



## First Convocation SBU

The First Convocation of Sarala Birla University held on 18<sup>th</sup> January 2024, marks a significant milestone in the institution's history. The inaugural convocation celebrated the academic achievements of its first graduating cohort. The ceremony underscored the university's commitment to fostering excellence and innovation in the higher education. Hon'ble Governor, Jharkhand, Shri C. P. Radhakrishnan honoured the event as the Chief Guest. Shri B.K. Dalan, hon'ble Pro-Chancellor of Sarala Birla University also graced the occasion.

In this convocation, students from the Faculty of Commerce & Management, Engineering & Applied Sciences and Humanities & Yoga were awarded with the degree. In total, 23 Gold Medalists were given the medals by the hon'ble Governor. During the first convocation ceremony, honorary doctorate degrees were conferred to Dr. S. Unnikrishnan Nair, Sri S. Somanath, and Sri Ashok Bhagat for their exemplary contributions in their respective fields.

Dr. S. Unnikrishnan Nair is a distinguished scientist and the Director of Vikram Sarabhai Space Centre. Sri S. Somanath, an Indian Aerospace Engineer and Rocket Scientist, is serving as Chairman of the Indian Space Research Organisation (ISRO). Padma Shri Ashok Bhagat is an eminent social worker and founder secretary of Vikas Bharti, an NGO working for the upliftment of the rural population of Jharkhand.

The convocation was graced by notable dignitaries, including Dr. Radha Kant Padhi, Professor, Indian Institute of Science, Bangalore, who provided inspiring addresses and emphasized the importance of education in personal and societal advancement.

<b>GOLD MEDALIST RECIPIENTS</b>		
<b>Session</b>	<b>Name</b>	<b>Program</b>
<b>PASSING YEAR 2020</b>		
2018-2020	PUJA KUMARI	Master of Business Administration (Human Resource Management)
2018-2020	SHRUTI KUMARI	Master of Yoga & Naturopathy
<b>PASSING YEAR 2021</b>		
2019-2021	DIMPAL SINGHANIA	Master of Business Administration (Finance)
2018-2021	PURVI SINGH	Bachelor of Business Administration (Marketing)
2018-2021	DIKSHA KUMARI	Bachelor of Commerce (Hons.) Accounts
2020-2021	SUNIDHI KUMARI	Diploma in Yoga & Fitness Trainer
2019-2021	ANJANA KUMARI SINGH	Master of Yoga & Naturopathy
2018-2021	ANIMESH CHANDRA	Diploma in Computer Science & Engineering
2018-2021	NAVEEN KUMAR	Diploma in Mechanical Engineering

<b>PASSING YEAR 2022</b>		
2020-2022	MEGHA TOPPO	Master of Business Administration (Human Resource Management)
2020-2022	SUBHANKA KUMARI	M.Sc. in Yogic Science
2019-2022	SUJATA KUMARI	Bachelor of Business Administration (Human Resource Management)
2019-2022	PALLAWI KHANNA	Bachelor of Commerce (Hons.) Accounts
2019-2022	SRIYANKA	Bachelor of Business Administration in Capital Market
2019-2022	KUMARI SIMRAN	Bachelor of Arts (Hons.) English
2019-2022	NISHA KUMARI	Bachelor of Yoga & Naturopathy
2019-2022	SHIWANGINI SHREYA	Bachelor of Computer Application
2018-2022	ANJALI AGRAWAL	Bachelor of Technology in Computer Science & Engineering
2018-2022	BINAY KUMAR	Bachelor of Technology in Civil Engineering
2018-2022	SHIWANI KUMARI	Bachelor of Technology in Electronics and Communication Engineering
2018-2022	ANKUSH KUMAR CHANDEL	Bachelor of Technology in Electrical & Electronics Engineering
2018-2022	RITIK KUMAR BARDIYAR	Bachelor of Technology in Mechanical Engineering
2019-2022	SURAJ KUMAR	Diploma in Mechanical Engineering







## EDITORIAL



**Dr. Ria Mukherjee**  
Asst. Prof.

Welcome to the fifth edition of our university newsletter! As we turn the pages of this issue, we are excited to highlight some of the remarkable events that have recently unfolded on our campus. In this edition, we put a special spotlight to highlight our first convocation, marking a significant milestone for our graduates and also on our vibrant university events, showcasing the diverse activities that foster community engagement and academic excellence. From guest lectures to cultural festivals, these events enrich our educational experience and bring us closer together.

We are also thrilled to present a special feature on the Indian Knowledge System. This theme reflects our commitment to honouring and integrating the wisdom of our heritage into modern education. Thank you for being part of our university community. We hope you enjoy this edition!

### Editorial Board :

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## SPOTLIGHT

Pulse@SBU

### Five-Day Faculty Development Program

September 26 to 30, 2022, the Department of Civil & Environmental Engineering and Mechanical Engineering at Sarala Birla University hosted a five-day Faculty Development Program (FDP) on "Green Technology for Sustainable Environment" (GTSE). This FDP aimed to familiarize faculty members with the latest advancements in green technology, its impact on system energy efficiency, and its environmental benefits. The program featured a distinguished lineup of speakers, including Prof. Peter Jaffe from Princeton University, Prof. Udai Bhan Singh from the Mississippi Watershed Management Organization, and Prof. Gopal Pathak, Vice Chancellor of Sarala Birla University. Other eminent contributors included Dr. Satya Sekhar from IIT Jammu, Dr. Anbarasu Subramanian from NIT Rourkela, Dr. Sanjay Kumar from NIT Jamshedpur, Dr. Naresh Kumar from BIT Mesra, Dr. Dibyendu Adak from NIT Meghalaya, Dr. Karthik Selva Kumar from Pondicherry University, and Dr. V. N. Lakshmi Durga and Dr. S. Jeeva Chithambram from SBU Ranchi. The FDP provided a thorough examination of green technology's recent developments and applications, offering participants valuable insights into its role in enhancing environmental sustainability and energy efficiency.



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## National Conference on “Emerging Trends in Innovative and sustainable Business Practices”



A National Conference on "Emerging Trends in Innovative and sustainable Business Practices" was organized by the Faculty of Commerce & Business Management, Sarala Birla University on 13<sup>th</sup> - 14<sup>th</sup> October, 2022. It was organized under the patronship of Prof. Gopal Pathak, Hon'ble VC, SBU as the Chief Patron, Dr. Pradip Varma, Hon'ble CEO, SBU as the patron and Prof. Vijay Kumar Singh, Registrar, SBU as the co-patron. Dr. Sandeep Kumar was the convenor and Dr. Puja Mishra, HOD, Faculty of Commerce & Management & Dr. Ashok Kumar Asthana, DSW were the co convenors of the conference. The conference was organized keeping in view to bring intellectuals around the states of India to discuss about the recent trends in creating and implementing sustainable business practices. The conference had participants included intellectuals from industries, academics, research scholars and students.

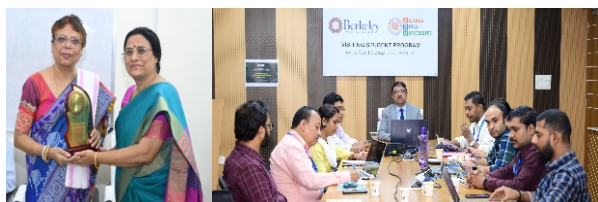
## National Conference on “Translation in Indian Languages and Indian Language System”

Faculty of Humanities & Linguistics, Sarala Birla University, Ranchi had organized a two day National Conference in collaboration with Bhartiya Bhasha Samitee, Ministry of Education, Government of India at B K Birla Auditorium on 2<sup>nd</sup> & 3<sup>rd</sup> March 2023 on the topic “Translation in Indian Languages and Indian Language System”. The Chief Guest, Swami Bhawaveshanand, Secretary, Ramakrishna Mission Ashram, Ranchi, inaugurated the two day Seminar with alighting the lamp of knowledge. The Chief Guest, Swami Bhawaveshanand, the Guest of Honour, Hon'ble Vice Chancellor, Prof. Gopal Pathak, Registrar Prof. V. K. Singh, Sarala Birla University and other distinguished dignitaries were welcomed by Dr. Neelima Pathak, Dean, Faculty of Humanities & Linguistics. While speaking on the eve, the Chief Guest highlighted the importance of Indian Languages and the Cultural Heritage of our language system. Further, he said that the renaissance of Indian Languages could only be possible through Indian Education System. He also stressed over the need and importance of preserving the Cultural Heritage of Indian Legacy. We should come out from the grove of a myth that Sanskrit is not a language for the mass, whereas Sanskrit is the most scientific and primitive language of the world. Dr. Ashok Priydarshi and other eminent speaker unanimously stressed over the importance of this language and its usage. Dr. Panda, Hon'ble Vice Chancellor, Kolhan University, Chaibasa said that America is one of the foremost country to realize the relevance of Sanskrit and NASA is applying sincere efforts making this language computer friendly and further it says that Sanskrit is the most scientific language suited to computer. Dr. Dhananjay Vasudev, HoD, Department of Sanskrit, Shyama Prasad Mukherjee University, Ranchi, Dr. Shailash Mishra, Binoba Vhave University, Hazaribagh, Dr. Sachin Kathaley, Head, Sanskrit Bharti also expressed their views and highlighted the relevance and implementation of Sanskrit Language in our curriculum. At the end of the session, Dr. R. M. Jha extended vote of thanks.



## National Conference on “Lifestyle Disorders”

The Faculty of Yogic Science and Naturopathy at Sarala Birla University organized a two-day National Conference on "Lifestyle Disorders: Solutions with Yoga & Alternative Therapies" on 12-13th April, 2023. The conference aimed to explore effective methods for managing lifestyle disorders through yoga and alternative therapies. Key speakers included Swami Antranand Ji, who provided insights into practical applications of yoga; Tullu Sarkar, who discussed alternative therapies and their integration with yoga; Shri Priyadarshi Amar, who offered perspectives on holistic wellness approaches; and Shri Sumit Dubey, who shared expertise on combining yoga with alternative therapies. The conference featured interactive sessions where attendees engaged with experts and gained practical knowledge, successfully highlighting the benefits of integrating yoga and alternative therapies into daily life for managing and preventing lifestyle-related diseases.

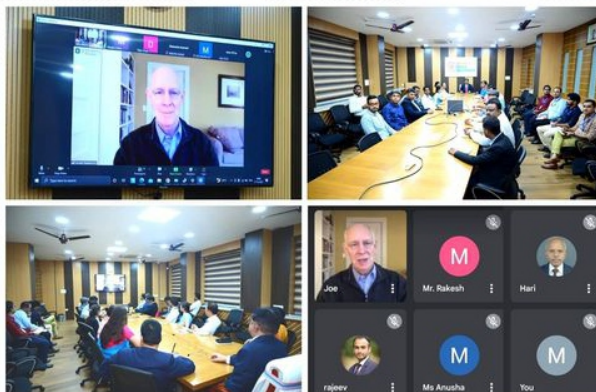


## Seminar on "Advanced Manufacturing Processes"

A seminar titled "Advanced Manufacturing Processes" was held on June 9, 2022. The event featured Dr. R. S. Joudon, Professor in the Department of Industrial and Production Engineering at G. B. Pant University of Agriculture and Technology, Uttarakhand, as the speaker. Dr. Joudon discussed Non-Destructive Testing (NDT) and various advanced manufacturing processes, highlighting their applications. He emphasized the significance of these processes in automotive technologies and mechatronics-related industries.

## Webinar on “Making the Hardest Leadership Decisions”

A webinar was organized on 27<sup>th</sup> oct 2022 by the Faculty of Commerce and Business Management of Sarala Birla University under the chairmanship of Professor Gopal Pathak, Honorable Vice Chancellor of the University on the topic "Making the Hardest Leadership Decisions". The keynote speaker of the webinar was Prof. Joseph L. Badaracco, John Shad Professor of Business Ethics, Harvard Business School, USA. Prof. Badaracco elaborated on the various aspects of Hardest Leadership Decisions. He mentioned that every leader has to take many important decisions in his life and career, which sometimes involves taking very difficult decisions. He also stated that a successful leader should not take any difficult decision in a biased manner. He discussed the decisions of Apple creator Steve Jobs and explained why he had to leave the Microsoft Company. He advised on taking fair decisions by avoiding the emotional side to become a successful leader. He also elaborated about difficult, complex and necessary decisions to be taken judiciously to deal with various conflicts. Prof. Badaracco enthusiastically answered questions related to the topic that the faculty members enquired about.





## Webinar on “ISHRAE”

On 12<sup>th</sup> Nov. 2022, Department of Mechanical Engineering organised a Sensitization Webinar on ISHRAE. The eminent Speaker of the event was Dr. B.Kiran Naik, Assistant Professor, Department of Mechanical Engineering, NIT Rourkela.

The speaker discussed about the importance of ISHRAE student membership and Benefits.

## Motivational Session for NET-JRF Aspirants

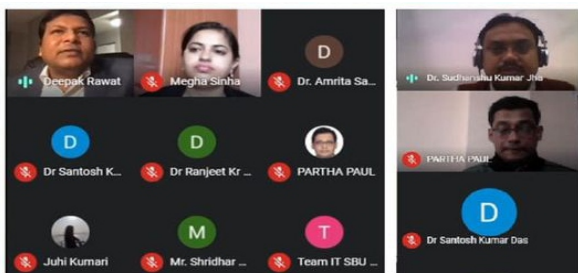
On 5<sup>th</sup> Dec. 2022, One day Webinar on the Topic - “Motivational session for NET-JRF aspirants” was organized by the Dept of Yoga and Naturopathy in which Mr. Surya Prakash, and Ms Pooja were the speakers of the Program.

## National Webinar on "Recent Trends of Photonics with Applications"

A national webinar on "Recent Trends in Photonics with Applications" was held on November 26, 2022, featuring two eminent speakers. Dr. Nitu Borgohain, Assistant Professor & Head of the Department of Physics at the University of Science & Technology, Meghalaya, presented on "Subluminal Light Propagations in Optical Media," exploring how light propagation differs in nonlinear optical media and its applications in optical switches, quantum optical memory, and quantum computing. Dr. Seabrata Mukherjee, Assistant Professor in the Department of Physics at IISc Bangalore, discussed "Topological Photonics," focusing on femtosecond laser propagation at material boundaries, the Quantum Hall Effect, and Photonic Topological Insulators, highlighting their significance in scientific and technological advancements.

## International Webinar on ‘Emerging Area of Machine Learning in Industry and Network Security’

A seminar was held on 06 February 2021. The speaker of the event was Dr. Sudhanshu Kumar Jha, University of Allahabad. Session on 'Network Security and Privacy'. Dr. Jha defined the different methods and smart tools by which we can monitor and protect our IP address and keep our systems secured.



## Webinar on “Career Opportunities in Semiconductor (IC/Chip Design) Industries “

On August 3, 2024, the Department of Electronics and Communication Engineering (ECE) at Sarala Birla University organized a webinar on "Career Opportunities in Semiconductor (IC/Chip Design) Industries." The event was open to registered participants, including SBU engineering students and external attendees. Dr. Manoj Pandey, Head and Associate Professor in the ECE Department at SBU Ranchi, led the session, providing valuable insights into career prospects within the semiconductor industry. The webinar offered a detailed overview of the opportunities available in IC and chip design, equipping participants with knowledge on pursuing a career in this evolving field.

### Seminar on “The Three New Criminal Laws Implemented from July 1, 2024.”



On August 14, 2024, the Faculty of Law and Legal Studies at Sarala Birla University hosted a seminar on "The Three New Criminal Laws Implemented from July 1, 2024." Held in Academic Block-2, Room A2-206, the seminar aimed to enhance students' understanding of the recent legislative changes and their implications.

The event was inaugurated by Ms. Komal Gupta, In-Charge of the Faculty of Law and Legal Studies, who provided an overview of the new laws. Faculty members, including Dr. R. K. Singh, Mrs. Rashmi Sahay, and Mr. Rajiv Ranjan, also shared their insights and analyses, contributing to a comprehensive discussion on the impact of these new regulations. The seminar was well-attended by both faculty and students, facilitating a valuable exchange of knowledge on the latest developments in criminal law.

### Five-Day Short-Term Training Program on “Scientific Writing and Publishing”

The Department of Civil & Environmental Engineering and the Department of Mechanical Engineering organized a five-day short-term training program on Scientific Writing and Publishing from July 31 to August 4, 2023.

The program focused on scientific writing, including the preparation of project reports, dissertations, and articles for academic journals. It aimed to equip emerging researchers with essential skills for writing and publishing research papers in peer-reviewed journals.

By the end of the workshop, participants gained a foundational understanding of how to write a scientific paper and navigate the publication process.

Topics covered includes:

- Conducting an effective and comprehensive literature review.
- Understanding plagiarism, referencing, and publication ethics.
- Selecting appropriate journals for submission
- Navigating the peer review process.
- Responding to reviewers' comments.

The workshop provided participants with the knowledge and tools needed to successfully publish their research.

### Workshop on “Direct Tax Management”

Faculty of Commerce and Business Management Sarala Birla University Ranchi organized a Workshop on 9<sup>th</sup> March 2024 on Direct Tax Management: Practical implementation of Tally and Excel in collaboration with ICA Edu Skills Pvt Ltd Ranchi in the Academic Building.



### Workshop on “Latest Advancements and Applications in Virtual Technology”



A one-day virtual workshop was organized in collaboration with IIT Delhi on December 5, 2022. The workshop aimed to provide participants with a comprehensive understanding of the latest advancements and applications in virtual technology. Mr. Prateek Sharma, a seasoned Field Engineer and Mentor, led the session, sharing his expertise and insights on the subject. The workshop featured interactive demonstrations and hands-on activities. The event emphasized the importance of staying updated with technological advancements to remain competitive. It also highlighted the role of virtual technology in enhancing productivity and innovation.

### 3rd District Level Yogasana Sport Championship 2022-23



Students participated in 3rd District Level Yogasana & Sport Championship 2022-23 organized by Yogasana Sport Association of Jharkhand on 11th Sep., 2022 at DAV Nandraj Bariatu was awarded with 10 medals in different events 6 Gold medal, 2 silver & 2 bronze medal.

### Workshop on “Future Scope and Skills for Engineering Graduates in Indian Semiconductor Industry”



On April 4-5, 2024, the Department of Electronics and Communication Engineering (ECE) at Sarala Birla University (SBU), Ranchi, in collaboration with the Internal Quality Assurance Cell (IQAC) and Truechip Solutions Pvt. Ltd., Noida, organized a two-day workshop on "Future Scope and Skills for Engineering Graduates in the Indian Semiconductor Industry." The event began with a traditional lamp lighting ceremony and the felicitation of distinguished guests, including Hon'ble Vice Chancellor Prof. Gopal Pathak, Mr. Ranveer Singh, University Relations Head at Truechip Solutions, and Mr. Shashi Kant Sharma, Knowledge Associate at Truechip. The workshop featured technical sessions on ASIC Design Flow and Digital System Design using Verilog, offering participants valuable insights into the semiconductor industry and necessary career skills. With around 130 Engineering students and 20 faculty members actively participating, The workshop successfully highlighted key future opportunities and skills in the semiconductor sector, fostering significant learning and networking among attendees.

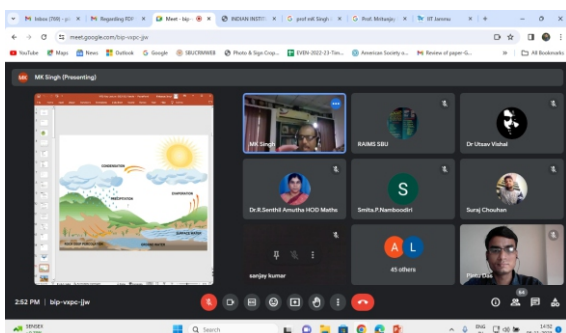
## National Conference on “Recent Advances in Quantum Science & Technology (NCRAQST -2024)”



The National Conference on “Recent Advances in Quantum Science & Technology (NCRAQST-2024)” was held from February 16 to 17, 2024, organized by the Faculty of Applied Sciences at Sarala Birla University, Ranchi, in collaboration with the Internal Quality Assurance Cell (IQAC) and sponsored by the Jharkhand Council on Science, Technology, and Innovation. The conference explored cutting-edge research and developments across various quantum science domains,

including Quantum Optics, Quantum Chemistry, Quantum Field Theory, Non-Hermitian Quantum Physics, Quantum Computing, Quantum Materials, and Optoelectronic Quantum Devices. Keynote speakers included Dr. Alok R. Chaturvedi from Purdue University, who presented on "Dynamics and Strategies in Multi-Sided Quantum Games: An In-Depth Simulation Study," and Dr. Ajay Chakravarty, Former Vice Chancellor of BIT Mesra, who inaugurated the event. Additional insights were provided by Prof. Debasish Sarkar, Dr. Nitin Chandra, and Dr. Md. Mabud Hossain, enriching the discussion on the future of quantum science and its applications.

## Faculty Development Program on "Recent Advancements in Mathematical Sciences (RAIMS)"



The Department of Mathematics at Sarala Birla University (SBU), Ranchi, hosted a five-day online Faculty Development Program (FDP) titled "Recent Advancements in Mathematical Sciences (RAIMS)" from November 6 to 10, 2023. The program aimed to update participants on cutting-edge developments in fields such as fluid dynamics, numerical analysis, cryptography, topology, and algebra, with the goal of enhancing their

research capabilities and teaching skills. Eminent speakers included Prof. Mritunjay Kumar Singh (IIT-ISM Dhanbad), Dr. Prashant Singh (IIT-Jammu), Dr. Hrishikesh Mahato (Central University of Jharkhand), Dr. Pratibhamoy Das (IIT-Patna), Dr. Pradip Kumar Parida (Central University of Jharkhand), Dr. Manish Kumar (IIT-BHU), Dr. Anirudh Singh Rana (BITS-Pilani), and Dr. Sumit Kumar Vishwakarma (BITS Pilani Hyderabad Campus). Feedback from participants was overwhelmingly positive, praising the program's effectiveness and its role in motivating the organizing committee to continue offering such impactful events in the future.



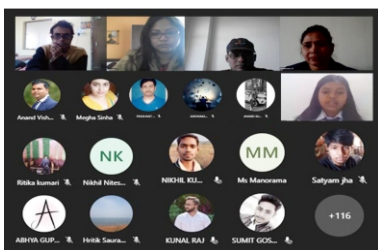
## National Space Day



On August 23-24, 2024, Sarala Birla University, Ranchi, in collaboration with the Central Bureau of Communication, Ministry of Information and Broadcasting, Government of India, hosted a significant celebration for India's inaugural National Space Day. The event featured a range of activities, including a photo exhibition, essay writing, drawing competitions, and an awareness program, all aimed at promoting knowledge and interest in space and rocket sciences. The festivities began with the inauguration of the exhibition by Prof. Gopal Pathak, Director General of Sarala Birla University. The event was further enriched by insightful addresses from distinguished guests, including Shri Akhil Kumar Mishra, Additional Director General of the Press

Information Bureau, Prof. S.B. Dandin, Honorable Vice Chancellor of Sarala Birla University, and other prominent figures such as Dr. Priyank Kumar from BIT Mesra, Dr. Abhijit Kar from the Indian Institute of Natural Resins and Gums, and Dr. Ranjeet Kumar Singh from Model College Rajmahal. The organizing committee, led by Dr. Pankaj K. Goswami, Dean of the Faculty of Engineering and Applied Sciences, and supported by members including Dr. Manoj Pandey and Dr. Deepak Prasad, played a crucial role in coordinating the event. Over 200 students from various institutions, including SBPS Ranchi, Acharyakulam Ranchi, and Sarala Birla University, actively participated in the competitions and programs. The valedictory session on August 24 concluded with the presentation of certificates and mementos to participants and winners, acknowledging their contributions and enthusiasm. This successful event highlighted the importance of space science and showcased the vibrant engagement of students in this field.

## Webinar on “Quantum Computing : A Beginning of Nouvelle Ere”



A seminar was held on 29 January 2022

Speaker: Dr. Kuntal Mukherjee, Assistant Professor at BIT Lalpur.  
Description: The speaker said "As Quantum Computing is a future technology Gaint of IT org. like Google, Microsoft, IBM all are adapting this technology. He said "Tomorrow's Neural Network and AI will be totally controlled by the Quantum Computing"

## Workshop on “Financial Education for Young Citizens”

The Faculty of Commerce and Business Management, Sarala Birla University Ranchi in association with the National Institute for Securities Markets (NISM) organized a Workshop on Financial Education for Young Citizens from 15<sup>th</sup> – 18<sup>th</sup> March 2024 for students of BBA, BCOM, BA Economics in the Academic Building of SBU. The resource person of the workshop was Prof (Dr.) Raman Ballabh, NISM.

## Induction Programme on “Intellectual Property Rights (IPRs)”

An Induction Programme on “Intellectual Property Rights (IPRs)” was organized by the Department of Electrical and Electronics Engineering on June 8, 2024. The programme aimed to educate participants about the significance and principles of intellectual property rights across various domains. It covered topics such as patents, trademarks, copyrights, and trade secrets, highlighting their role in fostering innovation and protecting creative works. Experts from legal, academic, and industry backgrounds shared their insights, discussing current trends and challenges in the field of IPRs. Participants gained valuable knowledge on how to navigate and leverage intellectual property laws effectively in their respective fields. The programme concluded with a call to integrate IPR strategies into organizational frameworks to promote innovation and economic growth.

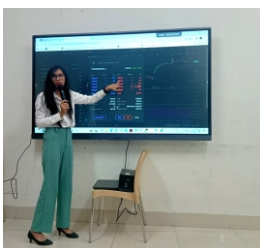
## International Conference on "Recent Developments in Commerce, Business Management, Technology and Social Innovation"



The Faculty of Commerce and Business Management organized a two-day international conference on "Recent Developments in Commerce, Business Management, Technology and Social Innovation" on 4th-5th January 2024 at B. K. Birla Auditorium & Nursing Building in Sarala Birla University, Ranchi. The chief guest was Mr. S.K. Jahangir, Chief General Manager at NABARD, Jharkhand. It was organized under the Patron ship of Prof. Goal Pathak, Hon'ble VC, SBU as the Chief Patron, Dr. PradipVarma, Hon'ble CEO, SBU as the Patron and Prof. Vijay Kumar Singh,

Registrar, SBU as the co-patron, and Dr. Sandeep Kumar as the Convenor. There were more than 180 abstracts received from the Esteemed personalities such as Mr. Sanjeev Shekhar from Adani Power, Jharkhand, Mr. Asis Chakraborty from M.T.I. Steel Authority of India Limited, Mr. Indrajit Yadav from M.A.M.E., Mr. S.K. Verma from MECON, Ranchi, Mr. Ajay Kumar from C.M.P.D.I., Ranchi, Prof. Gautam Sutrakar from N.I.T., Jamshedpur. Additionally, Prof. Joseph L. Badaracco from Harvard Business School, U.S.A., and Prof. Uday Bhan Singh from Minnesota, U.S.A., shared their thoughts in online mode. Mr. Sanjay Srivastav (Aditya Birla Group, Jharkhand): Mr. Srivastav, representing Aditya Birla Group, shared invaluable perspectives on the evolving dynamics within the group and the broader industrial scenario in Jharkhand.

## Seminar on “Stock Market in Live Trading”



On 2nd April 2024, a seminar on "Stock Market Live Trading" was organized by the Faculty of Commerce and Business Management of Sarala Birla University, Ranchi on the topic "Stock Market Live Trading." This was organized for the students to create awareness about the different perspectives of the share trading and stock market. The training session began with Certified Financial Planner (CFP) Mr. Abhijeet Waibhaw, Founder and Director, of Virtue Wealth Council. Ms. Shreya Singh Rajput, Founder and Director, HRS Finance Service displayed and provided

livestock training to the students.



## National Seminar

National Seminar on "Translation studies in Indian Languages and Indian Knowledge System" was organized by Department of Humanities and Linguistics on 2nd & 3rd March, 2023. The Speakers of the event were Members from Bharatiya Bhasha Samiti (Ministry of Education, स्वामी भावेशानंद जी, प्रो. प्रियदर्शी, प्रो. गंगाधर पंडा, डॉ. एच.आर. विश्वास, कुलपति प्रो. गोपाल पाठक, डॉ. प्रदीप वर्मा उपस्थित थे।

दो दिवसीय राष्ट्रीय संगोष्ठी "भारतीय भाषाओं में अनुवाद अध्ययन तथा भारतीय ज्ञान परम्परा" का उद्घाटन दीप प्रज्वलन, कुल गीत तथा राष्ट्र गीत के साथ किया गया। छात्राओं द्वारा 'गणेश नृत्यांजलि' के पश्चात कार्यक्रम की संयोजिका एवं मानविकी एवं भाषा शास्त्र की संकाध्यक्ष डॉ. नीलिमा पाठक ने संगोष्ठी परिचय एवं विषय प्रवेश कराया।

## Expert Talk on 'Sanskrit Diwas'



The Faculty of Humanities & Linguistics, SBU, Ranchi organised an Expert Talk on 'Sanskrit Diwas' for all the students of the university on 27th Aug., 2024. The occasion was graced by the Chief Guest Dr. Dhananjay Basudev Dwivedi, President, Dept. of Sanskrit, SBMU, Guest of Honour of the event was Dr. Sailesh Mishra, University Dept. of Sanskrit, Vinoba Bhave University & President of Jharkhand Sanskrit Academy.

Keynote Speaker Dr. Neelima Pathak and other guest were Hon'ble Director General, Prof. Gopal Pathak, Vice Chancellor, Prof. S.B. Dandin, Respected Registrar, Dr. Vijay Kumar Singh.

## Expert Talk on "Aadhyatmik Jeevan Shaili"

The Department of Yoga & Naturopathy organized an expert talk titled "Aadhyatmik Jeevan Shaili: COVID-19 ke Paripreksha mein" on 3rd January, 2023, at the seminar hall in the Nursing Block of Sarala Birla University. The talk aimed to explore the significance of a spiritual lifestyle during the COVID-19 pandemic, focusing on how spirituality can enhance mental and emotional well-being in challenging times. Aacharya Mithileshnandini Sharan delivered profound insights into the role of spirituality in coping with pandemic-related stresses, offering practical advice on integrating spiritual practices into daily life to foster resilience and inner peace. The event was well-received, providing valuable perspectives on maintaining spiritual health amidst global challenges.

## Expert Talk on "Balancing Mind, Body, & Soul in Indian Knowledge Tradition"

The Department of Yoga and Naturopathy, in collaboration with the Faculty of Humanities and Linguistics, Faculty of Yogic Science and Naturopathy, and Faculty of Commerce and Business Management, organized an expert talk titled "Balancing Mind, Body, and Soul in Indian Knowledge Tradition" on 15th May, 2024. This event was held in association with the Internal Quality Assurance Cell (IQAC) at Sarala Birla University.



## International Yoga Day



The Department of Yoga and Naturopathy at Sarala Birla University celebrated the 10th International Yoga Day on 21st June, 2024. This year's theme was "Swayam se Samaj" (From Self to Society), focusing on enhancing awareness of yoga's benefits for individual well-being and its positive impact on the community.

## Seminar on “Affordable Medicines for All & Installation of Pharma Sahi Daam App”

An awareness campaign organized by the National Pharmaceutical Pricing Authority (NPPA) was conducted at the Department of Pharmacy, Sarala Birla University, on September 15, 2023. The event featured Mr. Sumant Tiwari, Joint Director (Drugs) of Jharkhand, as the guest of honor. The program began with a welcome note from Dr. Shailesh Narayan, Dean of the Faculty of Pharmacy. Mr. Tiwari provided a comprehensive overview of the Price Monitoring and Resource Unit (PMRU) established in Jharkhand under NPPA. He discussed the monitoring of drug prices, including both scheduled and non-scheduled drugs, and the availability of medications at notified prices. The session aimed to educate faculty members and students about the significance of affordable medicines and the functionalities of the Pharma Sahi Daam App, designed to track drug prices and ensure medication accessibility.

## Webinar on “Career Opportunities in Pharmacy”

The Faculty of Pharmacy at Sarala Birla University hosted a webinar titled "Career Opportunities in Pharmacy" on October 19, 2023, to provide pharmacy students with insights into career prospects both in India and abroad after completing a B. Pharm. The Honorable Vice-Chancellor, Prof. (Dr.) Gopal Pathak, extended a warm welcome to Prof. S.H. Ansari from the Dept. of Pharmacognosy and Phytochemistry, Jamia Hamdard University, New Delhi, who was the guest speaker. Dr. Shailesh Narayan, Dean of the Faculty of Pharmacy, presided over the event. Prof. Ansari's talk covered various traditional and emerging roles in the pharmacy sector, highlighting career paths in production, quality control, and other areas. He emphasized the importance of combining management skills with core technical knowledge to excel in the modern pharmaceutical industry and encouraged students to explore diverse career opportunities within healthcare management.

## Workshop on “Cardiopulmonary Resuscitation”

The Faculty of Pharmacy at Sarala Birla University conducted an online awareness program on Cardiopulmonary Resuscitation (CPR) on December 6, 2023, organized by the National Board of Examinations in Medical Sciences (NBEMS). Under the supervision of Dr. Shailesh Narayan, Dean of the Faculty of Pharmacy, the program engaged faculty members, B. Pharm students, and Diploma in Pharmacy students. Mr. Sunil from the Department of Nursing provided a comprehensive overview of CPR, covering its importance, procedure, and precautions. The session included practical training on CPR techniques, equipping all participants with essential life-saving skills.



### Expert Talk on “Importance of Pharmacy in Medicinal Science”



On March 5, 2024, the Faculty of Pharmacy, in collaboration with the Nursing Department at Sarala Birla University, organized a seminar on "Importance of Pharmacy in Medical Science." The event aimed to highlight the critical role of pharmacy within the medical field. Honorable Vice-Chancellor Prof. (Dr.) Gopal Pathak extended a warm welcome to Dr. Jeevan Kumar Mitra, former Head of the Department of Medicine at RIMS Ranchi, who delivered an insightful talk on the topic. The seminar was presided over by Dr. Subhrajit Mantry, In-Charge of the Faculty of Pharmacy at Sarala Birla University.

### Webinar on "Law and Public Policy”

On September 15, 2023, the Department of Law at Sarala Birla University (SBU) organized a webinar titled "Law and Public Policy: Is It a Normative Shape for Policymakers?" The event took place at 3:00 pm in the Board Room of the Administrative Block at SBU. Prof. Santosh Kumar, Dean of the School of Liberal Arts at MIT World Peace University, Pune, was the keynote speaker. In his presentation, Prof. Kumar provided a comprehensive analysis of the interplay between law and public policy, examining whether and how legal principles influence the normative shaping of public policy. His insights offered a deep understanding of how legal frameworks impact policy-making processes.

### Webinar on "The Benefits, Challenges, and Opportunities of Comparative and International Law Degree"

On August 18, 2023, the Department of Law at Sarala Birla University (SBU), Ranchi, hosted a webinar titled "The Benefits, Challenges, and Opportunities of Comparative and International Law Degree" in the Board Room of SBU, Ranchi. The session featured Prof. Shanay Das Guru from the European Law School, Maastricht University, Netherlands, who delivered his lecture via video conferencing. Prof. Das Guru provided an in-depth discussion on the advantages, potential challenges, and career opportunities associated with pursuing a degree in Comparative and International Law, offering valuable insights into how this qualification can influence career and academic trajectories.

### Constitution Day Celebration

On November 26, 2023, the Department of Law at Sarala Birla University (SBU), Ranchi, in collaboration with the N.S.S. Unit, celebrated Constitution Day. The event featured speeches and discussions by Dr. R. K. Singh, In-charge of the Department of Law; Dr. Sanjeev Sinha; Dr. Megha Sinha, N.S.S. Coordinator; and the Dean of the Faculty of Pharmacy, along with faculty members and students from the Department of Law. Highlights of the celebration included a Speech and Quiz competition, which saw enthusiastic participation from students. The event provided a dynamic platform to reflect on the significance of the Constitution and its role in shaping the nation's legal and democratic framework.

## Expert Talk on “Consumer Protection Act-2019”

On December 1, 2023, the Department of Law at Sarala Birla University (SBU), Ranchi, hosted an expert talk on the "Consumer Protection Act-2019" in the Board Room, with the session conducted via video conferencing. Prof. Sunil George, Dean of the School of Law at MIT World Peace University, Pune, was the keynote speaker. In his presentation, Prof. George provided a comprehensive analysis of the Consumer Protection Act-2019, covering its key provisions, implications for both consumers and businesses, and the overall impact of the new regulations on consumer rights and protections. His expert insights significantly contributed to a deeper understanding of the Act and its relevance in today's legal framework.

## Expert Talk on “Custodial Violence”

On March 15, 2024, the Department of Law at Sarala Birla University hosted an expert talk titled "Custodial Violence: A Major Flaw in the Criminal Justice System" in the seminar hall of the Nursing Block. The session featured Mrs. Rashmi Sahay, Assistant Professor in the Department of Law, as the speaker, with Prof. Gopal Pathak, Vice Chancellor of Sarala Birla University, presiding over the event. Other attendees included Ms. Komal Gupta, In-charge of the Department of Law; Dr. R.K. Singh, Associate Professor; and additional faculty members from the Department of Law.

Mrs. Sahay began her talk by defining custodial violence as any abuse inflicted on individuals in custody, whether by police or judicial authorities. She elaborated on the two types of custody—judicial and police—and discussed various forms of violence, including physical, psychological, and sexual abuse. The talk provided a thorough examination of custodial violence, underscoring its grave impact on the criminal justice system and advocating for necessary reforms to tackle this significant issue.

## Expert Talk on “Law and Morality”



On March 11, 2024, the Department of Law at Sarala Birla University hosted an expert talk titled "Law and Morality" in the seminar hall of the Nursing Block, beginning at 3:00 p.m. The session featured Mr. Rajeev Ranjan, Assistant Professor in the Department of Law at SBU, as the keynote speaker. The event was presided over by Mr. Sandeep Kumar, Dean of Commerce & Management; Ms. Komal Gupta, In-charge of the Department of Law; and Dr. R.K. Singh, Associate Professor, along with other faculty members from the Department of Law.

Mr. Ranjan initiated the discussion by questioning how society develops law and its significance, using the analogy of a lion's dominance in the jungle to highlight societal inequalities and injustices. His presentation covered key topics including the Natural Law Theory and the Analytical School of Law, tracing their evolution from divine origins to contemporary legislation. The talk also delved into the philosophical foundations of law, examining contributions from notable philosophers such as Plato, Aristotle, and Socrates. The expert talk provided a thorough exploration of the interplay between law and morality, enhancing participants' understanding of legal philosophy.



## 5<sup>th</sup> Foundation Day



Sarala Birla University celebrated its 5<sup>th</sup> Foundation Day on 23<sup>rd</sup> September, 2022 at B.K. Birla Auditorium. The Guest of Honour of the event was Prof. Kamini Kumar, Honourable Pro Vice-Chancellor, Ranchi University.

Prof. Kamini Kumar gave her heartfelt congratulations to the entire family of SBU on the occasion of 5<sup>th</sup> foundation day. She said that it is the teacher who builds the students and raises them to the highest level of knowledge in dealing with all the adversities. Only ideal teachers are those who provide value-based education to the students with the latest technology. She expressed her views on the plan to build a competent citizen for a knowledge-based nation according to the national education policy presenting Honourable Vice Chancellor, Prof. Gopal Pathak also addressed the august gathering, he mentioned that the role of the teachers is very important in building the good character of future generations. He stressed on honesty, integrity and commitment towards our goals and objectives in life.



## National CSR Summit



The Faculty of Commerce & Business Management (SBU, Ranchi) organized the National CSR Summit on 6<sup>th</sup> January 2023. This summit was aimed to give practical exposure to CSR to all the participants, with specific references to the regulatory framework and processes to formulate policies for need-based assessment, stakeholder engagement, methodology, performance evaluation, and statutory reporting. Henry David Thoreau well said, "Goodness is the only investment that never fails". The major objective of the summit was to create a cadre of professionals who would help in the overall growth, development, and implementation of CSR and its related activities of organizations.

## Industry Academia Exchange Programme

An exchange program was conducted on 24<sup>th</sup> Jan 2023 for students of Sarala Birla University, Ranchi in collaboration with SEBI for "Seminar on Financial Education and Understanding of Securities Market". The major objective of the seminar was to empower, acknowledge and create awareness amongst students about their financial independence, manage their income, expenses and investments which would help them achieve their financial goals.

## Vigilance Awareness Programme



On 3<sup>rd</sup> November, 2022, the Faculty of Commerce and Business Management, in association with Central Coalfields Limited, organized a Vigilance Awareness program at the Old Nursing Building of the university campus. The event marked its beginning sharply at 9 am with events like a Rangoli competition, debate, elocution and a painting competition. The next set of events were then shifted to the B.K. Birla auditorium at around 12 pm. The program began with a welcome dance performed by a couple of students, Nukkad Natak, dancing and singing among the students. Mr. Naveen Jha, Chief Manager (Vigilance), CCL discussed about the importance of efficient utilization of resources to avoid corruption. He spoke about the responsibility of removing corruption from within ourselves to demolish it entirely from the country. He also stressed on the role played by technology in reducing dishonesty on the part of all officials at all levels. He said that although India is progressing at a quite fast pace in dismantling corruption, we still have a long way to go in fulfilling the objective of a completely corruption-free India.

## Inaugural of Campus to Corporate Guidance Cell

On 25<sup>th</sup> Januray,2023, The Faculty of Commerce & Management launched it's Campus to Corporate Guidance Cell to help the students be industry ready.

## Two-Day Survey Camp for the B. Tech. and Diploma Students



The Department of Civil & Environmental Engineering organized a "Two-Day On-Campus Survey Camp" from January 19 to 20, 2023. The camp, conducted by departmental staff, was designed to provide hands-on training to participants.

Following the completion of an Engineering Surveying course, students gain exposure to both the theoretical and practical aspects of surveying. This course further prepares students to plan and execute survey work on a larger scale. It offers comprehensive training for the surveying tasks involved in typical civil engineering projects, providing a holistic understanding of the surveying activities required before and during the construction phase of a project.

## YATRA: Yoga Ancient Trends & Recent Advancement

A webinar series named as 'YATRA' was organised by Dept. of Yoga & Naturopathy ie. Yoga Ancient Trends & Recent Advancement on 12<sup>th</sup> May to 11<sup>th</sup> June 2022. Guest were Dr. Ghanshyam Thakur, Assistant Professor, HNB Garhwal, Shri Subodh Tiwari, Associate Professor, Kaivalyadham, Dr. Ananda Balyogi , Director, Centre for Yoga Therapy Education & Research and Dr. Chinmay Pandya, Pro Vice-Chancellor, Dev Sanskriti Vishwavidyalaya,



## State Level Yogasana Sport Championship 2022-23



3rd State Level Yogasana & Sport Championship 2022-23 was organized by Yogasana Sport Association of Jharkhand on 15th to 17th Sep. 2022 at B. K. Birla Auditorium, Sarala Birla University. Students achieved 2 Gold, 2 Silver medals and also 4th & 5th rank in different event.

## Launch of Departmental Magazine Breeze & 3rd Edition of SBU Journal Manthan



On 11th Nov., 2022. The Faculty of Commerce & Management launched its first issue of the departmental magazine 'Breeze' and 3rd issue of SBU Journal Manthan. Prof Gopal Pathak, VC, SBU was the chief guest. Dr Pradip Varma was the guest of honour and Prof Vijay Kumar Singh was the Distinguished Guest of the event.

## Launch Ceremony of Chitrapat Jharkhand Film Mahotsav



Sarala Birla University had organized a launch ceremony of Chitrapat Jharkhand Film Festival on 13<sup>th</sup> May 2023 at its campus. On this occasion, Honourable Vice-Chancellor of the University, Professor Gopal Pathak said that this program is being organized to take the local art and talent to the national and international platform.

President of Chitrapat Jharkhand Film Festival, Dr. Pradeep Kumar Verma said that films are not only for entertainment but also carriers of values and culture. He said that efforts are being made to bring local talents to the fore through Chitrapat Jharkhand. He said that Chitrapat Jharkhand aims to strengthen its cultural values by promoting Indianness, Indian family values and Social Consciousness in Indian cinema.

## Application of Blockchain in Business World

The academic workshop on the "Application of Blockchain in the Business World" was organized by Sarala Birla University on 22<sup>th</sup> Nov 2023 in collaboration with IMI Kolkata proved to be a significant and enlightening event. The workshop aimed to provide students with insights into the practical applications of blockchain technology in the dynamic business landscape.

## Launch of Annual Report of Commerce & Management



On 14th January 2023, the Annual Report Booklet 2022-2023 of Faculty of Commerce & Business Management was released by Honorable Vice Chancellor Prof. Gopal Pathak, Registrar, Prof. Vijay Kumar Singh, Mr Ajay Kumar, Manager P&A and Dr. Sandeep Kumar, Dean C&M.

## HR Exophoria

On 31st January, 2023, an exhibition of student's work on the topics related to their subject 'Human Resource Management' was organised by the Faculty of Commerce & Business Management.

## Poster Competition

On 20th June 2023. SBU organized the internal level of poster competition programme on the occasion of 9th International Yoga Day.

## International Day of Yoga

On 21st June 2023. Celebrated the International Day of Yoga and delivered the lecture by Yogda Satsang.

## Yoga Competition

On 17th June 2023. SBU organized the yoga competition programme on the occasion of 9th International Yoga Day.

## Faculty Development Program



Sarala Birla University organised a Faculty Development Program for all the faculty members at New Academic Building, SBU Campus. The chief speaker of the event was Hon'ble VC, SBU, Prof Gopal Pathak. He delivered a talk on the topic "How to Improve Teaching Skills and Learning Standards through Quality Publications and Project consultancy".

## Environmental & Forest Awareness Program



On the occasion of International Day for Biological Diversity, National Service Scheme, Sarala Birla University, Ranchi and Forest Officers, Ranchi jointly organised "Environmental & Forest Awareness Program" on 22<sup>nd</sup> May, 2023.

## Establishment of Institution's Innovation Council

Sarala Birla University, Ranchi, has successfully established the Institution's Innovation Council (IIC) on April 19, 2024, in alignment with the Ministry of Education and the All India Council for Technical Education's vision to promote innovation and entrepreneurship in higher educational institutions. The IIC aims to create a sustainable innovation ecosystem by promoting innovation, fostering entrepreneurial thinking, facilitating collaborative research and development, conducting capacity-building programs, and providing start-up support.

The Council has constituted by Dr. Pankaj K. Goswami as President, Dr. Sandeep Kumar as Vice-President and Dr. Goutam Tanty as Convenor of the Council.

They had nominated various others members from Teaching, Non-teaching, Students and External Experts at various roles and responsibilities.

## Business Quiz "EYESACK"

A business quiz was conducted on 30<sup>th</sup> Jan 2023 to encourage fun-learning methods to enhance general knowledge of the students. It enables students to think out of the box by participating in quiz tournaments. It was an educational way to test students' knowledge simultaneously teaching them about business and helping them become a successful entrepreneur. The end result of these type of activities is that it helps the students to gain confidence and right attitude for learning.

## Symposium on GST

Faculty of Commerce and Business Management of SBU, Ranchi organized a symposium on GST on 7<sup>th</sup> Feb 2023 to address the most relevant issues cropped up during the year. The objective of this seminar was to discuss, deliberate and conclude on many significant aspects of GST Law with the help of eminent tax experts, industry executives, professional tax analyst and researchers. The subject matter for various sessions was to provide understanding on export of goods and international services, valuation of trade promotion schemes and related invoicing check points.

## 6th Foundation Day



The 6th Foundation Day of Sarala Birla University (SBU) was celebrated with great enthusiasm and reverence. The event was held at the university campus, marking another milestone in SBU's journey of academic excellence. The celebrations commenced with the lighting of the ceremonial lamp, followed by the welcome address by the

Hon'ble Vice-Chancellor, Prof. Gopal Pathak who highlighted the university's accomplishments over the past six years. The Chief Guest, Hon'ble Pro Chancellor Shri B.K. Dalan sir, Sarala Birla University, Ranchi, delivered an inspiring speech, emphasizing the importance of education in shaping future leaders. Various cultural performances by students added a vibrant touch to the event, reflecting the rich diversity and talent within the university. Academic achievers and meritorious students were also felicitated, recognizing their contributions to the institution's success. The day concluded with a vote of thanks, reinforcing SBU's commitment to fostering innovation and holistic development. The event was a resounding success, leaving the audience motivated and proud of SBU's growth.



## Vigilance Awareness Programme



The celebration of Vigilance Day in Sarala Birla University, Ranchi organized on 1st November 2023 focuses on communities that can emphasize the importance of being aware of potential risks, such as crime, terrorism, natural disasters, or other emergencies. The day serves as an opportunity to educate people about the significance of being vigilant in their daily lives, whether it be through practicing personal safety measures, adhering to security protocols, or actively participating in community-based initiatives aimed at enhancing public safety. Through coordinated efforts and partnerships, these celebrations can facilitate the development of effective strategies and initiatives that promote a safer and more secure environment for all.

## Fiesta 2K24

FIESTA 2K24: The Entrepreneurial Spark was organized on 5th April 2024 by the Faculty of Commerce and Business Management at Open Amphitheater Area, Sarala Birla University, Ranchi. It consisted of a variety of events, namely, food preneur, fun preneur, market preneur, people preneur, culture preneur, finance preneur and tally preneur. The event provided a platform for students to showcase their marketing and entrepreneurial skills through the food bazaar, game, fun zone, art & craft sale and gain practical experience in areas like product development, pricing, promotion, and sales.

## Expert Talk

The Faculty of Commerce and Business Management, Sarala Birla University Ranchi organized an Expert Talk on Role of Exchange and Broker in Financial Market and Financial Education for Young Citizens & for the students of B.Com. on 19th March 2024. The Resource Persons of the event were Mr. Samrath Nair, Manager, Commodity Exchange (MCX), Kolkata, Mr. Avijit Goswami, Central Council Member of ICAI, Kolkata, Mr. Abhijit Dutta, Regional Council Member of ICAI, Kolkata, CMA Sandeep Kumar, Founder, International Navodaya Chamber of Commerce, New Delhi and Mr. Raman Ballabh, Corporate Trainer, NISM.

## Industrial Visit to Puresh Dairy

The Industrial visit to Puresh Dairy was organized on 13.4.24 for students who participated in Foodpreneur with the aim of providing them with practical insights into the operations of a leading startup in the dairy industry. Puresh Dairy is a vertically integrated dairy company, encompassing everything from milk procurement to product distribution. The company prides itself on its commitment to quality, sustainability, and customer satisfaction. It is renowned for its high-quality dairy products and its innovative approach to sustainable production practices. The industrial visit to Puresh Dairy was both educational and inspiring for the BBA and MBA students. It offered them a firsthand glimpse into the dynamics of the dairy industry and highlighted the importance of innovation, quality, and sustainability in business operations. The visit also reinforced the significance of bridging the gap between academia and industry to foster mutual learning and growth. Overall, the industrial visit to Puresh Dairy was a resounding success, leaving a lasting impression on the students and enriching their educational journey.

## National Mathematics Day



On December 22, 2022, the Department of Mathematics at Sarala Birla University hosted a webinar to celebrate "National Mathematics Day." Conducted online via Google Meet, the event featured distinguished speakers including Prof. (Dr.) C. B. Gupta from The North Cap University, Gurugram, and Dr. Rakesh Bhatia from Vidya Bharti Akhil Bhartiya Shiksha Sansthan, Delhi. Prof. Gupta delivered the keynote address, highlighting the life and achievements of Srinivasa

Ramanujan, and stressed the importance of dedication and passion in honoring Ramanujan's legacy. Dr. Bhatia focused on Vedic Mathematics, detailing its role in formulating trigonometric identities and its practical applications. The webinar provided an insightful exploration of Ramanujan's contributions and the relevance of Vedic Mathematics in modern mathematical practices.

## Har Ghar Tiranga cum Plantation Programme



National Service Scheme unit of SBU organised the '**Har Ghar Tiranga and Plantation Programme**' on 13<sup>th</sup> August 2022. Plantation has been done in the adopted Villages- Aara, Jaratoli and Baram of Namkum Block, Ranchi.

## Corona Vaccination Camp



N.S.S. Unit of Sarala Birla University organized a **Corona Vaccination Camp** on 25<sup>th</sup> August 2022 in the GNM Building. In this camp nearly about 700 students and nearby villagers were immunised.

## Coding Club of SBU organized a Gaming Event "Next Level"

The SBU Coding Club in collaboration with the Trinity Gaming and Facebook Gaming had organized a gaming event "Next Level" in the Sarala Birla University Campus on 4<sup>th</sup> November 2022. The aim of the event was to make people aware about gaming and give a platform and opportunity to the students who are interested in making a career in gaming.



## Meeting with the Delegates of University of Berkeley



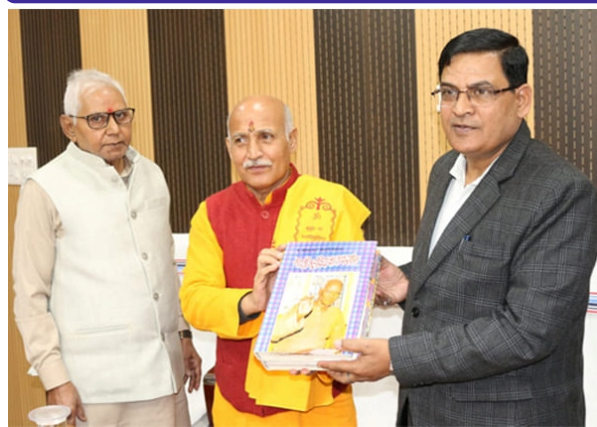
Sarala Birla University organised an Online Meeting with University of California, Berkeley, USA on 2<sup>nd</sup> September, 2022 in the Board Room, Administrative Block, SBU to explore the collaboration and International Exchange Program.

The meeting was chaired by Honourable Vice Chancellor, Prof. Gopal Pathak who welcomed all the members and discussed about the visiting Student Exchange Program. Under this programme, students of SBU will now be able to study at the University of California, Berkeley for higher education under the Berkeley International Study Program (BISP) and the University of California, Berkeley will provide support services for students.

## Yuva Mahotsav

Eight Volunteers of NSS, SBU Ranchi participated in Yuva Mahotsav held on 24<sup>th</sup> September, 2022 in the institute of Legal Studies of Ranchi University organized by Nehru Yuva Kendra under youth and sports ministry govt of India.

## Geeta Jayanti Celebration



On 3<sup>rd</sup> Dec. 2022, the occasion of Geeta Jayanti, Dept. of Yoga and Naturopathy celebrated the Geeta Jayanti in which Geeta Shloka were recited by the students.

## 3<sup>rd</sup> Orientation Programme for the Ph.D. Scholars (Monsoon)



Sarala Birla University (SBU), Ranchi hosted 3<sup>rd</sup> Ph.D. Orientation Program on October 10<sup>th</sup>, 2022. The program was commenced at 2:00 p.m. in the Seminar Hall of SBU, creating a conducive environment for learning and collaboration. On this occasion, Dr. Abhishek Chauhan, Dean of Research & Development delivered an informative session on Research Methodology and the procedures to be followed by the Ph.D. Scholars in accordance with the UGC guidelines and Ph.D. ordinance. In this programme departmental group discussions were conducted between the Ph.D. scholars and their respective departments which provide a platform for collaboration, fostering the exchange of knowledge and ideas among the scholars.



## Induction Programme



Sarala Birla University had organized an Induction cum Orientation programs on 7<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> October 2022 at B. K. Birla Auditorium for the newly admitted students of the Department of Engineering and Applied Sciences, Department of Commerce & Business Management and Department of Humanities & Linguistic as per the AICTE/UGC norms. Its purpose was to make the students feel comfortable in their new environment, create bonding in the respective batch, as well as between faculty and students.

On this occasion Prof. Neelima Pathak, Dean, Humanities & Linguistic and Yoga stated that honesty, integrity, selflessness, determination and control over the mind are the qualities that leads an individual towards the path of success. Prof. V.K. Singh, Registrar, SBU said that it is only the outcome of the trust shown by parents and the children to choose this university for their higher education. Prof. Gopal Pathak, VC, SBU spoke about time management, the aspirations of parents, human and moral values, the university discipline and the importance of class attendance. He further highlighted the importance of New Educational Policy, 2020, where the focus is on the all-round personality development of students. The functioning of the Training and Placement Cell, Examination Section, DSW Section, different Club Activities and Library Section were briefed to the newly admitted students.

## “Life Through Lens ' ' a Photography Exhibition by Shutterbugs Club



On May 19<sup>th</sup>, 2023, SBU Shutterbugs, the photography Club of Sarala Birla University organized a photography exhibition on the topic “Through the Lens: Exploring the Beauty of Life”. In this exhibition, the students showcased their photography talent by exhibiting photographs, which they have clicked over a period of one year covering various themes like the Rainy Season, Navratri, Deepawali, Chhath Puja, Floral Photography 2.0 etc. They also screened their self-produced movie showing their emotions and skills associated with SBU campus.

## SBU students participated in AVIRBHAHV 2023 organized by Law University, Ranchi.

Students of Sarala Birla University participated in AVIRBHAHV 2023 sports event organized by law University Ranchi from 24th to 27th April 2023. Sarala Birla University students participated in various sports event and got championship in football event and got Runner ship in Chess event.

## “Badhta Bharat Badalta Bharat”



A seminar was organized at Sarala Birla University on the topic "Growing India, Changing India" on 30<sup>th</sup> Dec, 2022. The eminent speaker of the event was Dr. Rakesh Kumar Sinha, renowned national thinker and Rajya Sabha MP of he said through the New National Education Policy, Prime Minister Narendra Modi is moving towards making Europe-centric India into an India-centric India. He said that India is always considered as a Vishwa Guru because of its tradition, knowledge and will continue to be so in the future.

## “T-10 Inter-University” Cricket Tournament

SBU Organized the T-10 Inter-University Cricket Tournament from 6<sup>th</sup> to 9<sup>th</sup> Jan. 2023 at SBU playground where 9 teams did registration and 6 teams had turned up for competition. Sarala Birla university won the tournament, Usha Martin got the Runner Up Trophy.



## Expert Talk on “Art of Living”



Sarala Birla University, Ranchi organized an expert talk on "Life Management" on 12<sup>th</sup> January, 2023. The eminent speaker of the session was Pandit Vijay Shankar Mehta Ji.

## Competition “Kai Po Che”



Makar Sankranti, to celebrate a new beginning of spring and to fill the students with zeal and enthusiasm. The event was conducted successfully under the guidance of Aditi Kumari, club president, Rohan Kumar Singh, club vice-president and Misha Kumari, club student coordinator.

## Birth Anniversary of Swami Vivekanand

On 12<sup>th</sup> Jan., 2023 NSS Unit, Sarala Birla University celebrated 159<sup>th</sup> “Birth Anniversary of Swami Vivekanand” under the chairmanship of Dr. Gopal Pathak, Vice Chancellor, SBU. On this occasion preaching's of Swamiji and his life history were enunciated by the dignitaries.



## 126<sup>th</sup> Birth Anniversary of Netaji Subhash Chandra Bose

NSS Unit of SBU celebrated 126<sup>th</sup> Birth Anniversary of Netaji Subhash Chandra Bose Jayanti as "Prakaram Diwas" on 23<sup>rd</sup> Jan, 2023 in the Academic Block.

## Annual Sports Meet - 2023



On 9<sup>th</sup> & 10<sup>th</sup> February, 2023, Sarala Birla University, Ranchi conducted its Annual Sports Meet, Umang-23. The event started with hoisting the University flag followed by jumble march, oath ceremony, torch lightning ceremony and the release of balloons in the sky. Students took part in a number of sports, including football, cricket, basketball, tug of war, volleyball, shot put, and track and field competitions. Patanjali House was the overall winner in the Annual Sports Meet.

## Saraswati Puja



Sarala Birla University hosted the Basant Panchami Utsav on its campus on 26<sup>th</sup> Jan 2023. An idol of Goddess Saraswati was placed at Puja Sthal in the open amphitheatre near the Administrative block of the University. The campus was lavishly adorned for the occasion.

## Alumni Meet



On 28<sup>th</sup> January, 2023, Sarala Birla University organized an Alumni meet for the former students of the university at the amphitheatre. Event was attended by 126 alumni. Various cultural program was performed by the current students of the university which included different solo and group dances, music, yoga demonstration, poem recitation and a band performance. On this occasion Hon'ble Vice Chancellor, Prof. Gopal Pathak welcomed the Alumni and congratulated them for being in a successful position in their lives.

## Republic Day



Sarala Birla University, Ranchi celebrated 74<sup>th</sup> Republic Day on 26<sup>th</sup> Jan., 2023 followed by a Flag Hoisting Ceremony and paid homage to the freedom fighters who sacrificed their lives for our Nation.



## “Food Bazaar” by Marketing Club



A Food Bazaar Competition was organized by the Marketing Club of Sarala Birla University in the amphitheatre of the University on 3<sup>rd</sup> February, 2023. In this competition 25 different types of food stalls were set up by the students. The students participated in the food market with great enthusiasm, interest and were able to learn various important tricks of market operation in a hands-on manner. On this occasion, Hon’ble VC, SBU, Prof. Pathak said that it is very important to have ethics in market operations. Registrar, SBU, Prof. V.K. Singh said today it is very important to have practical knowledge in which there is a proper inclusion of honesty and morality. Best three food stalls were awarded with certificates and gifts by the dignitaries.

## Expert Lecture on “Process to apply and prepare SSR for NAAC”

Internal Quality Assurance Cell (IQAC) of SBU organized an expert talk on "NAAC, The Process & Preparations' on 27<sup>th</sup> March 2023 at 3.00 PM in the boardroom of the Administrative Block. The eminent speaker of the event was Dr. R. Naresh Kumar, Associate Professor, Dept. of Civil & Environmental Engineering, BIT Mesra, Ranchi. The invited speaker Dr. R. Naresh Kumar, Associate Professor, Department of Civil & Environmental Engineering, BIT Mesra, Ranchi delivered a talk on “NAAC: The Process & Preparations. He discussed eligibility criteria and process for assessment and accreditation. He spoke about Annual Quality Assurance Report (AQAR), Institutional Information for Quality Assessment (IIQA) & Self-Study Report (SSR). He also highlighted the role of seven important criteria (1. Curricular Aspects, 2. Teaching, Learning and Evaluation, 3. Research, Innovations and Extension, 4. Infrastructure and Learning Resources, 5. Student Support and Progression, 6. Governance, Leadership and Management, 7. Institutional values and Best Practices) in the NAAC accreditation process.

## District Level Leveraging Neighborhood Youth Parliament Program



Sarala Birla University, Nehru Yuva Kendra Ranchi, Jharkhand, Ministry of Youth Affairs and Sports, Government of India, and Vivekananda Youthquake Foundation under the joint aegis of Vasudhaiva Kutumbakam theme Neighborhood Youth Parliament organized on the occasion of celebration of India's G-Twenty Presidency at B.K. Birla Auditorium on 26<sup>th</sup> feb 2023. The chief guest of the event was Mr. Karmaveer Singh, Bharatiya Janata Party's State Organization General Secretary, said with the announcement of Bharat Mata that for the first time after independence, India is presiding over the G-20 countries. On this occasion, 200 meetings are being organized at 56 places. He discussed in detail about environmental protection, water conservation, maximum tree plantation and tree farming.

## Sangosthhi



SBU organized Sangosthhi on 18<sup>th</sup> March 2023 in SBU Amphitheatre. The eminent speaker of the talk was Pujyapad Jagadguru Sankracharya Maharaj Jee, Govardhan Peeth, Puri, Orissa.

## Holi Milan Samaroh



Sarala Birla University put on a spectacular and vibrant event on 22<sup>nd</sup> March, 2023 to celebrate the Holi festival. By using colours and sweets, all the teachers and students exchanged heartfelt wishes among themselves.

## 132<sup>th</sup> Birth Anniversary of Dr. Bhimrao Ambedkar



National Service Scheme Unit of Sarala Birla University celebrated 132<sup>th</sup> Birth Anniversary of Dr. Bhimrao Ambedkar on 14<sup>th</sup> April 2023. On this occasion, Vice-Chancellor of the University, Professor Gopal Pathak highlighted in detail the biography and works of Baba Saheb Bhimrao Ambedkar. He said that India is always indebted to the works and thoughts of Baba Saheb Bhimrao Ambedkar. Babasaheb Ambedkar remained in favour of national unity, integrity, social harmony as well as cultural unity throughout his life. He further stated that according to Babasaheb Ambedkar all work has equal importance and should be respected equally.

On this occasion, the Registrar of the University, Professor Vijay Kumar Singh said that Baba Saheb Ambedkar was a skilled thinker with sharp intelligence and talent. Despite social animosity and caste stiffness, he became a factor of social change. He not only uplifted Indian politics but also did the work of renaissance of Indian society. For the unity of India, he was the creator of the great Indian constitution as well as a true Indian son.

## World Environment Day



National Service Scheme Unit, Sarala Birla University, Ranchi organized the World Environment Day on 5<sup>th</sup> June, 2023 in the Seminar Hall- 2 of GNM Building.

On this occasion, Honourable Vice-Chancellor Prof. Gopal Pathak, expressed his views on the theme of World Environment Day "Beat Plastic Pollution- Ecosystem Restoration" and encouraged everyone to accelerate this action and join the global effort to beat plastic pollution from our planet.



## Workshop on “Movie Making”



A Movie Making Workshop was organized by Shutterbugs, the photography club of Sarala Birla University on 24<sup>th</sup> May 2023. The students actively participated in the program and got answers to their questions based on their hardship related to movie making. The program's main guest was Dr. Sushil Kumar "Ankan," a former Instructor and Director of Ranchi University's, School of Journalism and Public Communication who has also created a number of short films and documentaries from Jharkhand.

## Expert Talk on “Youth & National Development”



Sarala Birla University, Ranchi had organized an Expert Talk on "Youth & National Development" on 8<sup>th</sup> June, 2023. The Eminent Speaker of the session was Dr. Sampson David, Former Joint Secretary, Association of Indian Universities (AIU), Member, Advisory Board, SBU, Ranchi. He delivered a talk on “Youth & National Development”. He spoke about the meaning and power of youth for the development of the nation.

## Youth and Road Safety Awareness Programme



The Samarpan Club of SBU had organized a two-day program on the theme “Youth And Road Safety Awareness Programme” on 25-26<sup>th</sup> May, 2023 under the chairmanship of Dr. Sandeep Kumar, Dean, Faculty of Commerce & Management, Sarala Birla University with the aim of promoting creativity, cultural expression, and community welfare. The programme was organised in association with the Jharkhand Film and Theatre Academy (JFTA). Various events such as Rangoli Competition, Poster Making Competition, Food Donation, Road Rally and Skits were organized to encourage everyone to follow the traffic rules and decrease road accidents and to develop skills of imagination, creative ability and artistic discrimination. The guests of honour of the event were Mr. Rajeev Singh, creative director of JFTA and Mr. Rishabh Anand.





## 122<sup>nd</sup> Death Anniversary of Bhagwan Birsa Munda

Sarala Birla University, Ranchi paid tribute to the great freedom fighter and son of the soil 'Dharti Abba' Birsa Munda on his 122<sup>nd</sup> death anniversary on 9th June, 2023. Honorable Vice Chancellor Prof. Gopal Pathak, Prof. Vijay Kr. Singh, Registrar, Sarala Birla University and other dignitaries paid floral tribute to Bhagwan Birsa Munda. On this occasion, Vice-Chancellor Professor Gopal Pathak said that Birsa Munda was such a hero in Indian history, who changed the condition and direction of the tribal society in Jharkhand through his revolutionary thinking.



## 9<sup>th</sup> International Yoga Day



Department of Yogic Sciences and NSS Unit-I & II of Sarala Birla University, Ranchi organised the '9<sup>th</sup> International Yoga Day' with great enthusiasm and zeal on 21st June 2023. On this occasion, the Hon'ble Vice-Chancellor of the University Prof. Gopal Pathak said that Yoga enables the unity of mind, body and soul. Different forms of yoga benefits our physical and mental health in different ways. Dr. Pradip Kumar Varma, CEO, SBU in his address highlighted that Yoga is the process of

connecting the soul with the divine. Dr. Neelima Pathak, Dean of Yoga and Naturopathy Department, elaborated on the meaning, importance, history and importance of Yoga. On this occasion, Prof. Vijay Kumar Singh, Registrar, SBU said that International Yoga Day celebrated on 21st June is a ritual for the ancient Indian art.

## “Chitrapat Jharkhand Film festival”



Three days Chitrapat Jharkhand Film Festival was organized in Sarala Birla University from 22<sup>nd</sup> June-25<sup>th</sup> June 2023. The Chief Guest of the inaugural event was Padma Vibhushan, former Lok Sabha Deputy Speaker Kadiya Munda, and special Guest of the event was Rajya Sabha MP, Dr. Mahua Maji. Themes fixed for the film festival were Tribal Society, Jharkhand Freedom Struggle, Vocal for Local, History of Jharkhand, Village Development, Women Empowerment, Environment, Social Harmony,

Employment Generation, Future India etc. In this festival, 41 films were screened on the second day and 60 selected films were screened on the third day. Film experts had a special conversation with the participants on the subject of film production and distribution. Best male actor, best female actress, best director were awarded in three categories (short film, documentary film and campus film) with trophy, certificates & cash prizes. The chief guest of the closing ceremony was former minister and current MLA Saryu Rai and special guest of the event was Padma Shri Mukund Nayak.

## Journal Publications:

1. Das, S. K., Dey, N., Crespo, R. G., & Herrera-Viedma, E. (2023). “**A non-linear multi- objective technique for hybrid peer-to-peer communication**”. Information Sciences, Vol: 629, Issue C, pp: 413-439.
2. Sanyal Kaustav & Paul Partha (2022).” **SKIP-GRAM Vectorisation of the Semantic rules of PANINI for Artificial Neural Network for Sanskrit Grammar.**” Semi- Conductor Optoelectronics, vol.41, pp: 767-770.
3. Sanyal Kaustav & Paul Partha (2022).” **Construction of a Recurrent Neural Network from the Amar Kosha**”. International Journal of Mathematical Statistician and Engineering Application vol. 71, pp.8958-8963.
4. Modak, S. K. S., & Jha, V. K. (2023).” **A novel multimodal biometric authentication framework using rule-based ANFIS based on hybrid level fusion**”. Wireless Personal Communications, Vol.128, Issue 1, pp: 187-207.
5. Modak, S. K. S., & Jha, V. K. (2024). **Diabetes prediction model using machine learning techniques.** Multimedia Tools and Applications, Vol. 83, Issue 13, pp 38523- 38549.
6. Modak, S. K. S., & Jha, V. K. (2024). **Machine and deep learning techniques for the prediction of diabetics: a review.** Multimedia Tools and Applications, pp.1-125.
7. Sen Bipasa & Kumari Dipti (2023)” **Usage of Blockchain in Indian Land Registration and Land Recording System-A Revolutionary Step**”. IJHESM, Vol.04 (1), pp.119-134.
8. Sen Bipasa & Kumari Dipti (2023)” **Infrastructural Developments of India- The key factor to integrate Blockchain in Land Recording and Land Registration Systems**”. China Petroleum Processing and Petrochemical Technology, Volume 23, Issue 2, September 2023, pp. 1066-1083.
9. Sen Bipasa & Kumari Dipti (2022).” **Impact of Blockchain-enforced Land Recording and Registration Systems on the Indian Economy**”. Economy Polity Environment, Volume 4. No. 1, pp.29-37.
10. Ansari, K., Srivastava, P. (2024). **An efficient automated image caption generation by the encoder decoder model.** Multimedia Tools and Applications, pp.1-26.
11. Prakash Anand, Dr. Priyanka Srivastava, Dr. Piyush Ranjan (2023). **A Review of Different Handwritten Character Recognition Methods**, Mukta Shabd Journal, pp: 976- 994, Vol.12, Issue XII.
12. Prakash Anand, Dr. Priyanka Srivastava, Dr. Piyush Ranjan (2023). **Analysis Of Handwritten Character Recognition and Interpretation of Results**, Journal of Sustainable Science and Transformative Research - Reviews & Letters, 2 (2), 153-159.
13. Dr. Ashish Kumar Sinha, Rashmi Ranjan (2022) “**Machine Intelligence To Predict Student Academic Performance Employing Feed Forward Neural Network Approach Through**

- Admission Procedures In Ranchi Universities**” Dogo Rangsang Research Journal, Vol. 12, Issue. 08, No. 07.
14. Dr. Ashish Kumar Sinha , Sonali Sinha (2022) **“A Machine Learning-Predicated Online Convivial Network Analysis”** International Journal of Humanities, Law and Social Sciences Published Biannually by New Archaeological & Genological Society Kanpur India, Vol. IX.
  15. Paruchuri, T., Kancharla, G. R., Dara, S., Yadav, R. K., Jadav, S. S., Dhamercherla, S., & Vidyarthi, A. (2022). **“Nature Inspired Algorithms for Solving Multiple Sequence Alignment Problem: A Review”**. Archives of Computational Methods in Engineering, 29(7), 5237-5258.
  16. Prakash Anand, Dr. Megha Sinha, Dr. Piyush Ranjan (2022). **“Image Segmentation Techniques and its Applied Methods: A Review”**, Kanpur Philosophers Vol IX, Issue V (III), 2022, ISSN 2348-8301.
  17. Prakash Anand, Dr. Meenakshi Kumari, **“Advancement in Financial Fraud detection with machine learning and data analytics: A Review”** pp: 560-575 Mukta Shabd Journal Volume XIII, Issue II.
  18. Anand Kumar Vishwakarma, Pankaj K. Goswami, Keshav Sinha and Lopamudra Hota **“A Hybrid Ensemble Framework for Intrusion Detection in Internet of Things Network”** Journal of Nonlinear Analysis and Optimization: Theory and Applications, ISSN No: 1906–9685.
  19. Anand Kumar Vishwakarma, Pankaj K. Goswami, Keshav Sinha, Lopamudra Hota **“An Analysis of Machine Learning Models for Customer Churn Prediction in Telecommunication Industry”** Journal of Nonlinear Analysis and Optimization: Theory and Applications ISSN: 1906-9685.

### Conference Publications:

1. Vishwakarma Anand Kumar, Paul Partha, Sinha Keshav, Manorama (2023) **“Modelling an Intrusion Detection System in Distributed Networks”**. International Conference on Emerging Research Paradigm for Sustainable Development (ICERPSD-2023), Jharkhand Rai University.
2. Ghosh swagata, Paul P, Sharma Neeraj Kumar (2023) **“Comparative study of Unsupervised Classification in Land use Land Cover data”**. In Proceedings of Microelectronics, Computing & Communication Systems (MCCS 2023).
3. Vishwakarma Anand Kumar, Sinha K, Paul P (2022). **“Detail Analysis of Attacks and Methods of Intrusion Detection System”**, in Proceeding of 8th International Conference on Nano electronics, Computational Intelligence & Communication (NCCS2022).
4. Dipti Kumari (2023) **“Integrating Block chain in Indian Land Recording and Land Registration System”** in International conference on Innovating Technologies & Intelligent Systems”. (ICITIS-2023).
5. Anand, P., Ranjan, P., & Srivastava, P. (2024). **“Hand-written Digit Recognition using Convolutional Neural Network in Python with TensorFlow”**. 5<sup>th</sup> International Conference on Recent Trends in Computer Science and Technology (ICRTCST) (pp. 510- 515). IEEE.
6. Pathak, R. K., Prasad, R. M., & Yadav, R. K. (2024). **“Bio Geography Based Optimization with Improved Initial Operator for Multiple Sequence Alignment”**. In International Conference on Security, Surveillance and Artificial Intelligence (ICSSAI- 2023) (pp. 437-445). CRC Press.
7. Prakash Anand, Priyanka Srivastava, Piyush Ranjan (2023), **“A review on image segregation and analysis within a broad image”** AIP Publishing.



**Books Published**

1. **Santosh Kumar Das**, Nilanjan Dey “**Constraint Decision-Making Systems in Engineering**”, IGI Global, January 2023, ISBN: 9781668473436.
2. **Santosh Kumar Das**, Massimiliano Giacalone, “Fuzzy Optimization Techniques in the Areas of Science and Management”, CRC Press October 17, 2022 .
3. Dr. Ashish K. Sinha, Ms. Sindhu Chauhan & Dr. Sudhanshu Maurya “**Artificial Intelligence-Based Business Development**” **Cosmas Scientific Publications, ISBN: 978-81-19359-27-1.**

**Book Chapters**

1. Keshav Sinha, Partha Paul, Megha Sinha, Devesh K. Upadhyay, Roma Kumari (2022) “**Right to Correct Information in the Cyber World**”, Handbook of Research on Cyber Approaches to Public Administration and Social Policy , IGI Global.
2. Kumari, S., Ranjan, P. and Srivastava, P. (2024). **Fluctuation of Emotion in Stress and Different Coping Mechanisms During the COVID-19 Pandemic.** In Multidisciplinary Approach to Information Technology in Library and Information Science (pp. 41-61). IGI Global.
3. Anand, P., Ranjan, P., Srivastava, P., & Kumar, D. (2023). **Hand-Written Devanagari Character Recognition Using Convolutional Neural Network in Python with Tensorflow.** In International Conference on Recent Trends in Artificial Intelligence and IoT (pp. 122-137). Cham: Springer Nature Switzerland.
4. Kumari, P., Ranjan, P. and Srivastava, P. (2024). **Classification and Assessment of Visual, Content of Medicinal Plants Using CNN.** In Handbook of Research on Innovative Approaches to Information Technology in Library and Information Science (pp. 126- 147). IGI Global.
5. Dr. Ashish K. Sinha, Jayanti Kumari, Khushbu Kumari (2024) “**Assessment of Machine Learning Techniques for Improving Agriculture Crop Production**”, Handbook of Research on Innovative Approaches to Information Technology in Library and Information Science, IGI Global.
6. Anand Kumar Vishwakarma, Partha Paul, Keshav Sinha, Manorama (2023) “**Modelling an Intrusion Detection System in Distributed Networks**”, Emerging Research in Science and Engg. pp 135-141, Parab Publications.

**Department of Mechanical Engineering****Journal Publications:**

1. Deepanka Saikia, Prakash Kumar Nayak, Kesavan Radha Krishnan, Rajesh Kondareddy, Durga Venkata Naga Lakshmi (2023) “**Experimental investigation of modified indirect solar dryer with integrated thermal storage material for drying of dhokia (Diplazium esculentum) fern,**” Environmental Science and Pollution Research.
2. Rajeev Ranjan, Sanjay Kumar Jha (2022) “**Low-frequency Vibration-assisted Welding: A Review**”

- of Recent Developments**". Journal of Experimental & Applied Mechanics, Volume 13, Issue 3, 2022.
3. Rajeev Ranjan, Sanjay Kumar Jha (2022), "**Effect of Vibration on the Weld Quality and Properties in Vibration Assisted Welding: A Review**". International Journal of Mechanical Handling and Automation, Volume 8, Issue 2.
  4. P Muthukumar, DVN Lakshmi, Puja Koch, Mukesh Gupta, G Srinivasan,(2022) "**Effect of drying air temperature on the drying characteristics and quality aspects of black ginger**", Journal of Stored Products Research, Volume 97.
  5. Deepanka Saikia, Prakash Kumar Nayak, K Radha Krishnan, Rajesh Kondareddy, DVN Lakshmi, (2022) "**Development of indirect type solar dryer and experiments for estimation of drying parameters of dhokia (Diplazium esculentum),**" Materials Today Proceedings, Volume 56, Part 2, 2022, Pages 774-780.
  6. Rajeev Ranjan, Sanjay Kumar Jha and Ajay Kumar (2023) "**Enhancing Hardness in SMAW Welded Joints with Low-Frequency Vibration Assistance: An Experimental and Analytical Study**". Journal of Adhesion Science and Technology (Taylor & Francis).
  7. Rajeev Ranjan, Sanjay Kumar Jha (2023) "**Experimental Investigation and optimization of impact strength during low frequency vibration assisted shielded metal arc welded joints**". Welding International (Taylor & Francis), 2023.
  8. Rajeev Ranjan, Sanjay Kumar Jha (2023) "**Investigation of Post weld heat treatment on Mechanical properties of Low frequency vibration assisted SMAW mild steel welded joints**". International Journal on Interactive Design and Manufacturing (IJIDeM) (Springer Nature).
  9. Rajeev Ranjan, Sanjay Kumar Jha, Tushar Sonar (2023) "**Investigation of welding parameters on Impact Strength of Low frequency vibration assisted butt-welded joints using Taguchi methodology**" International Journal on Interactive Design and Manufacturing (IJIDeM) (Springer Nature).
  10. Rajeev Ranjan, Sanjay Kumar Jha (2023) "**Optimization of welding parameters and microstructure analysis of low frequency vibration assisted SMAW butt-welded joints**". International Journal on Interactive Design and Manufacturing (IJIDeM) (Springer Nature).
  11. Rajeev Ranjan, Sanjay Kumar Jha (2023) "**Effect of low frequency vibration-assisted shielded metal arc welding on the properties of mild steel**". Welding International, Volume 37, Issue 8.

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1. Harsh Vardan, V N L Durga, Chandra Bhusan (2024) "**Analysis of Physical and Chemical Ignition Delay with Di-tert Butyl Peroxide in Diesel Engine using Hydrogen as Gaseous fuel**" International Conference on Sustainable Research in Energy and Environment (SREE-2024) Jointly Organized by Department of Chemical Engineering & Centre for Energy and Environment Dr B R Ambedkar National Institute of Technology Jalandhar.
2. Harsh Vardan, V N L Durga, Chandra Bhusan (2024) "**Analysis of ignition delay period by using Arrhenius Equation for a dual fuel diesel engine using hydrogen as a secondary fuel**" Second International Conference on Thermo-Fluids and System Design (ICTFSD 2024) from 04 – 05 April 2024, BIT Mesra.



3. VNL Durga (2024), **Embracing Synergy: The Intersection of IoT and Renewable Energy for Sustainable Solutions**” World IoT Day Symposium organized by the IEEE Bhubaneswar Sub-section as on 9<sup>th</sup> April 2024.
4. Santosh Kumar, V N L Durga (2024) “**Supply Chain Network Management by Fusion of IoT and Blockchain**” World IoT Day Symposium organized by the IEEE Bhubaneswar Sub-section as on 9<sup>th</sup> April 2024.

### Department of Electrical and Electronics Engineering

1. Anand Kumar, Chandan Kumar (2023), “**Load Adaptive PID-Aided Asymmetrical Voltage Cancellation Controller-Based Induction Heating System With Improved Power Factor**” *Electrica*, Vol 23, pp 385-396.
1. Rahul Prakash, and Dharmendra Kumar Dheer (2023), “**Evolutionary algorithms based model predictive control for vehicle lateral and roll motion control**”, *Arabian Journal for Science and Engineering*, Springer, vol. 48, no. 5, pp 6857-6871.
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3. Rahul Prakash, and Dharmendra Kumar Dheer (2024), “**Stability analysis of lateral dynamics of a vehicle model utilizing state feedback with integral control and bifurcation method**”, *Journal of Computational Science*, vol. 80, pp 102321.
4. Rahul Prakash, and Dharmendra Kumar Dheer (2023) “**Vehicle state estimation using a maximum likelihood based robust adaptive extended Kalman filter considering unknown white Gaussian process and measurement noise signal**”, *Engineering Research Express*, vol. 5, pp 025066.
5. Kumar, D., Kumar, N., & Kumar, L. (2023). **Impact of operating temperature and solar concentration on the conversion efficiency of InGaP/InGaAs/Ge hybrid triple- junction solar cell**. *Brazilian Journal of Physics*, 53(1), 31.
6. Sahay, S., Upputuri, R., & Kumar, N. (2023). **Optimal power flow-based approach for grid dispatch problems through Rao algorithms**. *Journal of Engineering Research*, 11(2), 100032.
7. Sahay S, Upputuri R, Kumari P, Kumar N. (2024). **An enhanced arithmetic optimization algorithm for optimal control of reactive power**. *Optimal Control Application Methods*; 1-31. <https://doi.org/10.1002/oca.3061>

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1. S. Sahay and N. Kumar (2024), “**Environment-Friendly Economic Load Dispatch Using a Novel GSA-BBO Hybridization Algorithm**,” Third International Conference on Power, Control and Computing Technologies (ICPC2T), Raipur, India, pp. 229-234.
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3. P. Kumari, S. Sahay and N. Kumar (2023), "**Extended Kalman Filter Approach for State of Charge Estimation of Lithium-Ion Battery**," IEEE 2<sup>nd</sup> International Conference on Industrial Electronics: Developments & Applications, Imphal, India, pp. 483-486,

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1. Rahul Prakash, Mukesh Kumar, Dharmendra Kumar Dheer, Dilip Kumar Choubey (2022), **Robotic Operating System and Human–Robot Interaction for Automated Guided Vehicles (AGVs): An Application of Internet of Things in Industries**, Industrial Internet of Things, CRC Press, pp. 205-224.
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3. Shuvam Sahay, Niranjana Kumar (2022) “**A Review on the growth of Indian Power Sector: Pre- and Post-Independence**” Wasewar, K.L., & Rao, S.N. (Eds.). SustainableEngineering, Energy, and the Environment: Challenges and Opportunities (1<sup>st</sup> edition.). Apple Academic Press.
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5. Sahay, S., Upputuri, R., Kumari, P., Kumar, N. (2024). **Cost-Effective Solution of Grid Dispatch Problems Using a Novel Rao-4 Algorithm**. In: Swain, B.P., Dixit, U.S. (editor) Recent Advances in Electrical and Electronic Engineering. ICSTE 2023. Lecture Notes in Electrical Engineering, vol. 1071. Springer, Singapore.
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8. Abhishek Kumar Sinha, Shuvam Sahay and Niranjana Kumar (2022) “**A Review on Ancillary Services in Indian Deregulated Power System**” International Conference on Power Electronics and Sustainable Development. (ICPESD-2022), April 23-25 2022, NIT Jamshedpur.
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### Department of Chemistry

1. Pintu Das, Abhijit Chatterjee, Sanjeev K.Sinha (2023), “**Comparative Study of Physico - Chemical Parameter for Two Distinct Water Bodies of Ranchi District**”, Journal of Environmental Science & Engineering, **in press**.
2. Abhijit Chatterjee, Pintu Das, Sanjeev K.Sinha (2024), “**Assessment of Physico-Chemical Parameters and Trace of Micro Bacteriological Parameter for water bodies of Western Region of Ranchi District**,”International Journal of Environment and Waste Management, **in press**.

### Electronics & Communication Engineering

#### Journal Publications

1. Abhishek Kumar, Sanjeev Kumar, Asutosh Kar, (2024), “**Improved Adaptive Type-2 Fuzzy Detection and Simple Linear Regression-Based Filter for Removing Salt & Pepper Noise.**” Circuits, Systems, and Signal Processing.
2. Asutosh Kar, S. Shoba, Srikanth Burra, Pankaj Goel, Sanjeev Kumar, Vladimir Mladenovis, Pitikhate Sooraksa, (2024), “**Adaptive Tap-Length Based Sub-band Mean M-Estimate Filtering for Active Noise Cancellation**”, Circuits, Systems, and Signal Processing. Vol: 43, pp: 5912–5932.
3. P. N. Suman, J. Kumari, N. Anjum, A. kiran, S. Muthumanickam, Amrita Rai, S. Debbarma, Sanjeev Kumar, M. K Ojha, Vijay Nath, G. K. Mishra, (2024), “**Design and Development of Metamaterial Absorber for IoT Applications**”, IETE Journal of Research, 1-10.
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1. Abhishek Kumar, Sanjeev Kumar, Abhinav Pathak, (2024) “**Fuzzy Logic Denoiser: An Approach for Salt & Pepper Noise Removal in Digital Images.**”, 2<sup>nd</sup> IEEE International Conference on Device Intelligence, Computing and Communication Technologies (DICCT), Dehradun, India, 2024, pp. 341-346,
2. Abhishek Kumar, Sanjeev Kumar, (2024) “**An Approach for Enhancement of Low Contrast Gray Scale Image Using Fuzzy Logic and Sigmoid Function.**”, 2<sup>nd</sup> IEEE International Conference on Device Intelligence, Computing and Communication Technologies (DICCT), Dehradun, India, 2024, pp. 1-6.

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3. Bharty, Monal; Srivastava, Atul. K.; Mahato, Hrisikesh (2023) “**Maxwell Cattaneo double diffusive convection (DDC) in a viscoelastic fluid layer**”. Journal of Computational analysis and applications, vol. 31, no.1, 2023.
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5. Das P., Chatterjee A. and Sinha S. K, **Comparative Study of Physico Chemical Parameter for Two Different Water Bodies of Ranchi District**, Journal of Environmental Science & Engineering, Vol. 4, 2021, 1297-1306.
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## Indian Knowledge System- A foundation for world Empowerment



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Right education to fellow citizens is the foundation for exploring the true human potential and economic development of a country. Education is so powerful it can form character, help to increase the strength of the mind and expand by which one can stand on one's feet to lead the world. The Indian-originated value-based education system is the best way to explore and nurture the knowledge-based resources that can add more holistic value to the individual, to the society, to the country, and to the world.

The world is moving towards Sustainable Development Goal 4(SDG4), to ensure inclusive, equitable quality education and promote lifelong learning opportunities for all by 2030. India as a country is also determined to offer a lifelong learning platform to fellow citizens by ensuring the highest ethical value by reconfiguring its education DNA mutation process. The knowledge landscape of the world is changing rapidly, as there are many transitioned phases in the technological front like from Industry 1.0 to Industry 5.0, the introduction of big data, ML, AI, robotics, Neurotech, and Metaverse. Many non-skilled jobs in the world would be taken care of by machines with fewer emotions, while there would be a great demand for a skilled workforce with emotions and analytical mind.

While analyzing the past database of 3443 articles, it has been observed that future generations would be given more emphasis on climate change, pollution, natural resources, energy, biodiversity, knowledge management, natural language processing, technology, medical education, higher education system, women empowerment, ethnicity, attitude building (Fig 1). The growing demand for the above subject requires multidisciplinary learning. There would be a great demand for humanities and art as well.

To tackle the changing global learning ecosystem, it is indeed a critical and hygienic requirement of any student or individual to emphasize learning cognitive process, and logical critical thinking, to solve problems with a

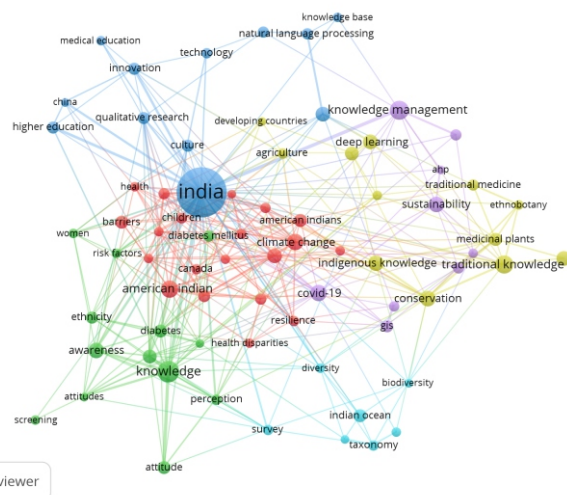


Fig 1: Indian Knowledge System Development



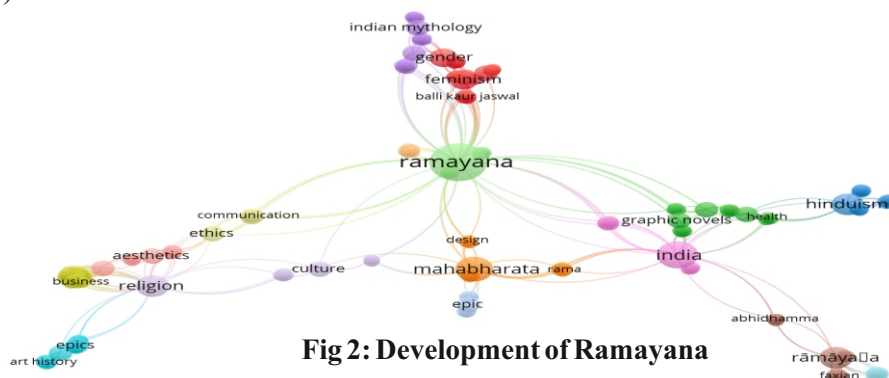
strategic mindset with a multidisciplinary approach. To ensure the above inner process and outcomes, a pedagogy that will ensure holistic development of individual, inquiry-driven, learner-centric, and discussion-based would have a strategic advantage. The curriculum must include arts, crafts, humanities, games, sports, language, culture, and value, in addition to Science, Technology, Engineering, Mathematics, and Management education. Education must build character, and enable learners to be ethical, rational, and caring and, at the same time fit for the job opportunities.

To fulfill this knowledge void, the Indian ancient and eternal knowledge system may be a guiding star to achieve SDG4 for the world, as the Indian knowledge system always considered gaining knowledge, wisdom, and truth to be the highest human goal in a lifetime to achieve overall development and to attained self-actualization stage. World-class Universities like Nalanda, Takshashila, and Vikramshila are multidisciplinary teaching and research institutes that contributed immensely to the world education ecosystem. Indian scholars like Charaka, Susruta, Aryabhata, Varahamihir, Chanakya, Gautama, Patanjali, Panini, Amir Khusrau, Pt. Ravi Shankar, Pingala, Sankardev, Maitreyi, Gargi, and Thiruvalluvar, among numerous others, made seminal contributions to world knowledge in diverse fields such as mathematics, astronomy, metallurgy, medical science and surgery, civil engineering, architecture, shipbuilding and navigation, yoga, fine arts, classical instrumental music, and more.

The Indian knowledge system is a rich and diverse tapestry of traditions, philosophies, and practices that have evolved over thousands of years. It encompasses a wide range of fields including philosophy, science, medicine, mathematics, literature, and arts. Below are some key aspects which strengthen the Indian Knowledge system and any learner should learn to empower the inner cognitive and spiritual power.

**Ramayana:** Indian culture of 'Vasudhaiv Kutumbkam' to develop a comprehensive approach of spiritual transformation where leaders strive to search for a 'Higher-order purpose of existence' (HOPE) and embrace a society-centric approach. It embarks on creating a value-based leadership (Rajarshi Leadership) framework that deals with a higher vision and mission.

I was very much surprised during my analysis of the database regarding the development of the Ramayana as a subject, the subject developed like an archery (Dhanush). That gives us strong evidence of how strong the Indian Knowledge System is to predict the future of a subject during the 5<sup>th</sup> century BCE (Figure 2).



**Fig 2: Development of Ramayana**

**Mahabharata-** Debate the potential for empowerment in feminine virtues through the example of Draupadi who defends her importance and value based on stri-dharma (righteous feminine actions).

**Vedic Philosophy:** Rooted in the Vedas, the oldest sacred texts of India, Vedic philosophy explores the nature of reality, duty, and the cosmos. Key concepts include Dharma (duty/righteousness), Karma (action and its consequences), and Moksha (liberation).

**Ancient Mathematics:** India is known for its early contributions to mathematics, including the concept of zero, the decimal system, and significant advancements in algebra and trigonometry.

**Astronomy:** Indian astronomers like Aryabhata and Brahmagupta made substantial contributions, including the calculation of eclipses and the movement of planets.

**Ayurveda and Siddha Medicine:** Traditional systems of medicine that focus on holistic health through balance of body energies (doshas) and natural remedies.

**Epics and Puranas:** Major texts like the Mahabharata, Ramayana, and various Puranas narrate historical, mythological, and philosophical stories and teachings.

**Classical Languages:** Sanskrit is a classical language of great importance in Indian knowledge systems, while Tamil, Kannada, and other regional languages also have rich literary traditions.

**Performing Arts:** India has a diverse range of traditional performing arts including classical dance forms like Bharatanatyam, Kathak, Odissi, and music traditions like Carnatic and Hindustani.

**Political Philosophy:** Ancient texts like Arthashastra by Kautilya (Chanakya) offer insights into statecraft, governance, and economics.

**Social Structure:** Concepts like Varna (social classes) and Ashrama (stages of life) are integral to understanding traditional Indian society.

**Hinduism, Buddhism, Jainism, and Sikhism:** These major religions each contribute to the Indian knowledge system with their unique doctrines, practices, and philosophical insights.

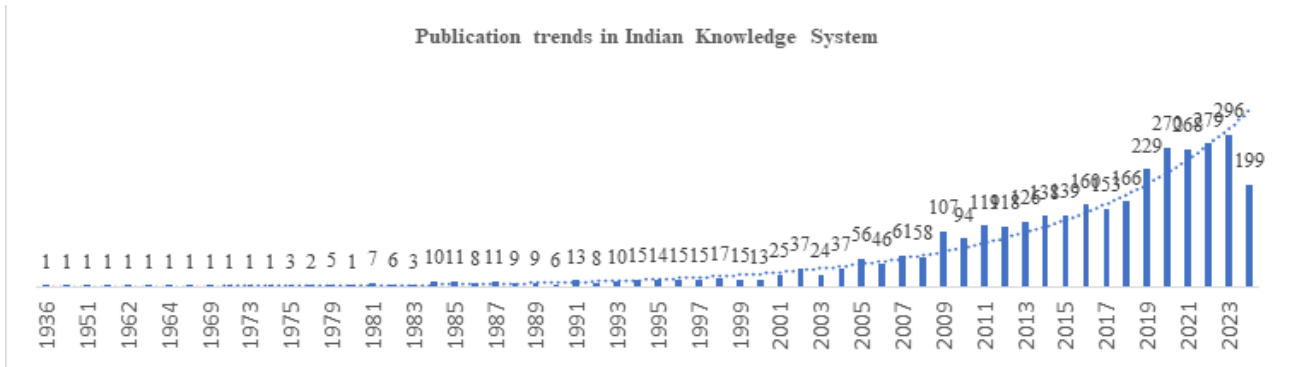
**Meditation and Yoga:** These practices, rooted in ancient Indian traditions, focus on mental and physical well-being, and have gained global recognition.

**Folk Knowledge:** Indigenous practices and wisdom related to agriculture, weather prediction, and local medicine and sustainability.

**Craftsmanship and Architecture:** Traditional knowledge in areas such as Vaastu Shastra (architecture) and various forms of craftwork.

Scholars from different parts of the world have realized the power of the Indian Knowledge system and published 3443 articles since 1936 (An average of 3 articles per month) to know the system, to guide the society, and to develop the nation.

Publication trends in Indian Knowledge System



The Indian knowledge system is not static; it continues to evolve, integrating traditional wisdom with contemporary scientific and technological advancements. This dynamic interplay helps preserve and transform India's rich intellectual heritage. We the teaching fraternity, who are the most respected members of the society, have a role to pass their knowledge, skills, and ethics optimally to the students to ensure a new and forward-looking Vision for India's Higher Education System.











# SBU GALAXY



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