

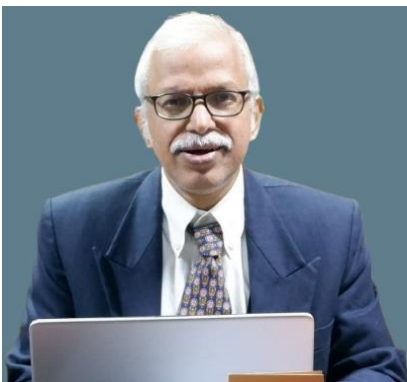


Vol. 16, No. 02



May - August 2024

## Message from Director



Namaskar. I have learnt that NITTTTR Kolkata in her new avatar is bringing out the newsletter again this month itself after a lull for a few months. I remember that industrial training

was compulsory for getting a diploma or a degree in engineering stream even in the 80s. Unfortunately, this program was discontinued abruptly when many engineering colleges with unamenable growth of engineering education without much planning opened just after the introduction of the globalization regime in India. Of course, the apprenticeship which is considered as a system for on-job training to new generation engineers took a back seat due to the lack of facilities in industries and their unwillingness to train students. During the apprenticeship, requisite training

is imparted while working with a certain stipend for an employer who helps the apprentices learn their trade or profession, for a certain period and gain certain competencies. It must be emphasized that apprenticeship was part and parcel of Indian scientific and technological heritage, and this important and elegant legacy was uprooted in a systematic manner by British rulers and native rulers in the pre-independence and post-independence eras. Although this concept of apprenticeship prevailed in the government system, but it has not been effective as both the apprentices and trainers and companies are not serious about it as they are not getting direct benefits out of this activity. With the advent of the New Education Policy, NEP 2020, The government is planning to creditize the apprentice who can improve the quality of this programme while trainees can get benefits for employability and higher studies.

In recent times, the NITTTTR Kolkata has taken up the onerous task of Creditization of apprentice training in order to bolster the National Apprentice Training program of the Government of India in collaboration with the Board of Practical Training (BoPT), eastern region, Kolkata. For this purpose, a framework for

Creditization and assessment of apprenticeship has been designed and developed by NITTTR, Kolkata in line with the National Credit Framework (NCrF). In the first phase, around 10 job roles catering to 100 programmes of 1200 hours duration per year are considered for which 40 credits will be provided as per the National Credit Framework (NCrF). Proper Credits will be awarded provided the trainees can achieve the defined learning outcomes to be determined by an assessment designed and developed by NITTTR Kolkata. Let us undertake this onerous and mammoth task of assessing around 1 lacs apprentice in future and awarding credits to successful apprentice trainees as this work can provide visibility and recognition as a budding university in future. Let us pray to the Almighty to bless all of us.

**Prof. Debi Prasad Mishra**  
*Director, NITTTR, Kolkata*

## ARTICLE

# Indian customs are not accepted, even though technically sensible

**Rayapati Subbarao**

*Associate Professor, Department of Mechanical Engineering, NITTTR Kolkata*

On 31<sup>st</sup> January 1988, at 7.30 PM in the night, my grandfather left for 'evening walk' from our residence in Challapalli, Krishna District, Andhra Pradesh. When he was leaving the gate, a cat tried to enter the house from the opposite direction. People treat it as 'bad luck', normally, they would go back into the house, sit for some time, take water and start their journey again is. But, he was not such a person, who followed all such beliefs. As usual, he had gone out. He was uncomfortable at the end of the walk, and called for a rickshaw. The rickshaw puller wanted to take him to the hospital, which was there right on their way. My grandfather denied it, saying he would take some medicine at home. God has his own say in this case. The rickshaw stopped right in front of our house and while taking him down, he breathed his last, in the hands of my father and aunt, even as, another uncle ran for a doctor nearby. No use. What was not supposed to happen, had happened. He was 72, a farmer, used a bicycle all the time to travel. (I was the eyewitness to the first half of this real incident, till he left the house and I was in 9<sup>th</sup> standard.) You may not trust. It happened. May be, he might have been saved,

had he chosen to stay back or gone back into the house for a 'small wait', as told in Indian customs.

Technically, cats are sensitive animals and may react to changes in their environment, which can sometimes interpreted as sensing something unusual. Cats do sense such things, whereas, human beings cannot. As long as this stands, we need to trust this belief. Yes, cats and dogs sense better than human beings. They can also listen better than us. Many un-reported incidents reveal that some super-natural or paranormal activities do happen around. We may not be able to sense. But, animals do sense and try to react. That is why, most of the time, the dog owners are surprised to see why the dogs do bark unnecessarily even if nobody is there, particularly during night times (As illustrated in Fig. 1). Even as an educated person, one cannot just rule it out. A dog's field of vision is much wider than ours; they can see objects at a greater distance, and their ability to see in twilight, dusk and dawn is far superior to ours, making it possible to pick up certain movements that are undetectable to the human eye [1]. Researchers are trying to reason it out [2].

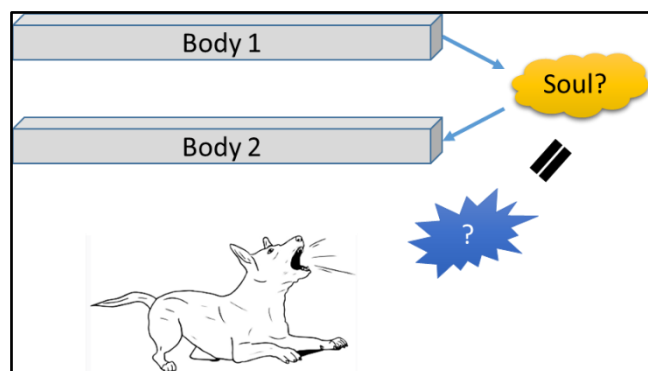


Fig. 1. Representative picture for illustration.

Matter did not end there. It was the third day of my last uncle's marriage (My father's youngest brother). In the horoscope of the bride, it was clear that there would be trouble for the father-in-law, if the marriage takes place. My uncle was sharing this fact with others, saying that priests hinted this, based on the horoscope. This was not anticipated and in this modern era, they were not willing to avoid that marriage, because of such nasty hints. But, folks, it had happened. In this case, my aunt had not been criticized/ victimized, as all have been sufficiently educated. To my astonishment, such aspect was never thrown into light, even as all got the hints of the 'horoscope matter'. Astrology cannot be wholly responsible for all of our doings. But, surely, it gives some hints, where we can be cautious or so. Most of the times, their calculations related to the characteristics and behaviour have been correct, if not on what will happen next. At the age of 24 or 25, when some old man (self-proclaimed astrologer) glanced

through the lines on my right hand, immediately, he yelled 'you are cheated by your friends about Rs. 5000 or so' (Fig. 2). Yes, it was truly correct and that time the amount was quite high for me. And another old man (also an astrologer) told me that I need to be continuously putting efforts throughout my life, as luck is not in my favour, based on the horoscope. This has also been 200% correct, for which I have good number of reasons to say (to reduce the length of the article, it is not being reported now). Interestingly, research shows increased number of believers in astrology [3].



Fig. 2. Lines used in astrology.

Not only this, many such things are happening around. Even as recently, in the year 2022, a dead girl is re-born [4]. A four-year-old girl in Rajsamand of Rajasthan, is able recall her earlier birth/life. She has been narrating all her past deeds and incidents with dates, including place, names of her earlier parents, brother and even her own kids. First, present parents neglected this as usual (After all, in this modern era of AI and ML, there is no scope for *Gita/Atma/Punarjanma*...right?) and taken her to a doctor, instead. After all tests, she was found to be strong and free from mental illness. As parents were not willing to still neglect it, they had taken her to the place, what she had been talking about. To their complete astonishment, all things were existing there. All points were true, including her claim of earlier death, which was because of the 'bursting of a gas cylinder'. This was enough for both the families to trust what she had been saying all along. Even though, she stays with the parents of the present birth, she is in constant touch with the parents and siblings from the earlier birth. People find it exciting as she is 6-year-old and her children from the earlier birth are of the age of 16 or 17, and daily over phone, she is enquiring their well-being. This can be further explained that on death, the soul having shaken off the body and frees itself from ignorance, makes a beginning on another body. Just as man acts, just as he behaves, so will he

be born. The soul when reaches the end of the present life, destroys the body and builds a newer and fairer time frame by its own activity [5]. Till scientists find the way of 'life' leaving the body, we need to trust such things.

Such things are not easy to trust. But, they have been happening. We are self-proclaimed technocrats and tend to neglect. We rely on Robots, drones, rockets, AI and ML, even as the predictions are always wrong. Robots/Missiles/Rockets fail to do the tasks assigned, good number of times (coding error?). The drone will come back and take the life of the person, who used it (programming mistake?). Still, we prefer such technologies. Somewhere, in the news, robot attempted suicide. Robot commits suicide in South Korea because, it was made to do a lot of work [6]. We trust all such things, but not our own customs or traditions. We call them as myths or acts of superstition. Even as they are useful and some technological significance is there as mentioned.

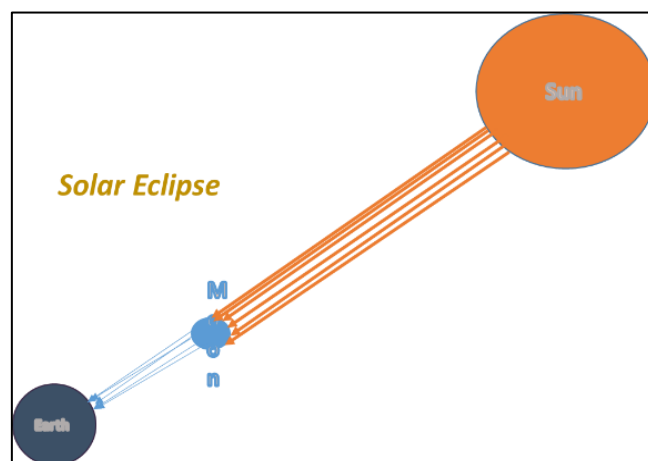


Fig. 3. Eclipse effecting humans on the Earth.

During an eclipse, because of the availability of less space, for the rays to reach earth, they will be more intense and will cause negative effect on human bodies (Fig. 3). This is the basic reason why people ask us not to venture out during 'Graham'. Same way, when the rays fall on eatable things, they may impact the digestion aspect. Such technical aspect also is not understood by the so called technocrats and they see something more in this and name that people are more superstitious. To prove that 'Graham' is not so uncommon phenomena, 'Jan Vignaana Vedika' (Science for Society) of Andhra Pradesh organized good number of programs in open air, during the time of eclipse [7]. Also, to prove that it is not 'bad luck to watch eclipses'. In the process, over enthusiasts try to watch the sun directly. It is difficult to predict an exact number, but historically, there have been cases of people suffering eye damage due to improper viewing of solar eclipses. Looking at the sun without proper eye protection, during an eclipse, may lead to solar retinopathy, which is damage to the retina that can



result in permanent vision loss. 'Breakfast Over Eclipse' by the same organization is to prove that it is not a superstition and there won't be a problem, if one eats during the eclipse. One myth is 'not to watch eclipse and to stay indoors' and another one is 'One should not have food at the time of solar eclipse'. But, while proving these things wrong, many unwanted things are happening. It is clear that when the moon comes between the sun and the earth, it releases sharp and strong UV radiations, which are not good for the human body. So, venturing out during 'eclipse' is not advisable at all. It is also believed that the rays of solar eclipse can affect cooked food, which when consumed during the eclipse period may cause indigestion and an upset stomach. A few researchers have accepted the fact that eating during the eclipse causes indigestion [8].

Many such things can be exemplified. Not only these, many Indian customs have been put in the category of myths or superstitions. It is absolutely false, as they have been there for hundreds of years. They benefitted people and have strong technical reason for adopting. As of now, I leave it to the readers to believe it or not.

## References

1. Can Dogs See Ghosts?, By Alexandra Anastasio, (2023, Sep 22) Retrieved October 28, 2024, from <https://www.akc.org/expert-advice/lifestyle/can-dogs-see-ghosts-spirits/>.
2. Can Dogs Detect Ghosts, Spirits, or Hallucinations? (2017, August 29) Retrieved October 28, 2024, from <https://www.psychologytoday.com/us/blog/canine-corner/201708/can-dogs-detect-ghosts-spirits-or-hallucinations?msocid=21eacbc8637365021fa2db5a62c164b5>
3. Fixating on the future: An overview of increased astrology use, International Journal of Social Psychiatry, Volume 68, Issue 5, 2022, <https://doi.org/10.1177/00207640221094155>.
4. ABN AndhraJyothy, Aame malli puttindi, (2022, Jan 25). Retrieved October 24, 2024, from <https://www.andhrajyothy.com/telugunews/she-mrgs-national-1922012410151803>.
5. Ankita Chakravarti, Robot commits suicide in South Korea because it was made to do a lot of work, India Today, (2024, July 5), Retrieved October 4, 2024, from <https://www.indiatoday.in/technology/news/story/robot-commits-suicide-in-south-korea-because-he-was-made-to-do-a-lot-of-work-2562775-2024-07-05>.

6. Keith, A B, The religion and the philosophy of Vedas and the Upanishads, Part II Vol 32, Motilal Banarsidass, Delhi, 1976, P573.
7. 'Breakfast Over Eclipse' Jana Vignana Vedika Ramesh Bust Myths And Superstitions, V6 News, (2020, Jun 21), Retrieved October 27, 2024, from <https://youtu.be/22oV0y4VKv0>.
8. Why we must avoid eating food during Surya Grahan, (2020, Jun 21). Retrieved October 25, 2024, from [http://timesofindia.indiatimes.com/articleshow/72979258.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://timesofindia.indiatimes.com/articleshow/72979258.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)

## International Yoga Day 2024

An invaluable gift of ancient Indian tradition, Yoga has emerged as one of the most trusted means to boost physical and mental well-being. NITTTR-Kolkata celebrated "International Day of Yoga" on June 21, 2024 with active participation of our honorable Director, Prof. Debi Prasad Mishra, faculty members, teaching and non-teaching staff and students of the institute. Our honorable Director, Prof. Debi Prasad Mishra enlighten on the theme "**Yoga for Self and Society**" of 10<sup>th</sup> International Yoga Day. Miss Manjori Mondal, Yoga Expert described the benefits of "Yogasana" and hosted a yoga session for the participants. The session ended with the "Om Chanting".



## 2<sup>nd</sup> Alumni Meet

With the approval from the competent authority, 2<sup>nd</sup> Student Alumni Meet for passed out M.Tech students was held on 30<sup>th</sup> June 2024 at Mini Auditorium of NITTTR, Kolkata. The programme was initiated and coordinated by Dr. S.K. Naskar, Prof. & HoD department of Education and Management NITTTR, Kolkata with the support and encouragement of Prof. Debi Prasad Mishra, honorable Director NITTTR, Kolkata.

Around 24 students including a few current students and faculty members of various departments attended the event. In the welcome address, the honorable Director of NITTTR, Kolkata highlighted the various ways through which the alumni can help the institute. He suggested establishing a formal Students Alumni Association. He also said that by virtue of having Deemed University status of NITTTR, Kolkata, alumni have enormous opportunities to take. He requested all alumni to visit the campus and suggest improvement. He also urged upon to propagate meaningful ideas by the Alumnus to improve and reposition the institute.

He also invited different institutes to collaborate with NITTTR, Kolkata and establish centers of excellence.

Departmental HoDs / representatives made presentations highlighting the departmental activities, proposed new PG and Ph.D programmes etc.

During the open interactive session, participants provided their feedback about their past days at NITTTR, Kolkata and wished to conduct such an event from time to time.

In the event, it was proposed by the Director that the Alumni Membership fees of the passed out student would be Rs.2000, which was agreed by the alumnus and passed out students from the year 2024 the same amount of money will be deducted from their caution money.

Finally, the meeting ended with a vote of thanks proposed by Prof. S.K.Naskar.

## National Doctor's Day 2024

National Institute of Technical Teachers' Training and Research, Kolkata, celebrated National Doctor's Day 2024 as "Healing Hands, Caring Hearts". As part of Sustainable Development Outreach Activities, SDG Goal 3: Good Health and Well-being, a pivotal event,

the Health Camp, was organized on July 3<sup>rd</sup>, 2024, at NITTTR Kolkata from 10:00 AM to 2:00 PM. This Health Camp is an event and a significant initiative towards promoting good health and well-being.

In the inaugural program, Prof. Naveen B.P. of NITTTR Kolkata, the coordinator of the Health Camp, mentioned the objectives of the free medical camp, emphasizing the crucial role of the participants in making the event a success. Prof. Debi Prasad Mishra, Director of NITTTR, Kolkata, warmly welcomed all medical camp participants, acknowledging their importance and highlighting the significance of National Doctor's Day.



## Two-days International Conference on Bharatiya Traditional Knowledge System (BTKS-2024): Brief Report

The National Institute of Technical Teachers' Training and Research (NITTTR) Kolkata proudly hosted the International Conference on Bharatiya Traditional Knowledge System (BTKS-2024) on July 26<sup>th</sup> and 27<sup>th</sup>, 2024, at its premises located at FC Block, Salt Lake City, Kolkata 700106. At the outset of the conference, Dr. Kinsuk Giri, the Convener of BTKS, delivered a welcome address on behalf of BTKS 2024. The conference was inaugurated by Prof. Debi Prasad Mishra, Director, NITTTR Kolkata, and delivered a special talk on "*Relevance of Bharatiya Paramparik Gyan in Modern Times*". The Chief Guest of the



inaugural session was Prof. Dhanush Dhari Misra, Chairman of the Research Council of CSIR CIMFR, Dhanbad, who delivered the inaugural address on his personal experience with traditional knowledge.

The primary objective of BTKS-2024 was to foster a robust research ecosystem focused on the Indian Knowledge System, as envisioned in the National Education Policy (NEP) 2020. This conference aimed to provide a dynamic platform for scholars, researchers, and academicians to come together and share their insights, experiences, and research outcomes related to various aspects of the Indian Knowledge System.

"We are delighted to host BTKS-2024 at NITTTR Kolkata. This conference has provided an invaluable opportunity for the academic community to delve deep into the rich heritage of the Indian Knowledge System and explore its relevance in contemporary times," said Prof. Debi Prasad Mishra, Director of NITTTR Kolkata.



Key highlights of the conference included keynote addresses, panel discussions, and paper presentations on various themes related to Bharatiya Traditional Knowledge. The event was attended by distinguished academicians, researchers, and practitioners, making it a significant milestone in the promotion of Indian Knowledge Systems. More than 50 participants participated at BTKS 2024.

## A two-day workshop on “Waste to Energy” under the theme “Energy, Sustainability & Climate Change”

The National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata, hosted a two-day workshop on “Waste to Energy” under the theme “Energy, Sustainability & Climate Change” from 29th to 30th July 2024 under the scheme AICTE-VAANI (Vibrant Advocacy for Advancement and Nurturing of Indian Languages) in Odia.

The ‘AICTE-VAANI’ scheme aims to foster the use of Indian languages among educators and students to enhance the teaching and learning experience. Regional languages or mother tongues are essential in education to ensure the nation's cultural diversity.

In the inaugural function of this workshop on the first day, the Vice Chancellor of Odisha University Technology & Research, Bhubaneswar, Prof. Bibhuti Bhusan Biswal, attended as the Chief Guest. On this occasion, the Director of NITTTR, Kolkata, Prof. Debi Prasad Mishra & Prof. Naveen B.P were present. The event started with the lighting of a lamp by the chief guest and esteemed dignitaries.

The workshop coordinator, Prof. Naveen B.P., warmly welcomed the participants and emphasized the importance of waste-to-energy technologies converting waste into energy. These technologies can help reduce the carbon footprint of waste disposal and contribute to renewable energy production in the regional language.



Prof. Debi Prasad Mishra, Director, NITTTR, Kolkata, highlighted that Waste-to-energy is a sustainable alternative to simply letting trash sit in a landfill and can be cost-effective for manufacturers. Also

appreciates the new initiatives of coordinators and said that such programs play a significant role in promoting modern technologies in waste management.

## “Industry Academic Conclave-2024” in association with Government Polytechnic, Bhubaneswar

The National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata, hosted an "Industry Academic Conclave-2024" in association with Government Polytechnic, Bhubaneswar, from August 8<sup>th</sup> to 9<sup>th</sup>, 2024, at Bhubaneswar Extension Centre, Odisha.

The Industry Academic Conclave-2024 is not just a gathering but a unique opportunity for experts from the academic and industrial fraternity to come together, discuss, collaborate, and explore new avenues in research, development, and innovation. This platform for mutual learning, idea exchange, and the development of synergies is a rare chance to benefit all stakeholders of the Technical Education System of the Eastern Region.

In the inaugural function of this conclave on the first day, Prof. Damodar Acharya, Former Director of IIT-Kharagpur and Chairman of AICTE, attended as the Chief Guest. The Director of NITTTR, Kolkata, Prof. Debi Prasad Mishra & Prof. Naveen B.P. were present on this occasion. The event started with the National Anthem, Ganesha Vandana, and Saraswati Vandana, followed by the Lighting of a Lamp by the chief guest and esteemed dignitaries.

The workshop coordinator, Prof. Naveen B.P., warmly welcomed the participants and emphasized the importance of Industry Academic Conclave-2024. This platform for mutual learning, idea exchange, and the development of synergies is a rare chance to benefit all stakeholders of the Technical Education System of the Eastern Region.

The program started with the welcome Address by Prof. Debi Prasad Mishra, Director of NITTTR, Kolkata, highlighted the Conclave is to bring together experts from the industry to discuss prime issues concerning industry and academia based on current societal requirements.



## Actions at NITTIR Kolkata regarding the celebration of National Space Day 2024

As per the letter from MoE (Ref. DO. NO ·A-44011/01/2024 – E.IV), NITTER Kolkata conducted few events regarding the National Space Day 2024 on 23<sup>rd</sup> August 2024.

### 1. Live telecast from Bharat Mandapam, New Delhi

The live telecast from Bharat Mandapam, New Delhi on National Space Day was observed in the Sri Ramakrishna Paramahansa Auditorium from 9:40 AM to 11:00 AM. Faculty, Staff and Students witnessed the programme organized at Bharat Mandapam, New Delhi by our Ministry of Education. Before the event started, the coordinator, Dr. R. Subbarao welcomed the gathering. He highlighted the importance of ISRO, their missions and the necessity of the celebration of National Space Day. Initially, welcome address by Secretary, DOS/ Chairman, ISRO was witnessed. Later all the participants enthusiastically observed the video on the Genesis of National Space Day & Pan-India Activities. Video on Genesis of National Space Day & Pan-India Activities was watched by the participants. Prize Distribution by Hon'ble President of India to the winners of 'Robotics Challenge' & 'Bharatiya Antariksh Hackathon' was witnessed by all. Video on 'Space Vision 2047', was well appreciated by the audience with lot of applause.

In addition, the address by Hon'ble Minister of State (Space) Dr. Jitendra Singh, covering details of the Mission Programmes was well acknowledged by the audience. In the end, all the audience eagerly listened to the address given by Hon'ble President of India, Smt. Droupadi Murmu. Hon'ble President discussed about the successful missions carried out by ISRO and the need of children to participate in the events organized by ISRO and others in Higher Engineering



Institutes. She appreciated the efforts taken by ISRO in solving the problems of Indian Citizens in various areas like communications, networking and data management. The initial programme ended with the National Anthem, 'Jana gana mana'.



After the inaugural session and tea break, Dr. Debi Prasad Mishra, Director, NITTTR Kolkata gave a lecture on 'Importance of Space Missions'. Dr. Mishra detailed about the important aspects of space missions. As a Professor in Aerospace Engineering, he could deal with couple of problems related to space applications during his tenure at IIT Kanpur. He elaborated the same and showed his desire to continue in future as well. He anticipated that more students will join the activities of ISRO and take interest in solving space problems.

After the lunch break, faculty, staff and students gathered again in the auditorium to witness the lectures by Dr. Rayapati Subbarao and Dr. Habiba Hussain. Dr. Subbarao discussed about the failures and successes of ISRO. The way ISRO transformed itself to successful launching of GSLVs and 'Chandrayan'. Also increase in the number of countries associated with ISRO.



Later in the day, lecture by Dr. Habiba Hussain impressed all. She stressed for more active

participation of the faculty and students. She highlighted the activities of ISRO and its role in India's growth. Thus, the programmes conducted at NITTTR, Kolkata (Deemed to be University) regarding the National Space Day 2024 on 23<sup>rd</sup> August 2024 were effective and successful.

## Anti-Ragging Day:

Anti-ragging day was observed on 12<sup>th</sup> August 2024 in Shri Ramakrishna Paramahansa Mini Auditorium. Initially the coordinator of the programme briefed the gathering about the importance of the day. The in-charge of the PG Cell, Dr. Subbarao gave the details of the activities being conducted regarding the same. The anti-ragging committee (ARC) and the Anti-Ragging Squad (ARS) were formed earlier in the year by the competent authority of the university. Details of the activities were briefed during the initial discussion. Students, Faculty, HoDs of the departments, members of ARC and ARS were present on the occasion.

After the briefing of the coordinator, the Director-in-Charge Prof. U. Kar gave the welcome address on the issue. She highlighted the importance of the day. Later on, she conveyed that the university has no issues with regard to ragging. Till now, there have been zero number of cases regarding the grievances of the students and incidents of ragging. She re-iterated the importance of checking the institute premises by ARS at regular intervals. She concluded her speech with the works to be carried out in the academic year 2024-25.

PG Cell ensured that the details of ARC and ARS are placed in all the notice board of the university. With the help of IWS, Banners of Anti-Ragging were prepared and displayed all over the campus. It was ensured that the hoardings are as per UGC/AICTE norms.





## Faculty Development Programmes (FDPs)

**Teachers' Training During the period of May - August 2024:** 3168 numbers of Technical Teachers have been trained, through various Short-Term Training Programmes, broadly in the areas of Content Updating, Management, Pedagogy and Professional Skill Development. A total of 74 training programs were conducted for the Teachers and Technicians of different Polytechnic colleges and Engineering colleges all over the Country during the 2<sup>nd</sup> Quarter of the Year 2024.

### List of Training Programmes (May-August, 2024)

Sl. No.	Programme Code	Programme Title	Programme Coordinator	From	To
1	CU20F	Laboratory Safety Management	Subrata Mondal	29/04/2024	10/05/2024
2	PS11B	Bloom's Taxonomy Based Question Paper Generation	Dipankar Bose	06/05/2024	10/05/2024
3	PS12B	Life skills for empowering 21 <sup>st</sup> century learners	Habiba Hussain	06/05/2024	10/05/2024
4	CU22B	Waste to Wealth	Naveen BP	06/05/2024	10/05/2024
5	CU23A	Introduction to Applied IP Networking	Rajeev Chatterjee	06/05/2024	10/05/2024
6	MGT03C	Waste Management Technology & Sustainability	Sailendra Nath Mandal	06/05/2024	17/05/2024
7	PS13A	Advanced pedagogy	Sukanta Kumar Naskar	06/05/2024	17/05/2024
8	CU25C	Data Analytics	Chandan Chakraborty	13/05/2024	17/05/2024
9	SPL04 (Inhouse BIT Mesra)	NBA Accreditation and SAR Preparation	Rayapati Subbarao	13/05/2024	17/05/2024
10	CU29A	LABVIEW and Industrial IoT	Sagarika Pal	13/05/2024	17/05/2024
11	PS14C	Designing Direct and Indirect Assessment Tools under OBE	Urmila Kar	13/05/2024	17/05/2024
12	CU32C	Basic Principles of Pile Foundations	Naveen BP	20/05/2024	24/05/2024
13	CU35C	SCILAB Programming	Kinsuk Giri	27/05/2024	31/05/2024
14	PS15F	Values and ethics for professional	Mithu Dey	27/05/2024	31/05/2024
15	PS16F	Research Methodology for Engineering and Sciences	Niladri Pratap Maity	27/05/2024	31/05/2024
16	SPL07(Inhouse GEC Bhojpur)	NBA Accreditation and SAR Preparation	Rayapati Subbarao	27/05/2024	31/05/2024
17	CU36C	Concrete Mix Proportioning as per IS 10262 - 2019	Santanu Bhanja	27/05/2024	31/05/2024
18	CU38B	Medical Instrumentation	Subrata Chattopadhyay	27/05/2024	31/05/2024
19	PS18C	Entrepreneurship Development	Subrata Mondal	27/05/2024	31/05/2024
20	PS19C	Experiential learning for improving teaching-learning	Habiba Hussain	03/06/2024	07/06/2024
21	CU40C	Network Infrastructure Management	Rajeev Chatterjee	03/06/2024	14/06/2024
22	PS20F	Advanced Pedagogy	Sagarika Pal	03/06/2024	14/06/2024
23	PS17C	NBA Accreditation and SAR preparation	Rayapati Subbarao	10/06/2024	14/06/2024
24	CU26B	Introduction to Image Processing	Indrajit Saha	10/06/2024	14/06/2024
25	CU44A	Arc Welding Processes	Dipankar Bose	10/06/2024	14/06/2024
26	CU45C	Digital Logic with CMOS IC Design	Niladri Pratap Maity	10/06/2024	14/06/2024
27	CU46C	Data Science in Engineering	Nirmal Kumar Mandal	10/06/2024	14/06/2024
28	CU47F	Environmental Pollution and Public Health	Sailendra Nath Mandal	10/06/2024	14/06/2024
29	CU48C	Non-Conventional Energy	Subrata Chattopadhyay	10/06/2024	14/06/2024

30	CU49B	Functional Textiles and Protections	Subrata Mondal	10/06/2024	14/06/2024
31	SPL06 (Inhouse MITACSC)	OBE (CO PO Mapping, Rubrics, Question Paper setting etc.)	Urmila Kar	11/06/2024	15/06/2024
32	CU50C	Principles of Waste Management	Naveen BP	17/06/2024	21/06/2024
33	CU51C	Application of finite element method in engineering using advanced software	Mithu Dey	17/06/2024	28/06/2024
34	CU52F	Fundamentals of RC Design – Limit State Method and Beyond	Santanu Bhanja	17/06/2024	28/06/2024
35	CU53B	Fundamentals of Data Science	Indrajit Saha	24/06/2024	28/06/2024
36	CU54B	Discrete Mathematics for Engineering	Kingsuk Giri	24/06/2024	28/06/2024
37	CU55C	Geotechnical Investigation Laboratory Testing	Naveen BP	24/06/2024	28/06/2024
38	PS22F	Thesis and Research paper writing	Rayapati Subbarao	24/06/2024	05/07/2024
39	CU58B	MATLAB Applications in Engineering	Soumitra Kumar Mandal	24/06/2024	05/07/2024
40	SPL14C	Induction Training	Sukanta Kumar Naskar	24/06/2024	05/07/2024
41	PS23A	Advanced Pedagogy	Urmila Kar	24/06/2024	05/07/2024
42	SPL05 (Inhouse ICFAI)	Essentials of Outcome Based Education	Habiba Hussain	09/07/2024	13/07/2024
43	PS24B	Student mentorship for holistic development	Habiba Hussain	01/07/2024	05/07/2024
44	CU59B	Introduction to Software-Defined Networking (SDN)	Rajeev Chatterjee	08/07/2024	12/07/2024
45	CU60B	Wastwater Treatment – Regulatory Trends and technical solution	Sailendra Nath Mandal	01/07/2024	04/07/2024
46	SPL12(Inhose EINSTAIN)	Effective Teaching using Courseware	Subrata Chattopadhyay	02/07/2024	05/07/2024
47	PS26C	Student Assessment and Evaluation	Dipankar Bose	08/07/2024	12/07/2024
48	PS25C	Research and Publication Ethics	Niladri Pratap Maity	08/07/2024	12-07-2024
49	CU61A	Artificial Intelligence (AI) in Civil Engineering	Naveen BP	08/07/2024	12-07-2024
50	PS27C	Community Development through Technical Institutes	Sheela Yadav Rai	08/07/2024	12/07/2024
51	PS28C	Approaches in developing curriculum	Sukanta Kumar Naskar	15/07/2024	19/07/2024
52	PS29C	Effective Teaching and Research	Indrajit Saha	22/07/2024	26/07/2024
53	CU68C	Analysis and Design of structures using latest version of a Structural Engineering Software	Santanu Bhanja	22/07/2024	26/07/2024
54	CU69C	Geotechnical Investigation Field and Laboratory Testing	Naveen BP	22/07/2024	26/07/2024
55	CU71C	Development of Laboratory Instruction and Manual	Subrata Mondal	22/07/2024	26/07/2024
56	CU72B	Electronioc Devices and High-K Dielectric Materials	Niladri Pratap Maity	22/07/2024	26/07/2024
57	PS49C	Use of Advanced Teaching Tool in Teaching	Mithu Dey	29/07/2024	02/08/2024
58	SPL13 (Inhouse RCCIIT)	Designing OBE Curriculum under Autonomy	Urmila Kar	29/07/2024	02/08/2024
59	CU75C	Fundamental and Applications of Nanomaterials	Subrata Mondal	29/07/2024	09/08/2024
60	CU76C	Deep Learning using PYTHON	Chandan Chakraborty	29/07/2024	09/08/2024
61	PS32C	Essentials of resilient pedagogy	Habiba Hussain	05/08/2024	09/08/2024
62	PS34C	Outcome Based Accreditation and NBA	Urmila Kar	05/08/2024	09/08/2024
63	PS35A	Advanced Pedagogy	Nirmal Kumar Mandal	05/08/2024	16-08-2024
64	CU77B	Machine Learning for Civil Engineering	Naveen BP	12/08/2024	23/08/2024
65	CU81C	Word Processing with LaTeX	Kinsuk Giri	12/08/2024	16/08/2024

66	CU80C	Air, Water Pollution – Impact on Environment & Public Health	Sailendra Nath Mandal	12/08/2024	16/08/2024
67	CU82B	Hydraulics and Hydraulic Machines	Dipankar Bose	19/08/2024	30/08/2023
68	CU83B	Advanced Industrial Automation	Sagarika Pal	19/08/2024	23/08/2024
69	MGT06C	Managerial Skills for Technical Teachers and staff	Sukanta Kumar Naskar	19/08/2024	23/08/2024
70	CU87B	Machine Learning with R Programming	Chandan Chakraborty	26/08/2024	30/08/2024
71	CU88C	AutoCAD for Engineers	Mithu Dey	26/08/2024	30/08/2024
72	PS37B	Writing research paper and Ph.D thesis	Rayapati Subbarao	26/08/2024	30/08/2024
73	PS33C	Engineering Pedagogy	Nirmal Kumar Mandal	26/08/2024	30/08/2024
74	CU84B	Introduction to Data Security	Indrajit Saha	26/08/2024	30/08/2024

## Invited Lectures delivered by Prof. Debi Prasad Mishra, Director, NITTTR Kolkata

- Delivering a Lecture as a Resource Person on “Innovation and Bhagwad Gita” at Indira Gandhi National Open University on 15-16 May 2024.
- Chief Guest for the “Matdan Hamara Rastiya Katab” at Bara Bazar Library and Ram Sarad Kothari Smiti Sangh on 18<sup>th</sup> May 2024.
- Delivering a Lecture as a speaker on Short Term Course (online) on “Craft of Leadership” at Malaviya Mission Teacher Training Centre at Mizoram University on 25<sup>th</sup> May 2024.
- Eminent Speaker for the National Webinar on The Indian Knowledge System: Various Aspects “Bharatiya Paramparik Gyan Ki Jhalak” at Swami Vivekanand Govt. P.G. College Neemuch (M.P.) on 27<sup>th</sup> May 2024.
- Guest of Honour in the Workshop “Role of Science and Technology in Indian Knowledge System” at IIT Kharagpur on 15-16<sup>th</sup> June 2024.
- Chief Guest for the “Innovation And Bhagwad Gita” at IGNOU, Regional Centre, Kolkata on 1<sup>st</sup> July 2024.
- Chief Guest for “Two days National “Seminar on Indian Knowledge System” organized by NITTTR Kolkata, in collaboration with Maulana Abul Kalam Azad Institute of Asian Studies Kolkata and Akhil Bhartiya Rashtriya Shaikshik Mahasangh on 5 & 6<sup>th</sup> July 2024.
- Delivered lecture as Inaugurator at 5 Days FDP on “Essential of Outcomes Based Education” at National Institute of Technical Teachers’ Training & Research Kolkata from 9<sup>th</sup> July 2024 to 13<sup>th</sup> July, 2024.
- Delivering Lecture at “Implementation of Multiple Entry and Multiple Exit and academic Bank of Credit (ABC) in context of NEP 2020” organized by AICTE on 20<sup>th</sup> July, 2024 at New Delhi.
- Delivering Lecture on ‘Waste to Energy’ at AICTE- VAANI workshop held at NITTTR Kolkata, Bhubaneswar Extension center on 29<sup>th</sup> and 30<sup>th</sup> July, 2024.
- Delivering Lecture on ‘Indian Traditional Knowledge and Science Society” organized by Balasore College of Engineering And Technology” as Guest of Honour on 07<sup>th</sup> August, 2024
- Delivered an Inaugural Speech on the Industrial Academia Conclave 2024, organized by the National Institute of Technical Teachers’ Training and Research Kolkata at the NITTTR Kolkata Extension Center, Bhubaneswar, on 8<sup>th</sup> August 2024.
- Delivering Lecture on the occasion of National Space Day on “Introduction to Astronomy and Astrology in ancient India” organized by The Institute of Advance Education and Research, Kolkata as Chief Guest on 23<sup>rd</sup> August, 2024.
- Delivering Lecture on “The Wonder: That was Bharatiya Traditional Knowledge System” in Madan Mohan Malaviya Teachers’ Training Programme at Utkal University, Odisha on 31<sup>st</sup> August, 2024.



## Publications

1. Susmita Singh, **Kinsuk Giri** and Adrita Chaudhury, "A Computational Study on the Modelling of the Flow Field Plates of a Polymer Electrolyte Membrane Fuel Cell", *Journal of Nano- Electron. Phys.*, Vol. 16, No 4, 04013, 2024
2. Tuhin K. Biswas and **Kinsuk Giri**, "Identifying Outliers Using Voronoi Circles", *Lecture Notes in Networks and Systems, Proceedings of the 12<sup>th</sup> International Conference on Soft Computing for Problem Solving, Springer, Volume 1, page 551-562, 2024*
3. **Dey, M.** and Alam, S. (2024) ,"Performance based plastic design of friction damped RC frames", *Advances in Concrete Construction*, 17(4): 221-232. DOI: <https://doi.org/10.12989/acc.2024.17.4.221>
4. **Dey, M.**, and Chakraborty, S. (2024), "Seismic performance of reinforced concrete building frames on sloping ground retrofitted with steel and reinforced concrete jacketing", [\*Innovative Infrastructure Solutions\*](#) , 9(11) DOI:[10.1007/s41062-024-01764-3](https://doi.org/10.1007/s41062-024-01764-3)
5. **Niladri Pratap Maity et. al.**, "Performance analysis of FEM simulated different shaped membranes based capacitive MEMS sensor", *Microsystem Technologies (Springer)*, Online published, 24<sup>th</sup> August, 2024, <https://doi.org/10.1007/s00542-024-05750-8>.
6. **Niladri Pratap Maity et. al.**, "Novel double deck gate field plate structure on a normally-off AlGaIn/GaN HEMT- An extensive analysis", *Micro and Nanostructure (Elsevier)*, vol. 192, August 2024, <https://doi.org/10.1016/j.micna.2024.207874>.
7. **Niladri Pratap Maity et. al.**, "Metal gate work function engineering for nano-scaled trigate FinFET", *Microsystem Technologies (Springer)*, Online published, 28<sup>th</sup> June, 2024, <https://doi.org/10.1007/s00542-024-05706-y>.
8. Suman Kumar Bhattacharyya, **Sagarika Pal**; Design and performance analysis of decision tree learning model for classification of dry and cooked rice samples; *European Food Research and Technology*; <https://doi.org/10.1007/s00217-024-04555-3>. Published 07 May 2024. Volume 250; Issue 10; Pages 2529-2544; Publisher Springer. SCIE; Journal Impact Factor 3.4 (2023).
9. Soudeep Chowdhury, **Sagarika Pal** and Subrata Chattopadhyay; Development of Remote Environmental Air Monitoring System Using LabVIEW and IoT; 3<sup>rd</sup> International Conference on Advanced Communication and Intelligent Systems ICASIS 2024; May 16-17, 2024, Organized by, Jawaharlal Nehru University, New Delhi, India, Warsaw Management University, Poland and ADSRS Education and Research Foundation, India. Publication Partner Springer Nature.
10. **Rayapati Subbarao** 'Studies on the flow capture through blade rows in a two-stage axial flow turbine', *Lecture Notes in Mechanical Engineering*, Krishna Mohan Singh et al. (Eds): Fluid Mechanics and Fluid Power, Volume 8, pp. 143-160, July 2024.
11. Geetika Salwan, **Rayapati Subbarao** and Subrata Mondal, 'Experimental Studies on Ti-6Al-4V Alloy for Its Suitability in Gas Turbine Engines', *Lecture Notes in Mechanical Engineering*, Krishna Mohan Singh et al. (Eds): Fluid Mechanics and Fluid Power, Volume 8, pp. 77-88, July 2024.
12. Geetika Salwan, **Rayapati Subbarao** and Subrata Mondal, 'Investigation of Mechanical Properties and Wear Behavior of Nickel-Based Superalloys Synthesized by Powder Metallurgy', *JOM, The Minerals, Metals & Materials Society*, <https://doi.org/10.1007/s11837-024-06800-2>, 2024.

## Activities of Learning Resource Centre (May- August 2024)

Activities of LRC are jotted below-

### i. List of educational resources developed/video coverage during the period

- a) Educational Video Film – 1
- b) Video coverage of the Institutional program – 04

### ii. Photography of the events

During the above-mentioned period following Thirteen (13) events were covered:



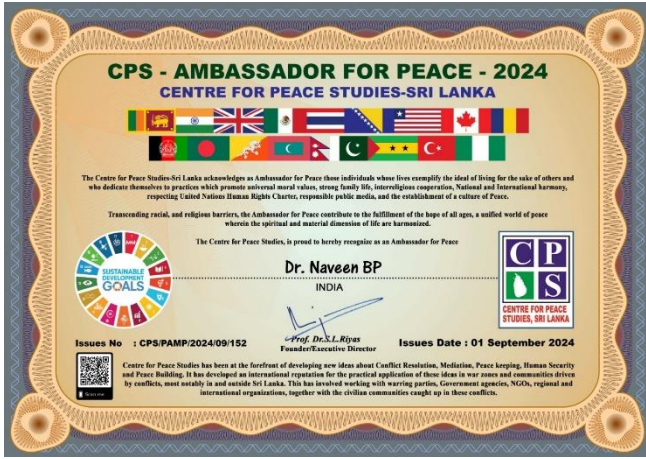
- a) Observing World Environment Day on 5<sup>th</sup> June 2024
- b) Launching of NITTR Kolkata IRINS portal on June 11, 2024
- c) Observing International Yoga Day on 21<sup>st</sup> June 2024
- d) Health Awareness Campaign to commemorate National Doctors' Day on 3<sup>rd</sup> July 2024
- e) International Conference on Bharatiya Traditional Knowledge System (BTKS) 2024 during July 26-27, 2024
- f) Observing Anti Ragging Day 12<sup>th</sup> August 2024
- g) Celebrating 78<sup>th</sup> Independence Day on 15<sup>th</sup> August 2024
- h) Observation National Space Day on August 23, 2024

**iii) Any other**

Beside this, one on-line / hybrid mode STTP and Fifteen (15) numbers official meeting conducted from Smart-Classroom.

## Miscellaneous

Prof. Naveen B.P. has been selected for the "Peace Ambassador Award 2024" from the Centre for Peace Studies Sri Lanka. This prestigious award recognizes exemplary service and contribution to Civil Engineering Education. As a Peace Ambassador, he will join a distinguished network of global leaders working towards the United Nations Sustainable Development Goals (UNSDG) 2030.







## NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH, KOLKATA

Block-FC, Sector-III, Salt Lake City, Kolkata-700106

Phone: +91-33-66251900, Email: [ds@nitttrkol.ac.in](mailto:ds@nitttrkol.ac.in)

Visit us at [www.nitttrkol.ac.in](http://www.nitttrkol.ac.in)

## “Damyata Datta Dayadhvam”

[Be self-controlled, give, be compassionate.]

-The Upanishads



### Distance:

- From Howrah Railway Station: **42 min** (8.1 km) via Maniktala Main Road
- From Sealdah Station: **26 min** (7.4 km) via Beliaghata Main Road and Broadway Road
- From Kolkata Railway Station: **16 min** (4.8 km) via Canal Circular Road
- From Shalimar Station: **38 min** (18.8 km) via Parama Island Flyover
- From Netaji Subhas Chandra Bose International Airport: **27 min** (11.5 km) via Kazi Nazrul Islam Sarani/VIP Road

Google map link: <https://goo.gl/maps/F7gssJoeqxSvffqf9>



### Newsletter Committee, NITTTR Kolkata

- Dr. Samir Roy, Chairman
- Dr. Habiba Hussain, Member
- Shri Utpal Chakraborty, Member
- Layout and cover design and DTP work, Shri Utpal Chakraborty
- Photo coverage, Learning Resource Centre