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MESSAGE FROM THE CHAIRMAN

It is a great pleasure to know that, this issue of NIST Chronicle shall cover the annual report for 2022 and is focused on the theme “Mad rush toward Computer Science”.

The year 2020 and 2021 had a serious impact worldwide both on human life as well as on the economic front due to Covid-19. Since early 2022, it seems we are back to near normal life, leaving Covid-19 behind us. The year 2022 has been a great year for NIST with extraordinary accomplishments by the NIST fraternity including its students and faculty community. True to its mission for academic and research excellence, NIST has set the benchmark through its outstanding academic programs, quality education, and innovative multi-disciplinary research in various areas with global collaboration and partnership.

Placement at NIST in 2022 was historic with the participation of more than 160 companies and student placement over 75%. Many students have been admitted to MS/Ph.D. programs in India and abroad. Students have participated in national and international hackathons and bagged many prizes including the Hackathon event organized by IISc Bangalore. Three of the NIST faculty members received the University Foundation Day Research Award in 2022 for their seminal contribution to research and innovation.

NIST commemorated its 26 years of glorious journey on its foundation day on September 18, 2022, celebrating its rich heritage, legacy, and vision. In addition to having many distinguished guests during the inaugural session, the celebration was packed with seminars, showcasing the product and prototypes, startups, entrepreneurship, industry collaboration, and students pursuing their passion at NIST.

Though students’ rush to study in a specific discipline is typically driven by factors like perception of future prospects and its socio-economics benefits etc. As of today, certainly it is transient in nature. With the growth of technology and innovation, the fine line between different disciplines is gradually disappearing. In fact, it is more of the new avenues and areas where global expertise is needed. For example, the need for expertise in environmental sustainability, eco-friendly and cost-effective construction for smart homes on a massive scale, water resource management and conservation, and autonomous vehicles are the areas where expertise and knowledge in cross-domain disciplines are critical. However, it is not just academic study for a few years but creative thinking, innovation, the skill how to learn new areas, and a lifelong learning process that are immensely significant to stay relevant in today’s ever-evolving world. I strongly suggest student community follow their passion in an unbiased manner to excel in their life and future to their fullest potential.

My sincere thanks to the NIST fraternity including faculty, staff, student, and alumni community for wonderful accomplishments at NIST to date. We have made tremendous progress so far including in the year 2022, but we have miles to go, as our quest for excellence will never stop; our rich heritage and legacy will only continue and grow further.

I congratulate the entire editorial team for their hard work, diligence, and dedication to bringing out this edition of the NIST Chronicle



Dr. Sukant K. Mohapatra



Dr. Sukant K. Mohapatra
Founder Chairman, NIST (Autonomous)

MESSAGE FROM THE PRINCIPAL



Dr. Priyadarshi Tripathy
Principal, NIST (Autonomous)



India is a robust, sensible, and entrepreneurial country today. NIST envisages cultivating intellectually astute, patriotic, law-abiding citizens who relentlessly pursue excellence and have genuine care for everyone. With responsible, intelligent, and self-assured individuals, we intend to give more potency to our students and inspire them for their multidimensional advancement.

NIST places a strong emphasis on helping students for the development of both their cerebral and physical skills through academics, dance, theatre, music, and a range of sports, that foster a student's growth in every aspect. In addition to the customary procedural education, we continuously improve and update our teaching methods and tools.

NIST is committed to making dreams and aspirations a reality. As we stand on the threshold of a new academic session, I extend a very warm welcome to all my students, especially the ones who have joined us in this session. Every new academic year marks a new milestone, a dream come true and new goals for the future. NIST believes in instilling strong values in students as well as giving them wings to fly far and wide.

I encourage them to go forth and embrace their own personal voyage of self-discovery and welcome their future with open arms. They will be able to stand in good standing in every circumstance, and their lives will be prosperous. May God bless them abundantly. I wish you all the very best in life. Live a happy and peaceful life by providing dedicated service to humanity.

Never worry about asking, don't hesitate, if you are in need.



Priyadarshi Tripathy

Dr. Priyadarshi Tripathy



LETTER FROM THE EDITORS

Mad rush toward Computer Science



Chief Editor:

- Dr. Ratikanta Nayak

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The best thing one can do with life is to explore his/her potential and convert it into fruitful outcomes. However, as often is the case; instead of exploring one's true potential, people quickly get inspired by some successful persons around them and start mimicking their path. Add to that the coercion from the family and acquaintances forming opinions on what one should do. This model is called a "Status Trap". It is a trap because it sometimes works, and oftentimes fails to take the victim into a mental prison. The current generation needs to work on overcoming the status trap to become successful in the true sense. Unless overcome, this becomes so contagious that it makes handicap all the other windows of your thought process. A reinforced thought gradually consolidates into a new belief, becoming a gospel truth with time. Ideally, our planning should focus on our abilities, interests, and goal. A SWOT analysis (Strength, Weakness, Opportunity, and Threat) of self is the best starting point. If we consider successful people, they have their individual theories of getting success. The word "success" is a relative term as much as the "theory of getting success" is not a universal theory that may be accepted irrespective of time and temperament. The status trap is a very old game in the evolution of the brain, which started in the age of the apes. What one monkey does, another monkey mimics it; or what a human being does, the monkey repeats the same. The status game similarly influences a person to choose a work that is adopted by neighbouring successful persons. There is another type of trap which is called a competition game in life, where we always try to become the number one player by dislodging the number two to the second place. At the same time, the number three always tries to become number two by dislodging the number two position. The competition never ends. Nowadays, everyone is trying to become number one. Hence, a huge rush is happening for a particular job. In this mindless race, the ultimate aim of the soul is being neglected. We have forgotten to ask ourselves what is best for us, which work will give enjoyment to us. Whether my passion/hobby, should be my job or not? Only to maintain the existing status, we try to become number one while neglecting our peers. We should introspect whether this is the objective of human life! Are money and status the core component of happiness? This is the question of the hour.

Instinctively, we plan for the short term. We always choose such a profession, in which our neighbours have become successful. Tend to spend a lot of time earning huge money sans any interest in what we do to earn it. However, history has been testimony to the fact that in the long run, only those genuinely interested in a profession shall be able to sustain themselves in difficult times & others will eventually quit or fail. Passion has the potential to drive a long journey & it should be the ultimate parameter for choosing a career in life.

FEATURE STORY

Mad Rush Towards Computer Science

Engineering education in the country is passing through a very crucial time, one-third of the seat of the core branches remain vacant. The question arises why this disparity? Is it good for society? what about the infrastructure of the core branches in the various colleges? Does it become obsolete with time?

If we search the disparity between core branches with CS / IT,

it is evident that there is a huge job opportunity in CS/IT. It is not only huge but it is also high paying whereas the salary spectrum in core branches is very low. Many IT-related services and products were in their peak period during corona; hence they needed similar professionals as per their requirements, which directly influence the job opportunity of the similar professional. When the world is going to new normal, the fascinating secondary IT products and services are losing their charm, many successful companies and start-ups are in debt and those entrepreneurs are losing hope with each passing day. On the other hand, most of the IT/CS jobs are like consulting jobs and it depends upon the number of national/international projects your company has. The no of the international project is directly proportional to the political stability/instability of the sponsoring nation. In a minuscule, we may conclude that though the CS/IT jobs are lucrative, these are highly volatile and no one knows when the balloon will burst. Vis-a-vis the world is going to be virtual, human beings can enjoy all the facilities through a single click on his/her mouse. Our food, education, shopping, entertainment, business services, and other arrays of facilities are going online, hence new race of IT/CS professionals is needed to full fill its requirement.

Let's analyse the controversial question, of whether this trend is good for society. There are no direct answers to the question. We may find there are several technological developments happen in the history of civilization and that era is named as the era of technology like the Fire age, Stone age, Iron age, etc...in the same way, it is nothing wrong to say the current age is the "Age of Computer technology". The time has come to modify /update another branch of engineering with computer.

The first mechanisation was happened using water and steam power in industry 1.0 period. Further electricity was used in assembly line for mass production during Industry 2.0. The disruptive magic box "Computer" came in to lime light in Industry 3.0 which changed the complete scenario of the working style of industry in terms of automation.



communicate each other's to make decision without human involvement. Industry 4.0 offers the opportunity for manufacturers to optimize their operations using IOT, quickly and efficiently by knowing what needs attention . , Industry 5.0, the next revolution, has already begun. While the core technologies that made Industry 4.0 a reality have not changed, Industry 5.0 brings a renewed focus on the human touch and shifts in organizational objectives.

The core branches of engineering subjects are the essence of engineering. It evolved with time to solve the verities of problems that human beings faced in their daily life.

The building of roads, apartments, schools, residential complexes, and infrastructure will neverstop (Civil). Energy generation and transmission needs always be there (Mechanical/Electrical/Chemical), whether it is renewable or non-renewable. Whether it is energy or infrastructure, things will not move without a machine and their operation (Mechanical/Electronics).

All the above the world will not survive virtually, we need smart materials and high-grade engineering materials for energy, infrastructure, and electronics (Material Science). Nothing will be obsolete, only it is a matter of time. The time is favoring the Computer Science/Information Technology, hence the mad rush for the lucrative job is obvious, but it is not permanent. No system is stable at its peak, it will be stable sooner or later and the direction of the rat race will change. It is fine, but we should not tie our hands and wait. The other core branches should update themselves with the latest technological advancement and they should design industry-centric courses rather than swimming with the traditional syllabus. Academicians should open their eyes and ears to the corresponding industry's needs. Still, India is lack of properly skilled graduate engineers in the core sector. The infrastructure of the core branches of the various engineering college should be updated hands-in-hand with the faculties to attract new opportunities for its student.

FEATURE STORY

Most engineering institutes in India have witnessed high turnouts for IT branches and poor turnouts for core branches. Even the parents have shown such preferences. A question arises, what makes the IT domain more attractive than the core branches? In this context, "NIST Chronicle" wanted to explore the views of the students, who are the real stakeholders of the process.

"NIST Chronicle" Survey:

What is your opinion on the rush for taking admission to only IT/CSE/CST branches?



In this context, our editor Dr. Sushanta Kumar Sahu designed different interesting questions to explore the many aspects of the problem from the expert. In this column, our guest is a veteran government engineer, an industry expert, and an administrator Mr. Sayad Suleman Ali.



Mr. Sayad Suleman Ali
B.Sc Engg. (Civil) (Hons) NIT, Rourkela

He has forty-one years of experience in different leadership positions in Civil engineering and works at various government & Private organizations. In his long professional career, he has seen the rise & fall of employment opportunities in different core engineering branches as well as other applied branches. He is also an educationist rather than an engineer. He can easily connect the market requirement skills and the skills that are imparted inside the classroom to an undergraduate engineer. Therefore, NIST CHRONICLE tried to garner his views on the current scenario of the "Mad rush for taking admission in CSE/IT".

1) We are seeing an unusual rush for taking admission into IT/CSE branches. Is it a periodic or unprecedented trend? Is it sustainable from the country's perspective?

Ans- It is a fact that an unusual rush for admission into IT/CSE branches is seen. It is a periodic trend & may not continue for a longer time. It is also not sustainable from the country's perspective.

2) From your experience, could you please tell us: What are those factors which influence the decision to choose a branch during admission?

Ans- I can tell you from my experience that the factors which influence one individual to choose a branch during admission are mainly:

- a) Passion or interest in a branch
- b) Futuristic analysis of a branch
- c) Career opportunities

- d) Counselling during admission
- e) Interaction with faculties & senior students after ground visits.

Besides the brand name, financial affordability play a great role in choosing a branch.

3) Whether this trend is occurring globally or it is specific to the Indian education system?

Ans- It is a global trend. This is happening due to massive industrialization & digitization resulting in many job opportunities and lucrative packages.

4) Does this disparity show a healthy parameter for a developing nation like India?

Ans- It is not at all a healthy parameter for our country. This disparity may not continue for a longer period. This is mostly happening due to the fact that the aspiring students for core branches are dissuaded by family members or friends for fewer job opportunities & fewer packages.

FEATURE STORY

5) From placement statistics of most institutes, we can observe one thing the starting pay for the IT industry is higher than the other industries in the core sector. Why does that occur and in the long run what is the payout scheme across different branches/expertise areas? Do IT sector guys always get higher pay?

Ans-It is an admitted fact that IT industries pay higher at the initial stage than other core sector industries. This is happening due to rapid industrialization and digitization resulting in high demand for IT engineers. But due to the automatization of industries, the demand for IT engineers will gradually fall down. The pay package of IT engineers will no longer be higher than that of the engineers of core branches.

6) Which jobs are more stable & secure? IT/CSE industry or non-IT sector? It could be helpful if you could give specific examples.

Ans-Obviously the non-IT sector jobs are more stable and secure as we hardly see any layoffs in these jobs. Till the end of February, massive layoffs have taken place

globally for restructuring and cost-cutting. The layoffs are 18000 in Amazon, 12000 in Alphabet, 10000 in Microsoft & 1500 in Ericsson. The layoffs of Ericsson will be 8500 by the end of 2023. The layoffs in Google India stand at 450, but it will be 12000 by the end of 2023.

7) Now computers are ubiquitous and they proliferate every walk of life, should we see them as stand-alone branches of study or make them integral to every branch? The question is how to make core branches more relevant in the coming days.

Ans- We will see in the coming days that computers will become integral parts of every branch of engineering. The core branches are still remaining relevant in spite of fewer job opportunities & fewer packages. The development of a nation can never progress ahead without core branches of engineering. The core industries contribute a lot to the infrastructural & economic development of a country. Now the need of time demands to change our curriculum of core branches and make them more field-oriented by providing the latest laboratory equipment to attract students to choose core branches.



A conversation with artificial intelligence-based “Chat GPT”. GPT signifies “Generative Pre-Trained Transformer”. It is a language model that relies on deep learning to generate human-like text from publicly available data sets for a given text-based input. This APP is used to generate responses in any conversational context. Team Chronicle decided to publish the overall unbiased answers on the topic “Huge rush for taking admission in CSE/IT” from Chat-GPT. The conversation was carried out by Dr.Subrat Bhuyan, HOD Admission, NIST Berhampur.

1) We are seeing an unusual rush for taking admission into IT/CSE branches. Is it a periodic or unprecedented trend? Is it sustainable from the country's perspective?

Ans- The rush for admissions in IT and CSE branches is not a new phenomenon and can be considered a periodic trend. The demand for IT and computer-related skills has been on the rise globally for the past few decades, and this trend is expected to continue in the future as well. One of the reasons for the increased demand is the growing digitization of various industries, leading to an increased demand for professionals with technical skills. Additionally, the proliferation of smartphones, social media, and other digital platforms has created a need for professionals with expertise in areas like data analytics, artificial intelligence, and cyber security.

Furthermore, the COVID-19 pandemic has further accelerated the demand for digital transformation across various sectors, leading to an increased demand for IT and CSE professionals. Remote work, online education, and digital healthcare are just a few examples of how the pandemic has accelerated the need for digital technology. From a country's perspective, the sustainability of this trend depends on several factors. If the country has a robust education system that can produce highly skilled IT and CSE professionals, it can sustain this trend. Additionally, if the country has a thriving technology sector that can offer ample employment opportunities, it can retain its IT and CSE talent. However, if the country fails to provide adequate education and employment opportunities, the trend may not be sustainable in the long run, leading to a brain drain. In summary, the rush for admissions in IT and CSE branches is a periodic trend that is expected to continue in the future.

FEATURE STORY

2) From your experience, could you please tell me: what are those factors, that influence the decision to choose a branch during admission?

Ans-There are several factors that can influence a student's decision to choose a particular branch during admission, including: Interest and Aptitude: Students may choose a branch based on their interests and aptitudes. For example, students who enjoy working with computers and technology may opt for IT or CSE branches.

Career Opportunities: Students may choose a branch based on the career opportunities it provides. Some branches may have better employment prospects or higher salaries than others.

Family Expectations: Family expectations and social pressure can also play a role in a student's decision. For example, if the family has a history of engineering, the student may feel pressure to choose an engineering branch.

College Reputation: The reputation of the college or university can also influence a student's decision. Students may choose a branch based on the college's reputation in that field.

Course Curriculum: Students may choose a branch based on the course curriculum and subjects offered. Some branches may have more practical or hands-on courses, while others may have more theoretical courses.

Entrance Exam Scores: In some cases, entrance exam scores can determine a student's eligibility for a particular branch. If a student has scored well in a particular subject or section, they may be more likely to choose a branch related to that subject.

Future Goals: Students may also consider their future goals when choosing a branch. For example, if a student plans to pursue higher studies in a particular field or work in a specific industry, they may choose a branch that aligns with their goals.

3) Weather this trend occurring globally or is it specific to the Indian education system? Why is it happening?

Ans- The trend of increased demand for IT and CSE education is not specific to the Indian education system and is occurring globally. The proliferation of technology and the digitization of various industries have led to an increased demand for professionals with technical skills, including IT and CSE. Additionally, the COVID-19 pandemic has further accelerated the need for digital

transformation across the globe, leading to an increased demand for IT and CSE professionals. However, the trend may be more pronounced in India due to several factors. India has a large pool of young and talented students who are increasingly interested in pursuing careers in technology. Additionally, the Indian government has been investing heavily in digital infrastructure and initiatives such as Digital India and Make in India, which have created a demand for IT and CSE professionals.

Moreover, the Indian IT sector has been growing rapidly over the past few decades and has become a major contributor to the Indian economy. This has led to increased job opportunities for IT and CSE professionals, further fuelling the trend. Additionally, the relatively low cost of education in India and the availability of quality education in these fields have also contributed to the trend. In summary, the trend of increased demand for IT and CSE education is not specific to the Indian education system but is occurring globally. However, the trend may be more pronounced in India due to several factors, including a large pool of talented students, government initiatives, a growing IT sector, job opportunities, and affordable education.

4) Does this disparity show a healthy parameter for a developing nation like India?

Ans- The disparity in the demand for IT and CSE education compared to other fields of study may not necessarily be an unhealthy parameter for a developing nation like India. It can be seen as a positive development as it indicates that students are recognizing the importance of digital skills and are pursuing education in fields that are in high demand.

Moreover, the demand for IT and CSE education can be seen as an opportunity for India to develop a skilled workforce in these fields, which can contribute to the growth of the IT sector and the economy as a whole. The Indian IT industry is a major contributor to the country's GDP and has created numerous job opportunities, both directly and indirectly.

Therefore, by encouraging students to pursue education in these fields, India can create a talent pool that can cater to the demands of the industry and contribute to its growth. However, it is also essential to ensure that students have access to a wide range of educational opportunities in various fields, not just IT and CSE. It is important to develop a holistic education system that can cater to the diverse interests and aptitudes of students and can provide them with the necessary skills to succeed in various fields. Additionally, it is essential to create job opportunities in other sectors as well to ensure that students have a wide range of career choices.

FEATURE STORY

5) From the placement statistics of most institutes, we can observe one thing that the starting pay for the IT industry is higher than the other industries in the core sector. Why does that occur and in the long run what is the payout scheme across different branches/expertise areas? Do the IT sector guys always get higher pay?

Ans- The higher starting pay for the IT industry compared to other industries in the core sector can be attributed to several factors. One of the primary reasons is the demand-supply gap for skilled IT professionals. The IT industry has been growing at a rapid pace, and the demand for skilled professionals has been consistently higher than the supply, leading to higher salaries. In the long run, the payout scheme across different branches and expertise areas can vary depending on various factors such as industry demand, supply of skilled professionals, and experience level. While the IT sector may offer higher starting salaries, other industries such as finance, consulting, and management may offer higher payouts in the long run, especially for those with expertise and experience.

It is also important to note that the payout scheme can vary based on the specific expertise and skills within the IT sector. For instance, specialized skills such as artificial intelligence, cybersecurity, and data science are in high demand, and professionals with these skills may command higher salaries compared to those with more general skills. Therefore, it is not accurate to say that IT sector professionals always get higher pay. While the industry may offer higher starting salaries, the payout scheme across different branches and expertise areas can vary depending on various factors, and other industries may offer higher payouts in the long run.

6) Which jobs are more stable & secure? IT/CSE industry or in the non-IT sector? It would be helpful if you could give specific examples.

Ans- It is difficult to generalize which jobs are more stable and secure, as it can vary depending on several factors such as market demand, economic conditions, and job-specific factors. Both IT/CSE industry and non-IT sectors can offer stable and secure jobs, depending on the specific job role and industry. In the IT/CSE industry, jobs such as software developers, network architects, and cybersecurity specialists are in high demand and are likely to remain so in the future. Additionally, the IT industry has shown consistent growth over the past few decades and has been a major contributor to the economy. Therefore, jobs in the IT industry can be considered stable and secure. In the non-IT sector, jobs such as healthcare professionals, financial analysts, and civil engineers are also in demand and can offer stable and secure employment.

The healthcare industry, for instance, is a growing sector and has shown consistent demand for healthcare professionals such as nurses, doctors, and pharmacists. Similarly, the finance industry is a vital sector in the economy and has been shown to offer stable and secure jobs.

However, it is important to note that job-specific factors such as location, company size, and industry-specific challenges can affect job stability and security. For instance, jobs in startups and small companies can be more volatile and less secure compared to established companies. Similarly, jobs in certain industries may be affected by economic conditions, and the demand for certain jobs may fluctuate accordingly. Therefore, when considering job stability and security, it is essential to evaluate the specific job role, industry trends, and job-specific factors to make an informed decision.

7) Now that computers are ubiquitous, and they have proliferated every walk of life, should we see them as standalone branches of study or make them integral to every branch? The question is how to make core branches more relevant in the coming days.

Ans- As computers have become ubiquitous and have proliferated in every walk of life, it is becoming increasingly important to integrate them into every branch of study. The integration of technology can help make core branches more relevant in the coming days by providing new tools, insights, and methods for learning and research. For instance, in the field of medicine, the use of technology has enabled the development of new diagnostic tools, telemedicine, and remote monitoring systems.

Therefore, it is essential to incorporate technology as an integral part of every branch of study to keep pace with the changing world and stay relevant. This can be done by incorporating computer science and information technology courses as core requirements in every field of study. Additionally, universities and colleges can also offer interdisciplinary courses that combine core branches with technology, such as data science, digital humanities, and computational biology. Moreover, industry-academia collaborations can also play a significant role in integrating technology into every branch of study. Industry partners can provide real-world applications of technology and can help students and faculty understand how technology can be used in different fields. Overall, the integration of technology into every branch of study can help create a more relevant and dynamic education system that can prepare students for the changing world and the future workforce.

WELCOME TO NEW FACES OF THE NIST FAMILY

Mr. Sayad Suleman Ali



**Head
of HR & Administration**

Mr. Sayad Suleman Ali has completed his B.Sc Engg. (Civil) (Hons) from NIT Rourkela in the year of 1982 & joined as Asst. Engineer in Engineers India Ltd. Further, he was working as an executive engineer in the Works Department, Govt. of Odisha & Odisha Power Transmission Corporation. He has made many records to complete several emergency govt. project within the limited time frame. He has proved his leadership skill in different critical projects as a team lead. Apart from being an administrator & potential civil engineer, he is a vivid reader and writer. He possesses, a great interest in the heritage & culture of Odisha.

Prof. Simanchalo Panigrahi



**Professor
(Physics)**

Prof Panigrahi completed his Ph.D. from Berhampur University in 1988 in the field of Material Science. He possesses a great and rich experience of teaching for 40 years in various national and internationally reputed institutes. He also served as the director of the National Institute of Technology, Rourkela. He has more than 116 research papers in prestigious international journals.

A Google Scholar citation score of 3416 is on his credit. He has also authored several Physics books on experimental practice and some advanced material science books. Apart from academican, he is an author and an eloquent speaker. He possesses great skill in creative writing on society, life & science.

He has more than 14 years of rich teaching experience. He is interested in Cybernetics, bio-mathematics, Mathematical modeling & Non-linear dynamics. He possesses an Australian patent in the field of the spreading of Corona Virus.

Mr. Durga Madhab Padhy



**Asst. Professor
(Management)**

Durga Madhav Padhy has completed his master's degree from the Academy of Business Administration, Balasore (BPUT) with his master's project on "A Study on Competitive Analysis at Crompton & Greaves Appliances: With special reference to Bhubaneswar, Cuttack and Puri". He has more than 13 years of experience in teaching. He has a special interest in the field of corporate social responsibility, Work-life Balance, Employee Performance, and Green Entrepreneurship. There are six research papers, and one book chapter in his credit, also he has presented more than 10 papers in various national and International seminars.

Dr. Sasanka Sekhar Bishoyi



**Associate Professor
(Mathematics)**

Dr. Sasanka Sekhar Bishoyin has completed his doctorate degree from Berhampur University in "Fluid Dynamics" in 2014. He has also completed his master's degree in Mathematics from same Berhampur University. He has rich experience in teaching to undergraduate and postgraduate students for more than 21 years. Asides from academics, he possesses a special interest in vocal music, also qualified with a diploma in Vocals from Pryag Sangeet Samiti Allahabad in 2013.

Dr. Yerra Shankar Rao



**Asst. Professor
(Mathematics)**

Dr. Yerra Shankar Rao has recieved the Ph.D from SOA University Bhubaneswar on the topic "A mathematical study for the current generation of cyber-crimes" in 2018.

Mr. Debasish Padhy



**Asst. Professor
(Computer Science and Engineering)**

Mr. Debasish Padhy has completed his master's degree from the National Institute of Science & Technology,

WELCOME TO NEW FACES OF THE NIST FAMILY

Berhampur with his master's project on "Wireless Sensor Network" in 2016. He has more than 10 years of experience in teaching. He likes to work in the field of Data Science, Artificial Intelligence, and Machine learning.

Mr. Pitambar Sahu



**Digital Marketing Manager
(Public Relations (PR) Cell)**

Mr. Pitambar Sahu holds a Master's degree in Business Management in Digital Marketing & Business Analytics from Lovely Professional University, Punjab. Mr. Pitambar has an experience in Digital Marketing, Social media Optimization, Paid Social Ads, and Brand development for more than four years. He possesses the potential to create impactful designs which can appeal to customers across various segments. He is well-versed in multiple Digital Marketing channels,

such as Google AdWords, Facebook, Instagram, Twitter, Quora, and LinkedIn. Additionally, he possesses extensive experience in managing large budgets, media buying, planning strategies, stakeholder management, and reporting. Before joining NIST, he worked as a consultant on social media for the Chief Minister Dashboard in the Government of Arunachal Pradesh.

Ms. Kamakshi Brahma



**Junior Research Fellow
(Novel Material Research Laboratory)
Physics**

Ms. Kamakshi Brahma has completed her M.Sc (Physics) in NIST, Berhampur with her master's project on "Lithium-Ion batteries for electrical vehicle" in 2022. She got the best undergraduate award (PHYSICS) from Berhampur University. She has a special interest in Nano technology; Lithium-ion

batteries: electrode materials and separators; Vanadium redox flow batteries: cation exchange membranes & application of polymer nano composites in energy storage devices. She has participated in "one week workshop on Hands-On experience on high end instruments" at ICT-IOC Bhubaneswar.

Mr. Sushil Majhi



**Accounts Assistant
(Finance & Control)**

Mr. Sushil Majhi has completed his Intermediate from Maharashtra State Board. He has more than 12 years of experience in accounting and operation in the different products (Vardhaman Polypack) and services (Haqdarshak Empowerment Solution Pvt Ltd, Kanhai Jewel & Racheet Impex) sector. He has joined as Accounts Assistant in Finance & Control department.

INNOVATION & RESEARCH FRONTIER

PROJECT COMPLETION



Dr. Sandipan Mallik, Faculty of ECE has successfully completed the project entitled 'Structural Modification of Flexible Solar Cell by Incorporating Graphene tapered ZnO Anti-reflector in Wearable Electronics Power Solutions' of 35 lakh funded by DST SERB under Early Career Research Award (ECRA) Scheme [DST/ECR/2018/002477]. He has published his work in terms of two Indian Patents, five journals, three book chapters and two International Conferences as an outcome of the project. One doctoral scholar along with one post graduate and seven undergraduate students were trained under this project.

PATENT PUBLISHED

Dr. Basant Kumar Sahu, Associate Professor, Department of Electrical Engineering has published a patent entitled "Internet of Things (IoT) Based Smart Energy Metering and Monitoring System," having Indian Patent Application No. 202,231,056,186 in Oct. 2022 and the other inventors are Ayush Kumar Choudhary, Debjeet Chakroborty, Navin Kumar, Nishant Sen, Bittu Kumar, Shashil Roushan of NIST.

INNOVATION & RESEARCH FRONTIER

Dr. Basant Kumar Sahu, Associate Professor, Department of Electrical Engineering has published a patent entitled "Motorized Rechargeable Electric Bicycle", having Indian Patent Application No. 202,331,008,866, in Feb. 2023 and the other inventor is Mr. Amresh Asish Tripathy of NIST.

Dr. Manjushree Nayak, Associate Professor, Department of Computer Science and Engineering has published a patent entitled "Multi-Objective Optimization Technique for Task Scheduling in Cloud Computing Environment" having Indian Patent Application No. 202,311,003,515, in January 2023 and the other inventors are Manish Chhabra, Dr. Sujata V Mallapur, G Soniya Priyatharsini, Narender Chinthamu, Dr.Ashish, B Venkateswarlu, Mr. Rohit Kumar Verma, Dr. Barjinder Kaur, and Dr. Shubham Mahajan.

Dr. Sandipan Mallik, Associate Professor of ECE, published an Indian patent entitled "Method for production of textured flexible solar cells and solar cells attained thereof" (Application Number: 202331013288) in collaboration with Dr. C. S. Kumar, Professor, Department of ME, and Dr. Chacko Jacob, Professor, Materials Science Centre, along with Dr. Gufran Ahmad of Dayalbagh Educational Institute. Laxmi Vandana, Ajit Dash, Ujjal Dey, Shrabani Guhathakurata and Subhasis Mahata are the other co-inventors.

JOURNAL PUBLICATION

Prof. Pradeep Kumar Jena, and Prof. Charulata Palai, Faculty, Dept. of Computer Science and Engineering, of NIST have published a research article entitled "A Novel Approach for Diabetic Retinopathy Screening Using Asymmetric Deep Learning Features" having DOI as [://doi.org/10.3390/bdcc7010025](https://doi.org/10.3390/bdcc7010025) along with B. Khuntia; M. Nayak;; T.K.; Mishra, S.N. Mohanty in the Journal of Big Data and Cognitive Computing, January 2023.

Dr. Preeti Ranjan Sahu, Assistant Professor, Department of Electrical Engineering has published a research article entitled "Effective Load Frequency Control of Power System with Two-Degree Freedom Tilt-Integral-Derivative Based on Whale Optimization Algorithm, in the Journal of Sustainability with vol. 15 and pp. 1515 in Jan. 2023 along with Kumara Swamy Simhadri, Banaja Mohanty, Prakash Kumar Hota, Almoataz Y Abdelaziz, Fahad Albalawi, Sherif SM Ghoneim, and Mahmoud Elsis.

Dr. Sasmita Padhy and Dr. Preeti Ranjan Sahu, Faculties of the Department of Electrical Engineering have published a research article entitled "Participation of Renewable Energy Sources in the Frequency Regulation Issues of a Five-Area Hybrid Power System Utilizing a Sine Cosine-Adopted African Vulture Optimization Algorithm" in the Journal of Energies with Vol; of 16, and pp. 626 in Jan. 2023 along with Smruti Ranjan Nayak, Rajendra Kumar Khadanga, Sidhartha Panda, and Taha Selim Ustun.

Prof. Durga Madhab Padhy, Asst. Professor, Department of Management has published a research article entitled "Mandatory CSR Spending- A Novel Source for Transforming" in Scopus Indexed African Journal of Business and Economic Research, Vol. 15, Issue- 3 01-10 November 9, 2020 along with Dr. Santanu Kumar Dash.

Prof. Durga Madhab Padhy, Asst. Professor, Department of Management has published a research article entitled "The Work-Life Balance & Employee Satisfaction: A Study of Women Employees in Selected IT Sector" in Journal of Management & Entrepreneurship Vol. 1608-18, September 2022 UGC Care 4.257 along with Dr. Sadanand Sahoo and Dr. Santanu Kumar Dash.

Prof. Alok Patra, Dr. Souren Misra, and Prof. Santosh Kumar Panda faculties of Dept. of Mechanical Engineering have published a research article entitled "Heat transfer and Psychometric analysis of a counter flow wet cooling tower" in the Journal of Heat Transfer Research in 2023.

Dr. Shrabani Mahato, Asst. Professor, Dept. of Chemistry has published a research article entitled "Photo catalytic waste-to-renewable energy nexus using solar light-induced quantum dots" in the Journal of Energy Conversion & Management, 283 11691 7 17th March 2023 along with R Roshan; B K Nahak; D Mahata; P Yadav; S Panda; Santanu Patra; S S Mahato; Ashutosh Tiwari.

Prof. Bhabani Gouda, Asst. Professor, Department of Computer Science, has published a research article entitled "Distributed Intermittent Fault Diagnosis in Wireless Sensor Network Using Likelihood Ratio Test", in the Journal of IEEE Access, vol. 11, pp. 6958-6972, 13 January 2023 along with M. Panda, T.Panigrahi, S. Das, B. Appasani, O. Acharya, H. M. Zawbaa, and Salah Kamel.

Prof. Pradeep Kumar Jena, Prof Charulata Palai, and Prof Manjushree Nayak, faculties of Computer Science have published a research article entitled "A Novel Approach for Diabetic Retinopathy Screening Using Asymmetric Deep Learning Features" in the Journal of Data and Cognitive Computing, vol. 7, no. 1, 2023 along with Bonomali Khuntia, Tapas Kumar Mishra, and Sachi Nandan Mohanty.

INNOVATION & RESEARCH FRONTIER

Prof. Manjushree Nayak and Prof. Ashish Kumar Das, faculties of Computer Science have published a research article entitled “GSM and Arduino based Smart Home Safety and Security System” in the Journal of Recent Trends in Information Technology and its Application, HBRB Publication, vol. 6, no. 1, in Feb. 2023.

Dr. Ratikanta Nayak, Asst. Prof, Dept. of Physics has published a research article entitled “Nanocomposite of intrinsically conductive polymers used as the active component in acetone solvent sensors” in the Journal of “Nanotechnology for Environmental Engineering” in Jan 2023

Dr. Murthy Cherukuri, Professor, Dept. of Electrical Engineering has published a research article entitled “A Novel Metaheuristic Jellyfish Optimization Algorithm for Parameter Extraction of Solar Module”, in the Journal of “International Transactions on Electrical Energy Systems” in 6th April 2023 along with Dilip. Yadav, Nidhi. Singh, Vikas. Singh Bhadoria and Nimay Chandra Giri.

Dr. Murthy Cherukuri, Professor, Dept. of Electrical Engineering has published a research article entitled “Design and Analysis of FOPID based Damping Controllers Using a Modified Grey Wolf Optimization Algorithm”, in the Journal of “International Transactions on Electrical Energy Systems, in 17th October 2022 along with Manoj Kumar Kar, Sanjay Kumar, Arun Kumar Singh and Sibarama Panigrahi.

Dr. Kunjabihari Swain Assistant Professor and **Dr. Murthy Cherukuri**, Professor, Dept. of Electrical Engineering have published a research article entitled “Resiliency Estimation of Synchrophasor Communication Networks in a WAMS” in the Journal of “Frontiers in Energy Research (Smart Grids section)”, vol. 10, in 4th April 2022 along with Bhargav Appasani, Amit Kumar V Jha, and Dushmantha Kumar Mohanta.

Dr. Kunjabihari Swain Assistant Professor, and **Dr. Murthy Cherukuri**, Professor, Dept. of Electrical Engineering have published a research article entitled “Power Quality Events Detection and Classification based on Down Sampled Kriging Interpolated EMD and SOS-ELM”, in the Journal of “Computers and Electrical Engineering (Elsevier)”, vol. 100, in 2022 along with Indu Sekhar Samanta, Pravat Kumar Rout and Satyasis Mishra.

Dr. Murthy Cherukuri, Professor, Dept. of Electrical Engineering has published a research article entitled “Impact Assessment of Solar Power Generation Uncertainty on Smart Grid Reliability and Carbon Neutrality”, in the Journal of “Frontiers in Energy Research (Smart Grids section)”, vol. 10, 2022 along with Anant Milan Khalkho, Bhargav R, Gourab Majumder and Dushmantha Kumar Mohanta.

Dr. Murthy Cherukuri, Professor and **Dr. Kunjabihari Swain** Assistant Professor, Dept. of Electrical Engineering have published a research article entitled “Fast TT-Transform and Optimized Probabilistic Neural Network Based-Power Quality Event Detection and Classification”, in the Journal of “Electrical Engineering (Springer)” along with Indu Sekhar Samanta, Pravat Kumar Rout, and Satyasis Mishra.

Dr. Kunjabihari Swain Assistant Professor, Dept. of Electrical Engineering has published a research article entitled “Power Quality Disturbance Detection and Monitoring of Solar Integrated Micro-Grid,WSEAS,” in the Journal of “Transactions on Power Systems”, vol. 17, pp.306-315, SCOPUS indexed along with Debasish Pattanaik, Sarat Chandra Swain, Indu Sekhar Samanta, Ritesh Dash.

CONFERENCE

Prof. Akankshya Patnaik, Associate Professor, Dept. of Management. Presented a paper entitled “Role and Implementation of AI in Human Resource Management” at the International Conference “Contemporary Development in Business and Management in a digitized era - Towards Industry 5.0” in a conference organized by Koustuv Business School on 11th March 2023.

Shrabani Mahato, Asst.Prof, Dept. of Chemistry has presented a research article in National Conference on Recent Advances in Chemical Sciences (NCRACS-2023). The title of the paper is “Synergetic Effects of Citrus Limon Extract Passivation and e-doping on Photoluminescence Properties of CdS Quantum Dot” in P.G. Dept. of Chemistry, Berhampur University on 19-20 March 2023.

Dr. Shrabani Mahato, Asst.Prof, Dept. of Chemistry, presented a research article at the 7th International Conference on Nanoscience and Nanotechnology - ICONN 2023. The title of the article is “Ag and Fe doped TiO₂ thin film for Visible Light Responsive Photocatalytic Hydrogen generation from Seawater” in the Department of Physics and Nanotechnology, SRM Institute of Science and Technology on March 27-29, 2023.

Prof. Manjushree Nayak, Associate Professor Dept. of Computer Science Participated and Presented a Paper entitled “Distributed Self Fault Outlier Detection in Wireless Sensor Network Based on Machine Learning” in the 2023 (ICAECT 2023) held at the Department of Electrical and Electronics Engineering, Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India during 05 - 06, January 2023.

INNOVATION & RESEARCH FRONTIER

Prof. Manjushree Nayak, Associate Professor Dept. of Computer Science Participated and Presented a Paper entitled “Distributed Self Fault Outlier Detection in Wireless Sensor Network Based on Machine Learning” in the 2023 IEEE Sponsored Third International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2023) held at the Department of Electrical and Electronics Engineering, Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India during 05 - 06, January 2023.

Prof. Manjushree Nayak, Associate Professor Dept. of Computer Science Participated and Presented a Paper entitled “An Energy saving approach for routing in wireless sensor Networks with ML based faulty node detection”(Sub ID:088) at an international conference on Advances in IOT, Security with AI(ICAISA-2023)held on 24-25March,2023 at New Delhi, India.

Dr. Sabyasachi Rath, Dean, College of Management and Liberal Arts, NIST (Autonomous), was Invited as the Chief Speaker at the National workshop on “Managing Future Entrepreneurs for Sustainable Development”, organized by Institute for Policy Research in Economics Management and Social Development (IPREMS), Berhampur on 12th February 2023.

Dr. Murthy Cherukuri, Professor, and **Dr. Kunjabihari Swain** Assistant Professor, Dept. of Electrical Engineering have presented a research article entitled “Unmanned Integrated Autonomous Vehicle: Swayambhu”, in IEEE 2nd ODICON on Electrical Power Engineering Communication & Computing Technology held in 11-12 November, 2022, in Bhubaneswar, India along with Ankit Anand and Indu Sekhar Samanta.

Dr. Kunjabihari Swain Assistant Professor, Dept. of Electrical Engineering has presented a research article entitled “Synchrosqueezed Wavelet transform Based Power Quality Disturbance Detection and Monitoring of Solar Integrated Micro-Grid, in International Conference on Power Electronics and Energy (ICPEE),pp.1-6,2023 along with Debasish Pattanaik, Sarat Chandra Swain, Indu Sekhar Samanta, Ullash Kumar Rout, Ritesh Dash.

Prof. Minakshi Dash, Asst. Prof Dept. of English, participated and presented a paper entitled “Film as a New Form of Literature” on 24-26th November 2022 at the 65th All India English Teachers Conference on “English & Literature in English: Emergence, Essence and Presence” at Nava Nalanda Mahavihar, Nalanda.

Prof. Minakshi Dash, Asst. Prof Dept. of English, participated and presented a paper entitled “The Politics of Compassion: The Gandhiji’s Principle of Truth & Non-violence” at National Seminar “The Politics of Compassion: Lincoln, Marti, Gandhi, King, Mandela” from 24-26th March 2023 held at Berhampur jointly organized by Forum on Contemporary Theory (Vadodara), Berhampur University (Berhampur) & International center for American Studies, USA.

BOOK CHAPTER

Prof. Akankshya Patnaik, Associate Professor, Dept. of Management. Published a book chapter entitled “Systematic Literature Review on Sustainable Business Practices” in the book “Neo Business Practices in the Emerging Global Scenario” by N.B Publications on Dec 2022

Dr. Kunjabihari Swain Assistant Professor, and **Dr. Murthy Cherukuri**, Professor, Dept. of Electrical Engineering have published a book chapter entitled “Smart Industry Pollution Monitoring and Control Using Internet of Things”. In the book “Harnessing the IoT for Hyper-Connected Smart World”, by CRC Press, Taylor & Francis Group, LLC, Florida, USA). in October 2022 along with Amiya Ranjan Senapati and Santamanyu Gujari.

Dr. Sandipan Mallik, Associate Professor, Dept. of Electronics and Communication Engineering, **Dr. Kunjabihari Swain** Assistant Professor and **Dr. Murthy Cherukuri**, Professor, Dept. of Electrical Engineering and have published a book chapter entitled “IoT-Based Resources Management and Monitoring for a Smart City”, in the book “,Internet of Things” by CRC Press, Taylor & Francis Group, USA. Chapter-07, pp. 125-148, 29th April 2022 along with Prakash Panigrahi, Yashwardhan Kumar, Shivendra Pratap Singh.

Dr. Kunjabihari Swain Assistant Professor and **Dr. Murthy Cherukuri**, Professor, Dept. of Electrical Engineering have published a book chapter entitled “Situational Awareness of Micro-Grid Using Micro-PMU and Learning Vector Quantization Algorithm in the book “Intelligent Renewable Energy Systems: Integrating AI Techniques and Optimization Algorithms”, by John Wiley & Sons, 2022. New York, United States.

Dr. Murthy Cherukuri, Professor, Dept. of Electrical Engineering have published a book chapter entitled, **Murthy Cherukuri, D K Mohanta**, “Application of Artificial Intelligence and Machine Learning Techniques in Island Detection in a Smart Grid”, in the book “Intelligent Renewable Energy Systems: Integrating AI Techniques and Optimization Algorithms”, John Wiley & Sons, 2022. New York, United States along with Soham Dutta, Pradip Kumar Sadhu.

WORKSHOP, SEMINAR & TALK

A Talk on "Scope in Civil Engineering" by Mr. M Uma Maheswari Rao



A technical talk on "Skill development for future opportunities in civil engineering" was organized by the Department of Civil Engineering at TIFAC Seminar Hall, NIST(AUTONOMOUS) in collaboration with the Civeng's Club on 4th March 2023. Mr. M Uma Maheswar Rao, Technical Consultant in GIZ, India discussed the multidisciplinary aspects of civil engineering as well as recent trends and job opportunities in civil engineering. He also enlightened the students regarding, how to get-rid of water scarcity problems and increasing groundwater level.

Building Sustainable Career in Industry 5.0



A talk on "Building Sustainable Career in Industry 5.0" was delivered by Ms. Swetaleena Panda, Alumna, Electronics & Instrumentation Engineering, 2008-12 Batch, NIST on 5th January at Galleria Auditorium, NIST Institute of Science and Technology (Autonomous).

Ms. Panda is currently working as a PM & PPM professional at Siemens Healthineers and having more than seven years of experience in different roles such as Software developer, Content developer, Entrepreneur and Business analyst in different domains like Energy, Automation, Internet of Things (IoT), Medical Instruments, Healthcare Management platform etc.

She is awarded with post-graduation degree for Graphology. She is also passionate about the study of handwriting and finger print analysis. Currently she is pursuing research on the "Application of Vedic Management on administration in modern age".

A visit & talk by Harvard Society fellow Dr. Anshuman Swain



Dr. Anshuman Swain, Junior Fellow at the Harvard Society of Fellows, & James S. McDonnell Foundation (JSMF) Fellow at Harvard University, Cambridge, MA, USA, visited NIST Berhampur and delivered a distinguished lecture to the 1st and 2nd year B.Tech & M.Sc students on 21st December and showed a path on potential carrier opportunities in the area of bio-engineering and possibilities of higher studies in foreign universities. Dr. Swain also holds additional appointments at the Massachusetts Institute of Technology (MIT) and the Smithsonian National Museum of Natural History.

Talk on Innovation by International Experts



Experts from India, Denmark & Netherlands joined hands to discuss R&D and Technology led innovation in Higher Education Institutes (HEIs) for Self-Reliance. It was organized by Institute Innovation Council (IIC), at Galleria Auditorium, NIST on 7th April 2013. Dr. Priyadarshi Tripathy (Principal) extended a warm welcome to the esteemed guests. Dr. Bijay Kumar Sahu, Ph.D, Senior Regional Manager, NRDC, Govt. of India, addressed the gathering while Dr. Vijay Tiwari, Professor, Institute of Molecular Medicine, University of South Denmark, and Dr. Jitendra Badhai, Sr. Scientist, The Netherlands Cancer Institute, interacted with the faculties and students.

Dr. Sahu, in his speech, highlighted how students of various courses can choose careers and do independent research. Dr. Badhai and Dr. Tiwari discussed the relevance of Computer Science in cancer research and answered various questions from the students.

WORKSHOP, SEMINAR & TALK

A talk on Start UP & Innovation by COO, STPI







Mr. Priyadarshi Sadangi, COO, EMTEKCOE, Software Technology Parks of India (STPI), under the Ministry of Electronics & Information Technology, Government of India delivered a online session on startup and internships opportunities available at their facility on 24th Feb 2023. He also emphasized on the collaboration between incubators, and linkage between industry and startup.

Faculty induction program



IQAC of NIST conducted a "Faculty induction program" to enhance the academic potential of newly joined faculty on 13 & 14th Feb 2023. Prof. Rajesh Kumar Dash, Dr. M Suresh, Dr. Sandipan Mallik, Dr. Manabendra Patra and Prof. Simanchalo Panigrahy delivered talk on teaching skills and few tips to newly joined faculty. A total of twelve number of faculty members from various departments have participated in this program.

INDUSTRY COLLABORATION

Industry & Date of collaboration	Area of collaboration	Benefit for NIST	Benefit of Industry partner
 Bariflolabs Private Limited Bhubaneswar, Odisha Date: 07.09.2022	<ul style="list-style-type: none"> ✓ Development of water quality testing methods and equipment, development of water quality control methods and equipment. ✓ Innovation of IOT based remotely deployable devices for waterbodies, communication technologies, data analytics & IP 	<ul style="list-style-type: none"> ✓ Sponsored projects from Bariflolabs in IoT, data analytics, fabrication, robotics and water resource domains. ✓ Sponsorship for four M.Tech seats and one PhD candidate 	<ul style="list-style-type: none"> ✓ Product development support
 Celona Inc. California, USA Date: 17.10.2022	<ul style="list-style-type: none"> ✓ Testing and development of private 4G/5G cellular networks 	<ul style="list-style-type: none"> ✓ Sponsorship for setting up of private 5G lab at NIST campus. ✓ Internship opportunities for UG/PG students ✓ Collaboration opportunities for faculty members and PhD students ✓ Curriculum development support from Celona 	<ul style="list-style-type: none"> ✓ Joint research and IP development in 4G/5G communication domain
 IG Drones Pvt. Ltd. Bhubaneswar, Odisha Date: 29.04.2022	<ul style="list-style-type: none"> ✓ Training and development on Drone technology 	<ul style="list-style-type: none"> ✓ setting up a Drone Excellence Centre engaging personnel for development & industrial standard on-job training ✓ Placement support for trained manpower 	<ul style="list-style-type: none"> ✓ A training center approximately 1800 sq.ft. with adequate furniture, Air conditioning, Internet connection. ✓ Product development support for drone parts
 Molecular Connections Pvt. Ltd. Bengaluru, Karnataka Date: 29.04.2022	<ul style="list-style-type: none"> ✓ Training and development on Drone technology 	<ul style="list-style-type: none"> ✓ Internship opportunity for students ✓ Collaborative project 	<ul style="list-style-type: none"> ✓ Dedicated software development center support. ✓ Product development support for indigenization of drone parts

INDUSTRY COLLABORATION

SCIENCE / ENGINEERING / JOB ARTICLE / MANAGEMENT

FATE OF DRUGS IN OUR BODY

Dr. Ranjan Kumar Padhy, Department of Chemistry, NIST (Autonomous)

What are drugs? What happens to the medicines or drugs when we consume it? Where it goes? How it acts? These are the fundamental questions. This brief article highlights the answers to these queries.

In pharmacological terms, Drug is a chemical entity of known structure other than nutrients of essential dietary ingredients, which when administered by any means to a living organism produces a biological effect, i.e., a drug is a medication used to treat, cure, prevent or diagnose. Drugs can be used for recreational purpose also besides medicinal administration. Psychoactive drugs are used to influence and regulate the state of consciousness for pleasure and modifying either the feelings or the emotions of the user. The objective of drug therapy is to accomplish a pharmacologic response. The magnitude of the response to a drug generally is reflected by the number of receptors with which the drug can interact. Mostly, receptors are the protein molecules such as regulatory proteins, enzymes, transport proteins, and structural proteins. Nucleic acids are also drug receptors, particularly for chemotherapeutic agents. The ability of a drug to reach the receptor site is determined by pharmacokinetic parameters. The concept of drug-receptor interactions can be best described by "lock and key model" wherein the receptor (the lock) has a region at which an appropriately shaped molecule, i.e., (the key) can interact.

Coming to the other aspects about the drugs: if you put a tablet into water, it starts dissolving very slowly and the water will turn bit cloudy. This process goes pretty faster inside our body as the stomach has a very acidic environment, or the small intestine which is having alkaline environment. In general, formulating a drug is not that simple at all, because the drug molecule has to survive the very same enzymes that break down our food we eat. If the enzymes break down the drug molecules, then it becomes completely useless. For example, if you try to eat insulin tablet it wouldn't do anything that you desire. Remember insulin (injected when needed) is a protein species and will be immediately digested by protease enzymes found in our digestive system. If the drug molecules survive through the enzymes, it must have the ability to diffuse through the lining of the small intestine so as to enter the bloodstream.

Next, how the body reacts to drugs and how they affect the body. In fact, pharmacology and pharmacokinetics are the field that demonstrate the entire cycle of a drugs life and fate inside our body. Basically, there are four main stages of pharmacokinetics referred as ADME: A- Absorption, D- Distribution, M- Metabolism, E- Excretion. Knowledge of these four main stages of pharmacokinetics, aids the design of drugs or medicines that can be more effective and produce fewer side effects.

Absorption

It is the first stage of ADME. Drugs are absorbed when they move from the site of the administration into the body for circulation. Common ways of drug administration are oral, such as swallowing a Sinarest tablet), intramuscular (getting a COVID 19 vaccine shot in arm muscle), subcutaneous (injecting insulin under the skin), intravenous (administering the drug through a vein) or transdermal (ointments on skin). Medicines taken orally are moved via blood vessels that leads from the digestive tract to the liver, wherein quantitatively major amount of the drug is broken down. In other routes of drug administration, the drug molecules enter the bloodstream directly or via the skin or lungs bypassing the liver.

Distribution

Once a drug is absorbed in our body, the next stage of ADME is distribution. Actually, the bloodstream is the vehicle for transporting the medicines throughout our body system. During this stage, side effects can be felt when a drug becomes effective at a site other than its targeted site. For a pain reliever drug, the target is the sore muscle in the arm or leg; stomach irritation may be the side effect. Different drugs have different targets. Some need to go to the brain some need to stay in the intestines to kill off bacteria. Drugs designed to reach to brain has to pass through a nearly impenetrable fencing called the blood-brain-barrier (BBB) that protects the central nervous system from dangerous substances such as viruses or poisons. Fortunately, chemists have designed various means to pass desired drugs through BBB. Other parameters include molecules like fats and proteins in the blood stream that can take the drug molecules out of action.

Metabolism

Once drug molecules are distributed throughout the body and has done its desired job, the molecules are broken down or metabolized, the M in ADME sequence. Every medicine that enters the bloodstream-when either swallowed, injected or administered by any means is carried to liver: body's chemical processing plant. Here, molecules are chemically twisted, stuck together or cut apart and are transformed by essential enzymes. Many of these transformed products of enzyme action less active chemically than that of the original species. The ability to metabolize drugs or the enzyme action can be affected by genetic differences.

Excretion

The E in ADME sequence (excretion) removes the now-inactive drug molecules via the urine or faeces. By quantifying the drug in urine or blood over time, pathologists can calculate how a human body is interacting with a drug. Knowledge of this test results may be used in the change to the prescribed dose of a medicine or even the alteration of the drug.

“All medicines are drugs but all drugs are not medicines”



Prof. Nilesh Dalai

Prof. Nilesh will be deeply missed by all who knew them. His kindness, wisdom, and enthusiasm for learning were infectious, and he had a profound impact on the lives of countless students and colleagues. We extend our deepest sympathies to his family, friends, and loved ones during this difficult time.

We are grateful for the time that Prof. Nilesh spent with us, and for the many contributions that he has made to our institution and to the wider academic community.

His legacy will continue to inspire us in the years to come.

EVENTS & CLUB ACTIVITIES

NCESS-2022



NIST organized a National Conference on Energy Sustainability and Society (NCESS) in collaboration with Indian Energy Congress on 10th Dec. 2022. The conference was inaugurated by Dr. Sukant K. Mohapatra, Chairman of NIST. Dr. Mohapatra and Dr. Pravakar Swain, President, IEC welcomed the experts and guests to this august event. The conference's chief guest was Sri. Bishnupada Sethi (Bishnupada Sethi), IAS, Chairman of Odisha Hydropower Corporation Ltd. while Executive Director, OPTCL Shri. Biswaranjan Mishra, Former Director General, CPRI Bangalore Dr. Ashok Kumar Tripathy, Dr. Priyabrata Pattnaik and IEC Vice president Dr. Pravat Kumar Parhi graced the event. The conference focuses on innovative technologies, research and design advances, renewable energy, and system integration in practice. A prelude music was performed by NIST musical club, and 50 students participated in poster presentation in four sessions. At the end, the valedictory address was given by Dr. Mohapatra, and the vote of thanks was addressed by Principal, Dr. Priyadarshi Tripathy. The ceremony was well-coordinated by Dr. Sachidananda Prasad, HoD, EEE & Dr. Sandipan Mallik.

National Science Day 2022

NIST celebrated National science day in collaboration with Rotary International Club Berhampur and supported by SERB DST on 28th Feb 2023. Around 300 students from different Institutes participated in this one-day event.

The event was inaugurated by founder chairman Dr. Sukant K. Mohapatra in online mode while opening address was delivered by principal Dr. Priyadarshi Tripathy and Er. Sayad Suleman Ali welcomed all the dignitaries. The inaugural Session was followed by a quiz competition and showcase of different club activities based on innovation and research.



Vice Chancellor of Khallikote University, Dr. Prafulla Kumar Mohanty as Chief guest, Eminent science writer Dr. Nikhilananda Panigrahy as chief speaker, Rtd. Professor, Berhampur University, Dr. Gouri Shankar Tripathy as Guest of honor, Rotary Club, Berhampur secretary Mr. Sarthak as Guest of honour joined in the inaugural session and graced the occasion. The event was well-coordinated by Dr. Ratikanta Nayak, Asst. Prof, College of Science, NIST.

National Youth Day Celebration



National Youth Day was celebrated at NIST by the Institute Innovation Council with a Speech Competition arranged for nearby school and college students at TIFAC Seminar Hall on 12th January 2023. Several students attended the event and delivered their speech in two categories. Junior group (Class 8-10th standard) spoke on the topic:

"Should services such as transportation be free in India", while the senior group (Inter to undergraduate) prepared their speech on the topic: "Allowing Mobile Phone in Academic Campus: Implications on Academic Delivery". Prof. Simanchalo Panigrahi, Dr Bishnukar Nayak and Prof. Achyutananda Parida judged the event while Dr.Subrat Kumar Bhuyan coordinated the event.

Trekking Adventure



The Management Club, NIST organised a trekking adventure on 13th Jan 2023 to Kumarsuni, Bellaguntha, Ganjam. There were 18 club members who trekked together. The primary objective of this activity is to encourage teamwork and gain experience in collaborating with others to accomplish a task.

NIST Table Tennis Team Won



NIST students participated in a inter-college sports fest organised by PMEC, Berhampur (SHUARYA 2K23) on 13-15th January 2023 and stood 1st in Table Tennis men's and women's (Singles and doubles) and runners up in women Kho Kho. The event was coordinated by SAC faculty in charge Prof Saroj Kumar Padhy. Principal Dr. Priyadarshi Tripathy & Er.Sayad Suleman Ali (Head HR & Administration) congratulated the team in this occasion.

EVENTS & CLUB ACTIVITIES

Republic Day Celebration at NIST



Glimpse of Republic Day celebration at our campus on 26th January 2023.

Industrial Tour to RSP by Student



Department of Management, NIST organized an Industrial tour for its final year MBA students to the Rourkela steel plant on 21st Jan 2023.

NIST Freshers Day Celebration 2022



The fresher's (2022) has celebrated the Fresher's Day event with lots of fun & fair on 24th December 2022.

Christmas Celebration in Orphanage



Team NSS, NIST celebrated Christmas

with a visit to an orphanage home. The volunteers distributed clothes and organised some special activities to bring joy to the residents.

NIST's CIVENG'S CLUB won award



NIST congratulates CIVENG'S CLUB member Ankit Mahato, Dibya Prerana Patnaik, Bibhudatta Panda, Debasish Mohapatra & Sai Chandan Sahoo for winning 2nd Prize, in the event called 'Sculpture your Smart Town' in a NATIONAL LEVEL TECHNO MANAGEMENT FEST conducted by AITAM TEKKALI, Andhra Pradesh.

National Mathematics Day at NIST



Department of Mathematics, NIST organised a National Seminar on "A tribute to S. Ramanujan" and a quiz competition (Ramanujan's Riddle) on the eve of National Mathematics Day, 22nd December 2022.

The seminar was attended by students from various colleges, and they actively participated in the quiz competition. Dr. Priyadarshi Tripathy, Principal inaugurated the program and addressed the gathering in the presence of Dr. Bhaskar Bhola, HoD, Math. Prof Simanchal Panigrahy, Dr. Sudhananda Maharana, Prof M Rajendra Kumar. Dr Bishnukar Nayak discussed some key concepts of Number Theory, its applications and

the biography of Shri S. Ramanujan. The quiz competition's winners were congratulated and given prizes at the end.

Dr. Bhaskar Bhola presented the valedictory address, while Dr. Sudhananda Maharana offered the vote of thanks. Prof. M. Rajendra Kumar, Dr. Bishnukar Nayak, and all of the department's faculty and students successfully coordinated the ceremony.

A Visit to President's Village



Govt. of India has made an ambitious project to develop the parental & inlaw's village (Rairangpur, Mayurbhanj District) of honourable president Draupadi Murmu, as a smart & sustainable model village. A national expert committee has been made consisting of 16 members from different expertise for the proper execution of the project. NIST has got the opportunity to represent its faculties from Mechanical, Electrical & Civil engineering dept. as the part of the national expert committee.

In this connection our heads of the department Dr. Souren Misra, Dr. Sachidananda Prasad and Dr. Barada Prasad Sethy represented the mechanical, Electrical & civil engineering respectively and visited these place from 22-25th February 2023 under the leadership of Dr. R. M. Pandey.

Along with the sixteen members expert committee, they visited the collector of Mayurbhanj district to aware him about the ground situations and further they are preparing the report for the Govt. of India.

EVENTS & CLUB ACTIVITIES

Rashtriya Ekta Divas by NIST NCC



Rashtriya Ekta Divas was observed inside NIST campus on 30th & 31st Oct 2022 under the leadership of Nilesh Dalai (NCC, CTO) & Pabitra Kumar Gouda (NCC, PI).The day is observed to recognize his contribution towards India's Independence and unity. The prime reason behind the celebrations of National Unity Day is to boost the nation's unity and spread awareness about Sardar Vallabhbhai Patel's contribution to the country. More than 20 NCC students were participated.

New Cadet Enrollment



NCC aims at inculcating a sense of patriotism and national pride in students. In addition, it helps in physical fitness and also promotes all round personality development in the students. Adequate facilities are available in the campus for regular parades, firing training, obstacle course and organizing camps. Total thirty number of boys & girls have joined in this program.

Blood Donation Camp at PMEC

Blood donation is the need of the time to save patient , those are dying due to lack of blood. As the part of the initiative, volunteers from various campuses of Berhampur Group Head



Quarter donated blood to blood banks. Ten NCC cadets from NIST were in the coordination team for organising this program.

NCC Day Celebration



National Cadets Crops (NCC) celebrated the 75th NCC day on 27th Nov 2022. The NCC was formed on 15th July 1848. However, the NCC day is observed throughout the country, on the fourth Sunday of November, because, it was on that day in 1947, when the first units was formed in Delhi. The first Prime Minister of India, Pandit Jawahar Lal Nehru inaugurated the first NCC Unit at Delhi on the last Sunday of Nov 1948. Naval NCC cadets enrollment was started on Nov 2021 at NIST Campus, Commander Kishor Chandra Routa (Commanding Officer & Staff of the 1(0) Naval Unit NCC, Berhampur) inaugurated the NIST Unit.

Road safety Awareness by NCC



The "Road Safety Awareness Week" was celebrated from 11th to 17th Jan 2023 and the theme of this year was

"Sadak Suraksha Jeevan Raksha".The main aim of the event is to aware the people about, how important the road safety measures!

CO & Group Commander Visit



Every year the CO and Group Commander do official visit to each NCC unit to ensure the availability of proper infrastructure facilities for imparting training to the cadets. For this year the group commander also visited NIST NCC unit and interacted with cadets.

Talk by Brigadier Dr. L.C Pattnaik



NIST invites Serving and Retired defence officers to its campus for several talk to inspire the students. This time, Brigadier Dr. L.C Pattnaik was invited and he shared his valuable experiences to our students, which was really motivated the students.

JNV Girls students Visited NIST



Students of Jawahar Navodaya Vidyalaya (JNV), Ganjam, Odisha visited NIST campus under their

EVENTS & CLUB ACTIVITIES

Vigyan Jyoti Program for empowering girls in STEM on 13th March 2023. Children visited the campus and facilities, including Fab lab, Robotics lab, and other resources. The Vigyan Jyoti Program is an excellent initiative of I-STEM, Govt. of India which helps in promoting gender equity and empowering girls to take an active interest in science, Technology, Engineering, and Mathematics, and providing them the necessary support/resources to pursue their interests to achieve their goals.



It was always encouraging to see young mind's interest towards Science and Technology. Their visit to NIST (Autonomous) campus has inspired and motivated the students to continue exploring their interests in STEM and pursue their academic and professional goals with enthusiasm and passion. Principal appreciated the efforts taken by the JNV Surangi, Ganjam, Odisha in empowering girls in STEM, and extended support for future collaborations with them, also he appreciated those institutes which are organizing similar events to encourage the students to follow their passion.

this vibrant festival with proper safety guideline. Both Day scholars & Hostel ites were participated in this festival.



International Women's Day at NIST



International Women's Day was celebrated with tremendous happiness and joy on 8th March 2023 at NIST campus. Students participated in various competitions like Debate, Acting, Painting etc. The purpose of the event was to recognize the



achievements of women and to increase public awareness of the challenges they still experience in society. The event was successfully coordinated by Dr. Sasmita Padhy, Assistant Professor, Dept. of EE.



KURUKHETRA 2k23



NIST organised its biggest Inter-college sports fest (KURUKHETRA 2k23) from 24th March - 28th March 2023. It was a fantastic opportunity for young athletes to showcase their skills and talents in various sporting events and to learn from each other in a spirit of healthy competition. Ten different colleges such as VSSUT (Burla), OUATR (BBSR), Sri Sri University (BBSR), SOA (BBSR), IGIT (Saranga), GIET (Gunupur), Ronald Institute of Technology (Berhampur), IISER (Berhampur), City College (Berhampur), Saraswati vidya mandir (Berhampur) were participated in KURUKHETRA -2023. Various sports such as Cricket, Badminton, Volleyball, Throw ball, Kabaddi, Kho-kho, Basket ball, Table tennis were conducted by sports officers Saroj Kumar Padhy & Basanti Patra.



Principl Dr. Priyadarshi Tripathy & Head of HR and Administration Mr. Sayad Suleman Ali were feliciated to the champion & runners of team at the closing ceremony. Dr. Muchharla Suresh, Dr. Preeti Ranjan Sahu, Dr. Bishnukar Nayak, Prof. Mitu Baral, Dr. Pradyumna Kumar Patra, Prof. Harikrushna Gantayat, Mr.Muna Mohanty & Ms. Soumya Muduli were sucessfully conducted the grand sports festival.

HOLI Celebration at NIST



NISTians celebrated the festival of colors, HOLI in the campus with great enthusiasm. It was amazing to see lots of students came together to enjoy

STUDENT SUCESS STORY

Innominds Won Hackathon



Mr. Rohit Raj Padhi, (4th Year ECE) and Mr. Ayush Behera, (3rd year EE) participated in Startup Mela at Bhubaneswar & won 1st Prize of Rs. 25000 in "Innominds-Hackathon" and 3rd prize of Rs. 5000 in "Student Exhibitor" organized by Startup Odisha on 16th January, under mentorship of Dr. Sandipan Mallik, Associate Professor, Dept. of ECE. They presented a bio membrane form waste material, which may replace the harmful plastic in future.

Global Student Entrepreneur Award 2023



Mr. V. Roshan Kumar Patro, (4th Year CSE) participated in Global Student Entrepreneur Award (GSEA) 2023 and awarded by Ministry of IT and Electronics by Mr. Manoj Mishra.

NISTians bagged prize in NCESS-2022



Mr. S. Sovan Kumar (4th Year ECE), Mr. Rohit Raj Padhi, (4th Year ECE) and Mr. Ayush Behera, (3rd Year ECE) participated and bagged the first position in the National Level Conference on "Energy Sustainability and Society" (National conference on energy sustainability and society's) organized by NIST(Autonomous), Berhampur in association with Indian Energy Congress on 10th Dec 2022.

NIST Google Developer Student Clubs (GDSC)



NIST Congratulates the 70 students who successfully completed the Google Cloud Career Practitioner program organized by Google Developer Student Clubs (GDSC) under the guidance of GDSC lead, V Roshan Kumar Patro, (4th Year CSE) and Google Cloud Certified, Sayed Imran, (4th Year CSE). Around 140 students participated in the program and out of which 70 students successfully completed all the tasks & badges to receive goodie/tokens from Google Cloud. The program enabled the students to learn and implement their knowledge of Google cloud computing platform through various techniques and patterns. The prizes were distributed by GDSC mentor Dr. Sandipan Mallik in the presence of Dr. Preeti Ranjan Sahu and Prof. Mitu Baral. NIST feels proud of our students for their outstanding achievement! NIST appreciates to the Google Cloud Community India & Qwiklabs for providing such an exciting opportunity for the students to learn about the cloud & to grow with it.



Google Office Bootcamp



V. Roshan Kumar Patro (4th Year CSE) was one among the 81 students shortlisted out of 1500+ applications across India to attend the in-person Bootcamp at Google Office, Mumbai. He is NIST GDSC club lead who got this opportunity to level up.

STUDENT SUCESS STORY

NISTian Won Award in Poster Presentation



NIST congratulates to Ms. K. Swatisree, a 2nd year MSc Chemistry student, for winning 3rd prize in the best poster presentation category at the National Conference on "Recent Advances in Chemical Sciences" conducted by Berhampur University. Students from several prestigious institutions, including IISER, NISER, NIT, and IMMT Bhubaneswar were participated in this event. Her achievement is truly remarkable.

NAC with NASA detected two Asteroids



The International Astronomical Search Collaboration (IASC) is a citizen science program that provides high-quality astronomical data to citizen scientists around the world. These citizen scientists are able to make original astronomical discoveries and participate in hands-on astronomy.

NIST Astronomy Club (NAC), in collaboration with the International Asteroid Search Campaign (IASC), has successfully made two preliminary asteroid detections. They used a software called Astrometrica to process the images designated to them by IASC. The event took place from September 18th to October 18th, 2022, which was supported by NASA. During this period, NAC club members found six faint detections, two of which were resulted to be true ones named YAV001 and NAC005. Club advisor Dr. Asish Kumar Mohapatra encouraged the students & provided all types of support to the students throughout the event.



World's Biggest Block Chain Hackathon



Mr. Sambit Sargam (3rd yr. IT Branch) from the Cloud Computing Club, under the guidance of Prof. Ashish Kumar Dass and Prof. Ashutosh Parida, had participated in the EthIndia hackathon conducted in the first week of December 2022 in Bangalore and got a prize sum of 1160 USD. EthIndia is the world biggest Block Chain Hackathon where 2000 + participants of 34 different countries were participated in that event.

IAS-INSA-NASI summer internship program



The three national Science Academies such as: Indian Academy of Sciences, Bengaluru, Indian National Science Academy, New Delhi, The National Academy of Sciences, India, Prayagraj offer several two-month Summer Fellowships to enable students/teachers (studying/teaching in India) to work with scientists associated with the three Academies during 2023.

In this connection Mr. Aditya Kumar Sahu, (3rd year, Electronics & Communication Engineering), NIST has been chosen as a fellow for a highly prestigious IAS-INSA-NASI summer internship program at IISc Bengaluru under the esteemed guidance of Prof. Mayank Shrivastava. Every year, the Indian Academy of Sciences in Bengaluru, Indian National Science Academy in New Delhi, and the National Academy of Sciences in Prayagraj provide various two-month Summer Fellowships, which offer a chance to students and teachers to collaborate with any of the three academies during the summer.

LITERATURE, ART & PHOTOGRAPHY

Art & Photography



Ms. Ujala Behera
M.Sc. Final Year
Department of Physics



Dr. Namrata Pattanayak
Assistant Professor
Department of Physics



ALUMNI SPEAK

Swastik Choudhury

B.Tech: Information Technology

Batch: 2003-2007

Current engagement: Infosys Ltd/Swastik Arthouse

Home town: Rourkela, Sundargarh, Odisha



Mr. Swastik Choudhry was instrumental in starting up two college magazines - one literary and the other technical and served in the editorial board of both. He also took part in multiple cultural shows and sports so that his engagement with various kind of people will

provide a platform to learn more. He always hear from his heart, hence did several jobs in his life from a teacher of orphanage to marketing. His friend, Amarta Bhattacharyya greatly influenced him and together they started making independent film making banner named as "Swastik Arthouse". So far their films have travelled to various International film festivals across the globe including International Film Festival of India (IFFI), International Film Festival of Kerala (IFFK), Kolkata International Film Festival (KIFF), Dhaka International Film Festival, Bangladesh and many others. He is being awarded as STAR ALUMNI award for his seminal contribution to art & culture on the eve of Foundation Day celebration 2022 at NIST campus on the occasion of 26th Foundation Day of NIST. NIST Chronicle family feel proud to have a candid discussion with him regarding, how was his life at our campus on that day.

NIST Chronicle: What is one remarkable memory with friends that you made while you were at NIST:

Swastik: There are so many but keeping it to the more sober side of it. Being on the editorial board of NISTIAN magazine. Prior to my joining, we used to have a very uni-color magazine. With the new team, we created a very colorful magazine, added new sections, and made it more connected with the students across all batches.

NIST Chronicle: Do you recall any location at NIST that reminds you of getting motivated or changing your course of action?

Swastik: Octagon classroom - some of the best teachers of my life taught me here in my initial years of engineering.

NIST Chronicle: You must be remembering your teachers. Who were the key influencers and why?

Swastik:

K Satyajit Patra - Made my foundations strong and his own personal journey was inspiring. He even took feedback from students positively.

Deepa Chatterjee - Took me into the editorial team of Nistian magazine, and taught us English but more than that taught me how to make the most of the opportunities that I get.

Biplab Ganguli - Made Physics look simpler and also fostered the idea of independent thought and exploring things inside out.

Ramakant Panigrahi - Apart from thermodynamics he showed being smart and disciplined are very necessary aspects.

M Suresh - He championed the philosophy that having a thorough understanding of your subject area is vital to success.

Ajit Panda - Knowledge can also come with humility and at the same time that's the only thing you may need to come out of any dire situation.

Ravi P Reddy -Your identity is related to your ability and skills - biggest lessons from him while learning foo-bar.



NIST Chronicle: What is your story related to joining NIST?

Swastik: There are two:

1. My elder brother's friend who was studying at NIST while I was in class 10, had come to our house and he was telling how Berhampur has so much of delicious food at the cheapest prices. Being a foodie, I used to imagine since then that I will be joining NIST and will binge on all sorts of delicacies.
2. By the time I finished my 10+2, my interest in the domain of computer science had grown a lot and NIST had made its mark in providing unparalleled education in Computer Science and IT departments.

ALUMNI SPEAK

NIST Chronicle: What are your college friends doing nowadays? Are you in touch with them?

Swastik: Yes, being in touch with them. All of them are doing well and settled in different parts of the world. While some of them have taken the tough path and followed their passion in alternate fields like art, creativity, and humanities.

NIST Chronicle: If a student of +2 or high school would seek your advice on making a career, what would be your advice? Or maybe you would like to give them a mantra or a few thumbs rules. Anything?

Swastik: Career opportunities are far and wide and not just a few professions. I will only want students to be an explorer and seekers. In the age of push notifications, please do the pull information - go out and find what is there. True knowledge doesn't come to you, you have to reach there.

NIST Chronicle: Let's say we have invented the time machine. And you have been authorized to do time travel (round trip) once. What would be that which you would like to change if possible?

Swastik: I believe everything that happens is an outcome of circumstances and situations. If situation A or B is changing, then the outcome will also change. So there is no point in thinking about what could have been made differently. If at I can go back I will only explore the world before I was born and learn about it but won't change anything.

NIST Chronicle: What is your take on earning? Desk job, field job, research, entrepreneurship, or even freelancing: what works best?

Swastik: It's based on your needs and appetite. We only need to be sufficient and content and when we truly become one you will know you are on a spiritual path.

NIST Chronicle: Any message that you would like to give to the new students:

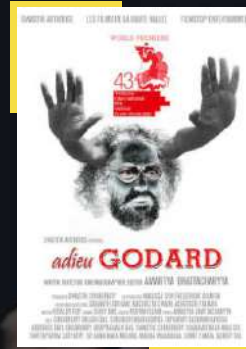
Swastik: The day you will come out of this college - life moves into a fast track. So it's important to take meaningful pauses and look if are we enjoying what we are doing. If yes, wonderful. If not, then you may feel I should have made the most of my student days to learn and explore. So to avoid that it is best we make the most of the time that we have now and use it to read, reflect on our skills and inclinations, learn and acquire knowledge related to it and identify the roads that have been less travelled.

FILMOGRAPHY



Capital I
The First Independent Feature Film of Odisha
Year: 2016

SWASTIK CHOUDHURY
Executive Producer
Producer



adieu GODARD
Stylized as adieu GODARD
Year: 2016

SWASTIK CHOUDHURY
Actor
Producer



Runanubandha
The He Without Him
Year: 2021

SWASTIK CHOUDHURY
Actor
Producer



Whispers of a Storm
Film On Odisha's Cyclone Fani
Year: 2023

SWASTIK CHOUDHURY
Actor
Producer



Khyanikaa
The Lost Idea
Year: 2012

SWASTIK CHOUDHURY
Actor
Producer

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SCAN ME

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Officially documenting the **life** of current students at campus
and reviving the campus **memories** for alumni.