

Name: Dr. Manjuri Hazarika

Designation: Professor

Department: Mechanical Engineering Department

Institute: Assam Engineering College

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Educational Qualifications:

Degree	Year	University/Institute	Class	Specialization
B.E.	1990	Dibrugarh University	1st	Mechanical
M.Tech.	1996	IIT Delhi	1st	Design Engineering
Ph.D	2011	IIT Guwahati		Manufacturing

Professional Qualifications:

Designations	From	То
Lecturer in Jorhat Engineering College (JEC)	26.10.90	31.10.93
Lecturer in Assam Engineering College (AEC)	1.11.93	20.11.97
Senior Lecturer in AEC	21.11.97	20.11.02
Lecturer, Selection Grade in AEC	21.11.02	31.12.05
Associate Professor in AEC	1.1.06	26.5.11
Professor in AEC	27.5.11	Till date

Publications

Books:

- 1. U. S. Dixit, M. Hazarika and J. P. Davim, 'A Brief History of Mechanical Engineering', Series Title: Materials Forming, Machining and Tribology, Springer International Publishing AG, Cham, Switzerland, 2017.
- 2. M. Hazarika and U. S. Dixit, 'Setup Planning for Machining', Springer Briefs in Applied Sciences and Technology, Springer Cham Heidelberg New York Dordrecht London, 2015.

Book Chapter:

1. Uday S. Dixit, Manjuri Hazarika and J. Paulo Davim, "History of Production and Industrial Engineering through Contributions of Stalwarts", Book Chapter in 'Manufacturing Engineering Education', Elsevier, ISBN: 9780081012475, 2018.

International Journal papers:

- 1. Rupam Das and Manjuri Hazarika, 'A Study on Effect of Process Parameters on Vibration of Cutting Tool in Turning Operation', *Journal of Physics, IOP Conf. Series:1240*, pp. 1–10, 2019.
- 2. N. Saha, D. Talukdar, K. Upadhaya, C. Barbhuiya, M. Hazarika, 'An Experimental Study on Burr Formation in Turning', *International Journal of Innovative Research in Science, Engineering and Technology*, Vol. 5, pp. 3215–3222, 2016.
- 3. M. Hazarika, U. S. Dixit and S. Deb, 'A method for fine tuning the membership grades assigned by experts: an application to burn height estimation in drilling', *Journal of Manufacturing Technology Research*, Vol. 4, pp. 75–87, 2012.
- 4. M. Hazarika, S. Deb, U. S. Dixit and J. P. Davim, 'A Fuzzy Set Based Setup Planning System with Ability for Online Learning', *IMechE Part B: Journal of Engineering Manufacture*, Vol. 225, pp. 247–263, 2010.
- 5. M. Hazarika, U. S. Dixit and S. Deb, 'Effect of datum surface roughness on parallelism and perpendicularity tolerances in milling of prismatic parts', *IMechE Part B: Journal of Engineering Manufacture*, Vol. 224, pp. 1377–1388, 2010.
- 6. M. Hazarika, U. S. Dixit and S. Deb, 'A setup planning methodology for prismatic parts considering fixturing aspects', *International Journal of Advanced Manufacturing Technology*, Vol. 51, pp. 1099–1199, 2010.

International Conference papers:

1. Rupam Das and Manjuri Hazarika, 'A Study on Effect of Process Parameters on Vibration of Cutting Tool in Turning Operation', *Proc. of 2nd International Conference on New Frontiers in Engineering, Science & Technology NFEST 2019*, February 18th – 22nd, NIT Kurukshetra, Haryana, India, 2019.

- 2. M. Gogoi and M. Hazarika, 'A Green Process Planning system', *Proc. of 5th International & 26th All India Manufacturing Technology, Design and Research Conference*, December 12th –14th, IIT Guwahati, Assam, India, 2014.
- 3. P. Saikia and M. Hazarika, 'An Experimental Study on Green Machining', *Proc. of 5th International & 26th All India Manufacturing Technology, Design and Research Conference*, December 12th –14th, IIT Guwahati, Assam, India, 2014.
- 4. M. Hazarika, U. S. Dixit and S. Deb, 'A method for fine tuning the membership grades assigned by experts: an application to burn height estimation in drilling', *Proc. of the 3rd International & 24th All India Manufacturing Technology, Design and Research Conference*, A.U. College of Engineering, Visakhapatnam, 2010.
- 5. M. Hazarika, S. Deb and D. K. Biswal, 'An Expert System Based Computer-Aided Process Planning Methodology for Setup Planning of Machined Prismatic Parts', Competitive Manufacturing–Proceedings of the 2nd International & 23rd All India Manufacturing Technology, Design and Research Conference, pp. 1049–1054, IIT Madras, Chennai, 2008.

National Conference papers:

- 1. Souvik D Roy, Dhiraj Rabha, Mahmoodul Hasan, Manjuri Hazarika, "Study and Analysis of a Solar Power System", National Conference for Students on Advances in Mechanical Engineering (NCSAME), Assam Engineering College, Guwahati, 6th March, 2020.
- 2. Arabinda Baruah, Pranjit Konwar, Iftiqur Alam, Imsusenba, Manjuri Hazarika, "Prediction of Surface Roughness in Milling", Research Conclave'19, Students' Academic Board, I I T Guwahati, 14-17 March, 2019.
- 3. Anubhav Goswami, Anamitra Phukan, Abhishek Goswami, Manjuri Hazarika, "Prediction of Surface Roughness in Milling Using Regression Analysis", Research Conclave'18, Students' Academic Board, I I T Guwahati, 8-11 March, 2018.
- 4. A. Goswami, M. Hazarika, "A Review of Rural Electrification in Assam Using Solar Energy Through Decentralized Distributed Generation (DDG)", National Conference on Non-conventional Energy: Harvesting Technology and its Challenges, Assam Engineering College, Guwahati ,17-18 October, 2017.
- 5. A. Goswami, A. Phukan, A. Borah, M. Hazarika, "Solar Energy Utilization in Raj Bhawan and Bijulee Bhawan, Guwahati: A Case Study", National Exhibition & Conference on New and Renewable Energy, ADBU Journal of Engineering Technology (AJET), 6-7 October, 2017.
- 6. B. Sarma, K. Borah, B. Saikia, A. Dhar, M. Hazarika, 'An Experimental Study on Burr Formation in Miilling', All India Seminar on Recent Trends in Mechanical Engineering, pp. 22–26, The Institution of Engineers (India), Assam State Centre, Guwahati, 21–22 October, 2016.
- 7. B. Sarma, A. Dhar, B. Saikia, K. Borah, 'An Experimental Study on Burr Formation in Drilling', 2nd Mechanical Engineering Graduate Research Symposium 2015 (MEGRES 2015), Indian Institute of Technology Bombay, Mumbai, 21st March, 2015.
- 8. M. Hazarika, K.S. Shishodia and G.S. Sekhon, 'A Study on abrasive jet machining of glass', Proc. of the 10th ISME Conference on Mechanical Engineering, New Delhi, 1996.

Awards/Prizes:

- 1. Vinod Kumar Memorial Cash Prize by the Applied Mechanics Society, Department of Applied Mechanics, IIT Delhi for obtaining the highest CGPA in M. Tech. (Design Engineering) in 1996.
- 2. Special Cash Prize by the Applied Mechanics Society, Department of Applied Mechanics, IIT Delhi for M. Tech. project work which culminated in the development of equipment in 1996.

Invited Lecture delivered:

- 1. 'Computer Aided Process Planning', Symposium on Machining, 20th August 2014, Assam Don Bosco University, Guwahati.
- 2. 'Computer Aided Process Planning and Green Machining', Symposium on Computer Aided Manufacturing, 29th September 2015, Assam Don Bosco University, Guwahati.

Reviewer of International/National Conferences:

- 1. Reviewed research papers for 3rd International Conference on Smart Village and Rural Development (COSVARD), organized as online Webinar on 7th 8th December, 2020.
- 2. Reviewed research papers for Online National Conference on Research and Developments in Material Processing, Modelling and Characterization 2020 (RDMPMC 2020) on 25th 26th August organized at NIT Jamshedpur
- 3. Reviewed research papers for 2nd International Conference on Smart Village and Rural Development (COSVARD) held in 2nd –4th December, 2019 at Administrative Staff College, Khanapara, Guwahati.
- 4. Reviewed research papers for International Conference on Recent Innovations and Developments in Mechanical Engineering held in November 8–10, 2018 in NIT Meghalaya, Shillong, India.
- 5. Reviewed research papers of 3^{0th} National Convention of Production Engineers (NCPR 15) organized by The Institution of Engineers (India), Tripura State Centre in 2015.
- 6. Reviewed research papers for 5th International & 26th All India Manufacturing Technology, Design and Research (AIMTDR) Conference held in December 12th –14th, 2014 in IIT Guwahati.
- 7. Reviewed research papers for International Conference on Computational Methods in Manufacturing (ICCMM2011) held in December 15th –16th, 2011 in IIT Guwahati.

Reviewer of International/National Journals:

Reviewed research paper for the International Journal of Machining and Machinability of Materials, InderScience Publishers in October 2015.

Member of Professional Institutions:

- 1. Fellow of The Institution of Engineers (India)
- 2. Life member of ISTE (Indian Society for Technical Education)

Interviewer/Examinar

- 1. Member of the Selection Committee for faculty selection in Mechanical Engineering Dept, NIT Silchar on 12.2.2021 and 13.2.2021.
- 2. Acted as an external Examiner for assessing final year project viva-voce examinations of 8th semester mechanical engineering students of JEC on 8.8.2020 and 9.8.2020.
- 3. Member of the 'Panel of Jury' for 'Sanskar: Manuhe Manuhor Babe', a scheme for scientific/research articles to spread awareness on COVID19, organised by Assam Science Technology and Environment Council (ASTEC), department of Science & Technology, Govt of Assam on 14.7.2020.
- 4. Member of the Selection Committee for faculty selection in Mechanical Engineering Dept, NIT Silchar on 14/11/2019.
- 5. Member of the Selection Committee for faculty selection in Mechanical Engineering Dept, NIT Silchar during June 24 25, 2019.
- 6. Member of the Selection Committee for faculty selection in Mechanical Engineering Dept, NIT Silchar during June 7 8, 2018.
- 7. Acted as Examiner for assessing final year project viva-voce and viva-voce examinations for different subjects in Tezpur University, Girijananda Institute of Management and Technology and Regional Institute of Science and Technology.

Member of Organizing Committee of Conference/Workshop:

- 1. Joint Coordinator of the Webinar on Professional Ethics organized by ME depts, AEC and JEC on 5th November, 2020.
- 2. Coordinator of the Induction Program 2019 held in Assam Engineering College, Guwahati on 1^{st} – 21^{st} August, 2019.
- 3. TEQIP-III Coordinator for Mechanical Engineering Department, AEC.
- 4. Organizing Coordinator of the two weeks faculty development program (FDP) on Recent Advancement in Welding and Allied Processes held in Assam Engineering College, Guwahati from 13th –24th August, 2018.
- 5. Organizing Coordinator of the four days Hands-On Workshop on Fundamentals of MATLAB held in Assam Engineering College, Guwahati from 3rd –6th April, 2018.
- 6. Organizing Coordinator of the one day seminar on Environment, Air Pollution and Noise held in Assam Engineering College, Guwahati on 23rd February 2018.

- 7. In Editorial Board of the two days National Conference on Non Conventional Energy: Harvesting Technology and Its Challenges held in Assam Engineering College, Guwahati on 17th–18th November, 2017.
- 8. In Editorial Board of International Workshop on Wind Engineering-Prospects and Challenges held in Assam Engineering College, Guwahati on 23rd February 2013.
- 9. In organizing committee of International Conference on Computational Methods in Manufacturing (ICCMM2011) held in December 15th –16th, 2011 in IIT Guwahati.

Post Graduate Thesis guided:

- 1. 'A Study on Effect of Process Parameters on Power Consumption in Turning Operation', Debajit Talukdar, 2019.
- 2. 'A Study on Effect of Process Parameters on Vibration of Cutting Tool in Turning Operation', Rupam Das, 2018.
- 3. 'A Framework for Green Machining using Analytical Hierarchy Process', Joober Islam Siddiqee, 2016.
- 4. 'An Experimental Study on Green Machining', Palash Saikia, 2014.
- 5. 'A Green Process Planning Expert System for Machining of Prismatic Parts', Mousumi Gogoi, 2012.

Visiting Scholar

Visited University of Melbourne (UoM), Australia as a visiting academic scholar for a period of seven weeks from 29th April to 16th June, 2019, sponsored as a member in a collaborative project on Smart Villages between Govt. of Assam and the University of Melbourne.

Total Short Term Course (STC)/Faculty Development Ptrogram (FDP) attended:

Sl No.	Title of the Course	Organizer	Course Duration
	Vibration Control	IIT Bombay	27 th June – 1 st July, 1994
1		(QIP)	(One week)
2	Quality Management-Recent	Jorhat Engineering	17 th – 28 th July, 2000
	Trends	College (QIP)	(Two weeks)
3	Design and Manufacturing of	IIT Guwahati	6 th –10 th December, 2004
	Composite Materials	(QIP)	(One week)
4	Microteaching	NITTTR, Guwahati	13 th –17 th December, 2004
			(One week)
5	Finite Element Analysis &	IIT Guwahati	20 th –24 th December, 2004
	Identification in Rotor	(QIP)	(One week)
	Bearing		
6	Fuels and Combustion	IIT Guwahati	5 th –9 th December, 2005
	Technology	(QIP)	(One week)

7	Computer Aided Design and	IIT Guwahati	12 th –16 th December, 2005
,	Manufacturing	(QIP)	(One week)
8	Advanced Processing of	IIT Roorkee	24 th –28 th July, 2006 (One
	Composite Materials	(QIP)	week)
9	Rapid Product Development	IIT Guwahati	11 th –15 th December, 2006
	Rapid i Toduct Development	(QIP)	(One week)
10	Advanced Engineering	IIT Guwahati	3 rd –7 th December, 2007
10	Polymers	(QIP)	(One week)
11	Introduction to Micro-	IIT Guwahati	24 th –28 th February, 2008
11	Manufacturing Technologies	(QIP)	(One week)
12	Introduction to Linear Elastic	IIT Guwahati	3 rd –7 th March, 2008
12	Fracture mechanics	(QIP)	(One week)
13	Applications of Lasers in	IIT Guwahati	24 th –28 th June, 2013
13	Manufacturing	(QIP)	(One week)
14	Advanced Machining and	IIT Guwahati	15 th –16 th December, 2014
14	<u> </u>		
15	Finishing Processes Introduction to Numerical,	(TEQIP) AEC Guwahati	(Two days) 9 th –13 th December, 2014
13			,
	Computational and	(NEQIP)	(One week)
16	Experimental Mechanics	A E.C. Carriologi	10th 22th Ianuary 2015
16	Recent Trends in Power	AEC Guwahati	19 th –23 th January, 2015
17	Engineering and Management	(NEQIP)	(One week) 9 th –13 th February, 2015
17	Environmental Impact Assessment: A Tool for	AEC Guwahati	•
		(NEQIP)	(One week)
18	Sustainable Development Advances in Renewable	AEC Guwahati	7 th –11 th March, 2016
10		(NEQIP)	(One week)
19	Energy and its Applications Faculty Induction Workshop	IIT Kharagpur	3 rd July – 7 th July, 2018
19	racuity induction workshop		
20	Modeline of Enginessine	(TEQIP-III)	(One week)
20	Modeling of Engineering	NITTTR, Kolkata	16 th July – 20 th July, 2018
21	Systems Decent Advancement in	Machaniaal Enga Dant	(One week)
21	Recent Advancement in	Mechanical Engg Dept,	13 th –24 th August, 2018
	Welding and Allied Processes	AEC & PSG College of	(Two weeks)
		Technology, Coimbatore	
22	Construction of the second	(TEQIP-III)	17th D 21st D 2010
22	Green Technology for	Chemical Engg Dept,	17 th Dec – 21 st Dec, 2018
22	Sustainable Development	AEC	(One week)
23	Industrial & Fire Safety	Civil Engg Dept, AEC	4 th – 8 th November, 2019
2.1	Engineering	D (03.5 1 1 1 1	(One week)
24	3D Printing	Dept of Mechanical	25 th – 29 th November,
		Engineering, AEC	2019
		7	(One week)
25	Quality and Quality	Dept of Mechanical	3 rd – 7 th December, 2019
	Engineering	Engineering, AEC	(One week)

26	Psychology in Education	Dept of Electronics and	27 th Jan 2019 – 1 st Feb,
		Telecommunication	2020
		Engineering, AEC	(One week)
27	Project Management	Dept of Mechanical	3 rd – 7 th February, 2020
		Engineering, AEC	(One week)
28	Recent Trends in Green	Dept of Mechanical	10 th – 14 th February, 2020
	Energy Utilisation	Engineering, AEC	(One week)

Total Conference/Workshop/Seminar attended:

Sl No	Title	Organizar	Course Duration
51 110	Regional Workshop on	Organizer Institute of Applied	7 th –8 th March, 2002
1	Technical Manpower Scenario	Manpower Research,	(Two days)
	in NE India	New Delhi	(1 wo days)
2	Women Managers in Higher	Gauhati University,	27 th –31 st March,
2	Education	Gaunati Oniversity, Guwahati	2007 (One week)
3	2 nd International & 23 rd		15 th –17 th December,
3		IIT Madras,	·
4	AIMTDR Conference	Chennai	2008 (Three days)
4	Regional Seminar Cum	Assam Engineering	4 th April, 2013
	Workshop on Pedagogy	College, Guwahati	(One day)
5	5 th International & 26 th	IIT Guwahati	12 th –14 th December,
	AIMTDR Conference		2014 (Three days)
6	Solar Energy Utilization-	Assam Engineering	4 th April 2015
	Opportunities & Challenges in	College, Guwahati	(One day)
	NER		4 4
7	Green Energy-Prospects and	Assam Science and	26 th –27 th April,
	Challenges	Technology University	2016
			(Two days)
8	MSME-AEC Meet-2016	AEC Guwahati	12 th May 2016
		(NEQIP)	(One day)
9	Recent Trends in Mechanical	The Institution of	21 st –22 nd October,
	Engineering	Engineers (India), Assam	2016
		State Centre	(Two days)
10	Workshop on Pedagogy	AEC Guwahati	5 th -6 th May, 2017
		(AICTE-NEQIP)	(Two days)
11	Non Conventional Energy:	Department of Chemical	17 th -18 th
	Harvesting Technology and Its	& Mechanical	November, 2017
	Challenges	Engineering, AEC,	(Two days)
		Guwahati, (NEQIP)	
12	Creativity in Design and	Department of	17 th February, 2018
	Innovation at the Grass Root	Mechanical Engineering,	(One day)
	Level	AEC (TEQIP-III)	

13	Environment, Air Pollution and	Department of	23 rd February, 2018
	Noise	Mechanical Engineering,	(One day)
		AEC (TEQIP-III)	
14	Research Conclave-18	IIT Guwahati	8 th -11 th March.
			2018
			(Four days)
15	International Conference on	NIT Kurukshetra	18 th –22 nd February,
	New Frontiers in Engineering,		2019
	Science & Technology:		(Five days)
	NFEST 2019		
16	2 nd International Conference on	University of Melbourne	2 nd – 4 th December
	Smart Village and Rural	and AEC	2019
	Development COSVARD 2019	(TEQIP-III)	(Three days)
17	Webinar on Building	Department of	26 th August, 2020
	Resilience and Emotional Well	Mechanical Engineering,	_
	Being for adapting to the new	AEC (TEQIP-III)	
	normal		
18	Webinar on Emerging	Department of	26 th – 27 th August,
	Technologies in Biofuel	Mechanical Engineering,	2020
	Production	AEC (TEQIP-III)	
19	Webinar on	Departments of	5 th November, 2020
	Professional Ethics	Mechanical Engineering,	
		AEC, JEC and	
		Vivekananda Civil	
		Service Academy, Ghy	
		(TEQIP-III)	
20	3 rd International Conference on	University of Melbourne	7 th – 8 th December,
	Smart Village and Rural	and AEC	2020
	Development COSVARD 2020		