CURRICULUM VITAE

DR. SOUGATA KARMAKAR

Associate Professor, Dept. of Design, Indian Institute of Technology (IIT) Guwahati, Guwahati-781039, Assam, India. Email: karmakar.sougata@gmail.com, karmakar.sougata@iitg.ernet.in Mobile/Cell: +91-8011403513, Ph: 0361-2582464 URL: http://www.iitg.ac.in/design/ergonomic%20lab/faculties.html



Educational Status:Ph.D in Physiology (Ergonomics), Bharathiar University, India.
M.Sc. in Physiology (Rank-1), University of Burdwan, India.
PGDM in Human Resource Management, Pondicherry University, India.

Work Experience:

- 1. Presently have been working as Associate Professor in Dept. of Design, IIT Guwahati, India since December 2016.
- 2. Assistant Professor in Dept. of Design, IIT Guwahati, India from March 2010 to November 2016.
- 3. Worked as Assistant Professor in K.G. College of Health Sciences, Coimbatore in Feb. 2010.
- 4. Worked as a Research Fellow from 29.11.04 to 28.11.09 in Defence Institute of Physiology & Allied Sciences (DIPAS), DRDO, Delhi-54, India.
- 5. Worked as Lecturer (01.07.04 to 25.11.04) in Dept. of Physiology in Krisnagar Govt. College, Krishnagar, Nadia (W.B.), India.

Editorial Board Member-Journal:

- International Journal of Occupational Safety and Health (IJOSH)-official journal of the Occupational Health and Safety Society of Nepal (OHSSN)
- Medical Science [ISSN: 2321-5291] published by Pubmed House, USA.

Reviewer:

- International Journal of Industrial Ergonomics [Elsevier]
- Current science [Spinger]
- HOMO-Journal of Comparative Human Biology [Elsevier]
- SpringerPlus [Spinger]
- Journal of the Institution of Engineers (India): Series C.[Spinger]
- Textile Research Journal [Sage Publication]
- Malaysian Journal of Nutrition [Pusat Sitasi Malaysia (Malaysian Citation Centre)]

SEMINARS/WORKSHOPS/CONFERENCES /SHORT-TERM COURSES ORGANISED

Role	Name of Sem./Wor./Con.	Funded	Date	International/
		By		National
Co-Organizer	Quality Improvement Programme	MHRD	25-29 th	National
	(QIP) 'Ergonomics & Technology		October	
	Applications'		2010	
Conference Secretary	Typography Day 2013	Various	7-9 th March	International
		Sponsors	2013	
Conference Secretary	International Ergonomics	Various	1^{st} -5 th	International
	Conference HWWE 2104	Sponsors	December	
			2014	
Principal Consultant and	Short term training program on	TATA	$16^{\text{th}} - 20^{\text{th}}$	National
Course Coordinator	Automotive Ergonomics & Design	Elxsi Ltd.	March 2015	

Invited Talk/ Workshop conducted:

- Invited as resource person and delivered lecture entitled 'Workplace Design Intervention in Industries' in TEQIP sponsored industry- institute interaction workshop on 'Ergonomics, Safety and Occupational Health' (30th Sept-1st Oct. 2016) organized by Department of Agricultural Engineering, NERIST, Nirjuli, Arunachal Pradesh, India.
- Invited as resource person and delivered lectures entitled 'Virtual Ergonomics Evaluation for Product and Workstation Design' in TEQIP (Phase-II) sponsored Workshop on 'Ergonomics in Workplace: Measurement, Analysis and Solutions' (20-22 July 2016) organized by Mechanical Engineering Dept., Rajiv Gandhi Institute of Technology (RGIT), Kottayam, Kerala, India.
- 3. Delivered invited talk on 'Research in Ergonomics in IIT Guwahati' during 3rd February 2016, at Department of Industrial and Production Engineering, **Vishwakarma Institute of Technology**, Pune, Assam, India.
- 4. Invited as keynote speaker in international conference "MED BY"- Mechanical Engineering & Design, organized by **SEC**, **Beer-Sheva**, **Israel** during 5th to 9th July 2015.
- Conducted week long (January, 2015) workshop on "Fundamentals of Ergonomics" and "Automotive Ergonomics" at DYPDC Center for Automotive Research and Studies, Charoli Bk. via Lohegaon, Pune - 412 105, Maharashtra, India.
- Delivered a lecture entitled 'Visual information processing to understand consumer behavior in Retail Business' in a AICTE sponsored seminar 'Atmospheric and Space Management in Retail Business' during 22nd December 2014, organized by Assam College of Management, Guwahati, Assam, India.
- As resource person, Dr. Sougata Karmakar, Assistant Professor, Department of Design, Indian Institute of Technology – Guwahati conducted a two-day research workshop on 'Ergonomics: Application in Engineering and Industrial Design' sponsored by TEQIP-II (Technical Education Quality Improvement Programme Phase-II) at the **PSG College of Technology**, Coimbatore, on August 24 to 25, 2013.
- 8. Delivered two lectures entitled 'Virtual Ergonomics in Product and Workplace Design' and 'Environmental Factors in Workplace' in a Faculty Development Programme (FDP) on 'Ergonomics and Safety in Product Design' during 14-18 May 2013, organized by Agricultural Engineering Dept., **NERIST**, Nirjuli, Arunachal Pradesh, India.
- 9. Invited as resource person and delivered lectures entitled 'Ergonomics in Built Environment' to AICTE approved faculties from various institutes during MHRD sponsored workshop 'National Programme on Technology Enhanced Learning' organized jointly by **IIT Guwahati and Royal Group of Institutions, Guwahati** on 29th April 2013.
- 10. Conducted one-day (25th March, 2013) workshop on "Fundamentals of Human Factors / Ergonomics" for the PG students at Dept. of Physiology, **Presidency University**, Kolkata-700001, West Bengal, India.
- Conducted one-day (3rd August, 2012) workshop on "Human Factors / Ergonomics for Interior Design" for the students at The Bhawanipur Design Academy, Kolkata- 700020, West Bengal, India.
- 12. Invited as resource person for presentation in National Design Sensitisation Seminar (NDSS), organized by National Institute of Design (NID), Ahmedabad, on behest of the Ministry of

Commerce and Industry, Govt. of India, on 2 August, 2012 at NIT Durgapur, West Bengal, India.

- Invited as resource person and delivered lectures in TEQIP sponsored Faculty Development Programme (FDP) Workshop on 'Advances in Computer Integrated Manufacturing and Robotics' (26-30 June 2012) organized by Mechanical Engineering Dept., NERIST, Nirjuli, Arunachal Pradesh, India.
- 14. Invited as resource person and delivered lectures in TEQIP sponsored Staff Development Programme (SDP) Workshop on 'Ergonomics in Workplace' (22-26 June 2012) organized by Mechanical Engineering Dept., **NERIST**, Nirjuli, Arunachal Pradesh, India.
- 15. Conducted half-day (16th April, 2011) workshop for M.Des students at Instrument Design Development Center, **Indian Institute of Techonology (IIT) Delhi**, Hauz Khas, New Delhi, India.
- Conducted week long (04-09 February, 2010) workshop on "Human Factors / Ergonomics for the Automotive Sector" at DYPDC Center for Automotive Research and Studies, Charoli Bk. via Lohegaon, Pune - 412 105, Maharashtra, India.

Awards:

- 'Prof. Sachidananda Banerjee Memorial Research Award: 2012', under Young Scientist Award scheme of Physiological Society of India (PSI)
- > National Scholarship: Awarded for Rank-59 in Madhyamik Examination, 1996.
- National Scholarship: Awarded for Rank-3 in B.Sc. Examination, 2001.
- > University Gold Medal: Awarded for being 1st Class 1st in M.Sc. in 2003.
- Certificate of merit was awarded in the 18th Annual Training Programme (2004) on Science Communication and Media Practice.

Membership:

- Regular Member of Human Factor and Ergonomics Society (HFES), USA [Record ID: 33130]
- Member of International Commission on Occupational Health (ICOH) [Code: K5968]
- Life member of Indian Society of Ergonomics (ISE) [L-148]
- Life member of Indian Science Congress Association (ISCA) [L-11636]
- Life member of Physiological Society of India (PSI)
- Life member of Indian Science News Association (ISNA)
- Life member of Indian Association of Biomedical Scientists (IABMS) [LM-840/2010]
- Life Member of Biomedical Engineering Society of India (BMESI) [LM-1031]
- Life member of the Association of Physiologist and Pharmacologist of Indian (APPI) [Membership No. 2701]
- Member of International Association of Engineers (IAENG) [Membership number: 124709]

Name	Roll No.	Status of thesis work	Thesis title/ research area
Dr. Anirban Chowdhury	126105003	Provisionally awarded	Influence of Anthropomorphic Product Appearance on Purchase Intention: A Cognitive Ergonomics Perspective
Mr. Sanjog J.	11610501	Thesis submitted	Ergonomic design interventions for improvement of shop-floor working conditions in the Indian small and medium scale injection-molded plastic furniture manufacturing industries
Ms. Swathi Matta Reddy	10610501	Thesis submitted	Influence of Colour and Form in Product Choice: Cognitive Ergonomics Perspective

PhD students and their research work:

Mr. Thaneswer Patel	126105007	Thesis submitted	Ergonomic Design Modification of 'Pedal Operated Paddy Thresher' Adoptable for Agricultural Needs of Northeast India
Mr. Surendra Kumar	126105004	Continuing research work	Study on illumination and noise level in handloom sectors and their physiological and psychological impact on weavers
Mr. Indresh Kumar	146105005	SOAS- appearing	Study on influence of various factors (in vehicle devices, age, gender, experience etc.) on distraction behavior of Indian drivers
Ms. Susmita Nath	156105008	Course work- going on	Design intervention towards reduction of impact of vibration during use of vibrating hand-tools in unorganized occupational sector

Sponsored Project / Consultancy (in reverse chronological order)

Sl. No.	Title	Sponsoring Agency	Sponsored Amount	Duration	Role	Co- Investigators
1.	Design intervention to reduce muscular fatigue during backpack mode of load carriage by Indian Army personnel	DRDO	9.75 Lacs	21.10.2016 to 20.10.2018	PI	Dr. U.R. Salve
2.	Massive online open access course (MOOC) on 'Digital Human Modeling and Simulation for Virtual Ergonomics Evaluation'	NPTEL, MHRD	3 Lacs	July 2016 to Sept. 2016	PI	Nil
3.	Design Intervention to ameliorate exposure to vibration during use of hand-held vibrating tools in unorganized sector (Stone- polishing work)	DIC, MHRD	20 Lacs	02.01.2015 to Continuing	PI	Prof. R. Tiwari
4.	Development of automatic fish seed grader cum counter	DIC, MHRD	06 Lacs	02.04. 2016 to Continuing	Co-PI	Dr. B. C. Borah
5.	Short-term training program on Automotive Ergonomics and Design	TATA Elxsi Ltd	1.07 Lacs	16.03.2015 to 20.03.2015	PI	Nil
6.	Lecture notes reparatory to a textbook: Digital Human Modeling and Simulation in Product and Workstation Design	QIP, MHRD	0.245 Lacs	June 2011 to 01.01.2013	PI	Nil
7.	Visual and Tactile Information Processing in Product Selection Process	DBT	40.83 Lacs	02.06.2011 to 01.06.2014	PI	Dr. S. Ghosh
8.	Design and Evaluation of Play Ground for Primary School Children in Virtual Environment	IITG	5.0 Lacs	26.08.2010 to 25.08.2012	PI	Nil

Publications

Journal Papers:

<u>2016</u>

- 1. Sanjog, J., Baruah, R.L., Patel, T. and **Karmakar, S**., 2016. Redesign of Work-Accessories Towards Minimizing Awkward Posture and Reduction of Work Cycle Elements in an Indian Shop-Floor Workstation. In: Advances in Ergonomics in Design (pp. 219-232). Springer International Publishing.
- Patel, T., Sanjog, J., Chatterjee, A. and Karmakar, S., 2016. Statistical Interpretation of Collected Anthropometric Data of Agricultural Workers from Northeast India and a Comparison with National and International Databases. *IIE Transactions on Occupational Ergonomics and Human Factors*, 4(4), 197-210. (DOI:10.1080/21577323.2016.1194912) [Taylor & Francis]
- 3. Patel, T., Sanjog, J. and **Karmakar, S.**, 2016. Ergonomics perspective in agricultural research: a user-centred approach using computer-aided design (CAD) and digital human modeling (DHM) technologies. *Journal of The Institution of Engineers (India): Series A, 97(3), 333-342* (DOI: 10.1007/s40030-016-0162-2) [Spinger]
- 4. Sanjog, J., Patnaik, B., Patel, T. and **Karmakar, S.,** 2016. Context specific design interventions in blending workstation: An ergonomics perspective. Journal of Industrial and Production Engineering, 33(1), 32-50. (DOI: 10.1080/21681015.2015.1099057) [Taylor & Francis]

<u>2015</u>

- Sanjog, J., Patel, T., Chowdhury, A. and Karmakar, S., 2015. Musculoskeletal ailments in Indian injection-molded plastic furniture manufacturing shop-floor: Mediating role of work shift duration. *International Journal of Industrial Ergonomics*, 48, 89-98. (DOI: 10.1016/j.ergon.2015.04.004) [Elsevier]
- 6. Sanjog, J., **Karmakar, S.**, Patel, T. and Chowdhury, A., 2015. Towards virtual ergonomics: aviation and aerospace. *Aircraft Engineering and Aerospace Technology: An International Journal*, Vol. 87 (3), 266 273. [Emerald]
- 7. Patel, T., Sanjog, J. and **Karmakar, S.**, 2015. Isometric hand grip strength of agricultural workers from northeast region of India. *Agric. Eng. Int: CIGR Journal*, 17(1), 130-140.

<u>2014</u>

- 8. Patel, T., Sanjog, J., Kumar, P., and **Karmakar, S.**, 2014. Isometric muscular strength data of Indian agricultural workers for equipment design: Critical analysis. *Agric. Eng. Int: CIGR Journal*, 16(2), 70-79.
- 9. Patel, T. and **Karmakar, S.,** 2014. Book review: Introduction to Ergonomics, Third Edition. *International Journal of Industrial Ergonomics*, 44(6), 892-893. [Elsevier]
- 10. Patel, T. and **Karmakar, S.,** 2014. Book review: Anthropometric and Strength Data of Indian Agricultural Workers for Farm Equipment Design. *International Journal of Industrial Ergonomics*, 1(44),189-190. [Elsevier]
- 11. Chowdhury, A., **Karmakar, S.,** Reddy, S.M. and Ghosh, S. and Debkumar Chakrabarti 2014. Usability is more valuable predictor than product personality for product choice in human-product physical interaction. *International Journal of Industrial Ergonomics*, 44(5), 697-705. (doi: 10.1016/j.ergon.2014.07.008)[Elsevier]

- 12. Patel, T. and **Karmakar, S.,** 2014. Book review: Automotive Ergonomics: Driver-Vehicle Interaction. Journal of Transport Geography, 41, 346–347. [Elsevier]
- 13. Karmakar, S., Sanjog, J. and Patel, T., 2014. Digital Human Modeling and Simulation in Product and Workplace Design: Indian Scenario. *International Journal of Engineering Research and Applications (IJERA)*, Special issue. Pp. 06-12. [ISSN: 2248-9622]
- 14. **Karmakar**, S., 2014. Book Review: Ergonomics in the Automotive Design Process. *Ergonomics in Design*, 22 (1), p.33. SAGE Publication. [DOI: 10.1177/1064804614522753]

<u>2013</u>

- 15. Chowdhury, A., **Karmakar, S.**, Ghosh, S. and Chakrabarti, D., 2013. Purchase intention of anthropomorphic chair is influenced by visual attractiveness and perceived pleasure. *International Review of Applied Engineering Research*, 4(2), 133-140.
- 16. Patel, T. and **Karmakar, S.,** 2014. Anthropometric and strength data of Indian agricultural workers for farm equipment design: Book review. *International Journal of Industrial Ergonomics, 44, 189-190.* (DOI: 10.1016/j.ergon.2013.10.006) [Elsevier]
- Patel, T., Sanjog, J., Chowdhury, A., and Karmakar, S., 2013. Applications of DHM in Agricultural Engineering: A Review. *Advanced Engineering Forum*, 10, 16-21. [DOI:10.4028/www.scientific.net/AEF.10.16]
- Patel, T., Karmakar, S., Sanjog, J., Kumar, S. and Chowdhury, A., 2013. Socio-Economic and Environmental Changes with Transition from Shifting to Settled Cultivation In North-Eastern India: An Ergonomics Perspective. *International Journal of Agricultural Science and Research*, 3(2), 117-136
- 19. Sanjog, J., Patel, T. and **Karmakar, S.**, 2013. Indoor physical work environment: an ergonomics perspective. *International Journal of Science, Engineering and Technology Research*, 2(3), 507-513.

<u>2012</u>

- 20. Sanjog, J., **Karmakar, S.**, Patel, T. and Chowdhury, A., 2012. DHM an aid for virtual ergonomics of manufacturing shop floor: A review with reference to industrially developing countries. *International Journal of Computer Applications*, 54(14), 18-23. (DOI: 10.5120/8634-2541)
- Chowdhury, A., Sanjog, J., Reddy, S.M. and Karmakar, S., 2012. Nanomaterials in the field of Design Ergonomics: Present status. *Ergonomics*, 55(12), 1453-1462. [doi:10.1080/00140139.2012.720287][Taylor and Francis]
- Sanjog, J., Karmakar, S., Agarwal, H. and Dattu Patil, C., 2012. Designing and ergonomic Evaluation of a Shoe-rack in CAD Environment. *International Journal of Computer Applications*, 49(20), 38-41. (DOI:10.5120/7890-1275)
- Chowdhury, A., Karmakar, S., Reddy, S.M., Sanjog, J., Ghosh, S. and Chakrabarti, D., 2012. Visual attention analysis on mutated brand name using eye-tracking: A case study. *Journal of World Academy of Science, Engineering and Technology*, Issue-68, p. 1132-1135. (pISSN: 2010-376X, eISSN:2010-3778)
- 24. **Karmakar, S.,** Pal, M. S., Majumdar, Deepti. and Majumdar, D., 2012. Application of Digital Human Modeling and Simulation for Vision Analysis of Pilots in a Jet Aircraft: A Case Study. *Work.* IOS Press, 41 Suppl. 1, 3412-3418. [DOI: 10.3233/WORK-2012-0617-3412]

 Reddy, S.M., Chakrabarti, D. and Karmakar, S., 2012. Emotion and Interior Space Design: An Ergonomic Perspective. *Work*. IOS Press, 41 Suppl. 1, 1072-1078. [DOI: 10.3233/WORK-2012-0284-1072]

Papers in Conference Proceedings:

<u>2015</u>

- Sanjog, J., Dash, T., Patel, T., and Karmakar, S., 2015. Redesign of small and medium scale injection molded plastic furniture manufacturing shop floor: Physical and environmental ergonomics aspects, In: Proceedings of 8th International Conference on Planning and Design (ICPD 2015), National Cheng Kung University, Tiwan, 25th - 28th May, 2015, pp. 276 – 286. [ISBN: 978-986-04-4432-2]
- Sanjog, J., Patel, T., Chowdhury, A., Kumar, S. and Karmakar, S., 2015. Ergonomics Investigations across Durable Goods Manufacturing Sector in India: an Insight. In: P.C. Dhara (Ed.), Ergonomics for Rural Development: A collection of articles presented at the International Conference on Ergonomics (HWWE 2013), 4th-6th December 2013, Vidyasagar University, Midnapore, West Bengal, India, pp.167-174. [ISBN: 978-93-5174-905-9]
- Patel, T., Sanjog, J., Kumar, P. and Karmakar, S., 2015. Analytical study of Isometric Muscular Strength of Agricultural Workers: Indian Perspective. In: P.C. Dhara (Ed.), Ergonomics for Rural Development: A collection of articles presented at the International Conference on Ergonomics (HWWE 2013), 4th-6th December 2013, Vidyasagar University, Midnapore, West Bengal, India, pp.69-77. [ISBN: 978-93-5174-905-9]
- Chowdhury, A., Reddy, S.M., Chakrabarti, D. and Karmakar, S., 2015. Cognitive Theories of Product Emotion and Their Applications in Emotional Product Design. *In*: A. Chakrabarti (ed.), ICoRD'15 – Research into Design Across Boundaries, Volume 1, 329-340. [Print ISBN: 978-81-322-2231-6].[Spinger]
- Reddy, S.M., Chowdhury, A., Chakrabarti, D. and Karmakar, S., 2015. Role of Colour and Form in Product Choice and Variation of Preferences Across Product Categories: A Review. *In*: A. Chakrabarti (ed.), ICoRD'15 – Research into Design Across Boundaries, Volume 2, 631-640. [Print ISBN: 978-81-322-2228-6].[Spinger]

<u>2014</u>

- Kumar, S., Sanjog, J., Patel, T., and Karmakar, S., 2014. Virtual Human Modeling and Simulation in Textile Industry, In: Proceedings of International Ergonomics Conference, HWWE-2014, (12th ISE annual Conference), IIT Guwahati, 3rd - 5th December, pp. 252 – 260. [ISBN: 978-93-392-1970-3][Mc Graw Hill Education (India) Pvt. Ltd.]
- Kumar, P. N., Sanjog, J., Karmakar, S., 2014. Prevalence of awkward working posture and consequent discomforts in body parts among workers of cashew nut processing factories in coastal regions of eastern India, In: Proceedings of International Ergonomics Conference, HWWE-2014, (12th ISE annual Conference), IIT Guwahati, 3rd 5th December, pp. 671 673. [ISBN: 978-93-392-1970-3] [Mc Graw Hill Education (India) Pvt. Ltd.]
- Kumar, S., Patel, T. and Karmakar, S. 2014. Scenario of handloom industry: Indian perspective. In: Proceedings of International Ergonomics Conference (HWWE: December, 3-5), Indian Institute of Technology, Guwahati, Assam, India, pp. 234-238. [ISBN: 978-93-392-1970-3] [Mc Graw Hill Education (India) Pvt. Ltd.]

- Sanjog, J., Patel, T. and Karmakar, S., 2014. Reduction of hand grip strength as an indicator towards discomfort of upper body extremities, In: Proceedings of International Ergonomics Conference, HWWE-2014, (12th ISE annual Conference), IIT Guwahati, 3rd - 5th December, pp. 655 – 659. [ISBN: 978-93-392-1970-3] [Mc Graw Hill Education (India) Pvt. Ltd.]
- Chowdhury, A., Sahoo, S.P., Chakrabarti, D. and Karmakar, S., 2014. Designing of anthropometric bike headlight using cognitive ergonomics approach, In: Proceedings of International Ergonomics Conference, HWWE-2014, (12th ISE annual Conference), IIT Guwahati, 3rd - 5th December, pp. 228 – 233. [ISBN: 978-93-392-1970-3] [Mc Graw Hill Education (India) Pvt. Ltd.]
- Patel, T., Sanjog, J., Sahoo, A., Das, B. and Karmakar, S., 2014. Assessment of Reliability and Technical Error of Measurement Associated with Anthropometric Data Collection, In: Proceedings of International Ergonomics Conference, HWWE-2014, (12th ISE annual Conference), IIT Guwahati, 3rd - 5th December, pp. 769 - 775. [ISBN: 978-93-392-1970-3] [Mc Graw Hill Education (India) Pvt. Ltd.]

<u>2013</u>

- Chowdhury, A., Karmakar, S., Reddy, S.M., Ghosh, S. and Chakrabarti, D., 2013. Product personality rating style for satisfaction of tactile need of online buyers- A human factors issue in the context of e-retailers' web-design. 2013 International Conference on Human Computer Interactions (ICHCI), 23rd-24th August, Chennai, India. p. 01-08. (DOI: 10.1109/ICHCI-IEEE.2013.6887784, ISBN: 978-1-4673-5702-9) [IEEE Xplore]
- Udaykumar, B., Bora, A., Sanjog, J., and Karmakar, S., 2013. Proactive Ergonomics through Digital Human Modeling and Simulation for Product Design Innovation: A Case Study. 2013 International Computer Science and Engineering Conference (ICSEC 2013), 4th-6th Sept., Bangkok, Thiland. p. 319-323. IEEE Catalog Number: CFP13IBE-ART (doi: 10.1109/ICSEC.2013.6694801, ISBN: 978-1-4673-5324-3) [IEEE Xplore]
- Chowdhury, A., Reddy, S.M., Karmakar, S., Ghosh, S. and Chakrabarti, D., 2013. Is Perception of Product Personality Related with Product Usability?- A Cognitive Ergonomics Perspective. In: Parimalam, P., Premalatha, M.R. and Banumathi, P. (eds.), Ergonomics for Enhanced Productivity, pp. 177-182. Excel India Publishers: New Delhi.[ISBN: 978-93-82880-43-1]
- 15. Patel, T., Karmakar, S., Sanjog, J., Kumar, S. and Chowdhury, A., 2013. Digital Human Modeling for Virtual Ergonomic Evaluation of Tractor Operator's Workplace: A Review. In: Parimalam, P., Premalatha, M.R. and Banumathi, P. (eds.), Ergonomics for Enhanced Productivity, pp. 203-208. Excel India Publishers: New Delhi.[ISBN: 978-93-82880-43-1]
- Chowdhury, A., Ramdas, R. and Karmakar, S., 2013. Muscle computer interface: A Review. In: A. Chakrabarti and R. V. Prakash (eds.), ICoRD'13, Lecture Notes in Mechanical Engineering. Springer, 411-421. [Print ISBN-13: 978-81-322-1049-8].[Spinger]

<u>2012</u>

- Chowdhury, A., Reddy, S.M. and Karmakar, S., 2012. Mutated/scrambled brand name and its impact on market. In: Kumar, A., Arshdeep. and Singh, K. (Eds.), *Emerging Issues in Managent and Behavioural Sciences*. Delhi: Bharati Publications, 201-209. [ISBN: 978-93-81212-17-2]
- Reddy, S.M., Chowdhury, A., Chakrabarti, D. and Karmakar, S., 2012. Need of visual behavioural study of Indian consumers. In: Kumar, A., Arshdeep. and Singh, K. (Eds.), *Emerging Issues in Managent and Behavioural Sciences*. Delhi: Bharati Publications, 285-293. [ISBN: 978-93-81212-17-2]

- Patel, T., Karmakar, S. and Chakravorty, A., 2012. Software for Performance Prediction and Matching of Tractor-Implement System. In: Proceedings of 3rd National Conference on Emerging Trends and Applications in Computer Science (NCETACS-2012), 30-31 March, 2012, St. Anthony's College, Shillong, Meghalaya, India. p. 262-269. IEEE Catalog Number CFP1258M-PRT [Print ISBN 978-1-4577-0749-0].
- Sanjog, J., Chowdhury, A. and Karmakar, S., 2012. Industry Specific Applications of DHM. In: Karim Abdel-Malek edited 'Proceedings of the International Summit on Human Simulation 2012 (ISHS-2012)', 23-25 May, 2012, St. Pete Beach, Florida, USA, Pp.123-134.
- Sanjog, J., Chowdhury, A. and Karmakar, S., 2012. Digital Human Modeling Software in Secondary Manufacturing Sector: A review. In: Proceedings of International Conference on Recent Trends in Computer Science and Engineering (ICRTCSE-2012), 3-4 May, 2012, Chennai, Tamil Nadu, India. AEC12397.[ISBN 978-81-9089-807-2].

<u>2011</u>

22. Karmakar, S., Majumdar, Deepti., Pal, M. S. and Majumdar, D., 2011. Ergonomic Study of Ingress-Egress of an Army Vehicle in Simulated Environment. In: Proceedings of International Conference on Trends in Product Lifecycle, Modeling, Simulation and Synthesis (PLMSS)-2011, Bangalore, India. 69-74.