

Innovation and change will keep you relevant as per the demand of time : Prof. C.C Tripathi

The Cliff News ● Bhopal

National Institute of Technical Teachers Training and Research (NITTTR,) Bhopal was established by the Government of India on 7th April, 1965 with the mandate to work for training of technical teachers in the country. This institute recently celebrated its 59th foundation day. There are four such institutes in the country. In the last one year, NITTTR Bhopal has made a mark, through its work style for capacity building programmes in the country. About a year back, Prof. C.C. Tripathi had joined the institute as Director. He is energetic, hardworking, determined, strong believer of Indian culture and tradition, and is consistently committed towards putting efforts in the interest of the institution, society, and country. The Director said that he intends to do something new and innovative every day in NITTTR Bhopal. In the last one year, this institute has taken many new positive initiatives. The Editor of The Cliff News met Prof.C.C.Tripathi .Let's take a glimpse of all those activities, from Prof. CC Tripathi.

The Cliff News: - A warm welcome to you from The Cliff News and we would like to know about your family background and education?

Director:My family background is from rural area. After studying till intermediate, I went to Banaras to pursue my B.Sc and M.Sc (Physics) from Banaras Hindu University. After that I

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completed M. Tech from BITS Pilani & PhD from Kurukshetra University.

The Cliff News: - Please share your views on The National Education Policy

Director:If I say in one sentence, then for the first time India has launched such an education policy, the centre of the policy rests in Indianness, emphasising its heritage and culture. Through this policy, we will get an opportunity to showcase the rich legacy for Indian traditional knowledge and philosophy that was much ahead of its time and can proclaim India as the Vishwa Guru.

The Cliff News: - Education in mother tongue has been talked about in the National Education Policy2020, what can be its results?

Director:This is a positive initiative. When we learn the subject in the mother tongue, it is the primary language for us, we have deep understanding capabilities and the brain will be saved from the process of translation. On the contrary, when we learn any principle or subject in our second or third language apart from our mother tongue, first our brain translates it to our mother tongue and then accepts it. This is the reason for the brain's receptive capacity is high-



Director Prof. C.C Tripathi

est in the mother tongue. In many countries of the world, classroom teaching is done in different regional languages, be it French, German, Russian or Chinese. Today with NEP-2020, the availability of technical and medical studies with books in regional languages is also being ensured.

The Cliff News: - NITTTR Bhopal has made its own identity in the field of technical education. What are the new initiatives of NITTTR Bhopal?

Director: Centre of Excellence has been established in NITTTR Bhopal. Through this, NITTTR, Bhopal is going to establish new dimen-

sions in the field of teaching, training, and research. According to the New Education Policy 2020, this centre will also meet the requirements of human resources for the industry in specialized labs. In this center, more than 300 graduate level students of interdisciplinary subjects will be able to simultaneously get the expected results on real life engineering problems through simulation tools and high-end hardware. In this center, students will be able to do research, summer internship of 4 to 6 weeks and 6 months. Batches of 120-120 students are taking training in this center. The Institute has also executed MoU's with various industries so that both the Institute and the industry can be benefited from the Center of Excellence. Our teachers have been given new research projects. Training and research work will also be done on future technologies like drones, GPS, augmented and virtual reality. Green Energy Lab is also being established.

The Cliff News: - Center of Experiential Learning is also being established in the institute, which is an innovative initiative in itself, what is its objective?

Director:NITTTR Bhopal is going to start Centre

for Experiential Learning on its campus. It will be a national level platform where experiential learning aids, tools, prototypes can be developed in physical form for engineering students, so that experiential pedagogical practices can be integrated into a teaching model to enable the multidisciplinary education. In this center, teachers from all over the country will be able to work with their unique ideas in turn rendering development of T-L. The basic objective of starting this center is to create such educational material in physical form, through which teachers can also give practical knowledge to the students while teaching in the classroom. At present, there is a need for a laboratory to explain various subjects. Now this center can prove to be helpful in taking the laboratory itself to the classroom. Due to this, there will be a big change in the teaching skills of the teachers, because at the time of classroom teaching, students can be easily explained by giving practical knowledge through these modules. Many changes are taking place from the National Education Policy-2020 & developing teaching skills has become most important for this purpose center is being started. This Centre will help in experiencing the subject knowledge as well as gaining expertise (**Continuie page 7**)

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to solve the contemporary problems of the subject.

The Cliff News: - There are four NITTTR's in the country Bhopal, Chandigarh, Chennai and Kolkata. Which according to you is performing the best among them?

Director: We do not have any kind of ranking here; all the four institutes are doing excellent work in their respective fields. We keep getting feedback from various stake holders from time to time whether we are on right track or need some improvement or change as per time. We do all our work accordingly.

The Cliff News: - NITTTR Bhopal is providing training work on various topics covered under Pradhan Mantri Gati Shakti Yojana, how will it be useful?

Director: In India, logistics is a very prominent sector contributing to around 14% of India's GDP as compared to 8% in developed countries. Therefore, there is an urgent need for improvement in the operation of this sector. Therefore, Honourable Prime Minister Shri Narendra Modi ji has launched the National Master Plan for Multi-Modal Connectivity named PM Gati Shakti to improve the logistics. Through this scheme, the supply chain network of the country will be operated in a better way. Increasing employment opportunities, to make the local manufacturer also competitive at the world level, developing new economic zones, adopting holistic approach in modern infrastructure, speeding up the country's economy, improving existing transport infrastructure in the country, increasing mutual coordination in resources. Emphasizing the development of the country's infrastructure, projects etc. National Meet cum Workshop is being organized on this subject on 18th and 19th May 2023 at NITTTR Bhopal. Expert from all over the country will discuss on this topic. The objective of this workshop is to prepare teachers by preparing 14 teacher training programs for skill development.

The Cliff News: - NITTTR Bhopal is known across the country for curriculum development, which projects are currently underway?

Director: NITTTR Bhopal has made a lot of innovations in Curriculum Development. Presently NITTTR Bhopal is working on outcome-based curriculum development for 18 Diploma Programs of SBTE, Patna, to improve the technical education system of Bihar State. Inclusion in the curriculum will create skilled man-power in the country. Earlier we have also designed curriculum for Gujarat, Maharashtra and Chhattisgarh.

The Cliff News: - What are the features of the new academic calendar of NITTTR which is applicable from 1st April?

Director: The new academic calendar has been designed for the needs of the teachers. Emerging Technology, Pedagogy, Millets, PM Gati Shakti, G-20, Education Technology, Official Language programs have been included in the academic calendar. Joint training program is also planned with Commonwealth of Learning Centre, New Delhi. Women Empowerment, ITEC training programs for foreign teachers are also being organized.

The Cliff News: - Various activities of NITTTR Bhopal are known through newspapers/electronic media, social media. Recently NITTTR has made a short film on Millets, will do any more work like this in future?

Director: NITTTR Bhopal is known for its educational films/video production and MOOCs programs. MOOCs programs are also available on the SWAYAM platform. NITTTR has many achievements in this field, the institute has so far created about 1500 educational resources. The year 2023 has been declared as the "International Year of Millets" by unanimously accepting a proposal presented by India by the United Nations General Assembly. NITTTR, Bhopal, taking an innovative initiative for its social responsibility, has produced a short film on the importance of Millets. NITTTR Bhopal has organized lectures by experts from all over the country on Millets and its related aspects. It is our responsibility to aware the next generations about Millets. This film will also be shown in the training programs organized by NITTTR throughout the year for technical teachers across the country, so that maximum awareness and publicity can be spread about Millets. In this context, letters have also been written to various educational/other institutions, urging them to screen this film for their students and staff. Such innovative work continues in the institution.

The Cliff News: - Recently, NITTTR Bhopal has signed MoUs with various institutions, what is their purpose, how will it help the functioning of the NITTTR?

Director: In the National Education Policy, multidisciplinary education, sharing of resources and expertise has also been discussed, now we have to work beyond the boundaries of our subjects, only then new research can be done in the interest of the society. We all will move ahead by taking help from each other and ensuring quality.

The Cliff News: - What are the challenges facing the country in higher education?

Director: The education system, running on the same pattern, was unable to provide various opportunities to the students. Our education system was limited to preparing doctors, engineers, scientists, chartered accountants, teachers. We may have lagged in the field of skill development. Sincere efforts are being made in this direction. Let the children do excellent work according to their wish. The National Education Policy will be able to answer all these challenges, there is a need to implement this policy properly.

The Cliff News: - Today many reports say that our engineers are not employable, what is the reason for this and is there any need for some improvement in the curriculum for this problem?

Director: It's really a matter of concern. Most of the engineering graduates who are coming have some shortcoming in their ability, knowledge and skills according to the needs of the industry. That is why both teachers and students will have to take the labs and workshop work seriously for their practical knowledge. Latest technology must be included in the curriculum. So that industry ready engineers can be prepared. It is important to develop skills and competencies in our engineering graduates.

The Cliff News: - For the last few days, there is a lot of discussion on startups and entrepreneurship in the country, how do you see this initiative? **Director:** This is an important step; our young friends are getting new opportunities from this and are also becoming successful. Today, instead of job seekers, students will also have to think in the direction of becoming job providers by starting new ventures. There are many schemes of the government in this direction, taking advantage of which, they can move in the direction of start-up and contribute to the country's GDP.

The Cliff News: - Sir you have experience of working in industry also what difference do you find in work culture in academia and industry?

Director: In education world, there is more focus on teaching, learning, & research but in industry there is time bound work which is more business focused. In education world people are more theoretical but in industry there is more practical and problem-solving approach.

The Cliff News: - The National Education Policy has arrived, there are many confusions about its implementation, what do you think?

Director: National Education Policy is an important document, its implementation is the moral responsibility of all of us, for this there is a need to change the mindset of the teachers. NITTTR is doing training programs every month on the implementation of the National Education Policy. We all can implement it easily.

The Cliff News: - On what basis do you evaluate the teachers who come to you for training?

Director: We take a lot of assignments and post tests in training & teachers take them very seriously. All the teachers complete them honestly with hard work in a timely manner.

The Cliff News: - NITTTR Bhopal has just won the championship in sports, what are the sports facilities available here? In NITTTR Bhopal, along with sports, many activities of Yoga, Gym and wellness are done regularly. All the facilities in the hostels are excellent.

The Cliff News: - NITTTR has built a gallery in its campus with biographies of writers of Indian languages and ancient and modern scientists of the country, what is its purpose?

Director: Most of the people of the world have a lot of knowledge about western scientists. A lot is taught on this subject even in schools and colleges. But it is a matter of great regret that even today the world knows very little about the great scientists of ancient India. Religion, Philosophy, Science, Vastu, Astrology, Astronomy, Architecture, Dance, Music, etc. all kinds of knowledge have originated in India. In India, since ancient times, great importance has been given to knowledge. Indian contribution in all these fields is unique. There are many such inventions of the modern era, which are based on the findings of Indian researches. Students and teachers of our country should have this information so that today's young generation can recognize our rich Indian scientific tradition and take pride in it.

The Cliff News: - Along with NITTTR Bhopal, you have also held the additional charge of Director of School of Planning and Architecture for a long time and you have successfully run both the national institutes together? What is the secret of this?

Director: I think the vision of the leader should be clear and the focus should be on solutions instead of problems. Your staff have expectations and hopes from you, we should make sincere efforts to solve their problems. So, you will never feel the burden of work and you will enjoy the work. We have tried to bring a cultural change in the institute. Today everyone is working with positive thinking.

The Cliff News: - What is your message for the engineering students?

Director: Keep developing your skills and abilities as per the demand of the time. Work sincerely in the lab, workshop, do the industrial training and project work very sincerely. An engineer should have this quality that he can apply his knowledge in the industry. Become a lifelong learner only then you will be able to stay relevant and do justice to your profession.

The Cliff News: - A person who is at the top position of an organization sometimes faces a lot of challenges and sometimes has to take tough decisions. What do you believe in this context?

Director: If your vision is clear and the goal is set, then you do not have any problem in taking decisions. Every person in the institute is unique, every person has some specialties and there may be some shortcomings also. We can make him useful for the institute by recognizing his abilities and working very well with him. I have done many such experiments in the past as a director.

The Cliff News: - sometimes decisions taken by the person at the top position of an institution come in the definition of right and wrong. What do you think?

Director: There is so much self-awareness inside all of us that what is wrong and what is right. This is the great tradition of Indian culture. This is also the culture of our country. Keep walking on the path of truth, you will get happiness, peace, and joy. It is the responsibility of the person sitting at the top position of the institute to keep the interest of the institute paramount. If you have to take the harshest decision in the interest of the institution, then take it.

The Cliff News: - What would you like to say about choosing a career for the youth?

Director: Today's youth is very aware and alert. Today is the age of information, he knows very well what he must do. We just must trust him and appreciate his right work. Let him choose the subject of his interest, there is a lot of scope everywhere. With time the scope has become very wide. Earlier the scope was limited, today there are immense possibilities everywhere. Do not force your aspirations on children but always be aware of their activities.

The Cliff News: - What is the criteria of success according to you?

Director: I strongly believe that there is no fixed criteria of success which should make you thrilled and happy. Happiness is not in amassing a lot but in living a balanced life with a sense of honesty, human values, compassion, universal brotherhood, and harmony with nature. It is more important than success that you become a good person so that people will remember you even after position, money, and power.