Dr. Sandhya Dixit

[H. No. 1013, Sector-8, Faridabad, Haryana, INDIA] [sandhyadixit@jcboseust.ac.in, sandhya parinam@yahoo.co.in]

Qualifications

[2019] Ph D

MECHANICAL ENGINEERING

J C Bose University of Science and Technology, YMCA, Haryana

[2008] M. Tech (First Division with Honors, Batch Topper)

MANUFACTURING TECHNOLOGY AND AUTOMATION

YMCA Institute of Engineering, Maharishi Dayanand University,

Rohtak, Haryana

[2001] B. E. (First Division with Honors, III Position in Batch)

(MECHANICAL ENGINEERING)

National Institute of Technology, Kurukshetra

[1998] Diploma (First Division with Honors, II Position in State)

MECHANICAL ENGINEERING Govt Polytechnic Nilokheri

Experience

[Feb 2022 – till date] Professor

Mechanical Engineering Dept.

J C Bose University of Science and Technology, YMCA,

Fridabad, Haryana

[Feb 2019 – Feb 2022] Associate Professor

Mechanical Engineering Dept.

J C Bose University of Science and Technology, YMCA,

Fridabad, Haryana

[Jan 2006 – Feb 2019] Assistant Professor

Mechanical Engineering Dept.

J C Bose University of Science and Technology, YMCA,

Fridabad, Haryana

[Sept 2001 – Aug 2005] Lecturer

Mechanical Engineering Dept.

DIET, Karnal

[April 1998- July 1998] Workshop Instructor

Govt Polytechnic, Nilokheri

Responsibilities at University / Department Level

- Coordinator MERITE Scheme
- Editor J. C. Bose UST e-Journal
- Member Academic Council, JCBUST, YMCA, Faridabad
- Member BOF, Faculty of Engineering and Technology, JCBUST, YMCA, Faridabad

- Member Vigilance Cell
- Member BOS, ME, JCBUST, YMCA, Faridabad
- Member BOS, Centre of Energy studies, JCBUST, YMCA, Faridabad
- Member Departmental Research Committee (DRC)
- Member RAC of Mechchanical, Civil and JMC departments
- Departmental Academic Coordinator
- Departmental Library Coordinator

Responsibilities/positions held in the past at University/ Department Level

- Chief Hostel Warden (Girls) Hostel (Feb, 2019 Oct, 2022)
- Member Internal Complaints Committee (Women Cell), JCBUST, YMCA, Faridabad (Dec, 2020 – Mar, 2023)
- Member Proctoral Committee, (Feb, 2019 Oct, 2022)
- Member Court, JCBUST, YMCA, Faridabad till Aug 2020
- Member BOS, Community College JCBUST, YMCA, Faridabad
- Departmental BOF Coordinator (Upto Aug 2018)
- Departmental M.Tech Coordinator till 2020
- NAAC Cycle II Accreditation, 2022, Central Committee- Criteria 6 Coordinator, Presentation Team
- NAAC Cycle I Accredition, 2016, Central Committee Criteria 2: TLR, Presentation Team
- Centre Superintendent in University Final Examinations
- Member, Committee for proposing the Strategic plan of the University as "VISION 2030"
- Member Various Purchase committees
- Lab Incharge Applied Thermodynamics Lab
- Lab Incharge BME Lab (upto April 2017)
- Member University Academic Ordinances formulation committee
- NBA Visit (UG as well as PG)
- Member M.Tech Admission Committee
- Member B.Tech Admission (I Sem and LEET)Committee
- Member PhD Admission Committee
- Departmental Coordinator AQAR (2017-18)
- Member Organising Committee, CULMYCA
- Member organising committee for 3-days programme on Entrepreneurship Awareness Camp (09.10.2017 to 11.10.2017)
- Member organising committee, Science Conclave-2017
- Member organizing committee for Two week FDP on 'Entrepreneurship: An Effective Tool to Improve Industry- Institute Interaction from 07-20 Dec 2017
- Member Oraganizing Committee 'MSME Conclave 2018'
- Member Organizing Committee 'Industrial Conclave 2018'
- Member Organizing Committee 'TAME 2019'
- Member organising Committee for 3 days Entrepreneurship Awareness Camp. (14.11.2018 to 16.11.2018)
- Training and Placement Duties for smooth conduct of Placement activities
- Anti Ragging Duties
- Member organizing committee, 8th International symposium on ISFT' 20 from 06.01.2020 to 10.01.2020
- Member organizing committee in FDP on Research in Modern Era from 01.06.02020 to 05.06.2020
- Member organizing committee in STTP on 'Advances in Manufacturing Technology: CNC and Robotics from 17.08.2020 to 22.08.2020.
- Convener 'Celebration of National Technology Day 2022'
- Convener 'Yoga Camp in University, 2022'

- Member organising Committee TEQIP-III STC on 'Supply Chain Management, 2021
- Member Organizing Committee 'TAME 2021'

Research Guidance

PhD:

• In progress : 2

M. Tech:

• Successfully supervised : 17

Projects and Consultancy:

Applied for a project titled "Computational Analysis of the Ecological Impact of Non- Ionizing Radiations" under CSIR-ASPIRE (Women Scientist Scheme) amounting 30.5 Lakh

Publications

International Journals : 15
 International Conferences : 01
 National Conferences : 08

Total Papers indexed on

Clarivate Analytics (SCI/SCIE/ESCI) : 3
Scopus : 6
Google Scholar : 7

List of Papers (International Journals)

- [1] Sandhya Dixit, Tilak Raj, "Identification and modelling of the various factors affecting the productivity of FMS". *International Journal of Productivity and Quality Management*, Vol. 17, No. 3, pp. 353-379, March 2016. SCOPUS UGC 23394
- [2] Sandhya Dixit, "Hardness Testing of Friction Stir Welded AA1200 Aluminium Alloy", International Journal of Manufacturing Science and Engineering, Serials Publications Pvt Ltd., 8(1) 2017: January-June pp. 17-21, Jan 2017.
- [3] Mohit Yadav and Sandhya Dixit, "Modelling of the Various Flexibilities in a Flexible Manufacturing System, "International Education and Research Journal," Vol. 3, No. 6, pp. 241-243, June, 2017.
- [4] Sandhya Dixit, Tilak Raj, "A TISM Model for Structuring the Productivity Elements of Flexible Manufacturing System", World Academy of Science, Engineering and Technology, International Journal of Industrial and Manufacturing Engineering, Vol.11, No.4, pp. 905-912, 2017. UGC 33105
- [5] Ojha, V., Dixit, S. and Goyal, S., "Comparision of automated material handling system with human labour in FMS environment: Identification of core attributes", *International Journal of Management Technology and Engineering*, Vol, 8, No.5. pp. 2019-214, May, 2018. UGC 45550
- [6] Sandhya Dixit, Tilak Raj, "Feasibility analysis of FMS in small and medium scale Indian industries with a hybrid approach using ISM and TOPSIS", *International Journal of Advanced Operations Management*, Vol. 10, No. 3, pp. 252-280, July 2018. SCOPUS, UGC 2502

- [7] Sandhya Dixit; Tilak Raj, "A Hybrid MADM Approach for the Evaluation of Different Material Handling Issues in Flexible Manufacturing Systems", *Administrative Sciences*, Volume 8, Issue 4, 69, pp. 1-19., Nov, 2018. ESCI (Web of Science) Impact Factor 1.988
- [8] Sandhya Dixit, Vimlesh Kumar Ojha, "Review of different planning, design and operational issues of flexible manufacturing system", *International Journal of Management, Technology and Engineering*, Volume 8, Issue XI, pp. 359-368 Nov 2018. UGC 45550
- [9] Umesh Deswal, Sandhya Dixit and Sanjeev Goyal, "Identification of barriers to the successful implementation of VMI", *International Journal of Management, Technology and Engineering*, Volume 8, Issue XI, pp. 871-876, Nov 2018. UGC 45550
- [10] Devesh Kumar, Sanjeev Goyal and Sandhya Dixit, "Hierarchy model to measure performance of routing in FMS", *International Journal of Engineering Sciences Paradigms and Researches*, Volume 48, Special Issue, pp. 354-359, April 2019. UGC 42581
- [11] Pooja Rani, Sandhya Dixit, "Productivity Enhancement with Adoption of Advanced Automation Techniques: A case of Automobile Industry", *International Journal of Engineering Sciences Paradigms and Researches*, Volume 48, Special Issue, pp. 354-359, April 2019. UGC 42581
- [12] Vimlesh Kumar Ojha, Sandhya Dixit and Sanjeev Goyal, "An AHP-based comparison between automated and manual material handling systems in FMS environment", *International Journal of Productivity and Quality Management*, Vol.28, No. 2, pp. 256-277, Oct 2019. SCOPUS, UGC 23394
- [13] Sandhya Dixit, Tilak Raj "Quantifying the influence of FMS on the productivity of a firm", International Journal of Process Management and Benchmarking, Volume 9, Issue 4, pp. 447-468, Nov 2019. SCOPUS, UGC 23387
- [14] Arun Chandra Akriti, Sanjeev Goyal and Sandhya Dixit, "Loading Issues in FMS-Interpretive Structural Modeling," *Advances and Applications in Mathematical Sciences*, Vol. 20, No. 10, Aug 2021, pp. 2197-2213. ESCI (Web of Sciences) ISSN 0974-6803.
- [15] Sandhya Dixit, Suman Gothwal and Tilak Raj, "A LAPTOP methodology to evaluate the transition of CMS into FMS: a case study, International Journal of System Assurance Engineering and Management, DOI 10.1007/s13198-021-01224-6, pp. 516-534, Aug, 2021. ESCI (Web of Sciences) ISSN 0975-6809.

Books Published

Authored a Book titled:

'Engineering Graphics and Machine Drawing' for UG Engineering students Publisher: Dhanpat Rai and Co. (ISBN No. 978-81-770-214-0)

FDPs/ STCs/ Workshops Attended

- One week FDP on 'Application of Artificial Intellegence Tools in Power, Department of Electrical Engg YMCAUST, Faridabad, from 19.06.2012 to 25.06.2012.
- Two days Workshop on 'Research Techniques & MADM Approaches,' Department of Mech Engg YMCAUST, Faridabad, from 16.04.2013 to 17.04.2013.
- Two weeks FDP on Emerging Trends in Engineering, Technology and Management (ETIETM'13), Department of Computer Engg YMCAUST, Faridabad, from 14.01.2014 to 15.01.2014.
- ISTE approved One week STC on 'Effective Teaching and Research', MED, YMCAUST, Faridabad, from 07.07.2014 to 11.07.2014.
- ISTE approved One week FDP on 'Soft Skills and Personality Development', Department of Management Studies, YMCAUST, Faridabad, from 15.07.2014 to 21.07.2014.

- AICTE approved One week STC on 'IC Engines through ICT', NITTTR, Chandigarh, from 15.12.2014 to 19.12.2014.
- AICTE approved One week STC on 'Technical Teachers' Role, Self- Esteem, Motivation and Professionalism Development through ICT', NITTTR, Chandigarh, from 08.06.2015 to 12.06.2015.
- One week STC on 'Applied Research: Design and Execution', IIT, Roorkee, 15.06.2015 to 19.06.2015.
- One week STC on 'Disaster Mitigation and Management', NIT, Kurukshetra, from 22.06.2015 to 26.06.2015.
- AICTE recognized STC on 'Communication Skills through ICT', NITTTR, Chandigarh, from 11.01.2016 to 15.01. 2016.
- One Day IEEE Xplore Digital Library Awareness Workshop held at YMCAUST, Faridabad on 16-Oct-15
- One day Seminar on 'An Integrated to Research Quality and Ethics', YMCAUST, on 20.01.2017
- Two weeks FDP sponsored by (DST-NIMAT) on 'Entrepreneurship: An Effective Tool to Improve Industry- Institute Intraction' YMCAUST, from 07.12.2017 to 20.12.2017.
- One week STC on 'Soft Skills Development: A Tool for Effective Teaching', IIT Roorkee, from 25.06.2018 to 29.06.2018.
- One week FDP on 'Data Science and Big Data Analytics', ICT Academy, from 28.08.2018 to 01.09.2018.
- One week FDP for 'Improving Teaching, Learning and Research Competence,' ESCI, Hyderabad, from 25.06.2019 to 29.06.2019.
- One and half weeks FDP on 'Work System Design', NAPTEL- AICTE, Oct 2019.
- One week FDP on '3D Printing & Design', AICTE Training and Learning Academy, Jaipur, from 20.01.2020 to 24.01.2020.
- Two weeks FDP on 'Transformation in Teaching Learning Process (DTITLP)', course organised by NPIU and conducted by IIT Bombay on SWAYAM from 06.04.2020 to 22.04.2020.
- One week FDP on 'Research in Modern Era', Mech Engg. Deptt., JCBUST, YMCA, Faridabad from 01.06.2020 to 05.06.2020.
- One day International symposium on COVID 19 & Beyond: The new normal in HEIs, IQAC, JCBUST, YMCA, Faridabd, on 10.06.2020.
- AICTE approved One week FDP on' Incorporating Universal Human Values in Technical Education', AICTE online, from 05.08.2020 to 09.08.2020.
- One week Short term training program on 'Advances in Manufacturing Technology: CNC and Robotics', Mech Engg Deptt, JCBUST, YMCA, from 17.08.2020 to 22.08.2020.
- Professional Development Training at IIM Raipur from 14.01.2021 to 16.01.2021.
- National Seminar on 'Teacher's Role in National Education Policy-2020 Implementation' at JCBUST, YMCA, Faridabad on 18.02.2021.
- TEQIP-3 sponsored STC on Supply Chain Management at JCBUST, YMCA, Faridabad from 13.03.2021 to 17.03.2021.
- FDP on 'Cardinal Role of Quality Education in Developing Self-Reliant India' at IQAC, Aggarwal College, Ballabgarh from 07.07.2021 to 14.07.2021
- FDP on Exergy Analysis in Industrial Applications from 25.10.2021 to 29.10.2021
- FDP on Engineering Materials from 24.01.2022 to 30.01.2022.

Others:

- Conducted a Value Added Course on 'Universal Human Values' for UG students
- Completed 3 MOOCs 'Work System Design' and 'Operations Management' and 'Digital transformation in Teaching Learning'
- Fellow, 'The Institution of Engineers (India)'.

- Life Member, 'Indian Institution of Industrial Engineering, Navi Mumai'.
- Life Member, 'Indian Science Congress Association'.

Personal Qualities

- Passionate about teaching and mentoring students
- Strong commitment to the growth of the department and University
- Excellent Interpersonal skills

Hobbies and Interests

- Reading
- Visiting places of religious and cultural importance

Personal Details

Name: Dr Sandhya Dixit D.O.B.: 01.02.1979 Nationality: Indian Religion: Hindu Category: General Marital Status: Married

Husband's Name: Dr Ashutosh Dixit

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