

Curriculum Vitae



Dr Sangeeta Pandit

Assistant Professor

Design Discipline

PDPM-Indian Institute of information Technology, Design and Manufacturing, Jabalpur

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Madhya Pradesh- 482005, India.

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Personal Details:

Date of Birth:- 9th February, 1981

Marital Status:- Single

Nationality:- Indian

Present Address:- Indian Institute of Information Technology Design and Manufacturing
Jabalpur. Jabalpur-482005, Madhya Pradesh, India.

Permanent Address:- 122 Raja Rajendra lal Mitra Road. Kolkata. 700085

Professional Qualification:

- PhD in Design Ergonomics from Department of Design, IIT Guwahati
- MSc. In Human Physiology with specialization in Ergonomics from Calcutta University

Teaching Experience:

- June 3rd 2013 till date at IIITDM Jabalpur
- 2007-2008 at KPC Medical College and Hospital, Kolkata as Assistant Professor

Research Experience:

- Worked as Assistant Project Scientist in MHRD funded project (Sakshat Virtual labs – Ergonomics lab. How to apply anthropometric knowledge in virtual workstation) (2010-2012).
- Worked as SRF at NIOH, (I.C.M.R.) Ahmedabad in “WHO” funded Project (July, 2010-November, 2010).
- Worked as JRF at IDC, IIT Bombay in DST funded project (2008-2009).

Award:

One of the most distinguished papers award at International Conference on Research into Design (ICORD'15) for the paper title “Ergonomic Risk Assessment on Women Handloom Weavers in Assam with the Introduction of Jacquard” held at IISC Bangalore during 7-9th January, 2015.

Membership of Professional Bodies:

- Life member of Indian Society of Ergonomics Membership no L322 (1st sept 2011)
- Life member of Indian Science Congress Association Membership no L16314 (7th Sep 2010)

Selected Publications:

Journals

- ❖ **Pandit, S.**, Kumar, P., Chakrabarti D. "Ergonomic problems prevalent in handloom units of North East India", International Journal of Scientific and Research Publications,3 (1) (2013), pp 1-7.
- ❖ Chakrabarti, D., Deori, M., **Pandit, S.** and Ravi, T. " Virtual Ergonomics Laboratory: Human body dimension relevance", Advance engineering forum (2013), 10, pg 22-27.
- ❖ Amol and **Pandit, S.**, "New hand-cart for Old-Delhi whole sale market designed and engineered using Generic Product Development Process," Indian Journal of Pure & Applied Physics (IJPAP) (2020), 58, pg 698-705.

Conferences

- **Pandit, S.**, Jagtap, S., and Gupta, S., "Bamboo as a sustainable material for furniture design in schools especially in rural and remote areas", 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020) held on December 19-20, 2020, IIT Roopar, India (accepted).
- **Pandit, S.**, Padia, N., Gupta, S., "Design intervention in the field of Metrology / Quality control", 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020) held on December 19-20, 2020, IIT Roopar, India (accepted).
- **Pandit, S.**, Gupta, S., Padia, N., Jagtap, S., "Sustainability of indoor air-purifier", 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020) held on December 19-20, 2020, IIT Roopar, India (accepted).
- **Pandit, S.**, Sonawane, P., Vattam, R., "Ornamental Plant Nursery Layout Design", 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020) held on December 19-20, 2020, , IIT Roopar, India(accepted).
- **Pandit, S.**, Vattam, R., Sonawane, P., "An Ergonomics analysis of sowing operation for small and marginal farmers", 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020) held on December 19-20, 2020, IIT Roopar, India(accepted).
- **Pandit, S.**, Rao, Ch. A., Parashar, P., "Ergonomic analysis of workload of vegetable cart vendors in the manual pushcart used for vending vegetables", 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020) held on December 19-20, 2020, IIT Roopar, India (accepted).
- **Pandit, S.**, Parashar, P., Rao, Ch. A., "Risk analysis of musculoskeletal disorders (MSDs) on palledars working in mandi of sec-16,Faridabad", 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering (AFTMME 2020) held on December 19-20, 2020, IIT Roopar, India (accepted).
- **Pandit, S.**, Vinod, N., "Ergonomic issues related to production process of silk dye units of India", International Conference on Innovative Research In Science, Technology and Management, 16-17th September, 2017, Singapore.

- **Pandit, S.,** Bharti, S., “Accidents and risk factor analysis among marble carving artisans of Central India due to traditional hand-tool use”, 8th International Conference on Applied Human Factors and Ergonomics, 17-21st July, 2017, Los Angeles, California.
- **Pandit, S.,** Chakrabarti, D. “Ergonomic risk on handloom weavers of Assam with introduction of Jacquard on four pillar frame loom”, International conference on research into design, 7 -9 January, 2015. IISc Bangalore, Bangalore, India.
- **Pandit, S.,** Chakrabarti, D. “Investigation of work-related muscular pain among women handloom weavers of Assam a state of North-East India using REBA method”, Asian Conference of Ergonomics in Design, 21-24th May 2014,. Jeju, South Korea.
- **Pandit, S.,** Chakrabarti, D. “Ergonomic Intervention in Seat design for Commercial Handloom of Kamrup district of Assam” International Ergonomics Conference HWWE, 3-5th Dec, 2014. IIT Guwahati, Guwahati. India.
- **Pandit, S.,** Chakrabarti, D. “Assessment of occupational workload among women weavers in handloom industries of Assam”, 100th Indian Science Congress, 3-7th January, 2013, Kolkata, pp-181.
- **Pandit, S.,** Chakrabarti, D. “Occupational load assessment of sitting posture of women handloom weavers of Assam through lung capacity and expiratory flow”, International conference on humanizing work and work environment, ERGO 2012: Safety for All, 6-8th December, 2012, Uttarakhand, pp- 95.
- **Pandit, S.,** Chakrabarti, D. “ Ergonomic design intervention reducing physiological problems among women weavers of NE India”, 99th Indian Science Congress, 3-7th January, 2012, Bhubanesware, pp- 176.
- **Pandit, S.,** Chakrabarti, D. “ Effect of sitting postures on lung capacity among women weavers involved in traditional handloom industries of Assam”, International conference on molecules to systems physiology 100, 21-23rd September, 2011, Kolkata, pp-94.
- **Pandit, S.,** Ravi, T., Chakrabarti, D. “User experience and functional issues for Indian Railway coach interior”, International conference on ergonomic and Human factors, HWWE 2011, 15-17th December, 2011, IIT Madras, pp- 123.
- **Pandit, S.,** Chakrabarti, D. “ An ergonomic study of working posture among women weavers involved in handloom industries of Assam”, International conference on ergonomic and Human factors, HWWE 2011, 15-17th December, 2011, IIT Madras, pp- 32.
- Bhattacharyya, N., **Pandit, S.,** Chakrabarti, D. “Work related upper limb disorders among the women workers engaged in fruit processing industries of Assam and design development scope”, 98th Indian Science Congress, 3-7th January, 2011, Chennai, pp- 140. Paper no 10.
- **Pandit, S.,** Chakrabarti, D. “An ergonomic study on women weavers’ performance: design and occupational assessment in the handloom industries in Assam”, 98th Indian Science Congress, 3-7th January, 2011, Chennai, pp-211. Paper no 33, 2011.

Book chapters:

- **Pandit, S.,** Chakrabarti, D., Design for all Institute Of India, Occupational Risk Assessment of Health Condition of Women Handloom Weavers of Assam, (2014).
- **Pandit, S.,** Chakrabarti, D., User centered design and occupational wellbeing, McGraw Hill Education., New Delhi (India), 2014 [ISBN: 978-93-392-1970-3].

- **Pandit, S.**, Chakrabarti, D., Ergonomics for rural development, Department of Human Physiology with community health Vidyasagar University, Midnapore, West Bengal, 2015 [ISBN: 978-93-5174-905-9]
- **Pandit, S.**, Chakrabarti, D., Smart Innovation, Systems and Technologies, Springer, New Delhi, 2015 [ISBN: 978-81-322-2231-6].

Workshop attended:-

- Prevention of Coronary/Covid -19: Ergonomic Views held on 12th August, 2020
- Indian International Science festival: held on 22nd to 25th December 2020
- Attended FDP on Teaching Learning "Fundamentals of Engineering Education Practice" organized online by National Institute Of Technical Teachers Training And Research Institute Bhopal between 18-25th January 2021.

Keynote Lecture delivered:-

1. Lecture Title:-**Ergonomics for the unorganized sector** at International conference on "Advance and futuristic trends in mechanical and materials engineering (AFTMME-20)" organized by Society of materials and mechanical engineers held at Indian Institute of Technology Roopar on 19-20 December 2020.
2. Lecture Title:- **Ergonomics for the Engineers** held at a webinar organized by PSG College of Technology, Coimbatore on 28th December 2020.

Sponsored Project:

1. Design Department of IIITDMJ was identified for NRCs under PMMMNMTT Scheme through AICTE for conducting online refresher Courses for all faculties under SWAYAM Scheme. **Title Design Spectrum**
2. Ergonomic design intervention in hand block Bagh print of Madhya Pradesh under Design Innovation Center, MHRD.

Consultancy project:

1. Project title "Physiotherapy Device for Upper and Lower Limb exercise". Name of the consultancy firm **Inventin Design Private Limited**. Faridabad, India
2. Project title "Tread mill test machine for patients". Name of the consultancy firm **Recorders and Medicare Systems (P) Ltd.** Chandigarh. India

Courses developed by me at IIITDMJ and Senate approved:

- Occupational Ergonomics developed and approved by senate for MDEs
- Safety and Human Factors developed and approved by senate for MDEs
- Culture and Design developed and approved by senate for MDEs
- Human Factors Engineering developed and approved by senate for BTech
- Ergonomics in the management of Musculoskeletal Disorder developed and approved by senate for PhD
- Human Factors and ergonomic methodology developed and approved by senate for PhD

Courses conducted:-

Title	Level (BDes/MDes/PhD)
Ergonomics for Industrial Design	MDes
Occupational Ergonomics	MDes
Safety and Human Factors	MDes
Interaction design	MDes
Design Thinking	Both for MDes and BDes
Human Factors Engineering	BTech
Applied Ergonomics	BDes
Visual Ergonomics	BDes
Ergonomics in the management of Musculoskeletal Disorder	PhD
Human Factors and ergonomic methodology	PhD

Different administrative position held and ongoing:-

Title of the post	Nature of Work	Organization
Warden Girls hostel	Administrative	IIITDMJ
Member of Student advisory committee of Senate (SAC)	Administrative	IIITDMJ
Member of Women Cell	Administrative	IIITDMJ
Member of Library committee	Administrative	IIITDMJ
Academic Programme Committee of Senate (APCS)	Administrative	IIITDMJ
Member of Time table committee of the institute	Administrative	IIITDMJ
Member of Mess monitoring committee	Administrative	IIITDMJ

MDes and PhD Thesis guided

S. No.	Name of Student	Masters /PhD	Roll	Guided Sole/as co-guide	Status with year	Title of thesis
1	Aditya Dhanotiya	MDes	1410402	Sole	Completed June 2016	Design intervention in commercial cloth ironing process
2	Ankur Raj	MDes	1410403	Sole	Completed June 2016	Ergonomic intervention in design of knapsack sprayers in Indian context
3	Anshul Singh	MDes	1410404	Sole	Completed June 2017	Use of low cost anthropomorphic products to improve hydration status in kindergarten children
4	Prarabdh Dhomne	MDes	1610420	Sole	Completed June 2017	Design intervention in the field of public transportation in Jabalpur city
5	Aditi Chansori	MDes	1510401	Sole	Completed June 2017	Guidelines to enhance the usability of the accessibility feature for visually impaired smartphone users
6	Krunal Patel	MDes	1510416	Sole	Completed June 2017	Design for real time continuous blood pressure measurement and cardiac parameter monitoring device
7	Devendra Singh	MDes	1510408	Sole	Completed June 2017	Self-deployable balloon pad for emergency surveillance and navigation for crashed aircraft
8	Vinod N.	MDes	1510419	Sole	Completed June 2017	Design issues related to silk dye units in India
9	Ashish Rajvilas Kulkarni	MDes	1510406	Sole	Completed June 2017	Design of disposable sanitary pad incinerator
10	Alok Kumar	MDes	1610406	Sole	Completed June 2018	Design intervention to enhance the production of block print
11	Jetti Rahul	MDes	1610413	Sole	Completed June 2018	Design intervention to improve experience of boating in Bhedaghat
12	Shubham Bharti	MDes	1610426	Sole	Completed June 2018	Wayfinding system design in public space context bus stand "AICTSL" Indore
13	Leeladhar Ganvir	MDes	1610414	Sole	Completed June 2018	Strategic intervention to traditional classroom of Indian education system
14	Pratibha Sahu	MDes	1610420	Sole	Completed June 2018	Information Layout Designing of 'Barco Display Screen' used in State Load Despatch Centre at MPPTCL
15	Avinash Sahu	MDes	1714025	Sole	Completed June 2019	Design intervention in Madan Mahal heritage site at Jabalpur for generating and creating a unique user experience

16	Akhil Vasist	MDes	1610403	Sole	Completed June 2019	Space and Service design of food sampling zone in Indian restaurants
17	Amol	MDes	1814005	Sole	Completed June 2020	Design intervention in the manually pulled cart used for carrying the load in old Delhi area
18	Prasad Gadve	MDes	1814009	Guide:- Dr Sangeeta Pandit Co-guide: Dr Deepmala	Completed June 2020	Design intervention in low cost prosthetic limbs for upper knee amputee patients
19	Harshit Sharma	MDes	1814012	Sole	Completed June 2020	Design Intervention in The Field of Jodhpur Wooden Handicrafts
20	Rajat Kamble	MDes	1814017	Sole	Completed June 2020	Ergonomic intervention in hand block print tool designs for bag print of Madhya Pradesh, India
21	Shekhar Sumeet	MDes	1814022	Sole	Completed June 2020	Design intervention in Transportation to support rural healthcare
22	Shubham Ashok Jagtap	MDes	1914018	Sole	On-going	Bamboo as a sustainable material for furniture design in rural schools
23	Rajkumar Vattam	MDes	1914013	Sole	On-going	Ergonomic intervention in workstation design for marble carving artisans of Jabalpur
24	Neel Paresh Padia	MDes	1914027	Sole	On-going	Ergonomics principles to reduce parallax error in Quality Control measuring Instrument
25	Sonawane Pranoti Pravin	MDes	1914021	Sole	On-going	Ergonomic design Interventions in manual material handling in nursery Plantations
26	Jyotiprakash Dalai	MDes	1914025	Sole	On-going	Development of home care unit for pandemic situation
27	Sachin Rajendra Gupta	MDes	1914028	Sole	On-going	Sustainability in air-purifier design
28	Chelapareddi Anshuman Rao	MDes	1914003	Sole	On-going	Ergonomic intervention in vegetable hand-pulled cart design
29	Avinash Sahu	PhD	1914604	Sole	On-going	Design intervention in bell metal process for Dhokra craft workers of Bastar Chhattisgarh.
30	Rajat Kamble	PhD	T2014602	Sole	On-going	Manual Material Handling in fishing industries of Karbar Harbour port Karnataka