NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH Taramani, Chennai – 600 113

Minutes of the 55th Meeting of the Board of Governors (through Hybrid mode) held on 22nd February 2024, Thursday at 03.30 p.m. in the Board Room of NITTTR, Chennai

The following	Members were present	at the Meeting.
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O1 Prof. V. S. S. Kumar
Chairman, Board of Governors
NITTTR Chennai Society
[Former VC, JNTU, Kakinada]

02 Mr. M M Singh
Director (T)
TS-IV, Ministry of Education,
Department of Higher Education,
New Delhi – 110 001

Representative of
JS (TEL)

O3 Mr. Anil Kumar
Director - Finance
Integrated Finance Division
Ministry of Education,
Department of Higher Education,
New Delhi – 110 001

Representative of
JSFA

O4 **Dr. Ramesh Unnikrishnan** Member Advisor-II Training and Learning Bureau

All India Council for Technical Education Nelson Mandela Road, Vasant Kunj, New Delhi – 110 070.

05 Dr. R. Santhakumar

NITTTR, Chennai

Professor & Head
Department of Civil & Environmental Engineering
NITTTR Chennai

Member
(Faculty
Representative)

Of Dr. Usha Natesan Member-Secretary Director

The above Board members have attended the Board meeting through video conferencing except Dr. R. Santhakumar who have attended the Board meeting through contact mode.

At the outset, Prof. V.S.S. Kumar, Chairman welcomed all the members of the Board to the 55th Meeting of the Board of Governors. Then Dr. Usha Natesan, Member-Secretary briefed about the major activities / achievements of NITTTR Chennai during 1st December 2023 to 31st January 2024. The details are enclosed as Annexure-1.

The items on the agenda were taken up for consideration, deliberations and decisions as under:

Item No. BoG.55.01.01

To consider and confirm the minutes of 54th Meeting of the BoG held on 27.12.2023

Res. No. BoG.55.01.01/2023-24

The Board confirmed and approved the minutes of the 54th Meeting of the BoG held on 27.12.2023.

Item No.BoG.55.02.01

To report the action taken on the various resolution passed at 54th Meeting of the BoG held on 27.12.2023

Res. No. BoG.55.02.01/2023-24

The Board noted the action taken by the Institute on the various resolutions passed in the 54th Meeting of the BoG held on 27.12.2023 and approved the same.

Item No.BoG.55.03.01

To consider the Agenda and Notes being placed before the 52nd Meeting of the Finance Committee

Res. No. BoG.55.03.01/2023-24

The Board discussed the recommendations made by the Finance Committee(FC) on the agenda items placed in the 52nd Meeting of the FC held on 22.02.2024 as listed below and separate minutes has been prepared based on the discussion during the meeting of the Finance Committee.

Item No.	Items
52.01.01	To consider and confirm the minutes of the 51st Meeting of the Finance Committee held on 27.12.2023
52.02.01	To report about the action taken on the various resolutions passed at the 51 st Meeting of the Finance Committee held on 27.12.2023
52.02.02	To report about the details regarding grants received and progress of expenditure of the Institute up to 31.01.2024
52.03.01	To consider and approve the Minutes of the Building Committee Meeting
52.03.02	To consider and approve the engagement of Consultant (Accounts) on contract basis
52.03.03	To consider and approve the distribution of the NITTT Coordinating expenditure
52.04.01	To consider any c her item(s) with the permission of the Chair

Item No.BoG.55.04.01

To report the activities of the Institute carried out from 1st December 2023 to 31st January 2024

Res. No. BoG.55.04.01/2023-24

The Board went through the activities of the Institute carried out during 1st December 2023 to 31st January 2024 and noted the same.

Item No.BoG.55.04.02

To report on the MoUs signed between NITTTR Chennai and various Institutions

Res. No. BoG.55.04.02/2023-24

The Board noted the MoUs signed between NITTTR Chennal and various Institutions.

Item No.BoG.55.04.03

To report the joining of newly recruited Staff Members

Res. No. BoG.55.04.03/2023-24

The Board noted the joining of newly recruited Staff Members.

Item No.BoG.55.05.01

To consider and approve the quarterly target achieved in MoU for the period from 1st October 2023 to 31st December 2023

Res. No. BoG.55.05.01/2023-24

The Board went through the performance evaluation parameters and targets achieved for the quarterly period from 1st October to 31st December 2023 and approved the same.

The meeting ended at 03.45 p.m. with vote of thanks to the Chair.

DIRECTOR / Member-Secretary

CHAIRMAN, Board of Governors NITTTR Chennai Society

NATIONAL INSTITUTE OF

TECHNICAL TEACHERS TRAINING AND RESEARCH, CHENNAI

Institute Activities from 1st December 2023 to 31st January 2024

Revenue generated (1st December 2023 to 31st January 2024) : ₹. 53.36 Lakhs

Total Number of Participants Trained : 899

- 1. Proposal submitted/ awarded for Sponsored Research Projects/ conducting Training Programmes
- Fabrication of solid propellants using slurry based 3D printing and experimental investigations on minimizing curing time using various heat sources, 2023, DRDO for two years ₹.42.94 Lakhs.
- Project proposal submitted on Design and development of virtual reality applications on road safety for youth motorcycle road uses, HEFA.
- Project proposal submitted on Intelligent Assessment of pavement condition rating using machine unlearning techniques, MEITY.
- Project proposal submitted on Empowering Mobility: Unveiling an Affordable AI-Driven Smart Electric Wheelchair with Speech Recognition and IoT Brilliance, SERB.
- AICTE-ATAL funded FDP on Towards Factory of Future: Robots' Perspective, 29th January to 3rd February 2024,₹.2.5 Lakhs.

2. Patents

- Dr.E.Balasubramanian, Associate Professor, Department of Mechanical Engineering has been granted, Adjustable Frame Unmanned Amphibious Aerial Vehicle with Extended Floats (Patent No.480724)
- Dr.E.S.M.Suresh, Professor, Department of Civil and Environmental Engineering has application for A Method of Improving Mechanical Properties of Recycled Aggregate Concrete Through Partial Replacement

3. Publications

Books

- G.A.Rathy, VHDL and Arduino Board Programming (FPGA SPARTAN 3E & ARDUINO ATMEGA 328 AVR Microcontroller, Mahi Publication, 2023 ISBN: No.978-81-19492-96-1.
- P.Sivasankar and G.A.Rathy, General Programming Approaches to the Circuit Branch Graduates, Mahi Publication, 2023, ISBN No.978-81-19492-90-9.
- P.Sivasankar and T.Shankar, Meta-Heuristics Approaches for Wireless Ad Hoc and Sensor Networks, Mahi Publication, 2023, ISBN No.: 978-81-19492-44-2.

Journals

- E.S.M.Suresh, Peak ground acceleration study for Thiruvananthapuram city using machine learning for sustainable development, Journal of Environmental Protection and Ecology, Vol.24, No.8, 2023,pp.2689–2698, ISSN 1311-5065.
- AravindBalaji, G.A.Rathy, P.Sivasankar and K.Gunasekaran, RF based wearable metal detection glove for Industrial Based Test Bench, International Journal of Advances in Engineering and Management (IJAEM) Vol.5, No.12, 2023, pp.1-6, 2023, ISSN: 2395-5252.
- Bhanu Sankar Ravi, ChepuriMadhukanthi, P.Sivasankar and John Deva Prasanna, A
 Novel Technique to Improve Latency and Response Time of AI Models using
 Serverless Infrastructure, Proceedings of the International Conference on Inventive
 Computation Technologies (ICICT 2023)IEEE Xplore Part Number: CFP23F70-ART;
 ISBN: 979-8-3503-9849.

Conferences

- KR Dheepan, E.S.M.Suresh, T.L., Manivannan T.L., Shrikanthan Experimental Investigation on Clay Soil Stabilization using Ceramic and Granite Powder", Second International Conference on Innovative Research Trends in Civil Engineering, IRTCE 2K23, Sri Sairam Engineering College, Chennai.
- M.Valliammai, J.Mohanraj, Balasubramanian Esakki, Lung-Jieh Yang, Chua-Chin Wang and T.Sridarshini, Nanomaterial Coated Side Polished Fiber for Early Diagnosis of Cardiovascular Disease by Label-freeSensing of Troponin Biomarker, IEEE Conference on Recent Advances in Photonics (WRAP), 2023.

 Surendar Ganesan, Balasubramanian Esakki, Jae Sung Choi, S.Sridevi, C.Sarath Kumar and P.Vikram, Development of Unmanned Surface Vehicle for in-situ Water Quality Measurement Using IoT, International Society of Intelligent Unmanned Systems (ICIUS), 2023.

4. Student Activities

- Mr.MohanrajPanchanathan, I year ME student, Department of Civil and Environmental
 Engineering has been selected to receive a Scholarship for Winter School 2023
 (19.02.2024-01.03.2024) on "Regenerative Urban Futures: Integrated Spatial
 Planning for Resilience"-sponsor is BMBF through DAAD, RWTH Aachen
 University.
- Provided internship to 6 students from Madanapalle Institute of Technology & Science,
 Andra Pradesh.
- First and Second Batch of M.E (IEM) were given **Degree Certificates** on Institute Day Celebrations on 14.12.2023.

5. ITEC Programmes Conducted

 Strengthening Technical and Vocational Education & Training(TVET) Systems to meet the Sustainable Development Goals (SDGs) of the United Nations, January 24
 February 20, 2024.



Sustainable Rural
 Development through
 Entrepreneurship and Innovation,
 January 24 - February 20, 2024.

6. Specially Designed ProgrammesConducted Skill Development Programmes

 3 Days Boot Camp on Game Development using Unreal Engine in association with A Plus Associates LLP.



- 3 DaysBoot Camp on 3D Asset Development with Sketchfab using Blender and Unreal Enginein association with A Plus Associates LLP(Contact mode).
- Battery Maintenance in E-Vehicles in Electronics

Perspective for faculty members of Andhra Pradesh, Industry Professionals, Research Scholars and PG Students from EEE/ECE/EIE and Allied disciplines(Contact mode)

- 3 Days PDP on "The ABCs of Marketing "Battery Maintenance in Everyoname on "Battery Maintenance in Everyoname on 20,01,2014 to 20,02,02012

 Automation" at S.A. College of Arts & Science, Chennai for the Faculty Members, Research Scholars and Industry Professionals of various Institutions
- Drone Manufacturing and Service Technician programme under NSDC PMKVY



4.0's Skill Hub Initiative (Contact mode).

• Drone Manufacturing and Assembly Technician Programme, NSDC PMKVY 4.0's Skill Hub Initiative

Professional Development Programmes

- Outcome Based Education for faculty members of Er. Perumal Manimekalai
 College of Engineering, Hosur (Contact mode).
- "Python Programming" for faculty members of Dr. B.R. Ambedkar Institute of Technology, Port Blair (Contact mode)
- "Train the Trainer Programme" for faculty members of Air Works India
 Engineering Pvt. Ltd., Kochi (Kerala)

 (Contact mode)
- In commemoration of National Mathematics
 Week, PDP on "Effective Teaching of
 Mathematical Applications in Engineering"
 (Online mode)



Online PDP Courses – 18 Nos.

Contact Mode PDP Courses – 10 Nos.

7. Academic activities

Development of New SWAYAM Courses

S. No.	Name of the Course	Credits
1	Clean, Green and Sustainable Technology	3
	Academic Leadership in Cross cultural context of Higher Educational	,
2	Institutions	3
3	English for Research Paper Writing	3
4	Teaching & Learning (TL) Practices for Python Programming	2
5	Research Methodology and IPR	3
6	Outcome Based Assessment	2
7	UAV in Engineering Applications	3
8	National Education Policy and Institutional Building	11
9	Innovation Driven Entrepreneurship	3
10	Mentoring and Counselling Skills for teachers	3
11	Gati Shakti National Masterplan for Multi-modal Connectivity	2
12	Electric Vehicle Technology for Academia	2
12	Electric vernere recimiosegy as a series of the series of	T 1

Panel Discussion was conducted on "Reframing of Professional Development Systems Approach by Members from Academia and Industry" on 14.12.2023 on

part of Institute Day Celebrations.

 Programme Development Committee conducted on 30.01.2024 to identify the based courses from Andhra Pradesh,



was need

Telangana Karnataka, Kerala. DTE officials and their representatives participated.

8. Participation of Faculty Members in National / International Events



Prof.Usha Natesan has been nominated by the MoE and attended CPSC Regional Program on Navigating the Future of TVET: Addressing Challenges and Fostering Positive Change from 4th to 7th December 2023 and participated in the 50th Anniversary celebrations of CPSC in Manila, Philippines.

9. International Conference/ Seminar/ Workshops Conducted

• International Workshop on Quality Assurance through Accreditation in Higher



Education for Developing Countries jointly organised by JSS Science and Technology University, Mysuru and NITTTR Chennai on 8th December 2023.

International Seminar on Ethics

Teaching in Higher Education conducted on 8th January 2024.



10. Webinars Conducted

- Driving Digital Technology in TVET
 conducted on 15.12.2023in collaboration with CPSC(online mode).Dr.Shamsuri Bin
 Abdullah, Director, PUO, Malaysia delivered Opening Remarks in the International
 Webinar on "Driving Digital Technology in TVET" organised by NITTTR Chennai in
 collaboration with CPSC, Philippines and PoliteknikUngku Omar, Malaysia.
- Engineering Education: Challenges and Opportunities for the future on 14.12.2023 (online mode).

11. Interaction with academic and industrial experts

- Officials from the International Partnerships at the US Embassy in Delhi, US Consulate General Chennai and representatives from United Nations GirlUP visited NITTTR Chennai to conduct training for Girl Child and towards fostering international partnerships in the field of technical education and training.
- YB Mr.M.Kulasegaran, Deputy Minister of Laws

 and Institutional Reforms, Prime Minister Department, Malaysia, delivered Special Address during his visit to NITTTR Chennai. Mr.Saravanakumar, Counsel General of Malaysia, along with other experts and officials made visits to the different facilities at NITTTR Chennai and interacted with faculty members.



- Prof.Shannon Chance, Honorary Professor Centre for Engineering Education,
 University College London, UK conducted a session on "Ethics Teaching in Higher Education".
- Dr.Homero Murzi, Chair, ASEE, CEI, Leader of ECLIPS Lab, Virginia Tech, Blacksburg, VA, USA delivered Keynote Address on kickstarting of Diamond Jubilee during Institute Day Celebrations.
- Shri K. Veera Raghava Rao, IAS, Commissioner, Directorate of Technical Education visited NITTTR Chennai and interacted with the faculty members and participants of training programmes.
- Prof.M.V.Kartikeyan, Director, IIITDM Kanchipuram delivered Chief Guest Address on 60th Institution Day Celebrations on 14.12.2023.
- Shri Sivakumar, Regional Director, South Eastern Coastal Region, Central Ground Water Board, Ministry of Jal





Shakti, Goldelivered inaugural address to the participants of PDP on "Greener Technologies for the faculty members of Andra Pradesh.

Dr.Utpal Sharma, Principal,
 Dr.B.R.Ambedkar Institute of Technology,
 Port Blair and Special Secretary (IT) of
 Andaman & Nicobar administration visited

NITTTR Chennai for fostering academic and research collaborations.

Incubator, Chennai delivered inaugural address to the participants of ITEC on Strengthening Technical and Vocational Education & Training (TVET) Systems to meet the Sustainable Development Goals (SDGs) of the United Nations and Sustainable Rural Development through Entrepreneurship and Innovation.



12. Administrative Activities

Under Mission mode Recruitment process

- Two **Associate Professors**at DEMT and DCSE.
- Eight **non-teaching staff** ASO (Librarian)-1, ASO (Sr.Auditor)-1, SSA(Jr.Auditor)-1, Technicians- Civil & Plumbing-1, Electrical-2, R&AC/Mech-2
- A free health camp alongwith Apollo Hospitals for faculty, staff and students was



conducted on 19.12.2023. Also, an **Awareness** talk by **Gynaecologist** has been conducted for the benefit of female employees, students and research scholars.

For World AIDS Dayan awareness
 event(online)was conducted on 1stDecember
 2023alongwitha sensitisation programme of

taking the pledge to prevent stigma and discrimination related to HIV/AIDS.

- Registration has been completed in Central Procurement Portal.
- GeM Training programme was organised and conducted to the staff members.
- On Condemnation of scrap items and Van of Extension Centre Hyderabad through
 MSTC, ₹.641435 and ₹.75000 were generated.
- Attempts are being made to claim damage from New India Assurance company for the damage of the institute property due to Michaung Cyclone

13. Celebration of Days as per Ministry's directives



• The **Bharathiya Bhasha Utsav** was celebrated on 12thDecember 2023 at NITTTR, Chennai with much fanfare. All the members of the staff, faculty, research scholars and students eagerly signed in their mother-tongues as part of the **My Signature in My Mother Tongue**

Campaign. The campaign highlighted the multilingual presence and diversity in India. Following this, singing, speech and essay writing contests were held.



• A Pledge was administered on 25th January 2024 for the 14thNational Voters' Day.



• NITTTR Chennai proudly celebrates the 75th Republic Day, embodying the spirit of unity and progress.

14. **60th Institution Day** was celebrated on 14th December 2023 with grand ceremonies, unveiled the Diamond Jubilee Logo symbolizing six decades of academic excellence.

