09.2021. Students have performed well. Exam coordinators are instructed to complete result analysis for even semester results.
- Scoresheet of Internal 1 of M.Sc. Forensic Science 3<sup>rd</sup> semester, M.Sc. Cyber Security and Digital Forensics 3<sup>rd</sup> semester & B.Sc. Forensic Science 3<sup>rd</sup> semester was released on 30<sup>th</sup> September. Students have performed well.
- In order to promote the co-curricular activities of the students, CUTM, BBSR has successfully organized some events in the month of October, November and December for the academic session 2021-22. The students of department of Zoology actively participated in the CSR activities. The following events have been conducted in the following months.

#### October

02/10/21 - Gandhi Jayanti

08/10/21 - Flashmob

30/10/21 - Weekend Activity (3)

#### November

03/11/21 - Rangoli Competition

06/11/21 - Weekend Activity (2)

09/11/21 - Participation in Sexual Reproductive Health and Right of

Youths

11/11/21 - National Education Day

20/11/21 - Weekend Activity (2)

#### **December**

01/12/21 - Health and Wellness Marathon and World AIDS Day

03/12/21 - International Day of Person with Disabilities

09/12/21 - International Anti-corruption Day Webinar

18/12/21 - Debate Competition

- B.Pharm 3<sup>rd</sup> ,5<sup>th</sup> ,7<sup>th</sup> semester internal results have been released and students have been performed well.
- M.Sc. Forensic Science, M.Sc. Cyber Security and Digital Forensics 3<sup>rd</sup> semester & B.Sc. Forensic Science 3<sup>rd</sup>, 5<sup>th</sup> semester internal results have been released and students have performed well.
- Students of 3rd sem, 5th sem BSc and 3rd sem MSc appeared in their respective End Semester Examination
- Students of MSc 1st sem are preparing for their 1st internal examination which will be on online mode scheduled from 24th January 27th January 2022.
- All the final year students have completed domain project and internship of Automobile and CNC domain
- Hritik Patra has achieved gold medal for National Skill Competition (The qualified will represent India at World Skill Shanghai 2022) at Delhi.

• Mr. Subham Chakra borty qualified and secured Gate score 41.83%.

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# 2.2.1 Student Activity

- Students presented ppts on different topics as a part of 2<sup>nd</sup> internal and project evaluation.
- An induction cum orientation programme of BSc freshers was organized in the seminar hall, Centurion University of Technology and Management, BBSR from 25th to 27th October 2021.
- An induction cum orientation programme of MSc freshers was organized in the seminar hall, Madhusudan Building, Centurion University of Technology and Management, BBSR on 18th November 2021.
- MSc 2nd Year students Akash Kumar Behera (200705100046), Diptimayee Sahoo (200705100038), Abhilipsa Jena (200705100047) are participated in the Rangoli Competition organized by the School of Management on the eve of Deepavali.
- BSc 2nd Year Chemistry student [Mukesh Kumar Sahoo (200704100006)] has been selected to take part in the AIU (ALL INDIA UNIVERSITY) East Zone Kabaddi championship to be held at CV Raman University, Bilaspur in between 3rd January 2022 to 7th January 2022.
- Students participated actively towards training and placement and some students also emerged with more than one offer out of which they picked the organization of their choice and joined by taking the 'No objection certificate' as approved by Dean, SoM. School of Management also created two committees: -Alumni committee as well as the Placement committee as a part of the future strategic plan of School of Management. In both the committee there are student coordinators as well along with the faculty coordinators. But subsequently, both the committees were merged together and the necessary placement updates were given in the whts app group created.
- Student performance remains satisfactory during the quarter. Result analysis of the students' performance has been done after and the required files are uploaded in the drive (MBA, BBA and B. Com Odd semester result except first semester).
- B. A Media students covered 9<sup>th</sup> Convocation
- Students were involved in preparing news bulletins for C-Studio.
- Students prepared 10 short films on different Labs of CUTM
- 2nd internal assessment of B. Pharm 5<sup>th</sup>, 7<sup>th</sup> semester student have completed through PPT mode.
- End semester practical examination of B. Pharm 3<sup>rd</sup>,5<sup>th</sup>,7<sup>th</sup> have been conducted through off line mode.

- End semester examination of B. Pharm 3<sup>rd</sup>, 5<sup>th</sup> & 7<sup>th</sup> semester have been conducted through offline mode in the month of December by maintaining covid guideline.
- D. pharm 2<sup>nd</sup> year 1<sup>st</sup> internal have conducted through offline mode.

#### 2.2.2 Students Welfare

- School of Applied Sciences, Bhubaneswar Campus in collaboration with Indian Association of Nuclear Chemists and Allied Scientists- Eastern Region Chapter and Institute of Physics, Bhubaneswar organized a seminar on "Energy, Radiation and Materials" on 27th October, 2021
- The Department of Physics and Center for New Material Applications, along with IIC and Centre for Innovators and Entrepreneurs Organized a Webinar on "Smart Sensors and Computing Devices for Hardware Artificial Intelligence" on 9th November, 2021
- Flip classes were conducted for every subject to improve the presentation skill of the students.
- JAM classes were conducted for B.Sc students.
- A webinar on Sustainable Fisheries and how to achieve it was organized by the Department of Zoology on 07th October, 2021. The session was initiated by Dr.Yashaswi Nayak, H.O.D. of Department of Zoology. The speaker of the day was Dr.G.A.Thivakaran, Blue Bay Coastal Research Foundation, Chennai.
- A departmental webinar on Advanced Concept in Nutrition and Health of Fish was organized on 25th December, 2021. Dr. Annaian D.Sc,FAZ,FNIE ,Dip.LCS(Belgium) , Professor (Retd.) ,Faculty of Marine Sciences , Annamali University, Parangiperrai, Tamilnadu. Presented his talk on "Fish feed technology". The session was initiated by Dr. Yashaswi Nayak, the Head of the Department, Department of Zoology.
- Orientation program was started from 18<sup>th</sup> to November 2021 for new admission batch students. About 67 students from the department of Botany actively participated in this program. This was organized for the welcome ceremony and interaction with dean and Faculty members. Students were being aware of the all the course structure including future prospective and working facilities using skill and domain courses offered by the University.
- MD Rahman, Assistant Manager, Genotypic Technology interacted with our students regarding scope, start-up ideas and student internships, jobs in the field of next generation sequencing on 15<sup>th</sup> of December, 2021.
- Dr. Yasaswi Nayak, Dean interacted with all the students of B.Sc. and M.Sc. to discuss the various aspects of career progress and new scope of new syllabus on 24th July, 2021. Students are being informed about NET and GATE coaching facilities.
- Students were participating in open faculty talk and getting knowledge about different fields of research with specific goals.

- Remedial Classes were organized for poor performed students by respective faulty members.
- Students appeared their second internal test in PPT presentation mode as per new University rule which was a great and new experience for both students and teachers.
- Students performed CSR activities organized by CUTM, BBSR Campus.
- On the occasion of NATIONAL MATHEMATICS DAY, a Seminar was conducted under Department of Mathematics, School of Applied Sciences, organized it on 22<sup>nd</sup> December, 2021 on the topic "A brief overview on population dynamics." The invited speaker Prof. Seshadev Padhi, Professor in Mathematics, BIT, Mesra, delivered a talk on the above topic. In the inaugural session, Dr. Tumbanath Samantra, HoD, Mathematics Department, presented the welcome address. Prof. Dipankar Bhattacharyay, Pro-VC, Research & Learning was joined the session as Chief Guest. Dr. Yashaswi Naik, Dean, School of Applied Science, addressed the vote of thanks. All the students of master & batcher degree and faculty members of School of Applied Science were attended the session.
- Faculty members are told to help the students those are appearing EOD
- Odd semester examination was over and odd as well as semester classes will start from first week of December 2021.
- Students got their certificates in convocation held 26th November 2021.
- Counseling of students was done continuously as in the beginning of the academic session 2021-22, the attendance level was not up to mark for the offline classes during the beginning of the odd semester but post counselling, it significantly picked up. Students were advised to maintain social distancing while attending offline classes and wear masks as per the directions of Government of Odisha.
- Counseling on higher education was done for the undergraduate students those who wanted to do their post-graduation, those who were interested to go for placement were counselled accordingly. Both MBA and BBA final year students were advised to work hard on their placement preparedness and appearing and taking part in all the training and development initiatives conducted by the Career Development Team. Additionally, the faculty mentors are also counselling their respective mentees on a regular basis and motiving as well as monitoring their performance.
- Counseling of students was done to clear all their backlogs (if any) by appearing the EoD particularly to the final year students. The counseling sessions for (b) as well as (c) is done by the respective faculty mentors. But in first place students are encouraged not to keep any backlog papers rather to clear all the papers in the first attempt itself.
- Students are counseled by their mentors regularly through meetings and issues like placement preparedness, academic related issues, outstanding dues and any other problems faced by them were discussed.
- Mentoring classes at proper interval were done.
- Remedial classes were done

- Students were trained with scripting and with production techniques to train them with skills required for industry.
- They were guided for industry internship
- They were given career guidance and literatures relating to skill requirements of different professions in media sector
- The following students have qualified for India skill at the regional skill competition held at Patna. The details are as followed;
  - 1. Saurav Dhali: 3D game art: Student of B.Tech Computer Science
  - 2. Rohan and Abhigyan: Cyber security (Qualified for India skills)
  - 3. Srinibas and Pranab: Cyber security (Qualified for India skills)
  - 4. Chinmay: Cloud computing (Qualified for India skills)

# 2.2.3. Student Training:

- For placement in different sectors, training was given to interested students in various aspects of GD and PI.
- Physical training programme was conducted for B.Sc.and MSc final year students. Career counselling with group discussion was carried out.
- M.Sc. students were trained in Simulia tool to complete their domain course.
- Carrere counseling with group discussion and personal interview was carried out.
- Promoting students commitment to protect local Biodiversity is an important goal of education for sustainable development in Odisha. So under the guidance of DR. Siba prasad Parida Sir and Mr. Soumen Mohanty sir a field study was organized on bird nest count on dated 13<sup>th</sup> October 2021 at Nandankanan zoological park. There the students came to know about the names of different Species of Birds and their nesting habitat. Mainly the trip focus on the count of bird nest.
- For placement in different sector company; hands on practice training was given to interested students in various aspects of GD and PI.
- Physical training programme was done for B.Sc.and MSc final year students. Career counselling with group discussion was carried out.
- A training program on farming and seed production technology of brackish water fishes and Molecular Technique was organized by ICAR CIBA. In this program the total no. of participants were 27. It was a 6-day training Program, in these 6 days of training program they mainly focus on brackish water fishes, ornamental fishes, how to do fish farming by the innovative way, which feed we should give to fish for their proper development, so that the productivity will rise and finally the molecular technique in which way they trained us to how to do autopsy, Microtomy, DNA isolation techniques, SDS page, Blotting Technique, PCR. The trainees were remained in the Trainees Hostel. All the Participants gifted with Certificate, Training Manual, Bag and Copy.

- A trip for field study was organized by department of Zoology on 4th November 2021 to Managalajodi Nature camp. The study mainly focussed on the Migratory Birds their habit, habitats, and their behavior. On that study trip Dr. Siba prasad Parida sir guided the students as well as the Range officers also interacted with the students and discussed about the innovative idea for the development of Mangala Jodi Nature Camp. All the students expanded their practical knowledge in this field study.
- MBA and BBA first- and second-year students appeared the IELTS tests for both reading and listening in online mode.
- School of Management students participated in the Myperfectice platform task which is directed towards placement preparedness.
- Mock Group discussion sessions, CV corrections and Mock PI was conducted throughout this quarter. Every day a meeting was held during the afternoon regarding the placement activities and the students' progress during the Mock PI that was held. Every day the placement meeting was conducted and Vice President, Registrar as well as VC, CUTM are involved in the monitoring of the placement activities.
- Students have registered in SFS (Skill for Success) course and they are
  pursuing the skill courses along with their core courses as well. Job
  readiness training is also being provided to the students completely in
  practice mode which is of six credits and it has been made compulsory for
  all students.
- All faculty members, MBA, BBA and BCoM students attended the seminar on "Financial Literacy on Recent Developments in Commodity Derivatives" on 18<sup>th</sup> December, 2021.
- All MBA, BBA and BCoM students attended the webinar on "Participatory Governance and Role of Youth" on 11<sup>th</sup> December, 2021.
- All MBA students attended the webinar on "Overview of Game Development with AR-VR" on 25<sup>th</sup> November, 2021.
- MBA and BBA students attended the webinar on "Organic electronic sensors for internet-of-medical things (IOMT) organized by CIE, Centurion University and Institutions Innovation Council (Ministry of Education Initiative) on 29<sup>th</sup> October, 2021.
- All students of SoM attended the conference on "Role of Universities in Achieving SDGs" on 5<sup>th</sup> and 6<sup>th</sup> October, 2021.
- All students of SoM attended the webinar on "Ek Bharat Shrestha Bharat" (A cultural build up awareness initiative of AICTE) on 23<sup>rd</sup> October, 2021.
- Special session on script writing was taken by Dr. Ambika Sankar Mishra
- One month Hospital training and Industrial internship program have also been carried out at various Hospitals and Industries by the students.
- One webinar has been organized on "Product management and Brand Management in Pharmaceutical Sectors" in association with School of management.
- Placement Orientation Programme have been performed for B. Pharm final Year (7th Sem.), students and **B. Pharm 1st year** students on 5<sup>th</sup> of October. The dignitaries of other departments ware present. Principal Dr. Gurudutta Pattnaik, sir of SoPLS have delivered the deck (placement

presentation) in front of B. Pharm final year students indicating the upcoming company's proposal, career opportunities of different pharma sectors, and future scope, and record of past companies' details. **Prof. KVD Prakash Sir,** Dean HRD and Senior HR of Centurion University has taken the session and conducted Placement orientation programme of students. The Orientation programme has been organized by Faculty and Placement co-ordinators Mr. Bikash Ranjan Jena and Mr. Abhisek Sahu of SoPLS, CUTM, Bhubaneswar Campus.

- Students have been trained by attending the **Mock interview** and **practise session** conducted by **Placement cell of CUTM** of concerned Schools and interviews of SoPLS had taken and evaluated by **Dr. Gurudutta Pattnaik, Principal,** SoPLS, CUTM, Bhubaneswar
- Career counseling and pre-placement program/industrial workshops were conducted for Final year **B.Pharm students** for recruitment to various departments of pharmacy like production, quality control, pharmacovigilance, clinical research, research and development etc.
- Optometry- We are training students to get a practical knowledge of testing eye sight, visual acuity
- Radiology
  - o Practical knowledge in manual and digital X-ray testing.
  - Industry visit on 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Oct in Prolife Diagnostic Center, BBSR.
- MLT-Students are getting trained to check blood pressure, blood-sugar, blood groups, Centrifuge, CBC, LFT, KFT, Lipid Profile, Malaria, Typhoid, Colorimeter, Semi Auto Analyzer and Full Auto Analyzer, Histopathology.
- CMB-Culture And Antibiotic Sensitivity, Media Preparation, Sterilization, GramStain, Isolation of Micro organisim (Bacteria and Fungus) from Food, water and others Sample, ZN Staining.
- OT-Students getting trained as an OT technician.
- 15 Students participated in internship programme at Clue4Evidence, Bangalore from 20/12/2021 10/1/2022.
- Special aptitude, reasoning, technical classes had been given.
- Life Skill Development Programme, Customized Training
- Inductive learning (Reasoning & Aptitude), Personality Development, Job Readiness Programme.
- Special Coaching for GATE & UPSC Exam.
- IELTS and AMCAT assessment test was held.
- Summer technical training for TATA Power Technical Training was conducted from department.
- Employability Training and Self Assessment by British Council
  - Aspiring Minds
  - Cocubes
  - iCalirator
  - Eureka
  - o OPTCL
  - o Pegasus
  - o Showhow2

- My perfection
- The student training for 3<sup>rd</sup>, 4th year students of B.Tech and 1<sup>st</sup> year MCA students was planned and executed to practice coding.
- As per the planned activity for student training and coding practice for 4th year students is done on a regular basis (C, C++, Java, Python)- Weekly 7 classes (Rakesh Kumar Ray, Saneev Kumar Das, Nilamadhab Dash, Abhijit Pal)

# 2.2.4 Job preparedness:

- Department has planned to provide special coaching for CSIR –NET, GATE and JAM to final year M.Sc and B.Sc students those have secured 8 or above CGPA in the last semester examination.
- All students participated in Webinar on "Indian Navy as a Career Choice" with Captain S Ravindra (Command Recruitment Officer, Headquarters Eastern Naval Command) with Centurion University on 6th Oct'21 and informed about various job opportunities in Indian Navy and how to join it.
- The head of training placement interacted with all newly admitted B.Sc and M.Sc students and explain how university along with T&P Department working towards student placement by councelling them according to their choice between higher study, industry jobs and entrepreneurship options.
- Job readiness course offered by SoM for both MBA and BBA students which is of six credits entirely in practice mode. Students also appeared the baseline test to check their current IQ and their readiness so that accordingly the placement training would be given. The result of the baseline test was compared with the result of the previous baseline test so that the corrective actions would be taken. Mock GD, CV preparation as per the format circulated by Training and Placement team and Mock PI was done during this quarter to make the students thoroughly prepared for the placement.
- Students were trained with scripting and with production techniques to train them with skills required for industry.
- They were guided for industry internship
- They were given career guidance and literatures relating to skill requirements of different professions in media sector
- Arranging for the students to participate in the events for exposure to the current technical knowledge like HACKATHON events, webinars, and expert talks is arranged at the department level.

# 2.2.5 Student Mentoring

• For every 40 students there is a mentor assigned. Mentors regularly interacted with parents and informing about academic updates and personal problems of mentees in this Covid Pandemic Situation.

 All the mentors were also advised to interact with parents as well as students regarding current semester teaching and learning updates in online mode.

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# 2.2.6 Student Satisfaction Survey

- Online feedback for different subjects was taken from Students through ERP.
- Class monitoring by HoD was conducted to analyze the understanding level of students for a particular subject.

# 2.3 Faculty and Staff

# 2.3.1: Faculty and Staff Welfare:

- All the faculty and staff members were noticed to come to campus as per department of higher education guideline, following covid rules.
- Faculty Retreat activity was held at Paralakhemundi Campus on 17th December 2021.All the faculty members joined there physically and enjoyed it.
- If any faculty develops any type of cold/fever/snitch, then he/she can work from after taking permission from HoD/Dean/VC.
- Sweets and Snacks were distributed among faculty and staff members on the eve of Deewali.
- All faculty and staff members attended the party given by Ms. Gitanjali Sahoo, Laboratory assistant on the occasion of his son's new job in TCS as software engineer.
- All faculty members participated in SoAS retreat ceremony held in CUTM, PKD Campus on17th December 2021.
- On the occasion of *NATIONAL MATHEMATICS DAY*, a Seminar was conducted under Department of Mathematics, School of Applied Sciences, organized it on 22<sup>nd</sup> December, 2021 on the topic "A brief overview on population dynamics." The invited speaker Prof. Seshadev Padhi, Professor in Mathematics, BIT, Mesra, delivered a talk on the above topic. In the inaugural session, Dr. Tumbanath Samantra, HoD, Mathematics Department, presented the welcome address. Prof. Dipankar Bhattacharyay, Pro-VC, Research & Learning was joined the session as Chief Guest. Dr. Yashaswi Naik, Dean, School of Applied Science, addressed the vote of thanks. All the students of master & batcher degree and faculty members of School of Applied Science were attended the session.
- Dr Rukmini Mishra visited Forest Engineering College, Mulugu to discuss signing of MoU and possible collaboration between CUTM and Forest Engineering College 29<sup>th</sup> to 1<sup>st</sup> December 2021.
- Dr Rukmini Mishra and Dr Sutar Suhas Bharat along with PhD research scholars successfully completed Whole genome sequencing of bacteria using nanopore sequencer at Genetics and Genomics Laboratory on 9<sup>th</sup> of December.

- Dr. Sagarika Parida delivered the talk as a resource person on the topic entitled "Cyanobacteria: The Wonder of Nature" in the Seminar organized by Derabis College, Kendrapara.
- The annual enumeration of migratory birds at Rairakhol Forest Division was conducted on 26th and 27th December 2021. Dr Siba Prasad Parida was invited as resource person for Pre-Bird Census Orientation programme of Rairakhol Forest Division.
- Students took part in various CSR activities physically.
- J. Lavanya won the Gold Medal under Healthcare category in Odisha skills 2021

# 2.3.2 Awards Received:

- Dr. Kalpita Bhatta received APSI Women Young Scientist Award 2021 organised by Academy of Plant Sciences India for her outstanding achievements, contribution and research in the field of environmental sciences, Limnology and natural product.
- Dr. Pradip Kumar Prusty was awarded with Ph.D. degree from Centurion University of Technology and Management, BBSR.
- Mr. Bikash Ranjan Jena got opportunity to elected as an "Editorial Board member" in Acta Scientific Pharmaceutical Sciences (ASPS) and as an International Reviewer and Editorial Team member in International Journal of Life Science and Pharma Research (IJLPR).
- Dr Chandan Das, Dr Rudra Narayan Sahoo, Dr Ranjan Kumar Sahoo and Dr Ashirbad Nanda have been awarded with PhD degree.

# 3. Research Innovations and Extension

#### 3.1 Research and Publication

- Dr. Swarnalata Jena has Published 1 research paper entitled "Analytical estimation of energy dissipations: Viscous, Joulian, and Darcy of viscoelastic fluid flow phenomena over a deformable surface" in Heat Transfer (Scopus) (Vol.50(8), 2021, 7798-7816).
- Sagarika Parida. Nutritional and Potential Trace Elements Assessment in Few Edible Tuber Crops in Two Blocks of Kandhamal District of Odisha. Ambient Science. 2021. 8(2):48-51
- Aritra Kumar Dana, Arnab Mannaa, Saikat Ghosha, Shreya Sikdara, Raghaba Sahib, Pankaj Kumar. Molecular Mechanisms of the Lipopeptides from Bacillus subtilis in the Apoptosis of Cancer cells A Review on its Current Status in Different Cancer cell lines. Advances in Cancer Biology Metastasis. 2021; 3:1-12.
- Aliva Das and Sagarika Parida. Innovative Cultural Practices and Cluster Front Line Demonstration by Krishi Vigyan Kendra, Angul, on Yield of Green gram (Vigna radiata L.). Indian Journal of Natural Sciences. 2021, 12(69): 37614-37625.

- Monalisha Giri and Sagarika Parida. Diversification of Fungus Associated with Skin and Nail Infection: A Review. Indian Journal of Natural Sciences. 2021, 12(69): 37632-37636.
- Barsha Senapati and Sagarika Parida. Survey on Predominant Diseases of Vigna mungo (L.) Hepper. in Jajpur, District of Odisha. Indian Journal of Natural Sciences. 2021, 12(69): 37642-37645.
- Aparna Das and Gyanranjan Mahalik. Retardation of Candidiasis by Certain Antifungals. Indian Journal of Natural Sciences. 2021, 12(69): 37537-37545.
- Satabdi Sahoo, Aparna Das and Gyanranjan Mahalik. An Overview of Boerhavia diffusa Plant used for the Treatment of Various Diseases in Odisha, India. Indian Journal of Natural Sciences. 2021, 12(69): 37559-37559.
- Swagat Kumar Barik, B. Jyotirmayee, Satabdi Sahoo and Gyanranjan Mahalik. A Review on Ethnomedicinal Plants Used for Digestive Disorder. Indian Journal of Natural Sciences. 2021, 12(69): 37504-37509.
- Chinmayee Chitralekha Pradhan, Kalpita Bhatta and Lakshmi Samad. Antimicrobial Activity of Leaves of Alstonia scholaris (Linn.) R.Br. Indian Journal of Natural Sciences. 2021, 12(69).
- Kalpita Bhatta\* and Mahima Brehura. Impact of Fly Ash on the Growth Parameters of Vigna radiata. L. Indian Journal of Natural Sciences. 2021, 12(69).
- Rajasri Sahoo, Kalpita Bhatta\*, Aparna Dasand Santilata Sahoo. Analysis of Antioxidant Activity of White and Black Varieties of Macrotyloma uniflorum (LAM) Verdc under Nickel Stress. Indian Journal of Natural Sciences. 2021, 12(69).
- Srimay Pradhan, Dallip Kumar Upreti, Kunja Bihari Satapathy. Lichen Diversity on Shorea robusta Gaertn. in the Transitional Zone of Similipal Biosphere Reserve. Ambient Science. 2021. 8(2):74-78.
- Bhagyeswari Behera, Kunja Bihari Satapathy. Diversity and Distribution of Aquatic Plants in Khordha, Odisha, India. . Ambient Science. 2021. 8(2):1-4.
- Bijayalaxmi Mahanty, Rukmini Mishra, Raj Kumar Joshi (2021)Molecular characterization of Zn(II)2Cys6 cluster gene family and their association with pathogenicity of the onion basal rot pathogen, Fusarium oxysporum f. sp. Cepae. Physiological and Molecular Plant Pathology, 117. (Accepted).
- Jiban Mishra, Gyanranjan Mahalik\*. ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED IN THE MANAGEMENT OF DIABETES IN THE URBAN AREAS OF KHURDA, ODISHA, INDIA. Innovare Academic Sciences Pvt Ltd. ISBN: 978-81-928286-7-1. Vol.4.
- Reshma Mohanty, Pallavi Jali, B. Jyotirmayee, \*Gyanranjan Mahalik.
   Allelopathic Effect of Aqueous Extract of Ageratum conyzoides L. on Seed
   Germination and Seedling Growth of Vigna radiate (L.) Wilczek (Mung
   Bean). Advances in Business Management & Technology. ISBN: 978-93 91681-40-1. Vol.1
- From October 2020 to December 2020 the faculty members of the department communicated research articles in various journal of repute. Some of the research articles were accepted and some of them are published in Scopus indexed, Web of Science and UGC journals.
  - 02 number of articles were contributed by Dr. Yashaswi Nayak

- 03 number of articles were contributed by Mrs. Sunita Sathapaty
- 02 number of articles were contributed by Dr. Siba Prasad Parida
- 01 number of articles were contributed by Dr. Sitaram Swain
- 02 number of articles were published by Dr. Pradip Kumar Prusty
- 04 number of articles were published by Dr. Gagan Kumar Panigrahi.
- 04 number of articles were published by Dr. Bibhudutta Mishra
- **Dr. Bibhunandini Das** authored an article titled "Trends and Patterns of Sea food Sector": Kala Sarovar (UGC CARE Group I indexed), has been accepted for publication.
- Dr. Ambika Sankar Mishra completed 2 issues of Centurion Journal of Multidisciplinary Research as issue editor.
- Total 9 numbers of articles from SoPLS were accepted and published in various index journal in the month of October to December 2021.
- Total 3 numbers of Book chapters are accepted and published in the month of October to December 2021.
- S. Dash and Sunil K. Jha have published An In Silico Strategy to Assess the Antibacterial Activity of Phytochemicals from Fenugreek (Trigonella foenumgraecum) against E. coli in Indian Journal of Natural Sciences in 2021 (0976 – 0997).
- Sangeeta Chhotaray, MadhusmitaParida and Soumya Jal have published In silico Screening of Phytochemicals from Nigella sativa for Its Potential Therapeutic Roles Targeting SARS-Co-V-2 in Indian Journal of Natural Sciences in 2021 (0976 – 0997).
- Monali P Mishra and Sunil K Jha have published An Wound Healing Activity
  of Phytochemical Coumarin against Alkaline Protease from Pseudomonas
  aeruginosa: An In silico Approach in Indian Journal of Natural Sciences in
  2021 (0976 0997).
- Sangeeta Chhotaray and Soumya Jal have published Prediction of Antiviral Activity of Elettaria cardamomum Targeting SARS-Co-V-2 using Computational Docking Techniques in Indian Journal of Natural Sciences in 2021 (0976 0997).
- Monali P. Mishra and Sunil K Jha have published Prevalence of Gram-Negative Uropathogens with Antibiogram Study in a Tertiary Care Hospital in Eastern India in Indian Journal of Natural Sciences in 2021 (0976 0997).
- S. Chakrabarty has published In silico Molecular Docking Studies of Oleanolic Acid from Cichorium intybus (Chicory) against Yersinia pestis Causing Plague in Indian Journal of Natural Sciences in 2021 (0976 0997).
- S. Chakrabarty has published In silico Molecular Docking Study of Chicoric Acid from Ocimum sanctum (Tulsi) Working against Achromobacter xylosoxidans Causing Bronchitis in Indian Journal of Natural Sciences in 2021 (0976 – 0997).
- S. Chakrabarty, Monali P. Mishra, Dipankar Bhatacharyay have published Targeting Microbial Bio-film: An update on MDR Gram Negative Bio-film Producers causing Catheter Associated Urinary Tract Infections in Applied Biochemistry and Biotechnology in 2021 (1559-0291).
- Debashree Debadatta Behera, Siba Prasad Mishra, Shiv Sankar Das, A.M. Mohanty, R.C. Mohanty, Bijaya Bijeta, Performance Analysis of PVT Based Hybrid Type Solar Dryer for Drying Food Products, Ambient Science, Volume 8, Issue 2, December 2021: pp.24-29

- Prajna paramita Debata published patent on "Design of Bioinspired forest chasis robots on a slope"
- Shiv Sankar Das, Debashree Debadatta Behera, Bijaya Bijeta Nayak, "Use of clean energy for sustainable livelihood in rural areas: A case from south Odisha", Materials Today: Proceeding, Elsevier, SMPBE-2021, Sustainable material and practices for built Environment, Accepted.
- Dr. R.K. Khadanga Presented a paper "Frequency Regulation of a Distributed Power System via Modified Whale Optimization Algorithm" in IEEE: i-PACT-2021 organized by VIT, Vellore.
- Sanjiba Kumar Baliarsingh, Aneesh Anandrao Lotliker, Suchismita Srichandan, Chandanlal Parida, Rajdeep Roy, R. Chandrasekhar Naik, T.M. Balakrishnan Nair, Kamal Kumar Barik (2021) Response of coastal phytoplankton pigment composition to tropical cyclone Fani, Marine Pollution Bulletin, Vol.173,pp.1-5.
- S P Mishra, **K K Barik** and S R Panda (2021) Geospatial Effect on the Mining Operation in Joda/Barbil Area of Odisha, India, Current Journal of Applied Science and Technology, Vol. 40 (37),pp. 36-55
- S R Panda, S P Mishra, J K Tripathy & K K Barik (2021) The Failed Resilience, Grim Water Future, and Salinity Intrusion through GIS of Kendrapara Coast, Odisha, International Journal of Lakes and Rivers, Vol.14 (2),161-181.

#### Research Publications :

- .1 Satyabrata Dash, Sujata Chakravarty, Sachi Nandan Mohanty, Chinmaya Ranjan Pattanaik, Sarika Jain , A Deep Learning Method to Forecast COVID-19 Outbreak, New Generation Computing SCI, Springer ,0288-3635 2 (Published)
- .2 Sasmita Kumari Nayak and Jharna Majumdar, Hybrid Method of Video Shot Segmentation Based on YCbCr Space Color Model, Journal of Engineering Research and Reports, 2582-29263 (published)
- .3 Sasmita Kumari Nayak, Mamata Beura, Mohammed Siddique and Siba Prasad Mishra, Analysis of Indian Food Based on Machine learning Classification Models, Journal of Scientific Research & Reports , 2320-02274
- .4 Mamata Garanayak, Suvendu kumar Nayak ,Recommendetion system for music based on content and popularity International journal of Informtion system and design IGI GLOBAL 1947-8186
- .5 Dayal Kumar behera, Shreela dash Extreme Gradient Boosting and Soft Voting Ensemble Classifier for Diabetes Prediction ,19th OITS International Conference on Information Technology (OCIT) (Published)
- .6 Sangram Keshari Swain Bikash Kumar Samantaray Waste to Wealth Management RESPONSIBLE AND SUSTAINABLE PAPER WASTE MANAGEMENT National , Amazon Kindle- Self Publishing
- .7 Sangram Keshari Swain Bikash Kumar Samantaray Waste to Wealth Management ELECTRONICS WASTE AND ITS SUSTAINABLE MANAGEMENT National, Amazon Kindle- Self Publishing.

# 3.2: Teachers awarded National/International fellowship for advanced studies /research during the year:

- Dr. Bidyut Kumar Kundu was selected as a faculty assistant for research as well as teaching in University of Cincinnati, USA for 2 years.
- **Dr. Gyanranjan Mahalik** has been awarded by Scholars Academic and Scientific Society (SAS Society) for his contributions in academics and research. For that SAS has provided the prestigious SAS Fellow Membership Award (FSASS) with Membership ID-SAS/FSASS/388/2021.

#### 3.3: Research Publications in the Journals notified on UGC website

- Dibyashree Rout, Swayam P. Sahoo, Pratap K. Chhotaray, P. K. Sahoo and S. K. Sahu, "A Short Overview on Gram-Negative Bacteria: Salmonella typhimurium and Escherichia coli", Indian Journal of Natural Sciences, 12,68, 34802-34806.
- Nisha Poonia, Kashmiri Lal, Ashwani Kumar, Anil Kumar, Srikanta Sahu, Anurag T. K. Baidya, Rajnish Kumar, "Urea-thiazole/benzothiazole hybrids with a triazole linker: synthesis, antimicrobial potential, pharmacokinetic profile and in silico mechanistic studies", Molecular Diversity, 2021
- Pratap K. Chhotray, Soumyakanta Prusty, Kamalakanta Behera, Srikanta Sahu, "Exploring the Thermophysical Properties of Ionic Liquids for Industrial Applications", Indian Journal of Natural Sciences, 12,69, 37572-37580.
- Pratap Chhotray and Srikanta Sahu, "Investigation of Solubility Parameter of Hexafluoro Phosphate Based Ionic Liquids through Molecular Dynamics Simulation", Indian Journal of Natural Sciences, 12,69, 37586-37590
- Ashish Kumar Sahoo, "Graphene Composite of Cadmium Sulphide Nanoparticles and Study of Effect on Polluted Water", Indian Journal of Natural Sciences, 12,69, 37267-37272,2021
- Ashish Kumar Sahoo, "Synthesis and Study of Photocatalytic Activity of Cadmium Sulphide Nanoparticles", Indian Journal of Natural Sciences, 12,69, 37224-37228
- Ashish Kumar Sahoo, "Top-down Approach towards Exfoliated Graphene Sheets", Indian Journal of Natural Sciences, 12,69, 37255-37259
- Shraban Kumar Sahoo, Gagan Kumar Panigrahi, Manoj Kumar Sahu, "Biological synthesis of GO-MgO nanomaterial using Azadirachta indica leaf extract: A potential bio-adsorbent for removing Cr(VI) ions from aqueous media ", Biochemical Engineering Journal, 177, 108272
- Jitendra Kumar Sahoo, Amrutashree Hota, Chintan Singh, Supravarani Barik, Naini Sahu, Shraban Kumar Sahoo, Manoj Kumar Sahu & Harekrushna Sahoo, "Rice husk and rice straw based materials for toxic metals and dyes removal: a comprehensive and critical review", International Journal of Environmental Analytical Chemistry,
- N.K.Seth and C.R.Routray, Synthesis and Characterizations of ecofrientldly polymeric film from orange peels, Journal of Natural Sciences, 12,68.
- 2 research articles are accepted entitled "Dissipative heat for the Casson fluid flow past an expanding cylindrical surface" in Heat Transfer (Scopus) and "Impact of radiative and dissipative heat on the Williamson nanofluid flow within a parallel channel due to thermal buoyancy" in Proceedings of the

Institution of Mechanical Engineers, Part N: Journal of Nanomaterials, Nanoengineering and Nanosystems. (Scopus)

• 14 papers from SoAS Botany department published and three papers accepted in the journals notified on the UGC Website.

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# 3.4: Faculty participation in Seminars/Conferences and Symposia:

- Dr. Gangadhar Purohit attended a colloquium entitled "International Colloquium on Technology Readiness for High Volume Semiconductor Chip Manufacturing (Fab), (ICTFAB)-2021" held on Nov 15-16, 2021, at IIT Mandi in online mode.
- Dr. N.Nayak participated in the first event of ACS Seminars organized by the American Chemical Society and Indian Institute of Technology Roorkee on 18th & 19th Oct 2021.
- All faculty members participated in one day seminar organized in our University in association with IANCAS-ERC on Energy, Radiation and Materials on 27.10 2021.
- All faculty members participated in webinar on Copy rights and Design Patents on 15th December, 2021.
- All faculty members participated in webinar on "Solid Waste Management and Circular Economy" on 21st November 2021 organized Department of Chemistry and Research center for Waste to Wealth Management, Centurion University of Technology and Management, Odisha
- Mr. Chittaranjan Routray has participated in webinar on additive manufacturing with CII (Confederation of Indian Industry) and Wipro 3D from 15th,16th and 17th November 2021
- All faculty members participated in webinar on "Smart Sensors and Computing Devices for Hardware Artificial Intelligence" organized by Department of Physics and Center for New Material Applications, along with IIC and Centre for Innovators and Entrepreneurs on 9th November, 2021.
- Presented paper entitled "On a Geometric sequence ideal using Lacunary Orlicz sequence spaces of 1-fractional Difference operators4th International Conference on Frontiers in Industrial andApplied Mathematics (Virtual Mode) organized by Department of Mathematics, Sant Longowal Institute of Engineering & Technology, Longowal during 21-22 December 2021.
- Chaired a Session in the 4th International Conference on Frontiers in Industrial and Applied Mathematics (Virtual Mode) organized by Department of Mathematics, Sant Longowal Institute of Engineering & Technology, Longowal during 21-22 December 2021.
- Dr. Gyanranjan Mahalik has attended the following Open Science: A multifaceted framework to improve science and health outcomes. at Indian

Council of Medical Research, on Friday 29 October, 2021 organized by Elsevier.

- Dr. Gyanranjan Mahalik has attended an online workshop on Trends in Global Virology, at Indian Council of Medical Research, on Friday 19 November, 2021organized by Elsevier.
- Dr. Ambika Sankar Mishra participated in 5th National Media conclave.
- Dr. Harish Ch. Mohanta attended an online workshop on Artificial Intelligence and Assistive Technologies for Enhancing Learning and Inclusive Education: Concepts, Recent Trends and Research Challenges by IIT BBS during 18<sup>th</sup> to 21<sup>st</sup> Nov 2021.
- Presented a talk at ATAL FDP on Digital Manufacturing by Mrs. Swarna Prabha Jena and Mr. Subrat Kumar Pradhan on 25th Nov 2021.
- Rama Prasanna Dalai Attended a 30 days Renewable Energy System master class from 18/10/21 to 17/11/21 organized by Pantech eLearning.
- Rama Prasanna Dalai Attended a Five-days AICTE-ISTE Sponsored Refresher Programme on the topic titled "Electric Vehicle and Smart Grid: A Path Towards Sustainable Energy" held at KIIT deemed to be University, Bhubaneswar from 17/12/2021 to 23/12/2021.
- Dr. Rajendra Kumar Khadanga Attended a Five-days AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Type-1 and Type-2 Fuzzy Logic and Its Applications" organized by Department of Electrical Engineering, Indian Institute of Information Technology Kota, held during 06th to 10th December 2021.
- Dr. Rajendra Kumar Khadanga Attended a Five-days AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Artificial Intelligence Foundations for Power Systems" organized by Department of Electrical Engineering, K.L.N. College of Engineering, Madurai, held during 25th to 29th October 2021.
- Dr. Amit Kumar Sahoo Attended a Five-days AICTE-ISTE Sponsored Refresher Programme on the topic titled "Electric Vehicle and Smart Grid: A Path Towards Sustainable Energy" held at KIIT deemed to be University, Bhubaneswar from 17/12/2021 to 23/12/2021.
- Dr. Sujata Chakrabarty Chaired two sessions in Conference of Electrical and Computer Engineering (IEEE WIECON-ECE 2020), Bangladesh, 4th and 5th December, 2021.
- Dr. Sujata Chakrabarty Chaired a session in International Conference on Intelligent Computing and Advances in Communication ICAC-2019 on 26thth November 2021.
- Dr. Sujata Chakrabarty Delivered a talk on "Artificial Intelligence in Smart Agriculture" in an Webinar on "A Journey Towards Industry and Academia in

- the field of ICT: Opportunities and Challenges"" Organized by IEEE IIUC Student Branch WIE Affinity Group, Bangladesh, 10th October 2021.
- Prof. Sasmita Kumari Nayak completed FDP on "Deep Learning for Natural Language Processing" from 15/11/2021 to 19/11/2021 at Bhilai Institute of Technology Durg.

# 3.5: No of Students participating in extension activities with Government Organisations, Non-Government Organisations, and programs such as Swachh Bharat, Aids ,Awareness, Gender Issue, etc.:

• B.Sc and M.Sc students participated in "World AIDS Day" that was being celebrated on 1st December 2021 on the theme "End inequalities. End AIDS" and participated in poster making as well as sloganwriting compitations in virtual mode.

# 4. Resource acquisition

# 4.1: Faculty requirement and development –

- Ms. Swati Mahapatra and Subhashree Lenka joined as Laboratory Assistant on 1<sup>st</sup> December 2021.
- All most all faculties have attended online webinars and FDPs and Dr. Goutam Mahato Chaired a Technical Session in The 3rd International Conference on Frontiers in Industrial and Applied Mathematics, FIAM-2020, held at NIT Jamshedpur, India during December 21-22, 2020.
- Mr. Sasibhusan Padhi, Senior lecturer, Department of mathematics has successfully completed his PH.D defence under guidance of Dr. Goutam kumar Mahato, Associate professor, department of mathematics, CUTM.
- Mr Sudhansu Sekhar Panda joined as Assistant Professor in Finance on 1<sup>st</sup> November, 2021. One more faculty is likely to join in the area of HR in the month of January, 2022.
- Ms. Tamosa Mukherjee has joined as Lecturer in SoFS.
- Ms. Meenu Hariharan has joined as Lecturer in SoFS.
- Dr. Mamta has joined as Associate Professor in SoFS.
- Dr. Naga Jogayya Kothakota has Associate Professor as Lecturer in SoFS.
- The following 3 faculties were recruited in Dept. Of CSE between Oct to Dec.
  - .1 Subhashree Sahoo(M.Tech, CSE) on 18.10.2021.
  - .2 Mr. Bubun Kumar Mohanta(MCA) on 1.12.2021.
  - .3 Dr. kamalakanta Sethi(Ph.D) on 15.12.2021.
- Dr. Nagesh Kolagani delivered a talk on 26th November 2021 at 12 PM. The topic incudes: Satellite imagery processing using AI/ML techniques and JavaScript/Python coding in Google's Earth Engine platform on Drone imagery processing using Open Drone Mapping and NodeJS-Angular platform for integrating above two modules.
- Department of Computer Science and Engineering, SoET and Center for Data Science and Machine Learning cordially invite you to the webinar entitled "Recurrent Neural Network (RNN) and its Applications: The Keras Way".

The talk falls under Data Science domain of Computer Science. The speaker, Mr. Ashutosh Bajpai has pursued M.Tech. (IIT Hyderabad) in Data Science, and handled various Data Science and other R & D projects in industries and academics. Further details of the webinar and the speaker can be found in the attached flyer and synopsis. The schedule for is as follows Date: November 18, 2021 (Thursday)

Time: 7:30 to 8:30 PM (IST)

# **4.2:** Staff requirement and development –

- One teaching assistant for the M.Sc. lab was appointed in August.
- Dr. Chandan Das has joined as Assistant Professor in department of Pharmacognosy.
- Mr. Satish kanhar has joined as Assistant Professor in department of Pharmaceutical Chemistry.
- Mrs. Rupali Rupasmita Rout has joined as Assistant Professor in department of Pharmacology.
- Miss Kumuduni Sahoo has joined as Assistant Professor in department of Pharmacology.
- Miss Rashmita Jena has joined as Assistant Professor in department of Biotechnology.
- Mr Satyanarayan Tripathy has joined as Assistant Professor in department of Pharmaceutical Analysis.
- Miss. SashiSaroj Tiwari has joined as Assistant Professor.
- Miss Itishree Mohapatra has joined as Lecturer.

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#### 4.3: IT resource

- One virtual room is provided with IT resources.
- Urkund and Turnitin are used for plagiarism scrutiny.
- Nanopore sequencer and genome station were installed in Bhubaneswar and PKD campus.
- All the faculty members were provided the facility of Turnitin to check the plagiarism for publication.
- The courseware has been installed and every faculty member is directed to upload their study materials for online teaching. Minor changes in the syllabus made for the 2021-22 academic year also resulted in subsequent changes made in the courseware by the faculty members.
- Faculty members are using Google meet app and Zoom app to take the classes and record their lectures too for the intercampus classes as the oncampus classes are happening only by offline mode.

• CUTM, Time sheet tracker has been installed centrally so that every employee can submit their daily work report from campus as well as any work done from home beyond office hours to the Management every day.

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# 4.4: Lab/ workshops development (equipment & others)

- Maintenance of all equipment had been done.
- Some research activity initiated by both faculties and M.Tech. scholar in Thermal and EDM lab and 3D printing machine.
- Ph.D. students from ISM Dhanbad, NISER KIIT, ITER, BPUT Rourkela in Advanced Testing Laboratory, Domain students have done the project in the CNC lab.
- IMFA- MMC back filling material block testing in our ATC lab, UTM for compressive test UCS calculation.
- All equipment is in Functional Condition.
- We are using the ARVR lab for developing assets for anatomy and physiology subjects.
- New equipment and chemical list were prepared for various departments of U.G and orders have been placed.
- New labs are designed and developed for various departments of P.G and U.G of Pharmacy.
- -80°C refrigerator was procured for genetics and genomics lab.
- New labs are designed and developed for various departments of P.G and U.G of Pharmacy.
- New instruments have been installed in M. Pharm Pharmaceutics and Industrial Pharmacy lab.
- Mirror is installed in optometry Lab
- We are using ARVR lab for Developing assets for anatomy and physiology subjects
- Maintenance of microscopes were done
- Complaint of Digital Board given.

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# 4.5: Physical Facilities

- Proper classroom and Laboratory is provided for physical classes and experimental work.
- Physical classes commenced from 1<sup>st</sup> week of August 2021.
- Additional classrooms and an additional faculty room in the Kautilya building

- are going to be ready by the end of October 2021.
- Additional classrooms has been arranged on the third floor as in BBA 1<sup>st</sup> year there are 96 students and it required two sections.

# 4.6: Library facilities

- Faculty and students were advised to use the E-library facility available on the CUTM website.
- Faculty members involved in domain teaching uploaded their study materials in CUTM Courseware.
- Domain and certificate courses were prepared by faculties of respective subjects and uploaded in CUTM courseware.
- In the Departmental library, all books are available for each subject. For the upcoming academic session books on Aquaculture and Fisheries will be procured for references.
- The faculty members are encouraged to become the club members of NDL (National Digital Library) and all the e-resources of the library can be accessed by them. Faculty members are also accessing the e-resources for the library through the CUTM website as it will count for NAAC and NIRF rankings.
- The faculty members are encouraged to become the club members of NDL (National Digital Library) and all the e-resources of the library can be accessed by them. Faculty members are also accessing the e-resources for the library through the CUTM website as it will count for NAAC and NIRF rankings.

# **4.7: Facility for E-Content**

- Faculty members are preparing E-contents and videos for certificate and domain courses on behalf of their research Centre.
- E-Content is being prepared by the faculty members for their own courses handled by them and regularly the contents are updated in the courseware. A team of ten people has been created to review the courseware contents. Dr. Sisir Ranjan Dash and Dr. Sabyasachi Dey are also a part of this team and the courseware contents were regularly reviewed by the review team. Individually the faculty members were called, and the modifications required in their courseware were discussed with them. All the faculty members were instructed to prepare video lectures of atleast one course handled by them as the UGC 's permission to upload the e-content in the SWAYAM portal was obtained and the Team-SoM also started preparing video lectures each of 45 to 60 minutes duration. Till 31<sup>st</sup> December, 2021 the video lectures of first two semesters of MBA and first 4 semesters of BBA were completed. VC, CUTM and Registrar, CUTM reviewed the progress of video lectures prepared by faculty members.

# 5. Support and Progression

**5.1 CSR Activity** 

- Students took part in rangoli competations held on 3rd November on the eve of Deepavali.
- The students from the department of Botany actively participated in the CSR activities. The following events have been conducted and the students of both B.Sc. and M.Sc. actively participated in different events and became winners in different events.
- On the occasion of International Day of Persons with Disabilities, celebrated on 3rd of December 2021. Kajal Das with registration number 200705170075 of M.Sc (Botany) is one among few selected students from our University visited Home for Disabled, Padmashree society, Jatni to interact & spend some precious time with the residents.
- Ankita Choudaury of M.Sc. with registration number 200705170059 received 2<sup>nd</sup> position on PPT presentation competition on World Pharmacy Day.
- Manisha Dash, Ankita Choudaury and Shweta Aswini Parida and of M.Sc. with registration number 200705170046, 200705170059, 200705170069 got 2<sup>nd</sup> position in Rangoli competition held on November, 2021
- Nikita Jena, M.Sc 1st yr.(Botany) with registration number 210705170010 received 2nd Position in poster making competition on the occasion of World Aids Day held on 1st December, 2021
- Sweta Suman Patra, M.Sc 1st yr.(Botany) with registration number 210705170033 received 3rd position in poster making competition on the occasion of World Aids Day held on 1st December, 2021
- School of Management organised Rangoli competition on the eve of Deepavali on 3rd November, 2021. The theme of the event was "Let Knowledge Illuminate the World". More than 50 students participated in the competition. Dr. Yashaswi Nayak & Dr. Padmaja Patnaik were judges who evaluated the rangolis. Also, the event was organized successfully with the help of coordinator's support. Sanjana, Anisha, Arundhati and Sarmistha from BBA won the competition.
- School of Management organized a poster design competition for MBA first year students on 10 December, 2021. All the participants were asked to prepare the poster with the theme "Dignity, Equality, and Freedom for all". There were innovative posters and all groups showed creativity.
- December 24 is celebrated annually in India as National Consumer Rights Day, also called National Consumer Day, to commemorate December 24, 1986, when the Consumer Protection Act received assent of the President of India. The purpose of the day is to make consumers aware of their rights and responsibilities. School of Management organized a poster Design Competition for MBA students to showcase what students think for the same. All the participants prepared posters with the theme Protecting Consumer Rights.
- Observation of Gandhi & Shastri Jayanti and International Day of Non-Violence: on 2<sup>nd</sup> October 2021 students and faculty of SOVET have participated in the campus cleaning programme and observation of

Observation of Gandhi & Shastri Jayanti and International Day of Non-Violence.

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# 5.2. Number of awards/medals for outstanding performance in sports/cultural activities at national/international level: Nil

# 5.3. The activity of Student Council & representation of students on academic & administrative bodies/committees:

- Students represented in placement committee and alumni committee and took an active part in the second virtual alumni meet conducted on 3rd July 2021. They performed activities like anchoring, cultural activities, interaction with the alumni, etc.
- Recently to further streamline the process, both the alumni and placement committees are merged together and regular placement related activities, alumni updates shall now be done on one platform. Sunanda Priyadarshini and Rhitiq Pattnaik from MBA 2<sup>nd</sup> year and Sanjana Das from BBA final year are active throughout most of the student activities.

5.4. Meetings/activities organized by Alumni Association:

 A second virtual alumni meet was conducted by Team SoM on 3rd July 2021 in follow-up to the first virtual alumni meet on 12th June 2021. In this meet, the interactions with recent batches were done with whom the interactions could not be done during the first meet due to lack of time.

# **5.5. Details of campus placement:**

- B.Sc and M.Sc students were encouraged to apply for various competitive exams.
- Both M.Sc and B.Sc Students registered and participated in various campus drives
  of different companies like Cognizant, Byjus, Axis Bank, Surya International,
  Pulsus international, Mordor Intelligence etc.
- Diptimayee Sahoo from M.Sc final year has got selected in zolostays with a package of 4 lpa.
- Laxmipriya Mohapatra and Ankit Kumar Barik from M.Sc final year have got selected in pulsus healthtech pvt. Ltd. with a package of 2.4 lpa.
- 3 students from BBA and one from MBA (all from 2022 to be pass out batch) were placed at Extramarks.
- 1 BCoM, 2 BBA and 3 MBA students (all from 2022 to be pass out batch) were placed at Just Dial.
- One student from MBA (2022 pass out batch) was placed at eClinialWorks.
- One student from MBA (2022 pass out batch) was placed at IndiaMart.
- 5 students from MBA (2022 pass out batch) were placed at Siyan Info Solutions.
- 8 students from MBA (2022 pass out batch) were placed at Skolar
- 31 students from B.Tech Mech were placed in this quarter.
- 50 students from B.Tech CSE are placed in this quarter.

# 5.6. No of students benefited by guidance for competitive examinations and career counseling:

- B.Sc. and M.Sc. were encouraged and guided to apply for various competitive exams.
- Both M.Sc. and B.Sc. Students registered and participated in various campus drives of different companies like cognizant, byjus, Axis Bank, ZIFO International, etc.

# 6. Leadership and Management

# 6.1. Professional development / administrative training programmes

- Department of Chemistry in association with IANCAS-ERC had organized one day seminar on Energy, Radiation and Materials on 27.10 2021.
- Research centers works are going on according to requirement in different areas as mathematics department faculties were involved in CFD, HPC, QC, Trajectory optimization subareas.
- All the faculty members from SoM got exposure towards preparing class videos through OBS studio and Zoom and the lecture notes, question and answers etc towards the development of E-Content to get it uploaded in the SWAYAM portal of UGC. Faculty members were also asked to prepare the qualification packs towards a new job role in NSDC and subsequently prepare the Question Bank to get it uploaded at NSDC portal. Till December, 31<sup>st</sup> 2021 more 250 video lectures were prepared by the faculty members across all programs and courses.
- Pre-Employment Vision Check-up for NALCO was conducted on 21<sup>st</sup> DEC 2021
- We have distributed pamphlet to Nearby Medicine Stores for Promotion of Community Diagnostic Centre
- Webinar Report on "Numerical prediction of micro scale fluid flow and heat transfer" from 22nd December, 2021 organized by Computational Mathematics & Department of Mechanical Engineering, Centurion University of Technology and Management, Odisha

# 6.2. No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes:

- Mr.Chittaranjan Routray has participated in FDP on additive manufacturing with CII (Confederation of Indian Industry) and Wipro 3D from 15th, 16th and 17th November 2021 through online.
- Dr Rukmini Mishra and Dr Sutar Suhas Bharat attended a three days' workshop/training on Oxford Nanopore Sequencing at Genotyping Technology, Banglore from 20<sup>th</sup> to 23 October 2021.
- Dr. Sagarika Parida attended "Effective writing skills for promoting research what do we need to know?" at Indian Council of Medical Research, on Monday 13 December, 2021.
- Dr. Sagarika Parida attended "Featured Funding Opportunities for NGOs and Academic Institute-November-2021" organized by Navjivan Center for Development, Gujarat, India, on 15th November, 2021.
- All the faculty members of Team-SoM also attended the FDP conducted by SWAYAM team of UGC in which they demonstrated the methodology to upload the e-content in the SWAYAM portal of UGC.

- All the faculty members were participating in Online STTP sponsored by AICTE and got the certificate with securing more than 60% mark and 80% attendance.
- 9 faculties attended a FDP on MATLAB held on 23<sup>rd</sup> December 2021.
- Prof. Manas Ranjan Padhi attended ATAL FDP on "Novel Materials, Fabrication, Design & Optimization" from 2021-9-20 to 2021-9-24 at Veer Surendra Sai University of Technology, Burla.
- Prof. Debashree Debadatta Behera, Prof. Manas Ranjan Padhi and Dr. R. C. Mohanty attended ATAL FDP on "Computational Fluid Dynamics A Potential Engineering Design Tool" from 2021-07-26 to 2021-07-30 at Centurion University of Technology and Management.

#### 7. Values and Best Practices

### 7.1 Strategic plan.

- To increase the number of research publications in SCI/Scopus indexed journals.
- To develop expertise in Dassault tools like Materials studio.
- To develop some new materials in composites for E bike.
- Planning to organize international conferences.
- To increase the number of research publications so as to have a good score in NIRF
- To train all students for various national competitive examinations like JAM/NET/GATE etc.
- To increase the number of research publications with this six months so as to have a good score in NIRF
- To integrate the research with modern software tools like Python, Biovia's material and discovery studio, giovia, damola, simulia etc. so as to get quality publications that can lead to petent as well as new product development.
- To give Training all faculty members in python, biovia and other software tool for meeting industrial competency and high quality research publications
- Student Mentoring is a regular practice in order to provide a solid platform of learning to the meets through parent and teacher collaboration.
- To train all students for various national competitive examinations like JAM/NET/GATE etc. through external agencies.
- To develop some in products in the field of composites as per management suggestion.
- To Train more number of students through internship.
- Our plan was to set up a cactus garden and medicinal plant garden where students were involved to perform grafting of cactus plants, plant different medicinal plants and understand their medicinal values. Subsequently, these plants will be used for various research purposes. Near future research work will be done in nanopore sequencing and genome editing.
- Team SoM has formed two committees i.e., Placement committee as well as
  the Alumni committee as a part of the future strategic plan to develop the
  school. In both the committees there is a mix of faculty as well as student

coordinators in order to execute the responsibilities. Placement committee shall assist the central team in placement related activities whereas the alumni committee shall focus on the Alumni related activities. Already on 12<sup>th</sup> June 2021 a virtual alumni meet was conducted for School of Management for the very first time and another follow up virtual alumni meet was conducted on 3<sup>rd</sup> July 2021 as some alumni batch interactions could not be done during the first virtual alumni meet due to lack of time. But recently to further streamline the process, both the alumni and placement committees are merged together and regular placement related activities, alumni updates shall now be done on one platform.

- Team SoM has engaged the students in the production units of our campus in their courses respectively for the students and they shall work towards creation of sales orders, projects, development of research articles, case studies etc. Students also created the YouTube channel of the production units and they have started promoting by creating videos of the products from our production units.
- It was also discussed that faculty members would try their best to increase the number of research publications with these six months so as to have a good score in NIRF and also more and more proposals would be applied so that some external funding would be generated.
- Each Faculties were asked to publish 2 quality Research paper in a peer reviewed journals from Oct-Dec 2021.
- Each research centers were asked to publish at least 1 book.
- Each research center was asked to publish 1 patent.
- Ph.D faculties were asked to submit project proposal for different funding agencies.

# 7.2 Community engagement:

Nil

# 7.3 Consultancy:

- Dr. Rukmini Mishra visited MapMyGenome, Hyderabad and CDFD, National Core Genomics Hyderabad for possible collaboration for student training and consultancy in genomics on 30<sup>th</sup> December 2021.
- Dr Madhumita Das is involved in the consultancy of Telangana Minorties/ Nizams ITI/ Inter Board at Hyderabad for which she travels to Hyderabad to meet the client.