NIST CHRONICLE

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Biotech 2.0: From Gene Editing to Personalized Medicine

NIST UNIVERSITY
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Contents

MESSAGE FROM THE PRESIDENT

The NIST Chronicle team's diligence and dedication to publishing this journal featuring the latest happenings at NIST, with a focus on key articles relevant to education, technology, time, and society is laudable. It is indeed a great pleasure to know that this particular issue of NIST Chronicle is focused on the featured article, "Biotech 2.0 - From Gene Editing to Personalized Medicine" is very timely, given the latest evolution of biotech and medicine.

With the rapid advancement of biotechnology, medicine, computing, and AI, our ways of living and working will change in ways previously unimaginable.". In the recent past, there has been tremendous progress in the field of medicine, and biotechnology is playing a crucial role in the innovation and transformation.

Humans have about 20,000 genes. Our functional understanding of genes is still evolving. Roughly 18% (about 3,600 genes) of them remain completely unknown. Genes can be considered the fundamental units the atomic structure of the human body. Biotech and genomics will have a foundational impact in the field of human health and medicine. Some of the areas are:

- Understanding & Influencing Metabolic Expression of Gene: Read personal genetic makeup and use it to guide life style and nutrition.
- Blocking & Modifying Gene Expression: Therapies to turn off the expression of disease causing genes.
- Somatic Gene Therapy: Effectively change the Gene inside nucleus with new DNA.
- Therapeutic cloning: Create new cell, tissue, organ (Kidney, Heart) from version of our own cell (Trans-differentiation).

- Molecular nanotechnology and nano surgery: Blood cell sized nanobots will do precise surgery, clear arteries, destroy tumors.
- Genetically engineered Human being: People with different traits and intelligence could be engineered.
- Growing Younger and Living Longer: Growing younger and living longer is possible by leveraging genes to stop/even reverse aging process.

Personalized medicine has the potential of revolutionizing current patient care model. Treatment prescribes therapies specific to individual, based on genetic information of the person concerned. There are various advantages of using personalized medicine: avoidance of drug-related toxicity, targeted patient population, and cost reduction/optimization etc. The success of personalized medicine will depend on a better understanding of genomics and its advancement.

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

Dr. Sukant K. Mohapatra

MESSAGE FROM THE ADVISOR

Dear Readers,

We are living in an era where biotechnology is rapidly evolving beyond traditional boundaries, merging with fields like artificial intelligence, data science, and entrepreneurship. Biotech 2.0 is not just a scientific advancement-it is a powerful force that is reshaping how we live, work, and envision the future.

From personalized medicine and gene editing to sustainable agriculture and bio-based industries, biotechnology is set to transform everyday life. It holds the promise of longer, healthier lives, improved food security, cleaner environments, and smarter solutions to some of the world's most pressing challenges.

Equally significant is the expanding landscape of career opportunities this revolution brings. Today's students are no longer limited to conventional roles in laboratories. Biotech 2.0 opens doors to diverse career paths-ranging from bioinformatics and clinical research to biotech entrepreneurship, regulatory affairs, science communication, and innovation management. The integration of technology and biology is creating a demand for multidisciplinary professionals who can think creatively and adapt continuously.

In this edition of our quarterly Chronicle, we explore not only the breakthroughs but also the future pathways, about how biotechnology will influence industries, redefine skill requirements, and empower the next generation to become innovators and problem-solvers. Through insightful discussion with Industry Researchers, student contributions, and expert perspectives, we aim to provide a holistic view of this dynamic domain.

As Managing Editor, I take immense pride in the dedication and collaborative spirit of our contributors and the entire editorial team. This issue reflects not just knowledge, but a shared vision for the future.

I encourage you to delve into these pages with curiosity and imagination. Because Biotech 2.0 is not just about scientific progress-it is about shaping the future we will all live in, and the roles we will play in creating it.

Happy Reading!

Dr. Sabyasachi Rath

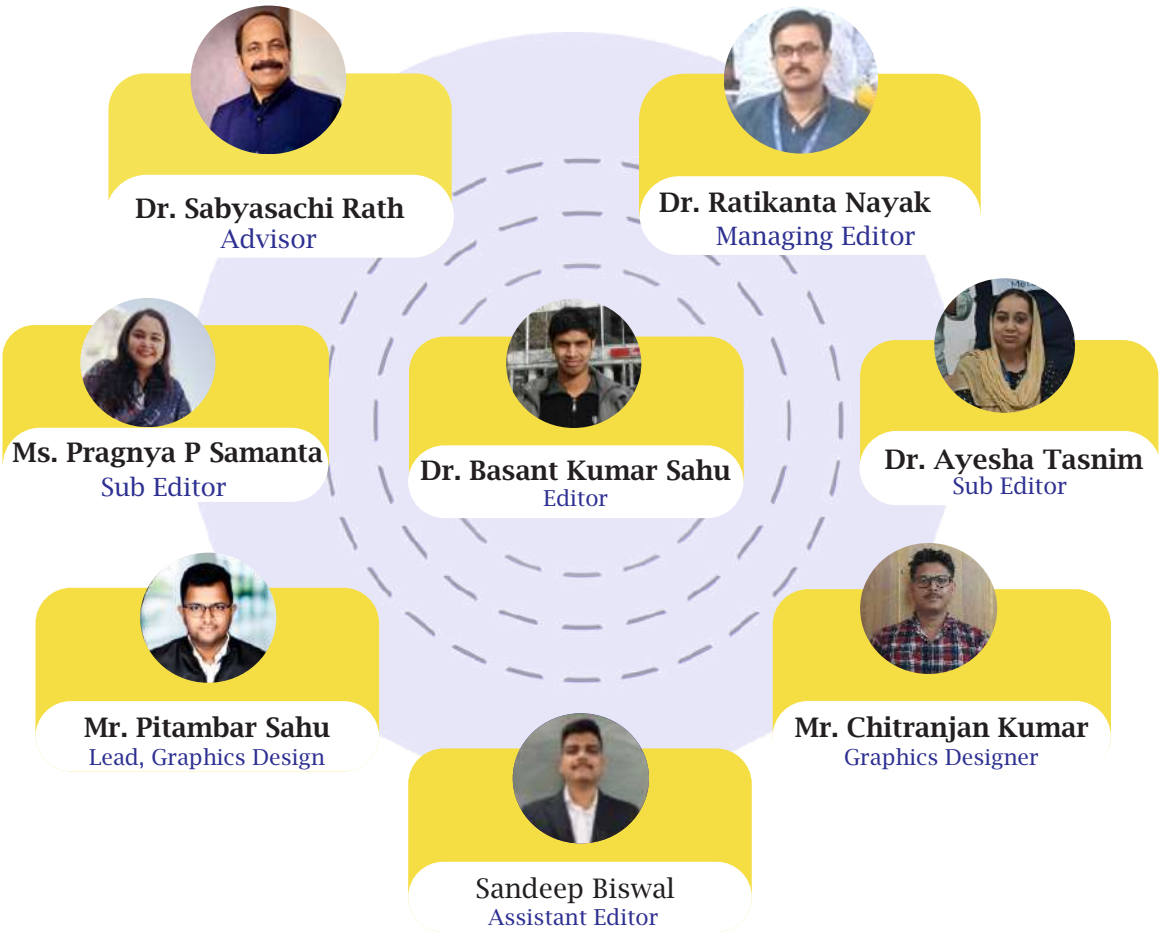
LETTER FROM BOARD OF EDITORS

When Francis Crick and James Watson unraveled the structure of DNA (Deoxyribonucleic Acid), their curiosity was simple yet profound: what controls life at its most basic level? That question opened the door to modern biology and today, it is guiding a revolution in medicine.

From that discovery, science has moved toward gene editing. Tools like CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) now allow scientists to carefully change DNA. Faulty genes that cause diseases, such as sickle cell anemia, can be corrected. What once seemed like science fiction is becoming real, offering hope to millions. But the story does not stop there. Personalized medicine takes this progress further. Instead of a one-size-fits-all treatment, doctors now use a person's genes, lifestyle, and environment to design care. A cancer treatment, for example, can target the exact mutation in a tumor, making it more effective and reducing side effects. Yet, this powerful technology has a darker side. If misused, gene editing could lead to unintended genetic changes, creating new diseases instead of curing them. The idea of "designer babies" choosing traits like appearance or intelligence raises serious ethical concerns and could increase social inequality.

In the end, the journey from gene discovery to personalized medicine is not just a scientific story it is a human one. The real question is not how far we can go, but how responsibly we move forward. Strong regulations, ethical awareness, and equal access must guide this progress.

BOARD OF EDITORS

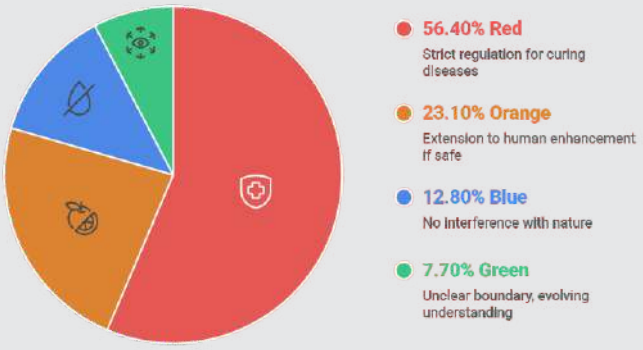


STUDENT SURVEY

BIOTECH 2.0: FROM GENE EDITING TO PERSONALIZED MEDICINE

A child born free from hereditary disease. A cancer patient cured through DNA-based therapy. Crops engineered to survive drought. These are no longer scenes from science fiction—they are becoming realities in the age of Biotech 2.0. Powered by revolutionary tools such as CRISPR-Cas9, gene sequencing, and precision medicine, humanity now stands at a historic crossroads: we can not only understand life, but increasingly redesign it.

But with such power comes an equally profound question: Where should we draw the line? To explore this issue, a campus survey was conducted among young students, representing the voices of a generation that will inherit and shape the future of biotechnology. Their responses reveal a thoughtful blend of optimism, caution, and ethical concern.



The survey clearly shows that the majority of students support biotechnology when it is applied for medical benefits under proper ethical regulation. The largest share of respondents, 56.4%, believed that biotechnology should be used strictly for curing diseases and improving human health. This indicates that most young people are not against scientific advancement, but they strongly favor responsible and controlled use of technology. They seem willing to accept gene therapy for cancer, inherited disorders, and other serious illnesses, provided that such treatments are guided by strict laws, transparency, and respect for human values. Their position reflects confidence in science as a healing force rather than a tool for reckless experimentation.

At the same time, a considerable number of students appear open to broader possibilities beyond medicine. Around 23.1% of respondents felt that biotechnology may be extended to human enhancement if it is proven safe and fair. This group likely imagines future applications where genetics could improve memory, physical strength, disease resistance, or even lifespan. Their views suggest that some young minds see biotechnology not only as a means of curing suffering, but also as a pathway for improving human potential. However, another 12.8% strongly believed that humans should not interfere with nature at all. Their response reflects ethical caution, spiritual beliefs, or concerns about unintended consequences. These students remind society that scientific progress must be balanced with humility and respect for natural boundaries.

A smaller section of respondents, 7.7%, stated that the boundary is still unclear and should evolve as future understanding develops. This thoughtful response recognizes that biotechnology often advances faster than laws, ethics, and public awareness. It suggests that society may need to redefine acceptable limits as knowledge grows. Overall, the survey reveals that students are neither blindly enthusiastic nor strongly opposed to biotechnology. Instead, they are calling for balanced progress guided by wisdom. Their message is clear: biotechnology should be used to reduce suffering, explored carefully for enhancement, and continuously discussed through ethical debate. As Biotech 2.0 transforms medicine and society, young people are already showing maturity in how they think about the future.

FEATURE STORY

A Conversation with Rajender Jena

Head, Malaria Vaccines (Quality Control), Serum Institute of India Pvt. Ltd., Pune

Rajender Jena earned his Ph.D. from the Indian Institute of Technology (IIT) Delhi, He brings extensive experience in biopharmaceutical product development, analytical sciences, and quality control, spanning vaccines, biosimilars, cytokines, and antibody fragments. Over his career, he has contributed to multiple products from early development to commercialization, encompassing upstream and downstream process development, analytical method development and validation, process characterization, and regulatory submissions. Prior to joining Serum Institute of India (SII), he led product development efforts at the Multi Vaccine Development Program, New Delhi, and held key roles in process development and scale-up at Intas Biopharmaceuticals, Ahmedabad.

At SII, Rajender leads quality control activities for malaria vaccines, including the WHO-prequalified R21 malaria vaccine.

NC: What distinguishes Biotech 2.0 from earlier waves of biotechnology?

RJ: Biotechnology has evolved far beyond its early foundations, making it difficult to define within rigid boundaries. The first wave of biotechnology focused largely on foundational innovations such as antibiotics, recombinant proteins, monoclonal antibodies, cytokines, and hormones—breakthroughs that transformed modern medicine.

Biotech 2.0, however, represents a paradigm shift driven by convergence across disciplines. It is characterized by advanced modalities such as bispecific antibodies, gene therapies, CAR T cells, and personalized medicines tailored to individual genetic profiles. Platform-based technologies now enable rapid scalability, while “super clones” and optimized expression systems have dramatically increased production yields, reducing both cost and time to commercialization.

Equally transformative are innovations in manufacturing, including single-use bioreactors and large-scale (10 kL and beyond) production systems. Novel clinical approaches such as controlled human infection models are shortening clinical development timelines. In essence, Biotech 2.0 is defined not just by scientific breakthroughs, but by speed, scalability, precision, and global impact.

NC: What role do genomics, advanced analytics, and artificial intelligence play in accelerating healthcare solutions today?

RJ: In an increasingly interconnected world, infectious diseases can rapidly escalate from local outbreaks to global pandemics. Addressing these challenges requires deep integration of genomics, advanced analytics, and artificial intelligence (AI).

Genomics plays a central role in identifying pathogen variants, tracking mutations, and facilitating vaccine design and redesign. Real-time genomic surveillance enables scientists to stay ahead of evolving threats, ensuring that therapeutics and vaccines remain effective.

Advanced analytics complements this by providing robust characterization of biological systems.

BIOTECH 2.0: FROM GENE EDITING TO PERSONALIZED MEDICINE

From analyzing single nucleotide polymorphisms (SNPs) to profiling host cell proteins and residual DNA, analytics ensures quality, safety, and regulatory compliance within the Chemistry, Manufacturing, and Controls (CMC) framework. It also supports efficacy evaluation and data integrity.Artificial intelligence further accelerates innovation by enabling rapid antigen discovery, optimizing adjuvant selection, and streamlining process design. Machine learning models can predict molecular interactions, improve yield optimization, and even assist in clinical trial design.

Together, these technologies form a powerful triad, enhancing precision, reducing timelines, and enabling faster, more effective healthcare solutions.

NC: What opportunities and constraints exist for personalized medicine in developing economies like India?

RJ: Developing economies such as India present a unique and promising landscape for personalized medicine. Rising incidences of lifestyle-related diseases, growing healthcare awareness, and increasing disposable incomes are creating strong demand for tailored therapeutic solutions. Advances in diagnostics and genomics are further enabling this transition toward precision healthcare.

However, significant challenges remain. One of the primary constraints is the socioeconomic disparity that exists within these populations. While a segment of the population may readily access personalized treatments, affordability remains a major barrier for a large proportion of citizens.

Despite these challenges, the long-term outlook remains optimistic. With continued investment, policy support, and technological democratization, personalized medicine has the potential to become more accessible.

NC: What interdisciplinary collaborations are most critical to realizing the promise of Biotech 2.0?

RJ: Biotech 2.0 is inherently collaborative, requiring seamless integration across multiple disciplines to translate innovation into real-world impact.

At the core are biologists, who drive discovery by identifying disease pathways, therapeutic targets, and novel interventions. Data scientists play a crucial role in interpreting complex datasets, modelling disease patterns, and identifying correlates of protection across populations.

Clinicians contribute by designing and conducting clinical trials that ensure safety, efficacy, and real-world applicability. Their insights are vital in bridging laboratory research with patient outcomes.

This interconnected ecosystem, spanning science, medicine, governance, and industry, is essential for the success of Biotech 2.0.

NC: What breakthrough or milestone will define the next phase of biotechnology and vaccine research?

RJ: The next decade of biotechnology is poised to be defined by the integration of artificial intelligence with advanced biological systems. AI-driven approaches are expected to revolutionize clinical trial design, enabling more efficient patient selection, predictive modeling of outcomes, and reduced development timelines.

Another key area of advancement will be multivalent and multi-pathogen vaccines, capable of targeting multiple diseases or different stages of a pathogen's lifecycle within a single formulation. This approach could dramatically improve compliance and cost-effectiveness, particularly in low-resource settings.

Ultimately, the convergence of AI, advanced immunology, and scalable manufacturing will redefine how vaccines and therapeutics are developed, making them faster, smarter, and more accessible than ever before.

29TH FOUNDATION DAY CELEBRATION

NIST University marked a significant milestone by celebrating its 29th Foundation Day along with the 2nd University Foundation Day on 20th and 21st January, 2026.

The event was inaugurated by Dr. Sukant K. Mohapatra, Hon'ble Founder and President. Delivering the welcome address Dr. Mohapatra highlighted how NIST University has set benchmarks through strong academic programmes, quality education, and multidisciplinary research excellence in areas such as IoT, renewable energy, drone technology, multimedia, and robotics.

The Chief Guest of the Inaugural Ceremony, Dr. Michael Patra, Former Deputy Governor of the Reserve Bank of India (RBI), in his inspiring talk spoke about India's fast-growing economy and emphasized the crucial role of youth in driving national growth. He highlighted that India has a demographic window of nearly 25 years to benefit from its youth dividend, presenting a unique opportunity for sustained development.

Prof. Priyadarsan Patra, Vice Chancellor of NIST University, elaborated the role of faculty, alumni, staff and students in the university's growth into a happening global

The Guest of Honour, Lt. General R.C. Srikant, Commandant, AADC, Gopalpur shared insights into the AADC as a centre of excellence for training in advanced technologies, safety systems, and autonomous platforms. He also highlighted the importance of collaboration with NIST University and briefly spoke about ongoing joint research initiatives in AI and security technologies following the signing of an MoU between AADC and NIST.

Mr. Sahaj Sandhu, Associate Vice President, T-Works, delivered the keynote address as the Chief Speaker. highlighted the importance of innovation and a strong industry ecosystem, stressing the need to bridge the gap between education and employability through industry–academia collaboration.

Dr Bishnukar Nayak, Registrar I/C proposed the vote of thanks by, expressing gratitude to all the dignitaries, guests, faculty, staff, and students for their valuable participation.

On 21st, January, the second day of the Grand 29th Foundation Day Celebration, the proud Alumunus of NIST university, from across the country,visitied their alma mater. Student members organised various events from academic seminars to cultural programs. The evening program was graced by two eminent leaders Shri Manoranjan Dyan Samantara , MLA Chikiti and Shri T. Anil Kumar, MLA, Brahmapur.

DISTINGUISHED AND STAR ALUMNI AWARD 2026

NIST University proudly congratulates Mr. Rajesh Samantray (B.Tech IT, 1999–2003 batch), CEO & Co-Founder of 3N Performance, on being honored with the Distinguished Alumni Award–26 during the 29th Foundation Day Celebration. 3N Performance is a US-based holding company dedicated to delivering captive and private-label business and technology services to clients worldwide. Prior to co-founding 3N Performance, Mr. Samantray held several leadership roles at globally renowned firms, including Infosys, Cognizant, and PwC. With over 18 years of experience, he has successfully managed Fortune 500 clients, primarily within the financial services sector. NIST University takes immense pride in his remarkable achievements and wishes him continued success in his future endeavors.

The university felicitated the Alumni Members with the Star Alumni award 2026 for their contribution in various fields:

NIST University honored Retd. Wg. Cdr. Reena Sahu (B.Tech–IT, 2003–07) with the Star Alumni Award 2026 on its 29th Foundation Day for her contributions to public service. Currently Associate Director & Head – Security Operations at Tribastion Technologies, she is a cybersecurity professional. She credited NIST for shaping her personality and confidence, calling the recognition a deeply meaningful moment in her journey of defence and public service.

NIST University honored its alumnus, Dr. B. Rajanarayan Prusty, with the Star Alumni Award 2026 on its 29th Foundation Day for contributions to academics and research. Currently Dean – Research and Innovation at Noida International University, he brings over 18 years of experience. He expressed gratitude for the recognition, calling it motivation to further his commitment to academic excellence and research innovation.

NIST University proudly honored Mrutyunjaya Dash (MJ), BTech-CS (2003–07), with the Star Alumni Award 2026 on its 29th Foundation Day for his outstanding contributions to art and culture. Currently Director, Master Artist, and Designer at Eimor Customs, he is known for his excellence in fine art and automotive airbrushing. With over two decades of experience and multiple national and international awards, MJ continues to inspire through his creative versatility.

WELCOME TO NEW FACES OF THE NIST FAMILY

Prof. Dr. Hrushikesh Patro

Dean, School of Agriculture

Prof. Dr. Hrushikesh Patro is an experienced academician having 34 years of experience in teaching, research, extension and administration. During his distinguished career he served in various capacities including Associate Director, Research, Director, Planning, Monitoring and Evaluation, Dean, College of agriculture, OUAT. He is also recipient of the prestigious Fulbright Nehru Visiting Lecturer Fellowship at Mississippi State University, USA. Prof. Patro has published more than hundred research papers in journals of repute and organsied fifteen national and international conferences.

Mr. Sumit Biswal

Asst. Accountant

Mr. Sumit is a Commerce graduate with approximately nine years of professional experience in logistics, auditing, and technical support. He is recognized for his analytical skills and efficient operational management.

Ms. Priyanka Nayak

Lab Supervisor, Physics

Ms. Priyanka is a postgraduate in Physics from Berhampur University.

Dr. Sapan Kumar Nayak

Assistant Professor (Mathematics)

Dr. Sapan holds a Ph.D. from the Central University of Jharkhand. He completed his Master's and M.Phil. degrees from VSSUT, Burla, and has two years of teaching experience.

Ms. Sonali Pradhan

Lab Supervisor, CSE

Ms. Sonali completed her Master's degree in Computer Science from NIST University in 2025. She possesses strong proficiency in the fields of AI and Machine Learning. She is passionate about applying emerging technologies to solve real-world challenges.

Mr. Debasish Patra

Lab Supervisor, CSE

Mr. Debasish completed his B.Tech from NIST University in 2025. He is proficient in Java, SQL, web technologies, and automation testing. He is dedicated to developing efficient software solutions with strong technical expertise.

Dr. Sanjeet Kumar Subudhi

Associate Professor (Electrical & Electronics Engg.)

Dr. Sanjeet is a seasoned academician with over ten years of experience in teaching, research, and institutional administration. He earned his Ph.D. in Electrical Engineering from NIT Rourkela. Dr. Sanjeet holds an M Tech from IIT Kharagpur and has research interests in smart energy systems, electric vehicles, microgrids, and nonlinear dynamics and control. He will also serve as Professor In-Charge – NIIEC- NIST Incubation, Innovation and Entrepreneurship Cell.
He is committed to fostering innovation-driven learning and advancing interdisciplinary research collaborations. He actively encourages technology-driven academic initiatives.

WELCOME TO NEW FACES OF THE NIST FAMILY

Mr. Ruturaj Rath

Admission Asst.

Ruturaj is a graduate currently pursuing a Master's degree in Computer Applications, demonstrating a strong commitment to advancing his knowledge and expertise in the field of computing and modern software development technologies.

Mr. Aniruddha Karmakar

Regional Head, Admissions

Mr. Aniruddha holds an MBA and has professional experience in the Sales and Marketing domain, with a strong understanding of market dynamics and customer engagement strategies, driving business growth and brand development.

Ms. Sarmistha Kar

Examination Asst.

Ms. Sarmistha is a postgraduate professional with around 15 years of experience in academic administration, specializing in support, coordination, and efficient institutional operations.
She is known for her organizational excellence and dedicated professional approach.

INNOVATION & RESEARCH FRONTIER

JOURNAL PUBLICATION

- Dr. Amarnath Padhi, Associate Professor, Department of MBA, has published a research article titled "What Does It Mean 'Human' in the Age of AI? A Bibliometric Evidence of Posthumanism's Evolution, Thematic Structures, and Future Directions" in the Journal of Documentation (ISSN: 0022-0418), pp. 1–26, on February 26, 2026.

- Dr. Amarnath Padhi, along with Junaid Iqbal, Kunal Lodhi, Muhammad Ashraf Fauzi, and Shipra, has published a research article titled "Impact of Psychological Contract Fulfillment on Frontline Employees' In-Role and Extra-Role Job Performance: Role of Employee Empowerment" in Evidence-Based HRM: A Global Forum for Empirical Scholarship (ISSN: 2049-3983), pp. 1–16, on February 26, 2026.

- Dr. Amarnath Padhi, along with Noraini Rusbadrol, Junaid Iqbal, Kunal Lodhi, and Mubashir Ahmad Aukhoon, has published a research article titled "Cognitive Diversity, Team Efficacy, and Team Learning: A Triadic Model for Enhancing Team Performance" in FIIB Business Review (ISSN: 2319-7145), pp. 1–16, on February 19, 2026.

- Prof. Rankanidhi Sahu, Professor Emeritus, Department of Physics, has published "Coherent and Incoherent Antineutrino Scattering on Stable Even-Even Isotopes of Molybdenum Detectors" in Physical Review D on December 29, 2025. DOI: 10.1103/vp2z-v69c.Authors: T. S. Kosmas, R. Sahu, V. K. B. Kota.

- Dr. Jagannath Panda, Assistant Professor, Department of Chemistry, has published "Tailored Defect-Induced Bimetallic MOF-Integrated PVDF Composite Films for Ammonia Detection" in Materials Letters, Vol. 407, p. 140052, on January 5, 2026.DOI: https://doi.org/10.1016/j.matlet.2026.140052Authors: Ho Jin Jung, Tanaswini Patra, Young Je Kwon, and others.

- Dr. Jagannath Panda, Assistant Professor, Department of Chemistry, has published "Enhanced Visible-Light-Driven Photocatalytic Degradation of Methylene Blue and Ciprofloxacin Using Magnetic $NiFe_2O_4$@ZIF-67" in RSC Advances, Vol. 16, pp. 1259–1270, on February 26, 2026.DOI: https://doi.org/10.1039/D5RA09822JAuthors: Anulipsa Priyadarshini, Niharika Das, Saraswati Soren, and others.

- Dr. Jagannath Panda, Assistant Professor, Department of Chemistry, has published "Nanostructured ZIF-67/$LaFeO_3$ p–n Heterojunction Interface for Amplified Cefotaxime Sensing and Intensified Photo-Fenton Degradation" in Nanoscale Advances on March 7, 2026.DOI: https://doi.org/10.1039/D6NA00081AAuthors: Monalisa Samal, Dakshita Snud Sharma, and others.

- Dr. Jagannath Panda, Assistant Professor, Department of Chemistry, has published "ZIF-Derived ZnO for Efficient Photocatalytic Degradation of Organic Pollutants" in ChemistrySelect, Vol. 11, p. e06091, on February 10, 2026.DOI: https://doi.org/10.1002/slct.202506091Authors: Niharika Das, Deepak Senapati, and others.

- Dr. Yerra Shankar Rao, Assistant Professor, Department of Mathematics, has published "Dynamic Analysis of Malware Attacks and Their Defense in Computer Networks" in Palestine Journal of Mathematics, Vol. 15(1), pp. 970–983, on March 1, 2026.Authors: Yerra Shankar Rao, Dhirendra Kumar Sahu, Binayak Dihudi, Mehmet Yavuz, Jayanta Kumar Dash, and Anasuya Nath.

- Dr. Santosh K. Panda, Assistant Professor, Department of Mechanical Engineering, has published "Integrated Investigation of Flow-Induced Drag Reduction in Stepped Cylinders at Supercritical Reynolds Numbers" in Journal of Fluid Mechanics Research, Vol. 53(2), pp. 21–33, on November 17, 2025.DOI: 10.1615/InterJFluidMechRes.2025060086

INNOVATION & RESEARCH FRONTIER

- Dr. Santosh K. Panda, Assistant Professor, Department of Mechanical Engineering, has published "A Decision Tree Regression-Based Performance Analysis of a Duct Air-Conditioning Test Rig" in AIP Conference Proceedings, Vol. 3341, p. 022027, on March 23, 2026.DOI: 10.1063/5.0320213Authors: Aruna Kumar Samantaray, Aswini Kumar Khuntia, Souren Misra, and Santosh Kumar Panda.

- Dr. Santosh K. Panda, Assistant Professor, Department of Mechanical Engineering, has published "Flow Measurement Using Vortex Strength Method" in AIP Conference Proceedings, Vol. 3341, p. 022018, on March 23, 2026.DOI: 10.1063/5.0320212Authors: Alok Patra, Aswini Kumar Khuntia, Souren Misra, and Santosh Kumar Panda.

- Dr. Trinath Sahu, Professor Emeritus, Department of Electronics and Communication Engineering, has published "Graphene Nanoribbon-Based Coupled-Quantum Well Asymmetric Triple-Barrier Resonant Tunneling Diode Structure" in Physica Scripta on March 27, 2026.DOI: https://doi.org/10.1088/1402-4896/ae5851Authors: Madhusudan Mishra, Narayan Sahoo, and Trinath Sahu.

- Dr. Ratikanta Nayak, Assistant Professor, Department of Physics, has published "Electrical and Dielectric Studies of Pr^{3+} and Sm^{3+} Modified $BaBi_4Ti_4O_{15}$ Aurivillius Ceramics" in Journal of Materials Science: Materials in Electronics on January 15, 2026.DOI: 10.1007/s10854-025-14115-4Authors: D. D. Pradhan, A. P. Chakraverty, T. Badapanda, R. Nayak, S. Sarangi, and S. Anwar.

- Dr. Ratikanta Nayak, Assistant Professor, Department of Physics, has published "Property Enhancement of Alternating Glass/Carbon Fibre Laminated FRP Composite by Glow Discharge Post-Plasma Irradiation" in Composites Part B: Engineering, Vol. 293, p. 112299, on January 15, 2026.DOI: 10.1016/j.compositesb.2025.112299Authors: Dibyajyoti D. Pradhan, A. P. Chakraverty, T. Badapanda, R. Nayak, U. K. Mohanty, and M. R. Das.

- Dr. Ratikanta Nayak, Assistant Professor, Department of Physics, has published "Recent Advances in Optimized Polybenzimidazole-Based Membranes for Vanadium Redox Flow Battery Applications" in Journal of Energy Storage, Vol. 106, p. 117372, on January 15, 2026.DOI: 10.1016/j.est.2025.117372Authors: Subhrakali Swain, Kamakshi Brahma, and Ratikanta Nayak.

CONFERENCE

- Dr. Akankshya Patnaik, Associate Professor, Department of Management Studies, presented a paper titled "Exploring Sustainability Transformation in the Fashion Industry: A Bibliometric and Systematic Perspective" at the 1st International Conference on SOLVE-2026, held from February 26–28, 2026.Authors: Trupti Mayee Das and Akankshya Patnaik.

- Dr. Akankshya Patnaik, Associate Professor, Department of Management Studies, presented a paper titled "Transformative AI in Sustainable Human Resource Management: Enhancing Workforce Planning with Topic Modeling" at the 1st International Conference on SOLVE-2026, held from February 26–28, 2026.Authors: Priyabrata Dash and Akankshya Patnaik.

- Dr. Akankshya Patnaik, Associate Professor, Department of Management Studies, presented a paper titled "Sustainability Transformation in the Global Fashion Industry: A Bibliometric Mapping of Research Trends and Future Directions" at the International Conference on 'New Economic Order and Corporate Strategic Response', organized by the Department of Commerce, Berhampur University, held on March 25–26, 2026.Authors: Trupti Mayee Das and Akankshya Patnaik.

- Dr. Yerra Shankar Rao, Assistant Professor, Department of Mathematics, presented a paper titled "Dynamics of Computer Virus Models: Stability, Hopf Bifurcation, and Recovery Time Delay" at the International Conference on 'Advances in Analysis and Its Applications' and the 53rd Annual Conference of the Odisha Mathematical Society (OMS), held from January 31 to February 1, 2026.

- Dr. Santosh K. Panda, Assistant Professor, Department of Mechanical Engineering, presented a paper titled "AI-Based Resonance Avoidance in Military Vehicle Components" at the ICADS 2026 Conference, held on February 12, 2026.Authors: Santosh K. Panda and Ratikanta Nayak.

- Dr. Santosh K. Panda, Assistant Professor, Department of Mechanical Engineering, presented a paper titled "Thermodynamic Performance Analysis of an Ice Plant with Variation in Component Temperature" at the International Conference on Metaverse 5.0 for Sustainable Manufacturing, held on January 23, 2026.Authors: Shaik Farook, Santosh Kumar Panda, Balaji Kumar Choudhury, and Kali Charan Rath.

- Dr. Ratikanta Nayak, Assistant Professor, Department of Physics, presented a paper titled "AI-Based Resonance Avoidance in Military Vehicle Components" at the International Conference on Applied Data Science (ICADS 2026), held on February 12, 2026.Authors: Santosh K. Panda and Ratikanta Nayak.

FDP

- Dr. Yerra Shankar Rao, Assistant Professor, Department of Mathematics, attended the Faculty Development Programme (FDP) on "Problem Driven AI: Real World Application and solution Frameworks" held at NIT Rourkela, Feb. 07 to 16, 2026.

BOOK CHAPTER

- Dr. Yerra Shankar Rao, Assistant Professor, Department of Mathematics, published a book chapter entitled "Stability analysis of malware propagation in the computer network for fractional-order differential equations" in the book Recent Developments in Theory and Applications of Fractional Order Systems, Elsevier, Jan. 01, 2026, DOI: https://doi.org/10.1016/B978-0-44-323952-6.00016-X. Authors: Yerra Shankar Rao, Binayak Dihudi, Saumitri Biswas, Dhirendra Kumar Sahu, Jayanta Kumar Dash, Dharmendra Kumar Singh.

PHD AWARDED

- Dr. Santosh K Panda, Assistant Professor, Department of ME, was awarded a PhD degree for the thesis entitled "Numerical Analysis to Predict Accurate Co-efficient of Discharge for a Fluid Flow through Single Orifice" in Thermal Engineering from GIET University.

FACULTY AWARDED

- NIST University proudly congratulates Dr. Abinash Dutta on being honored with the prestigious Young Scientist (IBS) Award in Medical Biotechnology at the International Conference on Medical Biotechnology (ICoMB 2026). The conference was organized by the Society for Biotechnologists, India (SBTI) in collaboration with Amity University, Noida, and was sponsored by the Department of Biotechnology, India (DBT), CSIR, India, and ANRF India

WORKSHOP, SEMINAR & TALK

International Conference on Air Defence and Security (ICADS-26)

NIST University proudly hosted the International Conference on Air Defence and Security (ICADS-26) in collaboration with the Army Air Defence College, bringing together eminent experts, defence professionals, academicians, and researchers from across the country. The two-day conference, held on 13th and 14th February 2026, served as a dynamic platform for insightful deliberations on emerging challenges, technological advancements, and strategic frameworks shaping modern air defence systems. Through engaging sessions and knowledge exchange, the event highlighted the importance of innovation and collaboration in strengthening national and global security.

ICADS-26 concluded successfully at NIST University after two days of high-level deliberations and strategic engagement. Day 2 commenced at the Stephen Hawking Cineplex with the opening address by Dr. Sukant K. Mohapatra, President of NIST University, followed by the welcome address by Prof. Priyadarsan Patra, Vice Chancellor. The Chief Guest, Lt. Gen. R. C. Srikanth, AVSM, VSM, Commandant, Army Air Defence College, delivered the opening remarks. The conference featured parallel technical sessions on Defence Strategic Environment, Specialized Defence Domains and Future Readiness, and Cyber Security and Information Warfare.

Dr. Balamati Choudhury, Senior Principal Scientist at CSIR-NAL, Bengaluru and a proud alumna of NIST, attended as Guest of Honour and shared her inspiring journey, highlighting the role of NIST in shaping her research mindset and professional growth. A special “Know Your Army” equipment display by the Army Air Defence College, along with vendor exhibitions and student projects, added practical insights to the event.

WORKSHOP, SEMINAR & TALK

National Science Day

Science came alive on our campus as School of Science, celebrated National Science Day on 26th, February with curiosity, creativity, and a spirit of discovery. The event brought together 300 students and teachers from schools and colleges around Brahmapur , who actively participated in the plethora of engaging activities, innovative exhibits, and thought-provoking discussions. Marking the legacy of Sir C. V. Raman and his groundbreaking work, the celebration inspired young minds to question, experiment, and imagine a future driven by knowledge and innovation.

Prof. Priyadarsan Patra, our Hon'ble Vice Chancellor, extended a warm welcome to all the students participating in the celebration and highlighted the discovery of the Raman Effect along with its significant contributions to humanity. The Chief Guest, Prof. GBN Chainy, Retired Professor of Zoology, UTKAL University highlighted the importance of building a strong foundation in science to inspire future generations and sustain the spirit of scientific innovation. The Guest of Honour, Ms. Aditi Acharya, Assistant Collector of Ganjam and In-charge District Culture Officer, shared valuable success mantras, motivating students to strive for excellence. Dr. Manish Kumar, Senior Principal Scientist, Dept. of Environment and Sustainability, CSIR-IMMT, delivered an insightful and thought-provoking lecture. Dr. Dr. Amit Patnaik, Convenor of the event, expressed his gratitude to all the participants and highlighted the importance and relevance of celebrating National Science Day. Various NIST clubs presented their innovative projects to the guests and participants. A key highlight of the program was the Science Quiz and Research Exhibition (Poster Presentation), where students from different institutions demonstrated exceptional scientific aptitude and creativity. The student winners in different events were rewarded with certificates, mementos and cash prize. The program concluded with a formal vote of thanks by Dr. Abinash Dutta, who expressed heartfelt appreciation to all participating schools and colleges.

WORKSHOP, SEMINAR & TALK

NIST University hosts Pre- Summit engagement for India AI Impact Summit

NIST University successfully hosted the AICTE–MIC HEI Pre-Summit Engagement for the India AI Impact Summit 2026 on 28 January 2026. The programme commenced with an inaugural session graced by our Hon'ble President, Dr. Sukant K. Mohapatra, and Vice Chancellor, Prof. Priyadarsan Patra, along with distinguished guests Dr. Dipan Kumar Sahu, Assistant Innovation Director, MoE's Innovation Cell (AICTE), New Delhi, and Mr. Umang Surana, Founder, Capabl India.

The speakers underscored the significance of the India AI Impact Summit 2026 and highlighted the pivotal role of such initiatives in strengthening AI-driven research, innovation, and academic excellence across Higher Education Institutions (HEIs). The session concluded with an engaging Q&A, drawing participation from over 300 attendees. The programme concluded with a vote of thanks and closing remarks by Dr. Bishnukar Nayak, Registrar (I/C), NIST University. Subsequently, a hands-on faculty training programme on "Application of Generative AI and Agentic AI Tools for Mentoring and Nurturing Innovation and Start-ups in HEIs" was conducted, with Mr. Umang Surana serving as the distinguished resource person.

National Youth Day Celebrated

Department of English in association with The Institute Innovation Council (IIC) organised an event themed, "Dream, Design, Disrupt: Youth Power in Entrepreneurship," on 12th, January to celebrate National Youth Day commemorating the birth anniversary of Swami Vivekananda.

The occasion highlighted the strength, potential, and vision of young minds through meaningful discussions, and vibrant participation. It served as a reminder of the vital role youth play in shaping the future, encouraging students to embrace leadership, responsibility, and positive change with confidence and commitment.

Dr. Simanchal Panigrahi, HoD, Physics, shared insights from scientific and entrepreneurial perspectives, emphasizing how innovation, experimentation, and learning from failure lead to long-term success. Dr Ayesha Tasnim, Faculty of English, addressed the philosophical and leadership dimensions of youth empowerment, stressing patience, courage, and self-realization. The programme concluded with an engaging interactive session where students shared reflections and sought guidance on leadership, entrepreneurship, personal development, and scientific thinking.

WORKSHOP, SEMINAR & TALK

Distinguished Lecture on Renewable Energy Innovations

Dr. Lov K. Kher, Former Technology Fellow at Verizon Wireless, USA, and Member of the Board of Advisors, visited NIST University where he interacted with faculty and students. He toured advanced facilities like the 5G and AI labs and delivered a keynote on "Technology Trends & Opportunities in the Renewable Energy Sector." He discussed global energy challenges, climate change, and the need for sustainable solutions, highlighting areas such as solar, nuclear, and green hydrogen technologies, with a particular focus on fuel cells, electrolysers, and seawater-based hydrogen generation.

Distinguished Lecture on Innovation and Creative Thinking

Dr. Gordhan Patel, Founder of JP Laboratories, Inc., USA, and a globally renowned innovator, visited NIST University and interacted with faculty and students on interdisciplinary, high-impact research. He also delivered a lecture, "Thinking Out of the Box: Innovation and Invention," emphasizing creativity, critical thinking, and real-world application of research.

Invited Talk on Achieving Problem-Solution Fit

NIST University's IIC Cell organized an inspiring talk on "Achieving Problem–Solution Fit" at the Volga Conference Center, delivered by Dr. Prabina Kumar Padhi. The session began with a welcome by Prof. Alok Patra. Dr. Padhi highlighted the importance of identifying real-world problems, developing practical and sustainable solutions, and validating them through user feedback. The seminar concluded with an interactive Q&A session, encouraging students to apply these concepts in research and entrepreneurship.

Workshop on AI and Industry 4.0 Tools

NIST University organized a one-day workshop on AI and Industry 4.0 Tools for Innovators and Entrepreneurs at the Volga Conference Center in

WORKSHOP, SEMINAR & TALK

association with its AI Global Innovation Center. Conducted by Ms. Debashree Sahoo and Mr. Kaliprasad Parida, the sessions focused on real-world applications of AI and Generative AI, offering hands-on experience with tools for image/audio generation, coding, website creation, and industry-level projects using LLMs and RAG. The session was attended by university leadership, faculty, and students.

Participation in Global Summit on Blue Economy

The Global Summit for Blue Economy was held on 13–14 March 2026 at the Odisha State Convention Center, bringing together global experts to discuss sustainable innovations. Faculty and students from NIST University actively participated, presenting research on areas such as dry fish processing, AI-driven coastal solutions, marine bio-inhibitors, and IoT-based water quality monitoring. The summit provided valuable opportunities for knowledge exchange and collaboration. Notably, Ajit K. Samal and Gopal K. Mahapatra won prizes in the paper presentation, highlighting the university's growing impact in blue economy research.

Dept of Management conducts session "Entrepreneurship Live - Safar, Sangharsh and Success."

The Department of Management Studies, NIST University organized a insightful sessions on Entrepreneurship and Sustainability under the initiative titled "Entrepreneurship Live - Safar, Sangharsh and Success." The program was mentored and guided by Dr Sabyasachi Rath, as whose vision continues to equip students with practical insights and foster an entrepreneurial mindset. Distinguished entrepreneur, Corporate Professional Dr. Ajay Kumar Mohanty, who have been awarded for his innovative start up projects shared his entrepreneurial journey in a very interactive and inspiring manner and suggested students to cultivate an entrepreneurial mindset focused on innovation, risk-taking, and thought leadership, while emphasizing the importance of sustainability in building successful ventures. Head of the Dept. Dr. Pramath Acharya and Prof. Dr. Sabyasachi Rath felicitated Dr. Mohanty. Ms Sruti Rani Prusty of MBA proposed Vote of Thanks

Invited Talk on Agri Business Management

NIST University IIC organized an insightful session on Agri-business Management by Ms. Subhasmita Mohapatra, an agri-business management consultant

WORKSHOP, SEMINAR & TALK

based in Delhi. The session, attended by postgraduate management students, focused on creating awareness about the growing importance of agribusiness in today's evolving economic landscape. The speaker highlighted how effective agribusiness management can transform traditional farming into a modern, profitable, and sustainable industry.

Invited Talk on Building Global Technology Brands

Shri Sudhir Jaiswal, President & CEO, ESSPL, delivered an insightful and inspiring session on "Building Global Technology from India." Addressing a vibrant audience of over 250 students, Shri Jaiswal emphasized on the importance of research, critical thinking, and product development in creating globally scalable technologies

Invited Talk on Design Thinking, Critical Thinking, and Innovation Design

The Institution's Innovation Council (IIC) of NIST University successfully conducted an insightful session on "Design Thinking, Critical Thinking, and Innovation Design", bringing together students and faculty for an enriching learning experience. The program was introduced by Dr. Souren Misra, Head of the Mechanical Engg., setting the context for the discussion. The session featured eminent speakers Dr. Boorla Srinivasa Murthy, Director of PE Geometry, who joined virtually and elaborated on industry-oriented innovation design processes, and Dr. Chitrasen Samantra, Assistant Professor of PMEC, Berhampur, delivered in-person insights on structured thinking in engineering and professional practice.

Invited Talk on "My Story"- The Journey of an Entrepreneur

NIST Incubation Foundation, in association with the Institute Innovation Council (IIC),organized a motivational session titled "My Story" on 19th February 2026. The session featured Mr. Sidhanta Padhi Sekhar, Co-Founder of Binimise, a cleantech company working on waste-to-wealth solutions. He shared his entrepreneurial journey and highlighted the importance of identifying real-world problems and converting them into viable start-up opportunities.

ARTICLE : SCIENCE/ ENGINEERING/ MANAGEMENT

BEYOND EDITING: TEACHING CELLS TO SENSE, DECIDE, AND HEAL

We are entering an era where medicine will no longer be something we simply take; it will be something that quietly thinks within us. For years, biotechnology has been about reading and editing DNA—the code that shapes life. We learned to identify errors and, in some cases, fix them. But even at its most advanced, this approach treated biology like a static script: something written once and only occasionally revised.

That idea is now fading. A new vision is emerging-one where cells are not just instructed, but guided to sense, interpret, and respond. This is the quiet revolution of Biotech 2.0, where cells are no longer passive carriers of genetic code, but active participants in decision-making systems. In this world, biology does not merely follow commands; it makes decisions. This is the essence of a new age in science: biology that writes back.

Traditionally, medicine has worked from the outside in. We take a drug, and it travels through the body, acting broadly-sometimes precisely, often not. But what if treatment could happen from within, with built-in awareness?

One powerful example already in use is CAR T-cell therapy (Chimeric Antigen Receptor T cells), often described in simple terms as training the body's own soldiers. In certain cancers, doctors take a patient's immune cells-the very cells that defend us-retrain them in the laboratory to recognize cancer, and send them back. These cells do not attack everything. They wait, they recognize, and only when they find the right target do they act. It is less like a drug and more like a decision being made.

Scientists are now taking this idea further. They are designing tiny biological programs inside cells-i.e., gene circuits-systems that allow a cell to respond only when specific conditions are met. Imagine a system that activates only when multiple warning signals appear together, reducing errors. It is, in a sense, teaching cells a form of logic: if this and this happen, then respond.

This shift is not limited to cancer. In the near future, specially designed beneficial bacteria-i.e., probiotics-may live in our gut, quietly monitoring health and releasing helpful molecules only when needed. In conditions like diabetes, researchers are working toward systems that can sense rising sugar levels and release insulin automatically, closer to how a healthy body naturally functions. Even disease detection is becoming more responsive, with tools like CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats)-based systems that can identify infections by recognizing unique biological signatures almost instantly.

What connects all these advances is a simple but profound change: we are no longer designing medicines alone; we are designing behavior within living systems. This leads to a bold realization: "We are not just editing life anymore; we are beginning to collaborate with it."

Medicine, then, becomes less of an external intervention and more of an internal dialogue. Treatments are no longer fixed instructions; they are responsive, adapting to the body in real time.

The future of healthcare may not come as a pill or a dose. It may come as something alive—quietly sensing, carefully responding, and making decisions within us. And when that future arrives, the greatest shift will not just be scientific. It will be in how we begin to see life-not as something we control, but as something that can think, adapt, and, in its own way, answer back.

Dr. Abinash Dutta,
Assistant Professor,
Dept. of Biotechnology,
NIST University
Email: abinash.dutta@nist.edu

EVENTS & CLUB ACTIVITIES

NIST University hosts KURUKSHETRA-2026

NIST University proudly hosted Kurukshetra-2026, the grand inter-university sports competition of South Odisha, on its campus from 26th February to 2nd March 2026. The week-long sporting event brought together talented athletes from various institutions, creating an atmosphere of enthusiasm, teamwork, and healthy competition. The event was formally inaugurated by Vice Chancellor,Prof. Priyadarsan Patra, Colleges and universities from across Odisha participated in the event, including OUTR Bhubaneswar, Sri Sri University, GITA Bhubaneswar, PMEC Berhampur, Berhampur University, MKCG Berhampur, Khallikote University, GIET University, Roland, VITAM, and UCP.

Students competed in a wide range of sporting events such as cricket, volleyball, kabaddi, kho-kho, basketball, table tennis, badminton, and football, showcasing exceptional talent, sportsmanship, and competitive zeal. The event also featured friendly sports competitions among NIST faculty and staff members, adding to the vibrant spirit of Kurukshetra-2026. The valedictory ceremony celebrated the achievements of the participants, where outstanding performers were felicitated with prizes and recognition. Dr. Sukant K. Mohapatra, Our Hon'ble Founder and President, congratulated to all the participating athletes and emphasized the importance of sports in shaping discipline, leadership, and resilience among students. Dr. P. Rajesh Kumar, Dean of Academics and Dr. Preeti Ranjan Sahu, Associate Dean of Student Affairs, motivated the students to continue pursuing excellence in both academics and sports. The entire event was seamlessly coordinated by Prof. Saroj Padhi, SAC Coordinator, with the dedicated support of sports instructors Ms Basanti Patra and Mr. Dharanidhar.

The NIST Cloud Computing Club organized a workshop, "Cloud Vision".

The NIST Cloud Computing, under the able guidance of Prof. Asish Das, organized a workshop titled "Cloud Vision" at the Galaxy Auditorium, focusing on practical cloud applications using AWS. The event began with a welcome address by Dr. Sukant K. Mohapatra, followed by encouraging remarks from Dr. Preeti Ranjan Sahu, Dr. Brojo Kishore Mishra, and Nihar Chopdar. The technical session, led by alumni Bikash Panigrahi and Amiya Panigrahi, introduced key AWS services such as Amazon S3, AWS Lambda, and Amazon Rekognition, along with a live demonstration of an image recognition system. With over 250 participants, the workshop concluded with a valedictory session by Dr. P. Rajesh Kumar. Dean, Academics

Astronomy Club and IIC organise a Chat with Adarsh Patra, Lead Aerospace Engineer from SpaceX

The Institution's Innovation Council (IIC), in collaboration with the NIST Astronomy Club, organized an expert talk titled "A Chat with a Lead Aerospace Engineer from SpaceX, USA," at NIST University. The session was delivered by Adarsh Patra, Lead Aerospace Engineer at SpaceX. He shared insights on satellite systems, aerospace engineering practices, and space-based internet technologies, highlighting Starlink's low Earth orbit satellites and their advantages. The session concluded with an engaging Q&A on career opportunities and future trends in the space industry, inspiring students and faculty alike.

Club Excel of NIST University organized a two-day hands-on Docker Workshop

Club Excel under the mentorship of Prof. Swetanjali Moharana and Prof. Bandan Panda, organized a two-day hands-on Docker

EVENTS & CLUB ACTIVITIES

workshop on February 25–26, 2026, with over 120 BTech students participating. The sessions covered containerization basics, Docker architecture, images, Dockerfiles, and practical aspects such as installation, container management, port mapping, and volumes. Participants also completed a hands-on task by creating and running their own Docker images.

NSS conducts Blood Donation Camp

NSS in association with Sambad - Ama Odisha organized a Mega Blood Donation Camp on February 24, 2026, at the Central Library. President, NIST University, Dr. Sukant K. Mohapatra inaugurated the program in the presence of key university dignitaries. Students, faculty, and staff actively participated, in the drive and collected 183 units of blood. Coordinated by NSS Programme Officer Md. Riazuddin and volunteers, with support from Ama Odisha, Sambad, and the NIST Pharmacists team, the camp ensured safe and efficient blood donation procedures followed, while promoting humanitarian values.

NFCC Organises Urbane

On January 20, 2026, NFCC-Urbane organized a vibrant ramp walk celebrating global unity and cultural diversity. Participants represented different countries through creative attire, blending fashion with cultural expression. With guidance from the faculty advisor, Ms Pragnya Samanta, the event was smoothly executed and received great appreciation for its creativity and inclusivity.

Labanya – Ethnic Fashion Show

On February 28, 2026, NFCC members participated in Labanya, showcasing the elegance of Berhampur silk through innovative and modern styling. Supported by the faculty advisor and Advisor, NICC.

NIST Musical Society (NMS)

On January 14, 2026, the NIST Musical Society (NMS) delivered an electrifying performance at Mahanagar Mahotsav, featuring vocals, instrumental acts, and duets. The performance by its 14 core members received recognition in leading Odia newspapers.

Continuing this momentum, on January 26, 2026, NMS organized the patriotic singing competition "Voices of the Republic," open to all students, especially freshers (2025). Ayush Routray (Winner), Priya Ranjan Lenka (First Runner-Up), and Komalkant Mohapatro (Second Runner-Up) emerged as top performers.

Further extending their achievements, on March 20, 2026, NMS participated in the Battle of Bands "Xtasy-2026" at OUTR, Bhubaneswar, where seven core members Nitin, Om Prakash, Jaswinder, Harshit, Satya, Soumya, and Sumit represented the club and secured the runner-up position.

These accomplishments were achieved under the guidance of Club Advisor Dr. Preeti Ranjan Sahu and the leadership of President Mr. Ausaf Anis Khan.

Data Science Club organises Coding Challenge

The NIST Data Science Club, in association with HackerRank, successfully organized a coding challenge titled "CodeSangam – Where Coders Unite." The event witnessed enthusiastic participation from over 200 BTech first- and second-year students. The primary objective of the challenge was to strengthen students' problem-solving abilities and programming skills, while fostering a competitive coding culture among participants. Participants took part in a 2-hour coding contest featuring

EVENTS & CLUB ACTIVITIES

30 problems of varying difficulty levels. . The successful execution of the event was made possible through the coordinated efforts of the student members and Prof. Bhabani Prasad Mishra, Advisor of the Data Science Club.

International Women's Day Celebrated

The University celebrated International Women's Day with enthusiastic participation from students and staff members. The celebration commenced with a Walkathon involving women employees and students, setting a vibrant tone for the event. this occasion, Dr.Sukant K. Mohapatra, Hon'ble President of NIST University, extended his appreciation to all women employees for their commitment and diligence,while also highlighting the importance of celebrating International Women's Day. The entire program was efficiently coordinated by Dr. Sasmita Padhy, Head of the Electrical Engineering Department, along with other faculty members.

Dr. P. Rajesh Kumar, Dean (Academics), graced the occasion as the Chief Guest. A panel discussion served as one of the key highlights of the program, featuring Dr. P. Rajesh Kumar, Dr. Akankhya Pattnaik, alumni Wing Commander Reena Sahu, and student representative M. Pavitra, who shared insightful perspectives on women's empowerment, leadership, and achievements. Students also added to the festive spirit through cultural performances, including musical presentations. Several competitions such as speech, poster presentation, rangoli, musical chair, table tennis, and badminton were organized, and prizes were awarded to the winning faculty members and students.

Farewell 2025 – Year End Celebration

Time flies. Memories stay. The entire NIST family came together on 31st at Dankalpatu Sea Beach and celebrated the year-end with great enthusiasm. The fun-filled day signified team spirit, gratitude, and the importance of work-life balance. Faculty and staff members, along with their families, enjoyed dancing, singing, and games while relishing a scrumptious lunch. President Dr. Sukant K. Mohapatra greeted the NIST family and spoke on the significance of family values, the joy of celebration, and togetherness.

The event created lasting memories and strengthened the bond among all members of the NIST community. It truly reflected the spirit of unity, happiness, and shared success.

STUDENT SUCCESS STORY

NISTians Successfully Qualified in GATE 2026

We proudly congratulate Narayani Prasad Mohanty, Utkalika Pradhan (MSc Biotechnology), Manas Ranjan Nayak (MSc Data Science), and Raghunath Singh (B.Tech CSE) for successfully qualifying in GATE 2026, a testament to their hard work, determination, and academic excellence fostered at NIST University.

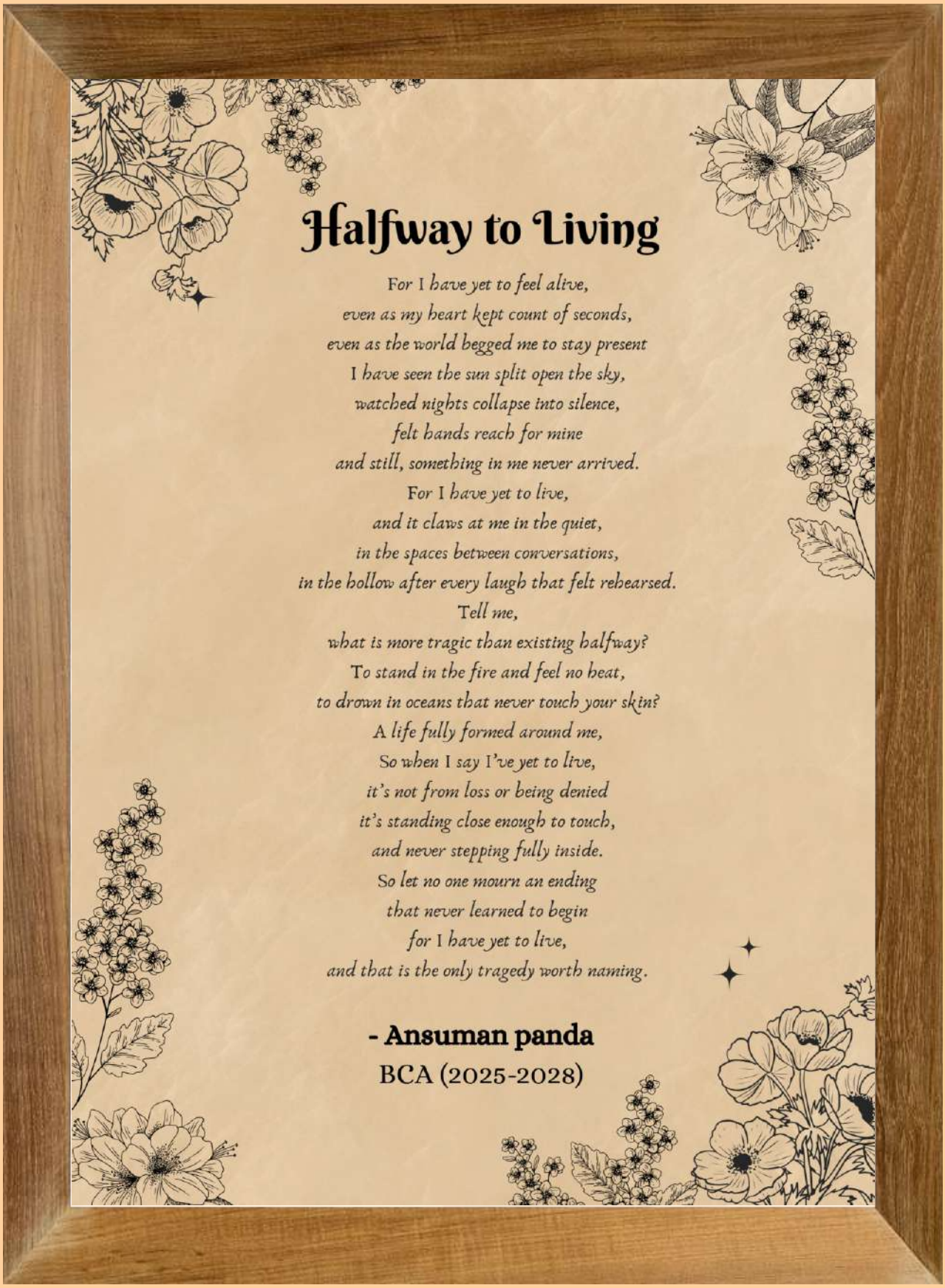
NISTians Shine at GFI 2026

NIST University proudly congratulates its BTech students, Satya Prakash (2022–26) and Bharata Roshan Sahu (2023–27), for securing the Best Poster Award (Runner-Up) at the International Conference on Grassroots and Frugal Innovation (GFI 2026) held at Birla Global University, Bhubaneswar. Their research, "IntelliRide: A Unified AI Framework for Predictive Smart Mobility," developed under the guidance of Prof. Ashish Kumar Dass, received widespread appreciation from international delegates for its innovative and sustainable approach to urban transportation challenges.

LITERATURE, ART & PHOTOGRAPHY

Literature

Poetry



Halfway to Living

For I have yet to feel alive,
even as my heart kept count of seconds,
even as the world begged me to stay present
I have seen the sun split open the sky,
watched nights collapse into silence,
felt hands reach for mine
and still, something in me never arrived.
For I have yet to live,
and it claws at me in the quiet,
in the spaces between conversations,
in the hollow after every laugh that felt rehearsed.
Tell me,
what is more tragic than existing halfway?
To stand in the fire and feel no heat,
to drown in oceans that never touch your skin?
A life fully formed around me,
So when I say I've yet to live,
it's not from loss or being denied
it's standing close enough to touch,
and never stepping fully inside.
So let no one mourn an ending
that never learned to begin
for I have yet to live,
and that is the only tragedy worth naming.

- Ansuman panda
BCA (2025-2028)

LITERATURE, ART & PHOTOGRAPHY

Art & Photography

Anjali Srivastava ECE-A (2024-2028)

Anjali Srivastava ECE-A (2024-2028)

ALUMNI SPEAK

Dillip Kumar Tripathy
Currently Working as: Associate Director/KPMG
Btech, Electronics and Instrumentation Engineering,
Batch: 2008-2012

An enthusiastic IT professional with a strong vision for personal and organizational growth, Dilip brings over 15 years of experience in high-quality software development. A proud NISTian, born to humble teacher parents, he is a seasoned technocrat who has worked with Hitachi, E&Y, Infosys, and now KPMG. His expertise includes Digital Strategy, Business Development, and Pre-sales. In a candid conversation with the NIST Chronicle Editorial Team, he shares his journey and insights on career building and work-life balance.

NC: What is your story related to joining NIST?

DK: I joined NIST as a lateral-entry student. It felt like stepping into a new world, filled with a mix of excitement and nervousness. I still remember walking onto the campus with so many unknowns in my mind, wondering how everything would unfold. But the moment I met my friends from UCP (my previous college), that anxiety slowly melted away.

Their familiar faces and warm presence made everything feel comfortable-almost like I had never left home. What began with hesitation soon turned into a beautiful journey filled with confidence, connection, and a strong sense of belonging.

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

DK:One of the most memorable experiences was attending the pre-placement sessions. They were filled with interaction, stress, and excitement, while an inner voice kept asking, "Can you crack it?" As we prepared for the next phase of life, we were equally responsible for maintaining a good CGPA. That phase taught me patience, resilience, and emotional balance.

Another special memory was when my cousin joined NIST as a junior. We hadn't spent much time together earlier, so I was really excited to connect with her. It gave me the opportunity to play the role of an elder brother-sharing my learnings and experiences.

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

DK: One place that really stands out for me at NIST is the bus journey to and from campus. It wasn't just a commute-it was a moving space filled with different moods and thoughts. Some days were full of noise, laughter, and endless conversations with friends. Other days, it became a quiet zone for last-minute exam preparation or deep discussions about life, the future, and everything in between.

Somewhere in those journeys, between chaos and calm, I often found clarity, motivation, and moments that quietly changed how I looked at things. Click more pictures… because we always thought, "There's always a next time."

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

DK:I'm truly grateful to all my teachers—they have all had a direct or indirect impact on who I am today. But a few of them have left a particularly strong impression on me. I will never forget Padhy Sir, the "Tiger of NIST," whose discipline, though tough at times, kept us on the right track and shaped us in many ways.

From M. Suresh Sir and Sukant Tripathy Sir, I learned a great deal about personality—how to carry oneself with confidence and clarity. RKD Sir, with his friendly and approachable nature, showed me how respect and warmth can go hand in hand. Each of them shaped me in their own unique way, and I carry those lessons with me even today.

ALUMNI SPEAK

NC: What about your college friends? Are you still in touch with them?

DK: Yes, we are still very much in touch, and I feel truly lucky about that. In fact, seven of us even live close to each other in the same apartment setup, it feels like one family, just with a few walls in between. Life has taken us in different directions, but our bond remains strong. Everyone is doing well in their own journeys, and it is wonderful to witness that growth.

And truly, "ye dosti hum nahi todenge" is not just a line for me; it is something we have genuinely lived.

NC: If a student of +2 or high school would seek your advice on making a career, what would be your advice?

DK: If I had to give one simple piece of advice, it would be this: be sincere, not serious. Give your best to whatever you choose, especially in today's uncertain times where your efforts truly matter. At the same time, don't forget to enjoy the phase you are in. School and college life will not come back, and those moments are truly special.

Trust me, once you step out of campus, you may have control over money, but time slowly starts slipping away. So work hard, stay focused, and build strong people skills. In the era of AI, human connection matters the most, something machines cannot replicate. Remember, "Everyone communicates, but few truly connect."

NC: What is your take on earning? Desk job, field job, research, entrepreneurship, or even free loading: what works best?

DK: For me, there is no single perfect way of earning-it depends on where you are in life. However, I strongly believe that having multiple income streams is always a wise approach. Relying entirely on one path can be risky, so maintaining balance is important.

At the fresher level, I would suggest starting with a field job-it provides real exposure, practical learning, and helps you understand how things work beyond theory. Desk jobs and research are valuable too, but they become more meaningful when you have clarity and direction.

In the long run, a combination of learning, stability, and perhaps a touch of entrepreneurship works best. Just avoid extremes because too much in one direction can become limiting.

NC: What message that you would like to give to the new students?

DK: I would like to tell the new students who are pursuing engineering and science program, that they must be preparing for a different career path after they complete their program. The future is for people with skills and competency. Academic degrees are not enough to compete in the market. The students must be skilling in life skills along with relevant technical skills. As in the future there will be more opportunities for remote and free lancing jobs, students must be ready for project based income opportunities. Moreover, the students should be willing to accept that lifelong learning will be the key to their future success, as technology and business trends are going to change rapidly. Hence they have to keep learning new tools, methods and tactics to avail job and income opportunities. Finally I will suggest to live fully, learn fiercely, and leave a mark so strong that your journey becomes someone else's motivation.

NC: What message that you would like to give to the new students?

DK: Live fully, learn fiercely, and leave a mark so strong that your journey becomes someone else's motivation.

NIST IN NEWS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