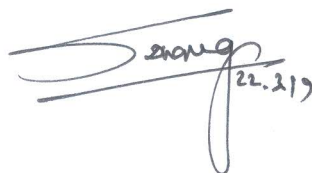## Minutes of the
Twenty Second Meeting of the Academic Council held on Thursday, 14.03.2019
at 03.00 p.m. at NITTTR, Chandigarh

The following were present:

1. Prof. S.S. Pattnaik, Director and Chairman, Academic Council, NITTTR, Sector 26, Chandigarh

2. Prof. Rajive Kumar, Adviser-1, Policy and Academic Planning Bureau All India Council for Technical Education, Nelson Mandela Marg, Vasant Kunj, New-Delhi-110070

3. Dr. MM Malhotra, H. No. 647, Sector-8, Panchkula-134 109 (Haryana)

4. Dr. HK Sardana, Chief Scientist, CSIR-CSIO, Sector 30-C, Chandigarh-160030

5. Dr. Mani Madhukar, IBM, India Pvt. Ltd. Program Manager, Univ. Relations, New Delhi

6. Ms. Anuka Kumar, Leader-Academic Partnerships IBM, India Pvt. Ltd, New Delhi

7. Dr. P.K. Tulsi, Professor, EMGT Department, NITTTR Chandigarh

8. Dr. SS Banwait, Dean, R&D and Professor, Mechanical Engg Dept., NITTTR Chandigarh

9. Dr. AB Gupta, Professor & Head, CDC, NITTTR Chandigarh

10. Dr. Sanjay Kumar Sharma, Professor & Head, Civil Engg Department, NITTTR Chandigarh

11. Dr. Hemant Sood, Professor, Civil Engineering Department, NITTTR Chandigarh

12. Dr. Sunil Dutt, Professor & Head, EMGT Department, NITTTR Chandigarh

13. Dr. BC Choudhary, Professor & Head, Applied Science Dept., NITTTR Chandigarh

14. Dr. Rakesh Wats, Professor & Head, Media Centre, NITTTR Chandigarh

15. Dr. Maitreyee Dutta, Professor IMCO and Head, ETV and CSE Dept., NITTTR Chandigarh

16. Dr. SS Dhami, Professor & Head, Mechanical Engg Department, NITTTR Chandigarh

17. Dr. C Rama Krishna, Professor, Computer Science & Engg Dept., NITTTR Chandigarh

18. Dr. UN Roy, Professor and Head, Rural Development Dept., NITTTR Chandigarh

19. Dr. Lini Mathew, Professor and Head, Electrical Engg Department, NITTTR Chandigarh

20. Er. Ajay K Duggal, Faculty Incharge, IMCO, NITTTR Chandigarh

21. Er. Vinod Kumar, Associate Professor, Civil Engineering Dept., NITTTR Chandigarh

22. Er. Amit Goyal, Assistant Professor, Rural Development Dept., NITTTR Chandigarh

23. Dr. K.C. Lachhwani, Assistant Professor, Applied Science Dept., NITTTR Chandigarh

24. Er. P.K. Singla, Faculty Incharge, Administration, NITTTR Chandigarh

25. Er. Rakesh Kumar Goel, Estate Officer, NITTTR Chandigarh

26. Mr. Ranbir Singh, Account Officer, NITTTR Chandigarh

27. Dr. S.K. Dhameja, Dean, Academics & International Affairs and Professor and Head EDIC Dept; and Member Secretary, Academic Council, NITTTR Chandigarh

Leave of absence granted to following members:

1. Prof. Jagat Bhushan Nadda, Director Consortium for Educational Communication I.U.A.C. Campus, Aruna Asaf Ali Marg, New Delhi-110067

2. Prof. Karamjeet Singh, Registrar, Panjab University, Sector-14, Chandigarh

3. Dr. BS Pabla, Dean, Extension & Consultancy Services and Professor, Mechanical Engineering Department, NITTTR Chandigarh

4. Dr. Rajesh Mehra, Professor, CDC and Faculty Incharge, Electronics & Communication Engineering Dept., NITTTR Chandigarh

5. Dr. Amod Kumar, Professor, Electronics & Communication Engg Dept., NITTTR Chandigarh

6. Sh. Manmohan Singh, Acting Chief Librarian, NITTTR Chandigarh

7. Dr. Ritula Thakur, Assistant Professor, Electrical Engg Department, NITTTR Chandigarh

ITEM NO. A 22.0   WELCOME TO THE CHAIRMAN AND MEMBERS OF ACADEMIC COUNCIL

Prof SS Pattnaik, Director and Chairman, Academic Council extended welcome to the honourable members of the Academic Council. In his welcome address, he highlighted the hubs created by NITTTR, Chandigarh in various part of the country with a view to provide our participants training on specialized areas and also to provide exposure of different diversities. Prof Pattnaik highlighted the new clustering approach being initiated by the institute in which the group of departments are clubbed together to offer joint training programmes. The departments will offer 50-60% of the courses in their areas of specializations and the remaining 50% as joint training programmes within cluster. Professor Pattnaik hoped that this move will facilitate the lateral mobility of faculty members in other departments as well. Three new Schools; Computing Informatics and Media Engineering; Educational Engineering; and Applied Sciences and Engineering have been setup with this purpose. This year Operational Plan (O.Plan) has been prepared accordingly and the training programmes have been categorized for the benefit of our stakeholders. This will help the participants being aware all type of courses before considering joining a course. The entire process of admission into the short term courses has been digitized and a software has been designed in this regard. This software will take care of the registration of the participants and also the delivery of the certificates. From this O.Plan onwards no physical certificate will be issued to the participants and the participants can download the certificate at their end. In addition, another company has been given the task of maintaining the NITTTR Chandigarh digital learning resource App. The artificial Intelligence inbuilt in this app will also advise the participants regarding the type of books they need to study and can be used for guiding their under-graduate students.

After the welcome address, the Member Secretary, Prof SK Dhameja proceeded with the agenda item wise.

निटर चंडीगढ़

Previous Meeting:

ITEM NO. A 22.1   **TO CONFIRM THE MINUTES OF THE TWENTY FIRST MEETING OF THE ACADEMIC COUNCIL HELD ON 15.03.2018**

As no comments were received, the Hon'ble Members confirmed the minutes of the Twenty First meeting of the Academic Council held on 15.03.2018

[Action: Dean (A&IA)/FIA/IMCO]

ITEM NO. A 22.2/ A.21.2   **TO NOTE THE ACTION TAKEN ON THE DECISIONS MADE IN THE TWENTY FIRST MEETING OF THE ACADEMIC COUNCIL HELD ON 15.03.2018**

The members were apprised of the action taken on various items of the 21st meeting of the Academic Council as per the recommendation/suggestions of the members. As regards the conduct of an impact study regarding the problems faced by specific identified villages and making necessary intervention, Prof. U.N. Roy was advised to takeup the study without further delay as it is delayed by more than 1 year. He was given the option to select the villages out of the 22 districts of Punjab for implementation of Unnat Bharat Abhiyan. Prof. MM Malhotra will provide necessary guidance in this regard. As regards the submission of results by the departments to the Academic Cell, it was made clear to all the five engineering departments to submit the result of ME programme to the Academic Cell within two months after completion of examination failing which necessary disciplinary action will be initiated.

[Action: Prof UN Roy & HODs of ME Running Depts.

ITEM NO. A.22.2/ 21.6   **CONDUCT AND FUNDING OF STUDENTS RELATED ACTIVITIES**

The institute conducted "TechSpardha2k18", a national event, on 5 September 2018 for facilitating the ME/MTech/Technical students of PG level to showcase their knowledge and skills and creativity. 86 participants from all over India participated in this event. 13 teams showcased their products. IBM was the technological partner of this event. First prize of ₹ 50,000/-, second prize of ₹ 30,000/- and third prize of ₹ 20,000/- were given to the winners. TechSpardha is an annual event and now be conducted annually by each department on rotation basis. For the year 2019-20, this event (TechSpardha2K19) has been assigned to Civil Engg Department. TechSpardha2K19 should be conducted two days before the annual day of the institute so that the winners can be awarded during the annual day function.

[Action: HOD-Civil Engg Dept.]

22.3.19   22.3.2019

ITEM NO. A.22.2/ 21.7/ **TO CONSIDER THE PROPOSAL FOR CONDUCT AND FUNDING OF STUDENTS RELATED PROFESSIONAL ACTIVITIES**

The committee comprising of Dean (A&IA), Dean (R&D), Dr Shimi SL and a Professor from IMCO which was constituted by the Director for evolving mechanism for operationalizing the activities of students chapter of professional bodies by all the five engineering departments has already met once and prepared recommendation to be approved by the Director. The student chapter shall start functioning by June 2019.

[Action: Dean-A&IA]

ITEM NO. A.22.2/ 21.8: **CREATION OF A FUND FOR SUPPORTING Ph.D SCHOLARS**

Dean, Research & Development was advised to conduct the meeting as early as possible without further delay to evaluate the modalities for funding of PhD students.

ITEM NO. A.22.9/ 21.9: **ESTABLISHING A BUSINESS INCUBATION CENTRE AT NITTTR, CHANDIGARH**

The institute has already signed a MOU with ROG Foundation to pursue the matter of establishing a Business Incubation Centre at Chandigarh. Shri AK Duggal has been entrusted with this responsibility. One of the IMCO Professors will also be assigned from April 2019 onwards for this purpose. The team will take support of EDIC Department in the operation of business incubator centre as required by the institute.

[Action: Shri AK Duggal]

ITEM NO. A.22.2/ 21.10: **LAUNCHING OF NEW COURSES BY ETV DEPARTMENT**

HOD, ETV Department was advised to evolve the proposal for starting some specialized PG diploma programmes from the academic session 2019-20.
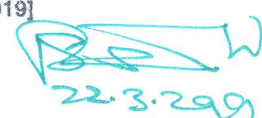
[Action: HOD-ETV]

ITEM NO. A.21.13: **TO SEEK GUIDANCE AND DIRECTIONS FROM THE MEMBERS OF THE ACADEMIC COUNCIL AS PER VARIOUS SCHEMES AND PERSPECTIVE PLANS OF MINISTRY**

The Members advised that suggestions given by the Members of Academic Council, most specifically, the suggestions of external members should be taken up in a considered manner and the action should be initiated as per the decision of Academic Council.

[Action: Dean-A&IA]

Items for Reporting

ITEM NO. A. 22.3 **TO REPORT ABOUT THE ACADEMIC CALENDAR IN RESPECT OF ME PROGRAMMES (BOTH REGULAR AND MODULAR) FOR THE SESSION 2019-2020**

Members of the Academic Council were appraised that the Academic Calendar in respect of ME Programmes (both Regular and Modular) for the Session 2019-20 has been sent to the Panjab University for approval vide institute's letter no. NITTTR/Academic/Cell/11831-32 dated 27.02.2019.

[Action: All concerned HODs/Dean-A&IA]

ITEM NO. A. 22.4 **360 DEGREE FEEDBACK SYSTEM**

AICTE has given a guidelines vide their gazette notification dated 1st March 2019 regarding 360-degree feedback system of all the faculty members working in technical education system. As per gazetted notification documents the calculation of 360-degree feedback score shall be determined on the basis of five parameters namely Teaching process, Student's feedback, Departmental activities, Institute activities, Annual Confidential report and Contribution to society. It was felt in the meeting that the functioning of NITTTR, Chandigarh is different from the conventional engineering colleges. The Director has setup a committee under the Chairpersonship of Prof PK Tulsi to come out a comprehensive documents regarding the implementation of this system. After obtaining approval from the BOG, the same will be implemented in the institute. Prof PK Tulsi informed that since the gazette notification has come very recently she will soon start the process resulting in a comprehensive document.

[Action: Prof. P.K. Tulsi]

ITEM NO. A. 22.5 **Quarterly performance appraisal of Faculty Members**

The submission of quarterly performance appraisal by the faculty members of this institute was discussed in the meeting. Director informed that this appraisal system is already approved by the BOG and all the faculty members have to submit the quarterly performance appraisal report and the activities under taken by them w.e.f. O.Plan 2019-20. The HODs were requested to make sure that their all faculty members comply with this requirement

[Action: HODs & All Faculty Members]

ITEM NO. A. 22.6 **INVITING PROFESSORS FOR PRE-THESIS AND THESIS VIVA-VOCE FOR ME AND PhD STUDENTS**

With a view to maintain quality and to get feedback from senior faculty members, it was decided that for the pre-thesis and thesis viva-voce of ME students and synopsis and thesis defense of Ph.D scholars, faculty not below the rank of a Professor will be invited. However, in case of experts from premium institutes (NITs/IITs/IIMs) faculty of any cadre may be invited. The relevant experience of the faculty invited may also be ensured. The Director emphasised that quality needs to be ensured at all times.

[Action: HODs & All Faculty Members]

ITEM NO. A. 22.7 **DEVELOPMENT OF MODEL CURRICULUM OF COURSES IN EMERGING AREAS FOR AICTE, DELHI**

As desired by the AICTE, the institute has prepared curriculum for nine courses by organizing the curriculum workshops inviting experts from IITs, representatives from industry, R&D and faculty from various academic institutions and NITTTR, Chandigarh. These nine emerging areas are:

1. Artificial Intelligence
2. Internet of Things (IoT)
3. Blockchain
4. Robotics
5. Quantum Computing
6. Data Sciences
7. Cyber Security
8. 3D Printing and Design
9. Virtual Reality (VR)

The curriculum documents were submitted to AICTE, Delhi in February 2019 which was released by Hon'ble Secretary, MHRD, GOI and has been uploaded by the AICTE on its website. Hon'ble members of the council were informed by the Advisor, AICTE about the appreciation which the Chairman of AICTE has heaped on the institute for these excellence curriculum documents.

[Action: Head, CDC & IMCO]

ITEM NO. A. 22.8 **SPONSORED PROJECTS RECEIVED BY FACULTY MEMBERS**

The Hon'ble members were informed that the institute submitted 18 research proposals/sponsored projects in different agencies for the year 2018-19. The institute received the approval of one sponsored project on "Establishment of Advance Cyber Security Lab for Technical Teachers Training" of amount ₹ 62 lakhs from Ministry of Information and Technology, Delhi. AICTE recommended to provide grant for one Research Promotion Scheme, National Conference on "IOT Inclusive Life", to conduct faculty development programme and short-term training programme.

[Action: All HODs]

Item No. A. 22.9   **NEW LABORATORY INITIATIVE BY DIFFERENT DEPARTMENTS**

The heads of the department of Mechanical Engineering and Electrical Engineering gave detailed account of the new facilities created in their departments which will help in undertaking state of the art research and also help for accreditation purpose. The Hon'ble members appreciated the move and were of the view this will have in creating centres of excellence and will be beneficial for the consultancy programme as well as for the new ME programme as envisioned by the institute. The Director also informed that out of 75 NRCs, NITTTR, Chandigarh has got NRC for Electrical and Electronics Engineering for offering training programme under the MOOCs. The Director also informed that NRC of NITTTR, Chandigarh is the first to launch the programme as per the target given by the MHRD and got a rating of 4.9 out 5 with the participation 1575 participants.

[Action: Heads of Engineering Departments]

ITEM NO. A. 22.10   **MOUs SIGNED BY THE INSTITUTE**

The Hon'ble members were informed that the institute has signed four MOUs during the period of 1st March, 2018 and 1st March, 2019. The members appreciated the initiatives undertaken of the institute.

[Action: HOD-IMCO]

ITEM NO. A. 22.11   **SIGNING OF MOU WITH IIT, NEW DELHI FOR IMPLEMENTATION OF UNNAT BHARAT ABHIYAN**

NITTTR Chandigarh has been identified as one of the "Regional Coordinating Institutes" by the MHRD, GOI for contributing and implementation of Unnat Bharat Abhiyan, a flagship programme initiated by Government of India, in the 22 Districts of Punjab. The Hon'ble members were informed that NITTTR, Chandigarh has signed a Memorandum of Understanding (MoU) with National Coordinating Institute Unnat Bharat Abhiyan – Indian Institute of Technology, Delhi on 6 March 2019 at Delhi to work as a Regional Coordinating Institution (RCI) under UBA. The activities of these 22 districts of Punjab shall be jointly undertaken by Prof UN Roy and Prof Poonam Syal of Rural Development Department in consultation with the Director, NITTTR Chandigarh.

[Action: Prof UN Roy/Dr. Poonam Syal/Prof-IMCO]

Items for consideration

ITEM NO. A. 22.12 **TO APPROVE THE OPERATIONAL PLAN OF THE INSTITUTE FOR THE YEAR 2019-2020**

O.Plan of the institute for the year 2019-20 has been prepared keeping into consideration, the requirement of stakeholder. A copy of the O.Plan for the year 2019-20 was submitted to the Hon'ble members of the Academic Council. Dr. Maitryee Dutta, Professor, IMCO gave a brief presentation. She highlighted the major achievements of the institute during 2018-19 including launching of MOOCs courses, Curriculum Development work for Haryana state and conduct an International training programme and International conference in collaboration with CPSC Manila. She informed the house that the institute launched 4 MOOC courses in SWYAM portal on Graphics and Animation Development (by Mrs. Shano Solanki), Curriculum Implementation (Dr AB Gupta), Development of Self-Learning Material (Dr Sunil Dutt) and Research in Technical Education (Dr PK Tulsi). She also informed that NITTTR Chandigarh is one of the 75 NRCs designated by MHRD. Being NRC in Electrical and Electronics Engineering, the institute launched one course in SWAYAM Portal titled "Real Time Power System Analysis and Smart Grid". NITTTR Chandigarh was the first one to launch course among 75 NRCs having rating of 4.9 constantly. Other 8 MOOC courses are in progress.

Dr Maitreyee Dutta gave glimpses of the new O.Plan for 2019-20 and informed that in the Staff Development 249 Short Term Courses have been planned under contact mode, 58 courses through ICT mode, 15 students training programme, 19 workshops and 6 conferences. The training programme have been categorized under 5 categories namely Pedagogy (45 courses) Skill oriented (29 courses), Industry supported (55 courses), Research oriented (55 courses) and Advance level (63 courses). All the departments of the institute have been clubbed under 4 clusters for offering cluster based programme. Dr. Maitreyee further informed that in the next O. Plan 2019-20, 6 curriculum design projects, 23 print instructional material, 8 MOOCs and 17 video films have been planned. In addition, 6 R&D projects, 11 extension services and consultancy projects, 15 sponsored projects and 45 consultancy projects have been planned for the next academic year 2019-20. The members of the Academic Council deliberated and recommended to the BOGs for approval of O.Plan 2019-2020.

[Action: Professor-IMCO]

ITEM NO. A.22.13   **DEEMED-TO- BE-UNIVERSITY STATUS FOR NITTTR, CHANDIGARH**

As per the directions of MHRD, Govt. of India NITTTR, Chandigarh proposes to acquire Deemed to be University status till it gets the status of Institute of National Importance (INI). A committee in this regard has been set-up under the Chairmanship of Prof. BS Pabla and Prof Rakesh Wats to prepare the document for submission to UGC with a copy to MHRD. The proposal was submitted to MHRD, and as per their instructions, the institute is going to apply online to the UGC for getting the above status. Deemed to be University status for NITTTR, Chandigarh will help in launching Long Term Programme in the emerging new areas as per the requirements of the world of work. The proposal will be mooted under Denovo Category to ensure offering of unique short-term and long-term programmes.

[Action: Prof BS Pabla & Prof Rakesh Wats]

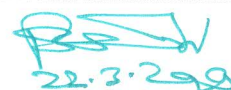**ITEM NO. A.22.14**   **VISION, MISSION AND STRATEGIC PLAN OF EVERY DEPARTMENT**

Director informed that each department is required to prepare their vision, mission along with five-year strategic plan consistent with the vision, mission and strategic plan of the institute. Each HOD is require to create tools, define process and evaluation mechanism for the same. All stakeholders are to be involved. The time line for completion of the same is April 30, 2019. HOD-EMGT will help in finalizing the tools in consultation with respective HOD.

[Action: HOD-EMGT & All HODs]

ITEM NO.A.22.15   **PROPOSAL FOR FOUR NEW ME PROGRAMMES AND ONE MBA PROGRAMME**

Hon'ble members were informed that the Institute has submitted a proposal to AICTE for starting of four new ME programmes on floating basis. It is proposed that the institute would operationalise ME programmes in new upcoming areas and run it for 4-5 years. These programmes will then be taken up by the Engineering Institutes of the country and NITTTR, Chandigarh will then take up new emerging areas. The above four new programmes are ME in Computer Science and Engineering (Specialization in Internet of Things, IOT), ME in Mechanical Engineering (Specialization in Robotics), ME in Electronics and Communication Engineering (Specialization in Artificial Intelligence) and ME in Electrical Engineering (Specialization in Energy Systems and Smart Grid). For Civil Engineering, the proposal on ME in Smart Infrastructure is under process. In addition, as per the AICTE, the institute has prepared a proposal for running a MBA Programme in Innovation, Entrepreneurship and Venture Development and submitted to AICTE for starting from the year 2019-20 onwards. The presentation for the same is now schedule on March 26, 2019. The Hon'ble Members appreciated the criteria of the institute and approved the same.

[Action: Heads of CSE/Mechanical/ECE/Electrical/Civil/EDIC]

ITEM NO. A.22.16: DIGITIZATION OF DEPARTMENTAL RESOURCES

Director informed that all the departments are required to digitize the instructional material namely modules, lab manuals, readers, lecture handouts, PPTs etc. and maintain a repository for the same. The central repository will be maintained by IMCO and therefore all the departments will transfer a copy of the digitized material to IMCO. The move was appreciated by Hon'ble Members.

[Action: All HODs & HOD-IMCO]

ITEM NO. A.22.17: PARTIAL USE OF IRG FOR HIRING EXPERTS FROM INDUSTRY AS ADJUNCT FACULTY TO TEACH SUBJECTS OF EMERGING AREAS

The Hon'ble members were informed that since the institute is expected to launch four ME and one MBA programme in emerging areas, experts from the Industry will be hired as adjunct faculty to teach the latest technology and practices covering almost 40% of the total curriculum content. The expenditure on this account will be borne from the IRG generated by the institute. The detailed modalities shall be prepared by a Committee to be constituted by the Director.

[Action: Professor-IMCO]

ITEM NO. A.22.18: ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR

(i) Director of the institute Prof SS Pattnaik appealed to all the HODs to follow the timelines and assume responsibilities for various activities as mentioned in minutes of Academic Council.

(ii) Mr. Mani from IBM suggested that the institute can setup centres of excellence with a view to generating the money. He specifically mentioned that-state-of the art infrastructure of NITTTR, Chandigarh may be extensively given on rent basis to the industry personnel on payment basis to improve the revenue generation. Centre of Excellence may be established with collaboration of Industry and may developed in core engineering branches. IBM can provide subsidization price to establish such types of laboratories.

22.3.2019

(iii) Prof MM Malhotra, Member of Academic Council suggested that ME thesis work and PhD research work should be industry oriented, integrated with industry research problems. He advised that each faculty of the institute can publish good research paper in technical education in the NITTTR institute journal (Journal of Engineering and Technology Education).

The meeting ended with a vote of thanks to the Chair.

(PROF SK DHAMEJA)
Member-Secretary
22.3.19

(PROF SS PATTNAIK)
Chairman
22.3.2019