

Academic and Administrative Aspects of the National Institute of Technology Manipur at the Indian State Manipur

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Abstract

National Institute of Technology (NIT) Manipur is an esteemed academic institute having national importance and controlled by the Ministry of Human Resource Development (MHRD) of the Government of India. NIT Manipur is equipped with different departments flourishing the branches of 'Science and Engineering'. Students from all the states of India are eligible to take admissions for acquiring the technological education. Faculty members as Teachers of NIT Manipur are always highly interested to academically help any student of this Institute. The Administration of NIT Manipur is a strong platform for the cultural growth of this Institute from all possible aspects.

Keywords: Academics, administration, department, technology, collaboration

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INTRODUCTION

Author has performed tremendous academic activities in many countries such as India, United Kingdom, Republic of Ireland, Italy, and Belgium by his own physical presence [1–8]. In India, author has academically contributed in different Indian states such as Uttar Pradesh, West Bengal, Manipur, Arunachal Pradesh, and Maharashtra by his own physical presence. Author was an Assistant Professor (Faculty Member) in the Department of Electronics and Communication Engineering (ECE) of the National Institute of Technology Manipur in the duration of 15th January 2013 to 21st August 2014 at the Indian state Manipur. Manipur is a culturally strong and historical state of the North-East India.

Author has vast experience in experimental and theoretical research in different branches of 'Science and Engineering' [9–15]. In the classroom teaching, author always applies this experience to demonstrate the practical applications of theoretical understanding [16–23]. According to author's point of view, engineering is the application of basic sciences [24–28]. The engineering students should develop their skills on both of the engineering

and basic sciences to make their knowledge more effective for the welfare of society. At the present dates, author is an Assistant Professor (Faculty Member) in the Department of Electronics and Communication Engineering (ECE) of the NIT Arunachal Pradesh at the Indian state Arunachal Pradesh, with his date of joining as 22nd January 2016.

National Institute of Technology Manipur was established in the year 2010 by Prof. (Dr.) Manmohan Singh as Honourable Prime Minister of India. Author has developed several teaching laboratories and academic syllabi of NIT Manipur by his own theoretical and practical teaching related to different courses; for example, basic electronics, analog electronics, electromagnetic theory, antenna theory, and microwave engineering. In this research paper, the academic and administrative infrastructure of NIT Manipur is briefly described by the author.

ESTABLISHMENT, VISION, MISSION AND OBJECTIVES OF THE NATIONAL INSTITUTE OF TECHNOLOGY MANIPUR

National Institute of Technology (NIT) Manipur is a centrally funded institution to

provide the quality technical education at the various levels and branches of higher learning. This institute is established by the Ministry of Human Resource Development (MHRD) of the Government of India, by the Administrative Order No. F.23-13-2009-TS-III dated on 30th October 2009 and 3rd March 2010. This institute is established to serve the academic need of the thousands of students of the North-East India in different fields of Technical Education. During and after the establishment, this institute has tremendous support from the State Government of Manipur. NIT Manipur has started the first session on the date of 1st August 2010. NIT Manipur has been first established under the Manipur Societies Registration Act, 1989 (Regd. No. 425/M/SR/2010). After the initial establishment, NIT Manipur was declared as a full-fledged institute of National-Importance by an Act of Parliament and notified under the Government of India Gazette Notification No. 28 of 2012 dated on 7th June 2012.

According to the vision of the institute, this institute provides the best infrastructure and facilities to the admitted students after registration. The target of the institute is to be established as one of the best institutes in South-East Asia. The institute is always active to admit the students from neighbouring South-East Asian countries, for example, Myanmar, according to the Look-East Policy of the Government-of-India. The institute always focuses on the integration between expertise of Faculty Members and communication skills of the students.

According to the mission of this institute, this institute as an Institute of National-Importance has the mission to become an excellent knowledge hub of the North-East Asia. At present, this institute is focusing to flourish the institutional academic and research activities towards the “Technopreneurs”. This institute has mission to build up tremendous emotional integration among the students of North-East India and students of other parts of India. According to these missions, the students of this institute will become Entrepreneurs of World-Class standard to serve the Global-Society.

This institute has the following major objectives: (a) to develop creativity in talented young minds by providing academic excellence; (b) to provide a platform for Entrepreneurs and Technocrats for achieving aspirations by fulfilling their dreams; (c) to encourage faculty members towards research activities of international standard for providing research guidance to students; (d) to build the academic career of students towards the fulfilment of the employability criteria of Multi-National-Companies; (e) to provide laboratories with advanced equipments and other facilities; and (f) to provide the academic and administrative infrastructure of international standard for accomplishment of extra-curriculum activities.

ACADEMICS AND ADMINISTRATION IN THE NATIONAL INSTITUTE OF TECHNOLOGY MANIPUR

Academic Infrastructure of the National Institute of Technology Manipur

National Institute of Technology Manipur is established in Imphal as capital city of the Indian state Manipur. Imphal is a military area with a distance of approximately 100 km away from the India–Myanmar border. The library of NIT Manipur is highly equipped with too many books available for the students and faculty members. Dr. N. Vidyavati Devi is the Head Librarian of NIT Manipur and holder of the following academic degrees as B.Sc, MLISc, PGDCA, and PhD (Doctor of Philosophy). Honourable Prof. (Dr.) Kamakhya Prasad Ghatak as Former Professor of the Department of Electronic Science, University of Calcutta, India, is a Member of the ‘Board of Governors’ (BOG) of the NIT Manipur [29–33]. According to Prof. (Dr.) K.P. Ghatak, “Teaching without Research is Body without Brain. Research without Teaching is Body without Blood. Both of the Brain and Blood are equally important for a Body to survive. Similarly, both of the Teaching and Research are equally important for the survival of any Academic Institution related with higher Education” [34–38]. In the NIT Manipur, Honourable Prof. (Dr.) Koijam Manihar Singh as Honorary Professor of Mathematics has performed many research work on Astrophysics.

Prof. (Dr.) Yagnaswami Sundara Rajan as Chairman of NIT Manipur has always inspired all faculty members to contribute in NIT Manipur academically. Honourable Prof. (Dr.) Yagnaswami Sundara Rajan as Chairman of NIT Manipur is the Professor of the Indian Space Research Organisation (ISRO). In the NIT Manipur, he has explained the principles of Geosynchronous Satellite Launch Vehicle (GSLV) and Polar Satellite Launch Vehicle (PSLV) fabricated by the ISRO. Also, he has described the Chandrayaan-1 (Moon Project) and Mangalyaan (Mars Orbiter Mission) started by the ISRO. Previously, he was a Rocket-Scientist of the 'National Aeronautics and Space Administration' (NASA) in the United States of America.

NIT Manipur has different teaching laboratories and research laboratories under the guideline of Prof. (Dr.) Okram Ibobi Singh as Honourable Chief Minister (CM) of Manipur. In the year 2014, Honourable Prof. (Dr.) Okram Ibobi Singh has appreciated the author for author's teaching capability along with the research capability. The administrative pillars of the NIT Manipur are Prof. (Dr.) Probrir Kumar Bose as Founder Director, Prof. (Dr.) Sarungbam Birendra Singh as Current Director, Prof. (Dr.) Kojiam Manihar Singh as Honorary Professor, Mr. Rajkumar Lalit Singh as Registrar, Mr. L. Dorendro Singh as Assistant Registrar of Administration, and Dr. I. Bidhanchandra Singh as Assistant Registrar of Academics.

About Prof. (Dr.) Kojiam Manihar Singh in the National Institute of Technology Manipur

Honourable Prof. (Dr.) Kojiam Manihar Singh as Professor of Mathematics in the NIT Manipur, is the holder of following academic degrees: B.Sc (Bachelor of Science) in Mathematics, M. Sc (Master of Science) in Mathematics, M.A (Master of Arts) in Economics, LL.B. (Law), PGDEA (Post Graduate Diploma in Educational Administration), Doctor of Philosophy (Basic Doctoral Degree) in Mathematics, and Doctor of Science (Highest Doctoral Degree) in Mathematics. Also, he is a C.Math (Chartered Mathematician, England). He is the fellow of the following Eminent Organisations:

'Institute of Mathematics and its Applications' (UK), 'New York Academy of Sciences' (USA), 'American Association for the Advancement of Science' (USA), 'Indian Mathematical Society' (India), 'Indian Academy of Mathematics' (India), 'Australian Mathematical Society' (Australia), 'American Physical Society' (USA), 'Indian Institute of Science' (India), 'National Astronomical Observatory' (Japan), 'Bulgarian Academy of Sciences' (Bulgaria), 'Harishchandra Research Institute' (India), and 'Indian Institute of Astrophysics' (India). Also, he has held many administrative designations as Principal, Vice Principal, Honorary Professor, and Head of the Department (HOD) in many institutions including NIT Manipur. Honourable Prof. (Dr.) Kojiam Manihar Singh is a Very-Important-Person (VIP) with more than 43 years of teaching experience and 40 years of research experience. He is also a Permanent-Observer of the Central Board of Secondary Education, New Delhi, India.

Academic Collaboration with Manipur University

NIT Manipur has good research collaboration with the Manipur University. Few PhD scholars of NIT Manipur are using the experimental facilities of Manipur University. Author as faculty member of NIT Manipur has attended the following conference organised by Manipur University: "National Symposium on Recent Trends in Chemical Sciences" (NSRTCS-2013) held at the Department of Chemistry, Manipur University, Canchipur, Imphal-795003, Manipur, India during 22nd-23rd March 2013 organised by the Department of Chemistry, Manipur University, India. Also, NIT Manipur has organised the following conferences in association with Manipur University: (a) "National Workshop on Nanotechnology and its Applications in Science and Engineering" (NASE-2013) held at the NIT Manipur, Government Polytechnic Campus, Takyelpat, Imphal-795001, Manipur, India during 23rd-24th March 2013; and (b) "Two Day Workshop on E-Learning Technologies and Practices" (NPTEL-NMEICT) held at the NIT Manipur, Government Polytechnic Campus, Takyelpat, Imphal-795001, Manipur, India during 1st-2nd March 2014. Author has attended all of these conferences.

Author's Contribution in the National Institute of Technology Manipur

Author has academically contributed in the National Institute of Technology Manipur according to the Vision, Mission, and Objectives of this Institute of National-Importance and established under the Ministry of Human Resource Development (Government of India). Author has taught the following subjects in the NIT Manipur in the mentioned time intervals: Basic Electronics (B.Tech, Theory) from 15th January 2013 to 21st August 2014; Basic Electronics (B.Tech, Practical) from 15th January 2013 to 21st August 2014; Analog Electronics (B.Tech, Theory) from 15th January 2013 to 21st August 2014; Analog Electronics (B.Tech, Practical) from 15th January 2013 to 21st August 2014; Microwave Engineering (B.Tech., Theory) from 15th January 2013 to 21st August 2014; Microwave Engineering (B.Tech., Practical) from 15th January 2013 to 21st August 2014; Electromagnetic field theory (B.Tech, Theory) from 15th January 2013 to 21st August 2014; Antenna theory and wave propagation (B.Tech, Theory) from 15th January 2013 to 21st August 2014; with Antenna theory and wave propagation (B.Tech, Practical) from 15th January 2013 to 21st August 2014.

In the NIT Manipur, author has taught in the following departments according to the mentioned time intervals: Department of Electronics and Communication Engineering from 15th January 2013 to 21st August 2014; Department of Electrical and Electronics Engineering from 15th January 2013 to 21st August 2014; Department of Civil Engineering from 15th January 2013 to 21st August 2014; Department of Computer Science and Engineering from 15th January 2013 to 21st August 2014; Department of Mechanical Engineering from 15th January 2013 to 21st August 2014; with Department of Basic Science and Humanities from 15th January 2013 to 21st August 2014.

In the NIT Manipur, author has fabricated the following academic syllabi in the mentioned time intervals: Analog Electronics (B.Tech, Theory) from 20th July 2013 to 27th July 2013; Microwave Engineering & Radar (B.Tech,

Theory) from 27th July 2013 to 3rd August 2013; Microwave Engineering & Radar (B.Tech, Practical) from 27th July 2013 to 3rd August 2013; Electromagnetic theory (B.Tech, Theory) from 3rd August 2013 to 10th August 2013; Antenna theory & wave propagation (B.Tech, Theory) from 10th August 2013 to 16th August 2013; Network analysis & synthesis (B.Tech, Theory) from 17th August 2013 to 24th August 2013; Semiconductor physics & devices (B.Tech, Theory) from 24th August 2013 to 30th August 2013; Signals & Systems (B.Tech, Theory) from 31st August 2013 to 7th September 2013; Analog communication (B.Tech, Theory) from 7th September 2013 to 15th September 2013; Control system (B.Tech, Theory) from 14th September 2013 to 20th September 2013; Digital Electronics (B.Tech, Theory) from 21st September 2013 to 28th September 2013; Electrical and Electronic Measurement & Instrumentation (B.Tech, Theory) from 28th September 2013 to 5th October 2013; Digital Communication (B.Tech, Theory) from 5th October 2013 to 12th October 2013; Microprocessor & Microcontroller (B.Tech, Theory) from 12th October 2013 to 19th October 2013; Digital Signal Processing (B.Tech, Theory) from 19th October 2013 to 25th October 2013; VLSI Engineering (B.Tech, Theory) from 26th October 2013 to 2nd November 2013; Industrial Electronics (B.Tech, Theory) from 2nd November 2013 to 8th November 2013; Introduction to Fibre Optic Communication (B.Tech, Theory) from 9th November 2013 to 15th November 2013; Wireless & Mobile Communication (B.Tech, Theory) from 16th November 2013 to 22nd November 2013.

In the NIT Manipur, author has developed the following teaching laboratories in the mentioned time intervals: Basic Electronics Laboratory from 30th November 2013 to 6th December 2013; Microwave Engineering Laboratory from 7th December 2013 to 13th December 2013; Analog Electronics Laboratory from 14th December 2013 to 21st December 2013; Mechanical Engineering Workshop from 11th January 2014 to 17th January 2014; Engineering Physics Laboratory from 18th January 2014 to 24th January 2014; Digital Electronics Laboratory from 25th January 2014 to 29th January 2014;

Microprocessor Laboratory from 1st February 2014 to 7th February 2014; HP Centre of Excellence from 8th February 2014 to 14th February 2014; Thin Film Coating and Solar Simulation Laboratory from 15th February 2014 to 19th February 2014; and Electrical Machine Laboratory from 20th February 2014 to 28th February 2014. Also, author has significantly developed the library of the NIT Manipur in the time interval of 15th January 2013 to 21st August 2014. Prof. (Dr.) Okram Ibobi Singh as Honourable Chief Minister (CM) of Manipur has come at the campus of NIT Manipur on 21st February 2014 to discuss the academic infrastructure of NIT Manipur.

CONCLUSION

Author has academically contributed in the National Institute of Technology Manipur according to the Vision, Mission, and Objectives of this Institute of National-Importance and established under the Ministry of Human Resource Development (Government of India). Prof. (Dr.) Sarungbam Birendra Singh as Current Director is highly contributing to the NIT Manipur academically and administratively. Faculty members are always active to bring sponsored research projects to NIT Manipur from different sanctioning authorities. Also, faculty members are highly interested to organise national and international conferences. In future, the number of teaching and research laboratories may increase in NIT Manipur. Also, NIT Manipur will develop much academic collaboration with different national and international institutions. In future, NIT Manipur will become a particular centre of academic excellence within India having international reputation.

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