

# Curriculum Vitae

---

**Dr. Biswajit Sarkar**, M. Sc., M. Phil., Ph.D., Post Doc.

*Associate Professor*

*Department of Industrial Engineering*

*Yonsei University, South Korea*

*Office Phone: +82-2-2123-4015*

*Mobile: +82-10-7498-1981*

*Homepage: [www.drbiswajitsarkar.com](http://www.drbiswajitsarkar.com)*

*E-mail: [bsbiswajitsarkar@gmail.com](mailto:bsbiswajitsarkar@gmail.com); [bsarkar@yonsei.ac.kr](mailto:bsarkar@yonsei.ac.kr)*

*Skype id: [biswajit\\_sarkar\\_ju](#)*

➤ *Present Address*

2nd floor, 21, Jayang-ro 37-gil, Gwangjin-gu, Seoul, Korea 서울특별시 광진구 구의2동  
자양로 37길 21 2층 04993

➤ *Permanent Address*

12D Telipara Lane, 1st Floor, Dhakuria, Kolkata 700031, West Bengal, India.

➤ *Objective*

I am searching for a competent University/Research Institute where I can get adequate exposure to develop a challenging and growing career where my skill and research activity can benefit the University/ Research Institute.

➤ *Present Research Status*

I am the best active researcher in the field cluster **Supply Chain Management & Industry** during **2017 ~ 2021**, according to SciVal (Data source: Scopus). During the last three years, my average TOP-tire SCI publications are **31 research papers per year**.

➤ Academic Records

➤ Degree University Year	: <b>Post-Doctoral Fellow</b> : Pusan National University, Korea : 2012-2013
➤ Degree University Year	: <b>Doctor of Philosophy</b> (Appl. Maths.-Operations Research) : Jadavpur University, India : 2010
➤ Degree University Year	: <b>Master of Philosophy</b> (Mathematics – Boolean Polynomials) : Annamalai University, India : 2008
➤ Degree Special Paper University Year	: <b>Master of Science</b> (Applied Mathematics) : <i>Operations Research</i> : Jadavpur University, India : 2004
➤ Degree University Year	: <b>Bachelor of Science</b> (Major- Mathematics) : Jadavpur University, India : 2002
➤ Degree University Year	: <b>Higher Secondary</b> (Science) : West Bengal Council of Higher Secondary Education, India : 1999
➤ Degree University Year	: <b>Secondary</b> (General) : West Bengal Board of Secondary Education, India : 1997

➤ Teaching Experience

<b>Name of the Organization</b>	<b>Designation</b>	<b>Nature of Duties</b>	<b>From</b>	<b>To</b>	<b>Reason for Leaving</b>
Yonsei University, South Korea	<b>Associate Professor</b> in Department of Industrial Engineering	<b>Teaching of Graduate and Under Graduate students &amp; Research</b>	2019.09.01	ongoing	
Hanyang University, South Korea	<b>Associate Professor</b> in Department of Industrial & Management Engineering	<b>Teaching of Graduate and Under Graduate students &amp; Research</b>	2017.09.01	2019.08.31	To join Yonsei University, South Korea, as an Associate Professor
Hanyang University, South Korea	<b>Assistant Professor</b> in Department of Industrial & Management Engineering	<b>Teaching of Graduate and Under Graduate Students &amp; Research</b>	2014.09.01	2017.08.31	Promoted to Associate Professor
Vidyasagar University (V.U), India	<b>Assistant Professor</b> in Dept. of Applied Mathematics with Oceanology and Computer Programming	<b>Teaching of Post- Graduate Students and Research</b>	2013.04.23	2014.08.31	To join Hanyang University, South Korea, as an Assistant Professor
Pusan National University (P.N.U), South Korea	<b>Post-Doctoral Fellow</b>	<b>Research</b>	2012.05.11	2013.04.22	Completion of Post-Doc Research

Vidyasagar University (V.U), India	<b>Assistant Professor</b> in Dept. of Applied Mathematics with Oceanology and Computer Programming	<b>Teaching Post-Graduate Students and Research</b>	2010.03.18	2012.05.10	With Study Leave for post-doctoral research at P.N.U.
Darjeeling Govt. College (D.G.C), India	<b>Assistant Professor</b> in Department of Mathematics	<b>Teaching Under Graduate Students and Research</b>	2009.08.11	2010.03.17	To join V.U.
Jadavpur University, India	<b>Junior Research Fellow</b> (CSIR-UGC Scheme)	<b>Research and Teaching Under Graduate Students</b>	2008.02.01	2009.08.10	To join DGC
Ichapur High School, India	<b>Assistant Teacher</b> in Mathematics	<b>Teaching</b>	2005.04.28	2008.01.31	To Join as JRF

## ➤ Publications

### ❖ SCI/SSCI/SCIE

217. N. Bairagi, S. Bhattacharya, P. Auger, **B. Sarkar\*** (2021) Bioeconomics fishery model in presence of infection: Sustainability and demand-price perspectives, *Applied Mathematics and Computation*, (Elsevier (Netherlands), ISSN – 0096-3003), (SCIE), Vol. 405, pp. 126225, DOP: 15 – Sept. – 2021.
216. **B. Sarkar**, M. Sarkar, B. Ganguly, L. E. Cárdenas-Barrón \* (2021) Combined effects of carbon emission and production quality improvement for fixed lifetime products in a sustainable supply chain management, *International Journal of Production Economics*, (Elsevier (Netherlands), ISSN – 0925-5273), (SCIE), Vol. 231, pp. 107867. DOI. 10.1016/j.ijpe.2020.107867, DOP: 1 – Jan – 2021.
215. A. Sepehri, U. Mishra, **B. Sarkar\*** (2021) A sustainable production-inventory model with imperfect quality under preservation technology and quality improvement investment, *Journal of Cleaner Production*, (Elsevier (Netherlands), ISSN – 0959-6526), (SCIE), Accepted for publication. DOA: 28 – Apr. – 2021.
214. D. Yadav, R. Kumari, N. Kumar, **B. Sarkar\*** (2021) Reduction of waste and carbon emission through the selection of items with cross-price elasticity of demand to form a

- sustainable supply chain with preservation technology, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, ISSN – 0959-6526), (*SCIE*), Vol. 297, pp. 126298. DOI: 10.1016/j.jclepro.2021.126298. DOP: 18 – Mar. - 2021.
213. M. Ullah, I. Asghar, M. Zahid, M. Omair, A. Alarjani, **B. Sarkar\*** (2021) Ramification of remanufacturing in a sustainable three-echelon closed-loop supply chain management for returnable products, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, ISSN – 0959-6526), (*SCIE*), Vol. 290, pp. 1125609. DOI: 10.1016/j.jclepro.2020.125609. DOP: 1 – Mar - 2021.
212. U. Mishra, J. Z. Wu, **B. Sarkar\*** (2021) Optimum sustainable inventory management with backorder and deterioration under controllable carbon emissions, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, ISSN – 0959-6526), (*SCIE*), Vol. 279, pp. 123699. DOI: 10.1016/j.jclepro.2020.123699. DOP: 10 – Jan - 2021.
211. M. S. Habib, O. Asghar, A. Hussain, M. Imran, M. P. Mughal, **B. Sarkar\*** (2021) A robust possibilistic programming approach toward animal fat-based biodiesel supply chain network design under uncertain environment, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, ISSN – 0959-6526), (*SCIE*), Vol. 278, pp. 122403. DOI: 10.1016/j.jclepro.2020.122403. DOP: 1 – Jan. – 2021.
210. A. Garai, S. Chowdhury, **B. Sarkar\***, T. K. Roy (2021) Cost-effective subsidy policy for growers and biofuels-plants in closed-loop supply chain of herbs and herbal medicines: An interactive bi-objective optimization in T-environment, *Applied Soft Computing*, (*Elsevier (Netherlands)*, ISSN – 1568-4946), (*SCIE*), Vol. 100, pp. 106949. DOI: 10.1016/j.asoc.2020.106949, DOP: 1 – Mar – 2021.
209. S. Samanta, V. Dubey, **B. Sarkar\*** (2021) Measure of influences in social networks, *Applied Soft Computing*, (*Elsevier (Netherlands)*, ISSN – 1568-4946), (*SCIE*), Vol. 99, pp. 106858. DOI: 10.1016/j.asoc.2020.106858, DOP: 1 – Feb. – 2021.
208. W. Ahmed, M. Moazzam, **B. Sarkar\***, S.U.R. Rehman (2021) Synergic effect of reworking for imperfect quality items with the integration of multi-period delay-in-payment and partial backordering in global supply chains, *Engineering*, (*Elsevier (Netherlands)*, ISSN – 2095-8099), (*SCIE*), Vol. 7(2), pp. 260 - 271. DOI: 10.1016/j.eng.2020.07.022. DOP: 01 – Feb – 2021.
207. B. K. Dey, S. Pareek, M. Tayyab, **B. Sarkar\*** (2021) Autonomation policy to control work-in-process inventory in a smart production system, *International Journal of Production Research*, (*Taylor & Francis Online (UK)*, ISSN – 1366 –588X(online), 0020-7543(Print)), (*SCI & SCIE*), Vol. 59 (4), pp. 1258 – 1280. DOI: 10.1080/00207543.2020.1722325. DOP: 22 – Feb. – 2020.
206. M. Tayyab, **B. Sarkar** (2021) An interactive fuzzy programming approach for a sustainable supplier selection under textile supply chain management, *Computers & Industrial Engineering*, (*Elsevier (Netherlands)*, ISSN – 0360-8352), (*SCIE*), Vol. 155, pp. 107164, DOI: 10.1016/j.cie.2021.107164. DOP: 2 – Feb. – 2021.

205. A. AlArjani, U. M. Modibbo, I. Ali, **B. Sarkar (2021)** A new framework for the sustainable development goals of Saudi Arabia, *Journal of King Saud University - Science, (Elsevier (Netherlands), ISSN – 1018-3647), (SCIE)*, Accepted for publication. DOA: 12 – May – 2021.
204. M. Omair, S. Noor, M. Tayyab, S. Maqsood, W. Ahmed, M. S. Habib, **B. Sarkar\* (2021)** The selection of sustainable suppliers by the development of a decision support framework based on analytical hierarchical process and fuzzy inference system, *International Journal of Fuzzy Systems, (Springer (Germany), ISSN – 2199-3211(online)), (SCIE), Article in press*, DOA: 18– Jan. – 2021.
203. R. Kumar, R. K. Chandrawat, **B. Sarkar**, V. Joshi, A. Majumder\* (2021) An advanced Optimization technique for smart production using  $\alpha$ -cut based quadrilateral fuzzy number, *International Journal of Fuzzy Systems, (Springer (Germany), ISSN – 2199-3211(online)), (SCIE)*, Vol. 23, pp. 107 - 127, DOI: 10.1007/s40815-020-01002-9, DOP: 17– Feb. – 2021.
202. B. Khurshid, S. Maqsood, M. Omair, **B. Sarkar\***, M. Saad, U. Asad (2021) Fast evolutionary algorithm for flow shop scheduling problems, *IEEE Access, (IEEE Xplore, ISSN – 2169-3536) (SCIE)*, Vol. 9, pp. 44825 – 44839, DOI: 10.1109/ACCESS.2021.3066446, DOP: 17 – Mar. – 2021.
201. M. Y. Jani, M. R. Betheja, U. Chaudhari, **B. Sarkar\* (2021)** Optimal investment in preservation technology for variable demand under trade-credit and shortages, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Accepted for publication DOA: 2– May – 2021.
200. A. Singha Mahapatra, H. Soni, M. Singha Mahapatra, **B. Sarkar\***, S. Majumder (2021) A continuous review production-inventory system with a variable preparation time in a fuzzy random environment, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 9(7), pp. 747. DOI: 10.3390/math9070747, DOP: 31– Mar. – 2021.
199. I. Khan, **B. Sarkar\* (2021)** Transfer of risk in supply chain management with joint pricing and inventory decision considering shortages, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 9(6), pp. 638. DOI: 10.3390/math9060638, DOP: 17– Mar. – 2021.
198. A. Sepehri, U. Mishra, M. L. Tseng, **B. Sarkar\* (2021)** Joint pricing and inventory model for deteriorating items with maximum lifetime and controllable carbon emission under permissible delay in payment, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 9(5), pp. 470. DOI: 10.3390/math9050470, DOP: 25– Feb. – 2021.
197. S. Gupta, A. Haq, I. Ali, **B. Sarkar\* (2021)** Significance of multi-objective optimization in logistics problem for multi-product supply chain network under the intuitionistic fuzzy environment, *Complex and Intelligent Systems, (Springer (Germany), ISSN – 2199-4536*

- (*online*), 2198-6053(Print)), (*SCIE*), Accepted for publication. DOI: 10.3390/en12193733. DOA: 28 – Feb. – 2021.
196. V. Gupta, S. R. Singh, D. Yadav, **B. Sarkar\***, M. Sarkar (2021) Effect of energy and carbon emission on an agile manufacturing system of a green supply chain management with two-level trade-credit policy, *Energies*, (*MDPI (Switzerland)*, *ISSN – 1996-1073*), (*SCIE*), Vol. 14 (6), pp. 1569. DOI: 10.3390/en14061569. DOP: 12 – Mar. – 2021.
195. **B. Sarkar**, B. K. Dey, M. Sarkar, A. AlArjani\* (2021) A sustainable online-to-offline (O2O) retailing strategy for a supply chain management under controllable lead time and variable demand, *Sustainability*, (*MDPI (Switzerland)*, *ISSN – 2071-1050*), (*SSCI*, *SCIE*), Vol. 13 (4), pp. 1756, DOI: 10.3390/su13041756. DOP: 06 – Feb. – 2021.
194. M. Abu, H.M. Wee, **B. Sarkar**, Y.H. Chiang Li (2020) A sustainable inventory system with the advanced payment policy and trade-credit strategy for a two-warehouse inventory system, *Kybernetes*, (*Emerald Insight (United Kingdom)*, *ISSN – 0368-492X(online)*), (*SCIE*), *Article in press*. DOI: 10.1108/K-01-2020-0052, DOA: 6– May – 2020.
193. S. Saha, D. Chatterjee, **B. Sarkar\*** (2021) The ramification of dynamic investment on the promotion and preservation technology for inventory management through a modified flower pollination algorithm, *Journal of Retailing and Consumer Services*, (*Elsevier (Netherlands)*, *ISSN – 0969-6989 (online)*), (*SSCI*), Vol. 58, pp. 102326. DOI: 10.1016/j.jretconser.2020.102326, DOP: 1 – Jan – 2021.
192. S. Bhuniya, S. Pareek, **B. Sarkar\*** (2021) A fuzzy supply chain model developed using service level constraints and different strategy, *Alexandria Engineering Journal*, (*Elsevier (Netherlands)*, *ISSN – 1110 - 0168 (online)*), (*SCIE*), Accepted for publish. DOA: 23 – Mar – 2021.
191. S. Bhattacharjee, A. Banerjee, A. Rakshit, S. Bhattacharyya, S. Chowdhuri, **B. Sarkar\***, B. Neogi (2021) Dynamics of cardiovascular muscle using nonlinear symmetric oscillator, *Symmetry*, (*MDPI (Switzerland)*, *ISSN – 2073-8994 (online)*), (*SCIE*), Vol 13(1), pp. 151, DOI: 10.3390/sym13010151. DOP: 18 – Jan. – 2021.
190. S. K. Sardar, **B. Sarkar**, B. Kim\* (2021) Integrating Machine Learning, Radio Frequency Identification, and Consignment Policy for Reducing Unreliability in Smart Supply Chain Management, *Processes*, (*MDPI (Switzerland)*, *ISSN – 2227-9717 (online)*), (*SCIE*), Vol 9(2), pp. 247, DOI: 10.3390/pr9020247. DOP: 29 – Jan. – 2020.
189. S. Bhuniya, S. Pareek, **B. Sarkar\***, B. K. Sett (2021) A smart production process for the optimum energy consumption with maintenance policy under a supply chain management, *Processes*, (*MDPI (Switzerland)*, *ISSN – 2227-9717 (online)*), (*SCIE*), Vol 9(1), pp. 19, DOI: 10.3390/pr9010019. DOP: 23 – Dec. – 2020.
188. I. Moon, W. Y. Yun, and **B. Sarkar\*** (2021) Effects of variable setup cost, reliability, and production cost under controlled carbon emission in a reliable production system. *European Journal of Industrial Engineering*, (*Inderscience online (Switzerland)*, *ISSN – 1751-5262(online)*, *1751-5254(print)*), (*SCIE*), DOA: 8 – Mar. – 2021.

187. M. Y. Jani, U. Chaudhari, **B. Sarkar\*** (2021) How does an industry control a decision support system for a long time? *RAIRO - Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559 (Print)), (SCIE), Accepted for publication*. DOA: 17 – Apr. – 2021.
186. S. Kumar, A. Kumar, **B. Sarkar\*** (2021) Fuzzy reverse logistics inventory model of smart items with two warehouses of a retailer considering carbon emissions, *RAIRO - Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559 (Print)), (SCIE), Accepted for publication*. DOA: 6 – Apr. – 2021.
185. A. H. M. Mashud, **B. Sarkar\*** (2021) Retailer's joint pricing model through an effective preservation strategy under a trade-credit policy, *RAIRO - Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559 (Print)), (SCIE), Accepted for publication*. DOI: 10.1051/ro/2021018. DOA: 6 – Feb. – 2021.
184. A. A. Shaikh, S. C. Das, A. K. Bhunia, **B. Sarkar\*** (2021) Decision support system for customers during availability of trade-credit financing with different pricing situations, *RAIRO - Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559 (Print)), (SCIE), Accepted for publication*. DOI: 10.1051/ro/2021015. DOA: 25 – Jan. – 2021.
183. B. Mandal, B. K. Dey, S. Khanra, **B. Sarkar\*** (2021) Advance sustainable inventory management through advertisement and trade-credit policy, *RAIRO - Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559 (Print)), (SCIE), Vol 261 - 284, pp. 113345, DOI: 1051/ro/2020067. DOP: 23 – Mar. – 2021*.
182. S. Habib, M. Tayyab, S. Zahoora, **B. Sarkar\*** (2020) Management of animal fat-based biodiesel supply chain under the paradigm of sustainability, *Energy Conversion and Management, (Elsevier (Netherlands), ISSN – 0196-8904), (SCIE), Vol 225, pp. 113345, DOI: 10.1016/j.enconman.2020.113345. DOP: 1 – Dec. – 2020*.
181. J. Jemai, B. D. Chung, **B. Sarkar\*** (2020) Environmental effect for a complex green supply chain management to control waste: A sustainable approach, *Journal of Cleaner Production, (Elsevier (Netherlands), ISSN – 0959-6526), (SCIE), Vol 277, pp. 122919. DOI: 10.1016/j.jclepro.2020.122919. DOP: 20 – Dec. – 2020*.
180. **B. Sarkar**, B. K. Dey, S. Pareek, M. Sarkar\* (2020) A single-stage cleaner production system with random defective rate and remanufacturing, *Computers & Industrial Engineering, (Elsevier (Netherlands), ISSN – 0360-8352), (SCIE), Vol. 150, pp. 106861. DOI: 10.1016/j.cie.2020.106861, DOP: 01 – Dec. – 2020*.
179. M. Ullah, **B. Sarkar\*** (2020) Recovery-channel selection in a hybrid manufacturing-remanufacturing production model with RFID and product quality, *International Journal of Production Economics, (Elsevier (Netherlands), ISSN – 0925-5273), (SCIE), Vol 219, pp.360 - 374. DOI: 10.1016/j.ijpe.2019.07.017, DOP: 1 – Jan. – 2020*.
178. A. I. Malik, **B. Sarkar\*** (2020) Disruption management in a constrained multi-product imperfect production system, *Journal of Manufacturing System, (Elsevier (Netherlands),*

- ISSN – 0278-6125*), (*SCIE*), Vol. 56, pp.227-240. DOI. 10.1016/j.jmsy.2020.05.015. DOP: 01 – July - 2020.
- 177.M. Sarkar, **B. Sarkar\*** (2020) How does an industry reduce waste and consumed energy within a multi-stage smart sustainable biofuel production system? *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, *ISSN – 0959-6526*), (*SCIE*), Vol. 262, pp.121200. DOI: 10.1016/j.jclepro.2020.121200 DOP: 20 – July – 2020.
- 176.U. Mishra, J. Z. Wu, **B. Sarkar\*** (2020) A sustainable production-inventory model for a controllable carbon emissions rate under shortages, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, *ISSN – 0959-6526*), (*SCIE*), Vol. 256, pp. 120268. DOI: 10.1016/j.jclepro.2020.120268. DOP: 20 – May – 2020.
- 175.M. Tayyab, J. Jemai, L. Han, **B. Sarkar\*** (2020) A sustainable development framework for a cleaner multi-item multi-stage textile production system with a process improvement initiative, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, *ISSN – 0959-6526*), (*SCIE*), Vol. 246, pp. 119055. DOI: 10.1016/j.jclepro.2019.119055. DOP: 10 – Feb. – 2020.
- 174.N. Saxena, **B. Sarkar\***, S. R. Singh (2020) Selection of remanufacturing/ production cycles with an alternative market: a perspective on waste management, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, *ISSN – 0959-6526*), (*SCIE*), Vol. 245 pp. 118935. DOI: 10.1016/j.jclepro.2019.118935. DOP: 1 – Feb. – 2020.
- 173.**B. Sarkar**, M. Omair, N. H. Kim\* (2020) A cooperative advertising collaboration policy in supply chain management under uncertain conditions, *Applied Soft Computing*, (*Elsevier (Netherlands)*, *ISSN – 1568-4946*), (*SCIE*), Vol. 88, pp.105984, DOI: 10.1016/j.asoc.2019.105948. DOP: 1 – March – 2020.
- 172.M. Imran, M. H. Agha, W. Ahmed, B. Sarkar\*, M. B. Ramzan (2020) Simultaneous customers and supplier’s prioritization: An AHP based fuzzy inference decision support system (AHP-FIDSS), *International Journal of Fuzzy Systems*, (Springer (Germany), *ISSN – 2199-3211(online)*), (*SCIE*), Vol. 22, pp.2625-2651, DOI: 10.1007/s40815-020-00977-9, DOP: 30– Oct. – 2020.
- 171.B. K. Sett, B. K. Dey, **B. Sarkar\*** (2020) Autonomated inspection policy for smart factory- an improved approach, *Mathematics*, (*MDPI Publishers (Switzerland)*, *ISSN – 2227-7390(online)*), (*SCIE*), Vol. 8(10), pp. 1815. DOI: 10.3390/math8101815, DOP: 16– Oct. – 2020.
- 170.B. K. Sett, B. K. Dey, **B. Sarkar\*** (2020) The effect of O2O retail service quality in a supply chain management, *Mathematics*, (*MDPI Publishers (Switzerland)*, *ISSN – 2227-7390(online)*), (*SCIE*), Vol. 8(10), pp. 1743. DOI: 10.3390/math8101743, DOP: 11– Oct. – 2020.
- 169.M. Sarkar, L. Pan, B. K. Dey, **B. Sarkar\*** (2020) Does the automation policy really help in a smart production system for controlling defective production? *Mathematics*, (*MDPI Publishers (Switzerland)*, *ISSN – 2227-7390(online)*), (*SCIE*), Vol. 8(7), pp.1142. DOI: 10.3390/math8071142, DOP: 13– July – 2020.

168. S. K. Sardar, **B. Sarkar\*** (2020) How does advanced technology solve the unreliability under supply chain management using game policy? *Mathematics*, (*MDPI Publishers (Switzerland)*), *ISSN – 2227-7390(online)*), (*SCIE*), Vol. 8(7), pp.1191. DOI: 10.3390/math8071191, DOP: 20– July – 2020.
167. A. I. Malik, **B. Sarkar\*** (2020) Coordination Supply Chain Management Under Flexible Manufacturing, Stochastic Leadtime Demand, and Mixture of Inventory, *Mathematics*, (*MDPI Publishers (Switzerland)*), *ISSN – 2227-7390(online)*), (*SCIE*), Vol.8(6), pp.911 DOI: 10.3390/math8060911, DOP: 3– June – 2020.
166. M. Mishra, S. K. Hota, **B. Sarkar\***, S. K. Ghosh (2020) Controlling waste and carbon emission for a sustainable closed-loop supply chain management under a cap-and-trade strategy, *Mathematics*, (*MDPI Publishers (Switzerland)*), *ISSN – 2227-7390(online)*), (*SCIE*), Vol.8(4), pp.466. DOI: 10.3390/math8030466, DOP: 27– March – 2020.
165. S. K. Hota, **B. Sarkar\***, S. K. Ghosh (2020) Effect of unequal lot size and variable transportation in an unreliable supply chain management, *Mathematics*, (*MDPI Publishers (Switzerland)*), *ISSN – 2227-7390(online)*), (*SCIE*), Vol.8(3), pp.357. DOI: 10.3390/math8030357, DOP: 5– March – 2020.
164. M. Alkahtani, M. Omair, Q. S. Khalid, G. Hussain, **B. Sarkar\*** (2020) An agriculture products supply chain management to optimize resources and carbon emission considering variable production rate by applying algebraic approach, *Processes*, (*MDPI (Switzerland)*), *ISSN – 2227-9717 (online)*), (*SCIE*), Vol.8(11), pp.1505. DOI: 10.3390/pr8111505, DOP: 20– Nov. – 2020.
163. S. Das, D. Nandi, B. Neogi, **B. Sarkar\*** (2020) Nonlinear system stability and behavioral analysis for effective implementation of artificial lower limb, *Symmetry*, (*MDPI (Switzerland)*), *ISSN – 2073-8994 (online)*), (*SCIE*), Vol.12(10), pp.1727. DOI: 10.3390/sym12101727, DOP: 19– Oct. – 2020.
162. S. Samanta, **B. Sarkar\*** (2020) Isomorphism on generalized fuzzy graphs and image visualizations, *Soft Computing*, (*Springer (United States)*), *ISSN – 1433-7479 (online)*, *1432-7643(Print)*), (*SCIE*), Vol. 24, pp. 14401 – 14409. DOI:10.1007/s00500-020-05260-5. DOP: 25 – Aug. – 2020.
161. **B. Sarkar**, B. K. Dey, M. Sarkar, S. Hur\*, B. Mandal, V. Dhaka (2020) Optimal replenishment decision for retailers with variable demand for deteriorating products under a trade-credit policy, *RAIRO – Operations Research*, (*EDP Sciences (France)*), *ISSN – 1290-3868 (online)*, *0399-0559(Print)*), (*SCIE*), Vol. 54(6), pp. 1685–1701. DOI: 1051/ro/2019100. DOP: 16 – Sept. – 2020.
160. M. W. Iqbal, **B. Sarkar\*** (2020) Application of preservation technology for lifetime dependent products in an integrated production system, *Journal of Industrial and Management Optimization*, (*AIMS (USA)*), *ISSN – 1553-166X(online)*, *1547-5816(Print)*), (*SCIE*), Vol. 16(1), pp. 141 – 167. DOI: 10.3934/jimo.2018144. DOP: 1 – Jan. – 2020.

159. A. Khanna, P. Gautam, **B. Sarkar\***, C. K. Jaggi (2020) Integrated vendor-buyer strategies for imperfect production systems with maintenance and warranty policy, *RAIRO – Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print)), (SCIE)*, Vol. 54(2), pp. 435 – 450. DOI:10.1051/ro/2019029. DOP: 27– Feb. – 2020.
158. A. Khanna, A. Kishore, **B. Sarkar\***, C. K. Jaggi (2020) Inventory and pricing decisions for imperfect quality items with inspection errors, sales returns, and partial backorders under inflation, *RAIRO – Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print)), (SCIE)*, Vol 54(1), pp. 287 – 306. DOI: 10.1051/ro/2018102 DOP: 11– Feb. – 2020.
157. R. Guchhait, B. K. Dey, S. Bhuniya, B. Ganguly, B. Mandal, R. K. Bachar, **B. Sarkar\***, H. Wee, K. S. Chaudhuri (2020) Investment for process quality improvement and setup cost reduction in an imperfect production process with warranty policy and shortages, *RAIRO – Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print)), (SCIE)*, Vol 54(1), pp. 251 – 266. DOI: 10.1051/ro/2018101, DOP: 11– Feb. – 2020.
156. A. A. Taleizadeh, **B. Sarkar\***, M. Hasani (2020) Delayed payment policy in multi-product single-machine economic production quality model with repair failure and partial backordering, *Journal of Industrial and Management Optimization, (AIMS (USA), ISSN – 1553-166X(Online), 1547-5816(Print)) (SCIE)*, Vol. 16(3), pp. 1273 – 1296. DOI: 10.3934/jimo.2019002. DOP: 1 – May – 2020.
155. S. Tiwari, W. Ahmed, **B. Sarkar\*** (2019) Sustainable ordering policies for non-instantaneous deteriorating items under carbon emission and multi-trade-credit-policies, *Journal of Cleaner Production, (Elsevier (Netherlands), ISSN – 0959-6526), (SCIE)*, Vol. 240, pp. 118 – 183. DOI: 10.1016/j.jclepro.2019.118183. DOP: 1 – Dec – 2019.
154. W. Ahmed, **B. Sarkar\*** (2019) Management of next-generation energy using a triple bottom line approach under a supply chain framework. *Resources, Conservation & Recycling, (Elsevier (Netherlands), ISSN – 0921-3449), (SCIE)*, Vol 150, pp.104431. DOI. 10.1016/j.resconrec.2019.104431, DOP: 1 – Nov. – 2019.
153. **B. Sarkar**, M. Tayyab, N. Kim\*, M. S. Habib (2019) Optimal production delivery policies for supplier and manufacturer in a constrained closed-loop supply chain for returnable transport packaging through metaheuristic approach, *Computers & Industrial Engineering, (Elsevier (Netherlands), ISSN – 0360-8352), (SCIE)*, Vol 135, pp.987 – 1003. DOI: 10.1016/j.cie.2019.05.035. DOP: 1 – Sept. – 2019.
152. H. Rashmanlou, M. Pal, S. Raut, F. Mofidnakhai, **B. Sarkar\*** (2019) Novel Concepts in Intuitionistic Fuzzy Graphs with Application, *Journal of Intelligent & Fuzzy Systems, (IOS Press (Amsterdam), ISSN – 1875-8967(online), 1064-1246(Print)), (SCIE)*, Vol. 37(3), pp.3743 – 3749. DOI: 10.3233/JIFS-182961. DOP: 9 – Oct. – 2019.
151. I. Khan, J. Jemai, H. Lim, **B. Sarkar\*** (2019) Effect of electrical energy on the manufacturing setup cost reduction, transportation discounts, and process quality

- improvement in a two-echelon supply chain management under service level constraint., *Energies*, (*MDPI (Switzerland)*, *ISSN – 1996-1073*), (*SCIE*), Vol.12(19), pp.3733. DOI: 10.3390/en12193733. DOP: 21 – Sept. – 2019.
150. **B. Sarkar**, S. P. Mondal, S. Hur\*, A. Ahmadian, S. Salahshour, R. Guchhait, and M. W. Iqbal (2019) An optimization technique for national income determination model with stability analysis of differential equation in discrete and continuous process under the uncertain environment, *RAIRO – Operations Research*, (*EDP Sciences (France)*, *ISSN – 1290-3868 (online)*, *0399-0559(Print)*), (*SCIE*), Vol 53(5), pp. 1649 – 1674. DOI: 10.1051/ro/2018071. DOP: 09 – Oct. – 2019.
149. **B. Sarkar**, R. Guchhait, M. Sarkar, L. E. Cárdenas-Barrón \* (2019) How does an industry manage the optimum cash flow within a smart production system with the carbon footprint and carbon emission under logistics framework? *International Journal of Production Economics*, (*Elsevier (Netherlands)*, *ISSN – 0925-5273*), (*SCIE*), Vol 213, pp. 243-257. DOI: 10.1016/j.ijpe.2019.03.012. DOP: 01 – July – 2019.
148. **B. Sarkar\*** (2019) Mathematical and analytical approach for the management of defective items in a multi-stage production system, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, *ISSN – 0959-6526*), (*SCIE*), Vol. 218, pp. 896 – 918. DOI: 10.1016/j.jclepro.2019.01.078. DOP: 1 – May – 2019.
147. **B. Sarkar**, R. Guchhait, M. Sarkar, N. Kim\* (2019) Impact of Safety factors and setup time reduction in a two-echelon supply chain management, *Robotics and Computer-Integrated Manufacturing*, (*Elsevier (Netherlands)*, *ISSN – 0736-5845*), (*SCIE*), Vol. 55(B), pp. 250 – 258. DOI: 10.1016/j.rcim.2018.05.001. DOP: 01 – Feb. – 2019.
146. M. S. Habib, **B. Sarkar\***, M. Tayyab, M. W. Saleem, A. Hussaina, M. Ullah, M. Omir, M. W. Iqbal (2019) Large-scale disaster waste management under uncertain environment, *Journal of Cleaner Production*, (*Elsevier (Netherlands)*, *ISSN – 0959-6526*), (*SCIE*), Vol. 212, pp. 200 – 222. DOI: 10.1016/j.jclepro.2018.11.154. DOP: 1 – Mar. – 2019.
145. J. S. Noh, J. S. Kim, **B. Sarkar\*** (2019) Stochastic joint replenishment problem with quantity discounts and minimum order constraints, *Operational Research*, (*Springer (United States)*, *ISSN – 1688-1505 (online)*), (*SCIE*), Vol. 19(1), pp. 151 – 178. DOI: 10.1007/s12351-016-0281-6. DOP: 5 – Mar. – 2019.
144. J. S. Noh, J. S. Kim, and **B. Sarkar\*** (2019) Two-echelon supply chain coordination with advertising demand under Stackelberg game policy, *European Journal of Industrial Engineering*, (*Inderscience online (Switzerland)*, *ISSN – 1751-5262(online)*, *1751-5254(print)*), (*SCIE*), Vol. 13(2), pp. 213 – 244. DOP: 18 – Mar. – 2019.
143. B. K. Dey, **B. Sarkar\***, M. Sarkar, S. Pareek (2019) An integrated inventory model involving discrete setup cost reduction, variable safety factor, selling-price dependent demand, and investment, *RAIRO – Operations Research*, (*EDP Sciences (France)*, *ISSN – 1290-3868 (online)*, *0399-0559(Print)*), (*SCIE*), Vol. 53(1), pp. 39 – 57. DOI: 10.1051/ro/2018009. DOP: 21 – Jan. – 2019.

142. W. Iqbal, **B. Sarkar\*** (2019) Recycling of lifetime dependent deteriorated products through different supply chains, *RAIRO – Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print)), (SCIE)*, Vol. 53(1), pp. 129 – 156. DOI: 10.1051/ro/2017051. DOP: 31 – Jan. – 2019.
141. B. Ganguly, **B. Sarkar\***, M. Sarkar, M. Omair, S. Pareek (2019) Influence of controllable lead time, premium price, and unequal shipments under environmental effects in a supply chain management, *RAIRO – Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print)), (SCIE)*, Vol. 53(4), pp. 1427 – 1451. DOI: 10.1051/ro/2018041. DOP: 13 – Sept. – 2019.
140. V. Kumar, M. Mittal, A. N. Sharma, **B. Sarkar\*** (2019) New product launching with pricing, free replacement, rework, and warranty policies via genetic algorithm approach, *International Journal of Computational Intelligence Systems, (Atlantis Press (Amsterdam), ISSN – 1875-6883), (SCIE)*, Vol. 12(2), pp. 519 – 529. DOI: 10.2991/ijcis.d.190401.001, DOP: 16– Apr. – 2019.
139. I. Asghar, **B. Sarkar\***, S. J. Kim (2019) Economic analysis of an integrated production-inventory system under stochastic production capacity and energy consumption, *Energies, (MDPI (Switzerland), ISSN – 1996-1073), (SCIE)*, Vol.12(16), pp.3179. DOI: 10.3390/en12163179. DOP: 19 – Aug. – 2019.
138. M. Sarkar, S. Kim, J. Jemai, B. Ganguly, **B. Sarkar\*** (2019) An application of time-dependent holding costs and system reliability in a multi-item sustainable economic energy efficient reliable manufacturing system, *Energies, (MDPI (Switzerland), ISSN – 1996-1073), (SCIE)*, Vol. 12(15), pp. 2857. DOI: 10.3390/en12152857. DOP: 25 – Jul. – 2019.
137. J. Jemai, **B. Sarkar\*** (2019) Optimum design of a transportation scheme for healthcare supply chain management: the effect of energy consumption, *Energies, (MDPI (Switzerland), ISSN – 1996-1073), (SCIE)*, Vol. 12(14), pp. 2789. DOI: 10.3390/en12142789. DOP: 19 – Jul. – 2019.
136. M. Sarkar, **B. Sarkar\*** (2019) Optimization of safety stock under controllable production rate and energy consumption in a smart production management, *Energies, (MDPI (Switzerland), ISSN – 1996 – 1073), (SCIE)*, Vol.12(11), pp. 2059. DOI:10.3390/en12112059, DOP: 29– May – 2019.
135. M. Omair, M. Ullah, B. Ganguly, S. Noor, S. Maqsood, **B. Sarkar\*** (2019) The quantitative analysis of workplace stress in the production system of the automobile part manufacturing industry. *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(7), pp. 627. DOI:10.3390/math7070627, DOP: 15– July – 2019.
134. M. Ullah, I. Khan, **B. Sarkar\*** (2019) Dynamic pricing in a multi-period newsvendor under stochastic price-dependent demand. *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(6), pp. 520. DOI: 10.3390/math7060520, DOP: 6– June – 2019.

133. A.A Taleizadeh, M. S. Babaei, S. S. Sana, **B. Sarkar\*** (2019) Pricing decision within an inventory model for complementary and substitutable products, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(7), pp. 568. DOI: 10.3390/math7070568, DOP: 26– Jun. – 2019.
132. C. W. Kang, M. Imran, M. Omair, W. Ahmed, M. Ullah, **B. Sarkar\*** (2019) Stochastic-Peternet modelling and optimization for outdoor patients in building sustainable healthcare system considering staff absenteeism, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(6), pp. 499. DOI: 10.3390/math7060499, DOP: 1– June – 2019.
131. R. Guchhait, S. Pareek, **B. Sarkar\*** (2019) How does radio frequency identification help to optimize the profit in a two-echelon unreliable supply chain management? *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(6), pp. 490. DOI: 10.3390/math7060490, DOP: 29– May – 2019.
130. A. I. Malik, **B. Sarkar\*** (2019) Coordinating supply chain management under stochastic fuzzy environment and lead time reduction, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(5), pp. 480. DOI: 10.3390/math7050480, DOP: 27– May – 2019.
129. **B. Sarkar**, M Ullah, S. B. Choi\* (2019) Joint inventory and policy for an O2O closed-loop supply chain model with random defective rate and returnable transport items, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(6), pp. 490. DOI: 10.3390/math7060490, DOP: 1– June – 2019.
128. C. W. Kang, M. Ullah, M. Sarkar, M. Omair, **B. Sarkar\*** (2019) A single-stage manufacturing system with imperfect items, inspection, rework, and planned backorders, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol.7(5), pp. 446. DOI: 10.3390/math7050446 DOP: 19– May – 2019.
127. M. R. Khan, **B. Sarkar\*** (2019) Change point detection for airborne particulate matter (PM<sub>2.5</sub>, PM<sub>10</sub>) by using Bayesian Approach, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol.7(5), pp. 474. DOI: 10.3390/math7050474, DOP: 24– May – 2019.
126. S. Bhuniya, **B. Sarkar\***, S. Pareek (2019) Multi-product production system with the reduced failure rate and optimum energy consumption under variable demand, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(5), pp. 465. DOI:10.3390/math7050465 DOP: 24– May – 2019.
125. B. K. Dey, **B. Sarkar\***, S. Pareek (2019) A two-echelon supply chain management with setup time and cost reduction, quality improvement and variable production rate, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 7(4), pp. 328. DOI: 10.3390/math7040328, DOP: 03– Apr. – 2019.
124. M. Ullah, **B. Sarkar\***, I. Asghar (2019) Effects of preservation technology investment on waste generation in a two-echelon supply chain model, *Mathematics, (MDPI Publishers*

- (Switzerland), ISSN – 2227-7390(online)), (SCIE), Vol. 7(2), pp. 189. DOI: 10.3390/math7020189, DOP: 17– Feb. – 2019.
123. M. Tayyab, **B. Sarkar\***, M. Ullah (2019) Sustainable Lot size in a multistage lean-green manufacturing process under uncertainty, *Mathematics*, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE), Vol. 7(1), pp. 20. DOI: 10.3390/math701002, DOP: 25– Dec. – 2018.
122. **B. Sarkar**, M. Tayyab, S. B. Choi\* (2019) Product channeling O2O supply chain management as power transmission in electric power distribution systems, *Mathematics*, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE), Vol. 7(1), pp. 4. DOI: 10.3390/math7010004, DOP: 20– Dec. – 2018.
121. **B. Sarkar**, M. Tayyab, B. N. Yahya\* (2019) Imperfect multi-stage lean manufacturing system with rework under fuzzy demand, *Mathematics*, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE), Vol. 7(1), pp. 13. DOI: 10.3390/math7010013, DOP: 24– Dec. – 2018.
120. N. Cheikhrouhou, **B. Sarkar\***, B. Ganguly, A.I. Malik, R. Batista, Y. H. Lee (2018) Optimization of sample size and order size in an inventory model with quality inspection and return of defective items, (SCI), *Annals of Operations Research*, (Springer (United States), ISSN – 1572-9338 (online), 0254-5330(Print)), Vol. 271(2), pp.445-467. DOI: 10.1007/s10479-017-2511-6. DOP: 1 – Dec. – 2018.
119. **B. Sarkar**, A. Majumder, M. Sarkar, N. Kim\*, M. Ullah (2018) Effect of variable production rate on quality of products in a single-vendor multi-buyer supply chain management, *International Journal of Advanced Manufacturing Technology*, (Springer (United States), ISSN – 1433-3015 (online), 0268-3768(Print)), (SCIE), Vol. 99(1 – 4), pp. 567 – 581. DOI: 10.1007/s00170-018-2527-3. DOP: 01 – Oct. – 2018.
118. S. Tiwari, W. Ahmed, **B. Sarkar\*** (2018) Multi-item sustainable green production system under trade-credit and partial backordering, *Journal of Cleaner Production*, (Elsevier (Netherlands), ISSN – 0959-6526), (SCIE), Vol. 204, pp. 82 – 95. DOI: doi.org/10.1016/j.jclepro.2018.08.181. DOP: 10 –Dec. – 2018.
117. M. S. Kim, J. S. Kim, **B. Sarkar\***, M. Sarkar, W. Iqbal (2018) An improved way to calculate imperfect items during long-run production in an integrated model with backorders, *Journal of Manufacturing System*, (Elsevier (Netherlands), ISSN – 0278-6125), (SCIE), Vol. 47, pp.153 – 167. DOI: 10.1016/j.jmsy.2018.04.016. DOP: 01 – Apr.- 2018.
116. W. Ahmed, **B. Sarkar\*** (2018) Impact of carbon emissions in a sustainable supply chain design for a second generation biofuel, *Journal of Cleaner Production*, (Elsevier (Netherlands), ISSN – 0959-6526), (SCIE), Vol. 186, pp. 807-820. DOI: 10.1016/j.jclepro.2018.02.289. DOP: 10 – Jun. – 2018.
115. **B. Sarkar**, C. Zhang, A. Majumder, M. Sarkar, Y. W. Seo\* (2018) A distribution free newsvendor model with consignment policy and retailer’s royalty reduction, *International Journal of Production Research*, (Taylor & Francis online (UK), ISSN – 1366 –

- 588X(online), 0020-7543(Print)), (SCIE), Vol.56(15), pp.5025–5044. DOI: 10.1080/00207543.2017.1399220. DOP: 11 – Feb. – 2018.
114. **B. Sarkar**, W. Ahmed, N. Kim\* (2018) Joint effects of variable carbon emission cost and multi-delay-in-payments under single-setup-multiple-delivery policy in a global sustainable supply chain, *Journal of Cleaner Production*, (SCIE), (Elsevier (Netherlands), ISSN – 0959-6526), Vol. 185, pp.421 – 445. DOI: 10.1016/j.jclepro.2018.02.215. DOP: 1 – Jun. – 2018.
113. C. W. Kang, M. Ullah, **B. Sarkar\*** (2018) Optimum ordering policy for an imperfect single-stage manufacturing system with safety stock and planned backorder, *International Journal of Advanced Manufacturing Technology*, (Springer (United States), ISSN – 1433-3015 (online), 0268-3768(Print)), (SCIE), Vol. 95(1-4), pp. 109 – 120. DOI: 10.1007/s00170-017-1065-8. DOP: 01- Mar. – 2018.
112. **B. Sarkar**, M. Omair, S. B. Choi\* (2018) A multi-objective optimization of energy, economic, and carbon emission in a production model under sustainable Supply Chain Management, *Applied Sciences*, (MDPI (Switzerland), ISSN – 1996-1073), (SCIE), Vol. 8(10), pp.1744. DOI: 10.3390/app8101744. DOP: 27 – Sept. – 2018.
111. M. Sarkar, **B. Sarkar\***, M. W. Iqbal (2018) Effect of energy and failure rate in a multi-item smart production system, *Energies*, (MDPI (Switzerland), ISSN – 1996-1073), (SCIE), Vol. 11(11), pp. 2958. DOI: 10.3390/en11112958. DOP: 30 – Oct. – 2018.
110. **B. Sarkar**, W. Ahmed, S. B. Choi\*, M. Tayyab (2018) Sustainable inventory management for environmental impact through partial backordering and multi-trade-credit-period. *Sustainability*, (MDPI (Switzerland), ISSN – 2071-1050), (SCIE), Vol. 10(12), 4761. DOI: 10.3390/su10124761. DOP: 13 – Dec. – 2018.
109. H. Rashmanlou, M. Pal, R.A. Borzooei, F. Mofidnakhai, **B. Sarkar\*** (2018) Product of interval-valued fuzzy graphs and degree, *Journal of Intelligent & Fuzzy Systems*, (IOS Press (Amsterdam), ISSN – 1875-8967(online), 1064-1246(Print)), (SCIE), Vol 35(6), pp. 6443 – 6451. DOI: 10.3233/JIFS-181488. DOP: 24 – Dec. – 2018.
108. A. A. Malik, **B. Sarkar\*** (2018) Optimizing a multi-product continuous-review inventory model with uncertain demand, quality improvement, setup cost reduction, and variation control in lead time, *IEEE Access*, (IEEE Xplore, ISSN – 2169-3536) (SCIE), Vol. 6, pp. 36176-36187. DOI: 10.1109/ACCESS.2018.2849694. DOP: 27 – Jun. – 2018.
107. S. Samanta, **B. Sarkar\***(2018) A study on generalized fuzzy graphs, *Journal of Intelligent & Fuzzy Systems*, (IOS Press (Amsterdam), ISSN – 1875-8967(online), 1064-1246(Print)), (SCIE), Vol. 35(3), pp. 3405 – 3412. DOI: 10.3233/JIFS-17285. DOP: 01 – Oct. – 2018.
106. S. Samanta, **B. Sarkar\***(2018) Representation of competitions by generalized fuzzy graphs, *International Journal of Computational Intelligence Systems*, (Atlantis Press (Amsterdam), ISSN – 1875-6883), (SCIE), Vol. 11(1), pp. 1005-1015. DOI: 10.2991/ijcis.11.1.76. DOP:18 – Mar. – 2019.

105. S. Samanta, **B. Sarkar\*** (2018) Generalized fuzzy Euler graphs and generalized fuzzy Hamiltonian graphs, *Journal of Intelligent & Fuzzy Systems, (IOS Press (Amsterdam), ISSN – 1875-8967(online), 1064-1246(Print)) (SCIE)*, Vol. 35(3), pp. 3413 – 3419. DOI: 10.3233/JIFS-17322. DOP: 01 – Oct. – 2018.
104. C. W. Kang, B. M. Babar, **B. Sarkar\***, M. Imran (2018) Effect of inspection performance in smart manufacturing system based on human quality control system, *International Journal of Advanced Manufacturing Technology, (Springer (United States), ISSN – 1433-3015 (online), 0268-3768(Print)), (SCIE)*, Vol. 94(9-12), pp.4351-4364. DOI: 10.1007/s00170-017-1069-4. DOP: 01 – Feb. – 2018.
103. H. Soni, **B. Sarkar\***, A. Mahapatra, S. Majumder (2018) Lost sales reduction and quality improvement with variable lead time and fuzzy costs in an imperfect production system, *RAIRO – Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print)) (SCIE)*, Vol. 52(3), pp. 819 – 837. DOI: <https://doi.org/10.1051/ro/2016075>. DOP: 18 – Oct. – 2018.
102. A. Majumder, C. K. Jaggi, **B. Sarkar\*** (2018) A multi-retailer supply chain model with backorder and variable production cost, *RAIRO – Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print)), (SCIE)*, Vol. 52(3), pp. 943 – 954. DOI: <https://doi.org/10.1051/ro/2017013>. DOP: 26 – Oct. – 2018.
101. **B. Sarkar**, B. Sett, S. Sarkar\* (2018) Optimal production run time and inspection errors in an imperfect production system with warranty, *Journal of Industrial and Management Optimization, (AIMS (USA), ISSN – 1553-166X(online), 1547-5816(Print)), (SCIE)*, Vol. 14(1), pp. 267-282. DOI: 10.3934/jimo.2017046. DOP: 01 – Jan. – 2018.
100. D. Shin, M. Mittal, **B. Sarkar\*** (2018) Effects of human errors and trade-credit financing in a two-echelon supply chain model, *European Journal of Industrial Engineering, (Inderscience online (Switzerland), ISSN – 1751-5262(online), 1751-5254(print)), (SCIE)*, Vol. 12(4), pp. 465-503. DOI: 10.1504/EJIE.2018.093574. DOP: 11 – Jul. – 2018.
99. A. Khanna, A. Kishore, **B. Sarkar\***, C. K. Jaggi (2018) Supply chain with customer-based two-level credit policies under an imperfect quality environment, *Mathematics, (MDPI Publishers (Switzerland), ISSN – 2227-7390(online)), (SCIE)*, Vol. 6(12), pp. 299. DOI: 10.3390/math6120299, DOP: 3– Dec. – 2018.
98. C. W. Kang, M. Ullah, **B. Sarkar\*** (2017) Human errors incorporation in work-in-process group manufacturing system, *Scientia Iranica, (IJST (IRAN), ISSN – 2345-3605(online), 1026-3098(Print)) (SCIE)*, Vol. 24(4), pp. 2050-2061. DOI: 10.24200/SCI.2017.4294. DOP: 01 – AUG. – 2017.
97. **B. Sarkar\***, A Mahapatra (2017) Periodic review fuzzy inventory models with variable lead time and fuzzy demand, *International Transactions in Operational Research, (Wiley online Library (New Jersey), ISSN – 1475-3995) (SCIE)*, Vol. 24(5), pp. 1197-1227. DOI: 10.1111/itor.12177. DOP: 01 – Sept. – 2017.
96. **B. Sarkar**, M. Ullah, N. Kim\* (2017) Environmental and economic assessment of closed-loop supply chain with remanufacturing and returnable transport items, *Computers &*

- Industrial Engineering, (Elsevier (Netherlands), ISSN – 0360-8352), (SCIE)*, Vol. 111, pp. 148-163. DOI: 10.1016/j.cie.2017.07.003. DOP: 01 – Sept. – 2017.
95. M. Kim, **B. Sarkar\*** (2017) Multi-stage cleaner production process with quality improvement and lead time dependent ordering cost, *Journal of Cleaner Production, (Elsevier (Netherlands), ISSN – 0959-6526), (SCIE)*, Vol. 144, pp. 572-590. DOI: 10.1016/j.jclepro.2016.11.052. DOP: 15 – Feb. – 2017.
94. **B. Sarkar\***, B. Mandal, S. Sarkar (2017) Preservation of deteriorating seasonal products with stock-dependent consumption rate and shortages, *Journal of Industrial and Management Optimization, (AIMS (USA), ISSN – 1553-166X(online), 1547-5816(Print)), (SCIE)*, Vol. 13(1), pp. 187-206. DOI: 10.3934/jimo.2016011. DOP: 01 – Jan. – 2017.
93. T. Pramanik, M. Pal, S. Samanta, **B. Sarkar\*** (2017) Fuzzy  $\phi$ -tolerance competition Graphs, *Soft Computing, (Springer (United States), ISSN – 1433-7479 (online), 1432-7643(Print)), (SCIE)*, Vol. 21(13), pp. 3723-3734. DOI: 10.1007/s00500-015-2026-5. DOP: 01 – Jul. – 2017.
92. M. Omair, **B. Sarkar\***, L.E. Cárdenas-Barrón (2017) Minimum quantity lubrication and a carbon footprint: a step towards sustainability, *Sustainability, (MDPI (Switzerland), ISSN – 2071-1050), (SCIE)*, Vol. 9(5), pp. 714. DOI: 10.3390/su9050714. DOP: 29 – Apr. – 2017.
91. M.S. Habib, **B. Sarkar\*** (2017) An integrated location-allocation model for temporary disaster debris management under an uncertain environment, *Sustainability, (MDPI (Switzerland), ISSN – 2071-1050), (SCIE)*, Vol. 9(5), pp. 716. DOI: 10.3390/su9050716. DOP: 29 – Apr. – 2017.
90. A. Majumder, R. Guchhait, **B. Sarkar\*** (2017) Manufacturing quality improvement and setup cost reduction in an integrated vendor-buyer supply chain model, *(SCIE), European Journal of Industrial Engineering, (Inderscience online (Switzerland), ISSN – 1751-5262(online), 1751-5254(print))*, Vol. 11(5), pp. 588-612. DOI: <https://doi.org/10.1504/EJIE.2017.087678>. DOP: 01 – Sept. – 2018.
89. **B. Sarkar**, A. Majumder, M. Sarkar\*, B. K. Dey, G. Roy (2017) Two-echelon supply chain model with manufacturing quality improvement and setup cost reduction, *Journal of Industrial and Management Optimization, (AIMS (USA), ISSN – 1553-166X(online), 1547-5816(Print)), (SCIE)*, Vol. 13(2), pp. 1085-1104. DOI: 10.3934/jimo.2016063. DOP: 01 – Apr. – 2017.
88. A. A. Taleizadeh, H. Samimi, **B. Sarkar\***, B. Mohammadi (2017) Stochastic machine breakdown and discrete delivery in an imperfect production system, *Journal of Industrial and Management Optimization, (AIMS (USA), ISSN – 1553-166X(online), 1547-5816(Print)), (SCIE)*, Vol. 13(3), pp. 1511-1535. DOI: 10.3934/jimo.2017005. DOP: 01 – Jul. – 2017.
87. **B. Sarkar\***, S. Saren (2017) Ordering and transfer policy and variable deterioration for a warehouse model, *Hacettepe Journal of Mathematics and Statistics, (Hacettepe*

- University, ISSN – 1303-5010), (SCIE), Vol. 46(5), pp. 985-1014. DOI: 10.15672/HJMS.201510414237.*
86. B. Sett, S. Sarkar, **B. Sarkar\*** (2017) Optimal buffer inventory and inspection errors in an imperfect production system with regular preventive maintenance, *International Journal of Advanced Manufacturing Technology, (Springer (United States), ISSN – 1433-3015 (online), 0268-3768(Print)), (SCIE), Vol. 90(1-4), pp. 545-560. DOI: 10.1007/s00170-016-9359-9. DOP: 01 – Apr. – 2017.*
  85. C. W. Kang, M. Ullah, **B. Sarkar\***, H. Iftikhar, A. Rehman (2017) Impact of random defective rate on lot size focusing work-in-process inventory in manufacturing system, *International Journal of Production Research, (Taylor & Francis online (UK), ISSN – 1366 – 588X(online), 0020-7543(Print)), (SCI), Vol.55(6), pp. 1748-1766. DOI: 10.1080/00207543.2016.1235295. DOP: 03 – Oct. – 2016.*
  84. M. Sarkar, S. Hur, **B. Sarkar\*** (2017) Effects of variable production rate and time dependent holding cost for complementary products in supply chain model, *Mathematical Problems in Engineering, (Hindawi (UK), ISSN – 1024-123X(online), 1563-5147(Print)), (SCIE), Article ID 2825103. 1-13. DOI: 10.1155/2017/2825103. DOP: 16 – May – 2017.*
  83. **B. Sarkar**, B. Shaw, M. Sarkar\*, T. Kim, D. Shin (2017) An integrated inventory model with variable transportation cost, two-stage inspections, and defective units, *Journal of Industrial and Management Optimization, (AIMS (USA), ISSN – 1553-166X(online), 1547-5816(Print)), (SCIE), Vol. 13(4), pp. 1975-1990. DOI: 10.3934/jimo.2017027. DOP: 01 – Oct. – 2017.*
  82. H. Soni, **B. Sarkar\***, M. Joshi (2017) Demand uncertainty and learning in fuzziness in a continuous review inventory model, *Journal of Intelligent & Fuzzy Systems, (IOS Press (Amsterdam), ISSN – 1875-8967(online), 1064-1246(Print)), (SCIE), Vol. 33(4), pp. 2595-2608. DOI: 10.3233/JIFS-16372. DOP: 22 – Sept. – 2017.*
  81. S. J. Kim, **B. Sarkar\*** (2017) Supply chain model with stochastic lead time, trade-credit financing, and transportation discounts, *Mathematical Problems in Engineering, (Hindawi (UK), ISSN – 1024-123X(online), 1563-5147(Print)), (SCIE), Article ID 6465912, 1-14. DOI: 10.1155/2017/6465912. DOP: 18 – May – 2017.*
  80. **B. Sarkar\***, S. Samanta (2017) Generalized Fuzzy Trees, *International Journal of Computational Intelligence Systems (OA) (Atlantis Press (Amsterdam), ISSN – 1875-6883), (SCIE), Vol. 10, pp. 711-720. DOI:10.2991/ijcis.2017.10.1.47. DOP:01 – Jan. – 2017.*
  79. **B. Sarkar\***, S. Saren (2016) Product inspection policy for an imperfect production system with inspection errors and warranty cost, *European Journal of Operational Research, (Elsevier (Netherlands), ISSN – 0377-2217), (SCIE), Vol. 248(1), pp 263-271. DOI: 10.1016/j.ejor.2015.06.021. DOP: 01 – Jan. – 2016.*
  78. **B. Sarkar**, B. Ganguly, M. Sarkar\*, S. Pareek (2016) Effect of variable transportation and carbon emission in a three-echelon supply chain model, *Transportation Research Part E:*

- Logistics and Transportation Review*, (Elsevier (Netherlands), ISSN – 1366-5545), (SCIE), Vol. 91, pp. 112-128. DOI: 10.1016/j.tre.2016.03.018. DOP: 01 – Jul. – 2016.
77. B. K. Sett, S. Sarkar, **B. Sarkar\***, W. Y. Yun (2016) Optimal replenishment policy with variable deterioration for fixed lifetime products, *Scientia Iranica, (IJST (Iran), ISSN – 2345-3605(online), 1026-3098(Print))*, (SCIE), Vol. 23(5), pp. 2318-2329. DOI: 10.24200/SCI.2016.3959. DOP: 08 – Dec. – 2015.
76. **B. Sarkar\***, S. Sarkar, W. Y. Yun (2016) Retailer’s optimal strategy for fixed lifetime products, *International Journal of Machine Learning and Cybernetics, (Springer (United States), ISSN – 1868-808X(online), 1868-8071(Print))*, (SCIE), Vol. 7(1), pp 121-133. DOI: 10.1007/s13042-015-0393-y. DOP: 01 – Feb. – 2016.
75. D. Shin, R. Guchhait, **B. Sarkar\***, M. Mittal (2016) Controllable lead time, service level constraint, and transportation discount in a continuous review inventory model, *RAIRO Operations Research, (EDP Sciences (France), ISSN – 1290-3868 (online), 0399-0559(Print))*, (SCIE), Vol. 50(4-5), pp. 921-934. DOI: 10.1051/ro/2015055. DOP: 03 – Nov. – 2016.
74. M. Tayyab, **B. Sarkar\*** (2016) Optimal batch quantity in a cleaner multi-stage lean production system with random defective rate, *Journal of Cleaner Production, (Elsevier (Netherlands), ISSN – 0959-6526)*, (SCIE), Vol. 139, pp. 922-934. DOI: 10.1016/j.jclepro.2016.08.062. DOP: 15 – Dec. – 2016.
73. **B. Sarkar\*** (2016) Supply chain coordination with variable backorder, inspections, and discount policy for fixed lifetime products, *Mathematical Problem in Engineering, (Hindawi (UK), ISSN – 1024-123X(online), 1563-5147(Print))*, (SCIE), Vol. 2016, Article ID 6318737, 14 pages. DOI: 10.1155/2016/6318737. DOA: 07 – Jul. – 2015.
72. **B. Sarkar**, S. Saren, M. Sarkar, Y. W. Seo\* (2016) A Stackelberg game approach in an integrated inventory model with carbon-emission and setup cost reduction, *Sustainability, (MDPI (Switzerland), ISSN – 2071-1050)*, (SCIE), Vol. 8(12), Article ID 1244, 23 pages. DOI: 10.3390/su8121244. DOP: 2 – Dec. – 2016.
71. T. Pramanik; S. Samanta, M. Pal, S. Mondal, **B. Sarkar\*** (2016) Interval-valued fuzzy  $\phi$ -tolerance competition graphs, *Springer Plus, (Springer (United States), ISSN – 2193-1801)*, (SCIE), Vol. 5, Article ID 1981, 19 pages. DOI: 10.1186/s40064-016-3463-z. DOP: 15 – Nov. – 2016.
70. S. Samanta, **B. Sarkar\***, D. Shin, M. Pal (2016) Completeness and regularity of generalized fuzzy graphs, *Springer Plus, (Springer (United States), ISSN – 2193-1801)*, (SCIE), Vol. 5, Article ID 1979, 14 pages. DOI: 10.1186/s40064-016-3558-6. 15 – Nov. – 2016.
69. **B. Sarkar**, S. Saren, D. Sinha, S. Hur\* (2015) Effect of unequal lot sizes, variable setup cost, and carbon emission cost in a supply chain model, *Mathematical Problem in Engineering, (Hindawi (UK), ISSN – 1024-123X(online), 1563-5147(Print))*, (SCIE), Vol. 2015, Article ID 469486, 13 pages. DOI: 10.1155/2015/469486. DOA: 5 – Oct. – 2015.

68. **B. Sarkar**, K. S. Chaudhuri, I. Moon\* (2015) Manufacturing setup cost reduction and quality improvement for the distribution free continuous-review inventory model with a service level, *Journal of Manufacturing Systems, (Elsevier (Netherlands), ISSN – 0278-6125), (SCIE)*, Vol. 34, pp. 74-82. DOI: 10.1016/j.jmsy.2014.11.003. DOP: 01 – Jan. – 2015.
67. **B. Sarkar\***, B. Mondal, S. Sarkar (2015) Quality improvement and backorder price discount under controllable lead time in an inventory model, *Journal of Manufacturing Systems, (Elsevier (Netherlands), ISSN – 0278-6125), (SCIE)*, Vol. 35, pp. 26-36. DOI: 10.1016/j.jmsy.2014.11.012. DOP: 01 – Apr. – 2015.
66. **B. Sarkar\***, S. Saren, L. E. Cárdenas-Barrón (2015) An inventory model with trade-credit policy and variable deterioration for fixed lifetime products, *Annals of Operations Research, (Springer (United States), ISSN – 1572-9338 (online), 0254-5330(Print)), (SCIE)*, Vol. 229(1), pp. 677-702. DOI: 10.1007/s10479-014-1745-9. DOP: 01 – Jun. – 2015.
65. **B. Sarkar\***, L. E. Cárdenas-Barrón, M. Sarkar, M. L. Singgih (2014) An economic production quantity model with random defective rate, rework process and backorders for a single stage production system, *Journal of Manufacturing Systems, (Elsevier (Netherlands), ISSN – 0278-6125), (SCIE)*, Vol. 33(3), pp. 423-435. DOI: 10.1016/j.jmsy.2014.02.001. DOP: 01 – Jul. – 2014.
64. **B. Sarkar**, I. Moon\* (2014) Improved quality, setup cost reduction, and variable backorder costs in an imperfect production process, *International Journal of Production Economics, (Elsevier (Netherlands), ISSN – 0925-5273), (SCIE)*, Vol. 155, pp. 204-213. DOI: 10.1016/j.ijpe.2013.11.014. DOP: 01 – Sept. – 2014.
63. I. Moon, E. Sin, **B. Sarkar\*** (2014) Min-max distribution free continuous review model with a service level constraint and variable lead time, *Applied Mathematics and Computation, (Elsevier (Netherlands), ISSN – 0096-3003), (SCIE)*, Vol. 229 (25), pp. 310-315. DOI: 10.1016/j.amc.2013.12.034. DOP: 25 – Feb. – 2014.
62. **B. Sarkar\***, P. Mandal, S. Sarkar (2014) An EMQ model with price and time dependent demand under the effect of reliability and inflation, *Applied Mathematics and Computation, (Elsevier (Netherlands), ISSN – 0096-3003), (SCIE)*, Vol. 231 (15), pp. 414-421. DOI: 10.1016/j.amc.2014.01.004. DOP: 15 – Mar. – 2014.
61. **B. Sarkar\***, H. Gupta, K. S. Chaudhuri, S. K. Goyal (2014) An integrated inventory model with variable lead time, defective units and delay in payments, *Applied Mathematics and Computation, (Elsevier (Netherlands), ISSN – 0096-3003), (SCIE)*, Vol. 237, pp. 650-658. DOI: 10.1016/j.amc.2014.03.061. DOP: 15 – Jun. – 2014.
60. **B. Sarkar\*** (2013) A production-inventory model with probabilistic deterioration in two-echelon supply chain management, *Applied Mathematical Modelling, (Elsevier (Netherlands), ISSN – 0307-904X), (SCIE)*, Vol. 37(5), pp. 3138-3151. DOI: 10.1016/j.apm.2012.07.026. DOP: 1 – Mar. – 2013.

59. L. E. Cárdenas-Barrón, **B. Sarkar\***, G. Treviño-Garza (2013) An improved solution to the replenishment policy for the EMQ model with rework and multiple shipments, *Applied Mathematical Modelling*, (Elsevier (Netherlands), ISSN – 0307-904X), (SCIE), Vol. 37(7), pp. 5549- 5554. DOI: 10.1016/j.apm.2012.10.017. DOP: 1 – Apr. – 2013.
58. **B. Sarkar\***, S. Saren, H. M. Wee (2013) An inventory model with variable demand, component cost and selling price for deteriorating items, *Economic Modelling*, (Elsevier (Netherlands), ISSN – 0264-9993), (SSCI), Vol. 30, pp. 306-310. DOI: 10.1016/j.econmod.2012.09.002. DOP: 01 – Jan. – 2013.
57. **B. Sarkar\***, A. Majumder (2013) A study on three different dimensional facility location problems, *Economic Modelling*, (Elsevier (Netherlands), ISSN – 0264-9993), (SSCI), Vol. 30, pp.879-887. DOI: 10.1016/j.econmod.2012.09.026. 01 – Jan – 2013.
56. **B. Sarkar\***, A. Majumder (2013) Integrated vendor-buyer supply chain model with vendor’s setup cost reduction, *Applied Mathematics and Computation*, (Elsevier (Netherlands), ISSN – 0096-3003), (SCIE), Vol. 224, 2013, pp. 362–371. DOI: 10.1016/j.amc.2013.08.072. DOP: 1 – Nov. – 2013.
55. **B. Sarkar\***, S. Sarkar (2013) An improved inventory model with partial backlogging, time varying deterioration and stock-dependent demand, *Economic Modelling*, (Elsevier (Netherlands), ISSN – 0264-9993), (SSCI), Vol. 30, pp. 924-932. DOI: 10.1016/j.econmod.2012.09.049. DOP: 1 – Jan. – 2013.
54. **B. Sarkar\***, S. Sarkar (2013) Variable deterioration and demand-An inventory model, *Economic Modelling*, (Elsevier (Netherlands), ISSN – 0264-9993), (SSCI), Vol. 31, pp. 548-556. DOI: 10.1016/j.econmod.2012.11.045. DOP: 1 – Mar. – 2013.
53. M. Sarkar, **B. Sarkar\*** (2013) An economic manufacturing quantity model with probabilistic deterioration in a production system, *Economic Modelling*, (Elsevier (Netherlands), ISSN – 0264-9993), (SSCI), Vol. 31, pp. 245-252. DOI: 10.1016/j.econmod.2012.11.019. DOP: 1 – Mar – 2013.
52. S. Khanra, B. Mandal, **B. Sarkar\*** (2013) An inventory model with time dependent demand and shortages under trade credit policy, *Economic Modelling*, (Elsevier (Netherlands), ISSN – 0264-9993), (SSCI), Vol. 35, pp. 349-355. DOI: 10.1016/j.econmod.2013.07.031. DOP: 01 – Sept. – 2013.
51. **B. Sarkar\*** (2012) An inventory model with reliability in an imperfect production process, *Applied Mathematics and Computation*, (Elsevier (Netherlands), ISSN – 0096-3003), (SCIE), Vol. 218, pp. 4881–4891. DOI: 10.1016/j.amc.2011.10.053. DOP: 1 – Jan – 2012.
50. **B. Sarkar\*** (2012) An EOQ model with delay-in-payments and time-varying deterioration rate, *Mathematical and Computer Modelling*, (Elsevier (Netherlands), ISSN – 0895-7177), (SCIE), Vol. 55, pp. 367–377. DOI: 10.1016/j.mcm.2011.08.009. DOP: 1 – Feb. – 2012.
49. **B. Sarkar\*** (2012) An EOQ model with delay in payments and stock dependent demand in the presence of imperfect production, *Applied Mathematics and Computation*, (Elsevier

- (Netherlands), ISSN – 0096-3003), (SCIE), Vol. 218, pp. 8295-8308. DOI: 10.1016/j.amc.2012.01.053. DOP: 1 – May- 2012.
48. B. K. Sett, **B. Sarkar\***, A. Goswami (2012) A two-warehouse inventory model with increasing demand and time varying deterioration, *Scientia Iranica Transaction E: Industrial Engineering*, (Sharif University of Technology (Iran), ISSN – 1026 – 3096) (SCIE), Vol. 19(6), pp. 1969-1977. DOI: 10.1016/j.scient.2012.10.040. 1 – Dec. – 2012.
47. **B. Sarkar\***, S. S. Sana, K. S. Chaudhuri (2011) An imperfect production process for time varying demand with inflation and time value of money – An EMQ model, *Expert Systems with Applications*, (Elsevier (Netherlands), ISSN – 0957-4174), (SCIE), Vol. 38, pp. 13543-13548. DOI: 10.1016/j.eswa.2011.04.044. DOP: 1 – Oct. – 2011.
46. **B. Sarkar\***, I. K. Moon (2011) An EPQ model with inflation in an imperfect production system, *Applied Mathematics and Computation*, (Elsevier (Netherlands), ISSN – 0096-3003), (SCIE), Vol. 217, pp. 6159-6167. DOI: 10.1016/j.amc.2010.12.098. DOP: 1 - Mar. – 2011.

❖ NON-SCI

45. S. Saren, **B. Sarkar\***, R. K. Bachar (2020) Application of various price-discount policy for deteriorated products and delay-in-payments in an advanced inventory model, *Inventions*, (MDPI Publishers (Switzerland), ISSN – 2411-5134(online)) (SCOPUS), Vol. 5(3), pp. 50. DOI: 10.3390/inventions5030050. DOP: 20 – Sept. – 2020.
44. I. Sangal, B. K. Shaw, **B. Sarkar\***, R. Guchhait (2020) A joint inventory model with reliability, carbon emission, and inspection errors in a defective production system, *Yugoslav Journal of Operations Research*, (University of Belgrade, ISSN – 2334 – 6043(online), 0354 – 0243 (Print)) (SCOPUS), Vol. 30(3), pp. 381 - 398, DOI: 0.2298/YJOR190415020S. DOA: 15 – Jul. – 2019.
43. R. Paramanik, S. K. Mahato, N. Bhattacharyee, P. Supakar, **B. Sarkar\*** (2020) Multiple constrained reliability-redundancy optimization under triangular intuitionistic fuzziness using genetic algorithm. *Reliability Management and Engineering: Challenges and future Trends*, (Taylor & Francis) (Book chapter), Chapter 9. Pp. 1 – 28. DOI: 10.1201/9780429268922-9, DOP: 15 – Jun. – 2020.
42. B. Shaw, I. Sangal, **B. Sarkar\*** (2020) Joint effects of carbon emission, deterioration, and multi-stage inspection policy in an integrated inventory model *Optimization and Inventory Management*, (Springer) (SCOPUS), Chapter 11. Pp. 195 – 208. DOI:10.1007/978-981-13-9698-4\_11, DOP: 1 – Sept. – 2019.
41. M. R. Khan, **B. Sarkar\*** (2019) Change point detection for diversely distributed stochastic processes using a probabilistic method, *Inventions*, (MDPI Publishers (Switzerland), ISSN – 2411-5134(online)) (SCOPUS), Vol. 4(3), pp.42. DOI: 10.3390/inventions4030042. DOP: 15 – Jul. – 2019.

40. A. Mahapatra, **B. Sarkar\***, M. Singha, H. Soni, S. Majumder (2019) Development of a fuzzy economic order quantity model of deteriorating items with promotional effort and learning in fuzziness with a finite time horizon, *Inventions*, (MDPI Publishers (Switzerland), ISSN – 2411-5134(online)) (SCOPUS), Vol. 4(3), pp. 36. DOI:10.3390/inventions4030036, DOP: 22 – Jul. – 2019.
39. S. Ruidas, M. R. Seikh, P. K. Nayak, **B. Sarkar\*** (2019) A single period production inventory model in interval environment with price revision, *International Journal of Applied and Computational Mathematics*, (Springer (United States), ISSN – 2199-5796 (online), 2349-5103(Print)), Vol. 5(1), pp. 7, DOI: 10.1007/s40819-018-0591-x. DOP: 1 – Feb. – 2019.
38. W. Iqbal, **B. Sarkar\*** (2018) Application of normalized lifetime-dependent selling-price in a supply chain model, *International Journal of Applied and Computational Mathematics*, (Springer (United States), ISSN – 2199-5796 (online), 2349-5103(Print)), Vol. 4, pp. 124. DOI: 10.1007/s40819-018-0551-5. DOP: 1 – Oct. – 2018.
37. W. Ahmed, **B. Sarkar**, M. Ullah\* (2018) Impact of reparation for imperfect quality items having shortages in the system under multi-trade-credit-period, *DJ Journal of Engineering and application Mathematics*, (DJ Publications (India), ISSN – 2455-362X) Vol. 5(1), pp. 1-16. DOI: DOP: 9 – Apr. – 2018.
36. R. Agarwal, S. Pareek, **B. Sarkar**, M. Mittal\* (2018) Ordering policy using multi-level association rule mining, *International Journal of Information System and Supply Chain Management*, (IGI-Global (USA), ISSN – 1935-5734(online), 1935-5726(Print)) (SCOPUS), Vol. 11(4), pp. 84-101. DOI: 10.4018/IJISSCM.2018100105. DOP: 1 – Oct. – 2018.
35. A. I. Malik\*, **B. Sarkar** (2018) A distribution-free model with variable setup cost, backorder price discount and controllable lead time, *DJ Journal of Engineering and application Mathematics*, (DJ Publications (India), ISSN – 2455 – 362X), Vol. 4(2), pp. 58 – 69. DOI: 10.18831/djmaths.org/2018021006. DOP: 21 – Jun – 2018.
34. S. J. Kim\*, **B. Sarkar**, S. Sarkar (2018) An inventory model with backorder price discount and stochastic lead time, *DJ Journal of Engineering and application Mathematics*, (DJ Publications (India), ISSN – 2455-362X), Vol. 4(2), pp. 34 – 48. DOI: 10.18831/djmaths.org/2018021004. DOP: 5 – May – 2018.
33. W. Iqbal, **B. Sarkar\*** (2018) A model for imperfect production system with probabilistic rate of imperfect production for deteriorating products, *DJ Journal of Engineering and applied Mathematics*, (DJ Publications (India), ISSN – 2455-362X), Vol. 4(2), pp. 1-12. DOI: 10.18831/djmaths.org/2018021001. DOP: 1 – Mar. – 2018.
32. R. Guchhait, S. Pareek, **B. Sarkar\*** (2018) Application of Distribution-Free Approach in Integrated and Dual-Channel Supply Chain Under Buyback Contract, *IGI Global Chapter 21*, (IGI-Global (USA), ISSN – 1935-5734(online), 1935-5726(Print)), pp.388-426. DOI: 10.4018/978-1-5225-3232-3.ch021.

31. R. Guchhait, M. Sarkar, **B. Sarkar\***, S. Pareek (2017) Single-vendor multi-buyer game theoretic model under multi-factor dependent demand, *International Journal of Inventory Research, (Inderscience online (Switzerland), ISSN – 1746-6970(online), 1746-6962(print))*, Vol. 4(4), pp. 303-332. DOI: 10.1504/IJIR.2017.090384. DOP: 1 – Mar. – 2018.
30. M. B. Ramzan, C. W. Kang, **B. Sarkar\*** (2016) A review paper on offline inspection of finished and semi-finished products and emerging research directions, *Yugoslav Journal of Operational Research, (YUJOR (India), ISSN – 2334-6043(online), 0354-0243(Print))*, Vol. 26(4), pp. 395-422. DOI: 10.2298/YJOR150815006R. DOP: 11 – Oct – 2016.
29. **B. Sarkar\***, B. K. Sett, G. Roy, A. Goswami (2016) Flexible setup cost and deterioration of products in a supply chain model, *International Journal of Applied and Computational Mathematics, Springer (United States), ISSN – 2199-5796 (online), 2349-5103(Print))*, Vol. 2(1), pp. 25-40. DOI: 10.1007/s40819-015-0045-7. DOP: 1 – Mar – 2016.
28. B. Santosa\*, R. Damayanti, **B. Sarkar** (2016) Solving multi-product inventory ship routing with a heterogeneous fleet model using a hybrid cross entropy-genetic algorithm: a case study in Indonesia, *Production & Manufacturing Research, (Taylor & Francis online (UK), ISSN – 2169-3277)*, Vol. 4(1), pp. 90-113. DOI: 10.1080/21693277.2016.1204961. DOP: 8 – Jul – 2016.
27. S. Khanra\*, B. Mandal, **B. Sarkar** (2015) A comparative study between inventory followed by shortages and shortages followed by inventory under trade-credit policy, *International Journal of Applied and Computational Mathematics, Springer (United States), ISSN – 2199-5796 (online), 2349-5103(Print))*, Vol. 1(3), pp 399-426. DOI: 10.1007/s40819-015-0024-z. DOP: 01 – Sept – 2015.
26. **B. Sarkar\***, B. K. Sett, A. Goswami, S. Sarkar (2015) Mitigation of High-Tech products with probabilistic deterioration and inflations, *American Journal of Industrial and Business Management, (Scientific Research Publishing (China), ISSN – 2164-5175(online), 2164-5167(Print))*, Vol. 5(3), pp. 73-89. DOI: 10.4236/ajibm.2015.53009. DOP: 5 – Mar – 2015.
25. **B. Sarkar\***, S. Saren (2015) Partial trade-credit policy of retailer with exponentially deteriorating items, *International Journal of Applied and Computational Mathematics, Springer (United States), ISSN – 2199-5796 (online), 2349-5103(Print))*, Vol. 1(3), pp. 343-368. DOI: 10.1007/s40819-014-0019-1. DOP: 1 – Sept – 2015.
24. **B. Sarkar\***, S. S. Sana, K. S. Chaudhuri (2013) Inventory model with finite replenishment rate, trade credit policy and price-discount offer, *Journal of Industrial Engineering, (Hindawi (UK), ISSN – 2251-712X(online), 1735-5702(Print))*, Vol. 2013, Article ID 672504, 18 pages. DOI: 10.1155/2013/672504. DOP: 22 – May – 2013.
23. L. E. Cárdenas-Barrón, **B. Sarkar\***, G. Treviño-Garza (2013) Easy and improved algorithms to joint determination of the replenishment lot size and number of shipments for an EPQ model with rework, *Mathematical and Computational Applications, (MDPI*

- (Switzerland), *ISSN – 1300 – 686X(online), 2297-8747(Print)*), Vol. 18, pp. 3138-3151. DOI: 10.3390/mca18020132. DOP: 1 – Aug – 2013.
22. **B. Sarkar\***, S. S. Sana, K. S. Chaudhuri (2011) An Economic production quantity model with stochastic demand in an imperfect production system, *International Journal of Services and Operations Management, (Inderscience online (Switzerland), ISSN – 1744-2389(online), 1744-2370(print))*, Vol. 9(3), pp. 259–283. DOI: 10.1504/IJSOM.2011.0411. DOP: 7 – Jul – 2011.
  21. U. Adak, **B. Sarkar\*** (2011) Existing theorems and necessary conditions for general formulation of linear bounded phase co-ordinate control problems in 2-Banach space, *Journal of The Assam Academy of Mathematics, (Queen’s University Belfast, ISSN – 2229-3884)*, Vol. 4, pp.25-36.
  20. **B. Sarkar**, S. S. Sana\*, K. S. Chaudhuri (2010) A finite replenishment model with increasing demand under inflation, *International Journal of Mathematics in Operational Research, (Inderscience online (Switzerland), ISSN – 1757-5869(online), 1757-5850(print))*, Vol. 2(3), pp. 347-385. DOI: 10.1504/IJMOR.2010.032723. DOP: 17 – Apr. – 2010.
  19. **B. Sarkar**, S. S. Sana\*, K. S. Chaudhuri (2010) Optimal reliability, production lotsize and safety stock: An economic manufacturing quantity model, *International Journal of Management Science and Engineering Management, (Taylor & Francis online (UK), ISSN -1750-9661(online), 1750-9653(Print))*, Vol. 5(3), pp. 192-202. DOI: 10.1080/17509653.2010.10671108. DOP: 16 – May – 2013.
  18. **B. Sarkar\***, S. S. Sana, K. S. Chaudhuri (2010) Optimal reliability, production lotsize and safety stock in an imperfect production system, *International Journal of Mathematics in Operational Research, (Inderscience online (Switzerland), ISSN – 1757-5869(online), 1757-5850(print))*, Vol2(4), pp. 467-490. DOI: 10.1504/IJMOR.2010.033441. DOP: 2 – Jun – 2010.
  17. **B. Sarkar**, S. S. Sana\*, K. S. Chaudhuri (2010) A stock-dependent inventory model in an imperfect production process, *International Journal of Procurement Management, (Inderscience online (Switzerland), ISSN – 1753-8440(online), 1753-8432(print))*, Vol. 3(4), pp. 361-378. DOI: 10.1504/IJPM.2010.035467. DOP: 30 – Sept – 2010.

#### ❖ Conference Papers

16. W. Ahmed, **B. Sarkar\***, M. H. Agha (2020) Integration of Triple Sustainable Management by Considering the Multi-period Supply Chain for Next-Generation Fuel. *IFIP International Conference on Advances in Production Management Systems, 2020*, pp.217 – 226. DOI: 10.1007/978-3-030-57993-7\_25. DOP: 30 – Aug. – 2020.
15. J. Jemai, **B. Sarkar\*** (2019) Optimum Design of a Transportation Scheme for Healthcare Supply Chain Management: The Effect of Energy Consumption. *Proceeding of the KIIE Fall Conference, 2019*, pp.1973 – 2002.

14. W. Ahmed, **B. Sarkar\***, R. Guchhait (2019) Employment of Fuzzy FMEA for Analysis of Safety Dynamics in Production Unit. *Proceeding of the KIIE Fall Conference, 2019*, pp.1956 – 1972.
13. R. Guchhait, **B. Sarkar\*** (2019) The use of carbon cap-and-trade mechanism within a smart production system under the system reliability and failure rate. *Proceeding of the KIIE Fall Conference, 2019*, pp.2003 – 2017.
12. **B. Sarkar\***, I. Khan (2019) Quality improvement and setup cost reduction in a two-echelon supply chain model with imperfect production process considering service level constraint. *Proceeding of the Korean Management Science Society 2019 Spring Joint Conference, 2019*, pp.1546 – 1568.
11. R. Guchhait, **B. Sarkar\*** (2019) Joint effect of radio frequency identification and vendor managed inventory in a supply chain management. *Proceeding of the Korean Management Science Society 2019 Spring Joint Conference, 2019*, pp.765 – 787.
10. **B. Sarkar\***, J. Jemai (2019) Is the drone really beneficial for a sustainable healthcare supply chain management? *Proceeding of the Korean Management Science Society 2019 Spring Joint Conference, 2019*, pp.743 – 764.
9. **B. Sarkar\***, M. Sarkar, S. K. Sardar (2019) Ascertainment of radio frequency identification technology and its discerned advantages in discrete aspects on supply chain management. *Proceeding of the Korean Management Science Society 2019 Spring Joint Conference, 2019*, pp.218 – 239.
8. M. Sarkar, **B. Sarkar\***, M. W. Iqbal, H. Lim (2019) Utilization of energy consumption in a two-echelon supply chain model under carbon emission and setup cost reduction, *Proceedings of the IAPE'19, Oxford, United Kingdom, ISBN: 978-1-912532-05-6*.
7. M. W. Iqbal, **B. Sarkar\***, M. Sarkar, R. Guchhait, S. K. Sardar (2018) Supply chain model for deteriorating products with advanced preservation policy, *Proceeding of the International Conference on Industrial Engineering and Operations Management (IEOM 2018, (United States))*, pp.
6. M. Ullah, **B. Sarkar\*** (2018) Smart and sustainable supply chain management: A proposal to use RFID to improve electronic waste management *Proceedings of International Conference on Computers and Industrial Engineering, CIE, 2018*, pp.1 – 15.
5. M. Sarkar, R. Guchhait, and **B. Sarkar\*** (2018) Modelling for service solution of a closed-loop supply chain with the presence of third party logistics, *IFIP International Conference on Advances in Production Management Systems (APMS 2018, Springer (United States) Link)*, pp. 320 – 327.
4. W. Ahmed, M. Sarkar, **B. Sarkar\***, S. Kim (2017) Effect of carbon tax and uncertainty in an economic policy for second generation biofuel supply chain, *Proceedings of the Fall Conference of the Korean Society for Industrial Technology*, pp.1700 – 1707.
3. M. Sarkar, Y. H. Lee\*, **B. Sarkar** (2015) Maximizing profit of supply chain with complementary products using game theory, *Proceedings of the Fall Conference of the Korean Society for Industrial Technology*, pp.3062 – 3067.

2. S. J. Kim, **B. Sarkar**, Y. H. Lee\* (2015) A supply chain coordination model considering transportation, financing, shipments, quality and setup cost, *Proceedings of the Korean Operations Research and Management Science Society*, pp.69 – 76.
1. J. Li, Y. H. Lee\*, **B. Sarkar**, (2015) Clustering algorithms for vehicle routing problem with special figure of stops, *Proceedings of Spring Conference of Korean Society of Industrial Engineering*, pp.59 – 68.

\*Corresponding author.

DOA: Date of Acceptance, DOP: Date of Publication.

### ➤ Book Published

<i>Sl. No.</i>	<i>Author's Name</i>	<i>Title of the Book</i>	<i>Name of Publishers</i>	<i>ISBN No.</i>	<i>Year of Publication</i>
1	Dr. Biswajit Sarkar	Modelling on Production Planning and Inventory	LAP Lambert Academic Publishing, USA, UK, Germany	ISBN 978-3-8433 6334-1	December, 2010
2	Dr. Biswajit Sarkar and Dr. Mitali Sarkar	Application of Optimization in Production, Logistic, Inventory, Supply Chain Management and Block Chain	Mathematics – MDPI Publishers, Switzerland	ISBN 978-3-03928-522-8(Pbk), 978-3-03928-523-5(PDF), DOI: 10/3390/books978-3-03928-523-5	April 2020
3	Dr. Biswajit Sarkar	Application of Renewable Energy in Production and Supply Chain Management	Energies – MDPI Publishers, Switzerland	ISBN 978-3-03928-672-0 (Pbk); ISBN 978-3-03928-673-7 (PDF), DOI:10.3390/books978-3-03928-673-7	June 2020

### ➤ Research Project

<i>Name of Project</i>	<i>Funding Agency</i>	<i>Amount Sanctioned</i>	<i>Status</i>	<i>Outcome</i>	<i>Year</i>
A decision support system for a hybrid smart manufacturing-remanufacturing under a sustainable closed-loop	National Research Foundation of Korea	\$150,000	Ongoing	6SSCI/SCI/SCIE papers	2020 ~ 2023

supply chain management						
Sustainable green product management through advanced logistic with the effect of industry 4.0 under unreliable framework	New Faculty Support, Yonsei University, South Korea	\$150,000	Ongoing	4 SSCI/SCI / SCIE papers	2019 ~ 2022	
Fourth party logistics involvement for the supply chain management under green logistics framework.	Post doc fund, Yonsei University, South Korea	\$14,000	Ongoing	1 Paper	2020 ~ 2021	
Some improvements on the decision support systems under a sustainable supply chain management	Post doc fund, Yonsei University, South Korea	\$14,000	Ongoing		2021 ~ 2022	
How does a remanufacturing procedure can make a sustainable production system?	New Faculty Support, Yonsei University, South Korea	\$30,000	Completed	1 SSCI/SCI / SCIE papers	2019 ~ 2020	
Service level Improvement with real-time information sharing in an unreliable global networking system through Radio-Frequency Identification (RFID)	National Research Foundation of Korea	\$150,000	Ongoing	14 SSCI/SCI/SCIE papers 3 other papers	2017 ~ 2020	
How does an industry make a sustainable supply chain management under sustainable energy?	Post-Doc Fund, Hanyang University, South Korea	\$30,000	Completed	12 SCIE/SSCI papers	2019 ~ 2020	
Application of Hamiltoian and Euler graph in industry problems	Industry University Collaborative Fund, Hanyang	\$20,000	Completed	16 SCIE/SSCI papers	2018 ~ 2019	

	University, South Korea				
Minimization of complexities in production system due to disruptions and uncertainties through improved optimization techniques	Industry University Collaborative Fund, Hanyang University, South Korea	\$60,000	Completed	4 SCIE papers	2016 ~ 2017
Preservation of deteriorated products and image segmentation based in graph theory	Post-Doc Fund, Hanyang University, South Korea	\$30,000	Completed	10 SCIE papers	2016 ~ 2017
Human errors in advanced manufacturing system and incentives in supply chain	Industry University Collaborative Fund, Hanyang University, South Korea	\$45,000	Completed	14 SCIE papers	2015 ~ 2016
Sustainable development on reliability, maintenance, transportation, and production strategies in inventory management	Hanyang University, South Korea	\$20,000	Completed	1 SCI paper, 1 SCIE paper, & 1 Non-SCIE paper	2014 ~ 2015
Production planning and inventory control: a new approach	UGC, India	\$2,000	Completed	9 Papers (5 SSCI and 4 SCIE)	2012 ~ 2014

➤ *Technical Skills*

Python, Artificial Intelligence, C++, Mathematica, MATLAB, Fortran-77

➤ *Editor-In-Chief*

Journal of Engineering and Applied Mathematics (2015-2017)  
Sustainable Supply Chain Management – Frontier Publishers (2019 – Continuing)

➤ *Guest Editor of Special Issues*

Mathematical Problems in Engineering – Hindawi Publishers (2020 – Continuing)  
Risks - MDPI Publishers (2020 – Continuing)  
Clean Technologies – MDPI Publishers (2019 – Continuing)  
Energies – MDPI Publishers (2018~2019) (SCIE)  
Mathematics – MDPI Publishers (2018 ~ 2019) (SCIE)

➤ *Deputy Editor-In-Chief*

DJ-Journal of Engineering and Applied Mathematics (2018-2020)

➤ *Area Editor*

Energies – MDPI Publishers (2019 – Continuing)

➤ *Editorial Board Member*

- Environmental Science – AIMS Press (Scopus) (Since 2020)
- International Journal of Mathematical, Engineering and Management Sciences (Scopus) (Since 2020)
- Open Journal of Statistics (Since 2020)
- International Journal of Engineering Informatics (Since 2020)
- Global journal of modeling and computational intelligence (Since 2020)
- International Journal of Engineering, Science, Technology and Innovation (Since 2020)
- Inventions – MDPI Publishers (Scopus) (Since 2019)
- Asian Journal of Economics, Finance and Management (Since 2018)
- Insights-Energy Science (Since 2018)
- American Journal of Operations Management and Information Systems (Since 2018)
- Journal of Society of Korea Industrial and Systems Engineering (Since 2015)
- Global Journal of Further Mathematics (Since 2015)
- Annals of Pure and Applied Mathematics (Since 2013)
- Mathematical Aeterna (Since 2012)
- The Yugoslav Journal of Operations Research (Scopus) (Since 2012)
- African Journal of Business Management (2010-2011)

➤ **International advisory scientific committee member**

1. Advisory member in International E - Conference on “Emerging Issues in Supply Chain Management: Interruption, Opportunities and Challenges” **organized by Department of Mathematics, Kazi Nazrul University, Asansol, 713340, India** during June 6-7, 2020.
2. Advisory member on Webinar “**Supply Chain Crisis in the Emergency Situation through Some Mathematical Approaches**” in International Webinar on “Mathematical Modelling in the context of COVID-19 and the Global Crises” **organized by Mathematics Department and IEEE Student Branch, National Institute of Technology (NIT), Agartala** on October 12 - 14, 2020.
3. Keynote speaker in online lecture series “**Advances in Inventory Control & Supply Chain Management**” organized by **Operational Research Society of India: Meerut Chapter** during Nov-Dec. 2020.

➤ **Invited Talk**

27. Delivered an Invited Talk on Webinar “**Effectiveness of the remanufacturing to make a sustainable supply chain management**” in International Webinar on “Applied Mathematics and Computational Intelligence” **organized by Mathematics Department and IEEE Student Branch, National Institute of Technology (NIT), Agartala** on December 23 - 24, 2020.
26. Delivered an Invited Talk on Webinar “**Supply Chain Crisis in the Emergency Situation through Some Mathematical Approaches**” in International Webinar on “Mathematical Modelling in the context of COVID-19 and the Global Crises” **organized by Mathematics Department and IEEE Student Branch, National Institute of Technology (NIT), Agartala** on October 12 - 14, 2020.
25. Delivered an Invited Talk on Webinar “**Applications of Sustainability in Supply Chain Management**” in International Webinar **organized by Department of Mathematics Shri Guru Ram Rai (PG) College, Pathri Bagh, Dehradun -248001 (Uttarakhand), India** on September 14 - 18, 2020.
24. Delivered an Invited Talk on Webinar “**Ramification of Some Precautions for Controlling Disease under the Global Sustainable Supply Chain Management**” in International Webinar **organized by Department of Mathematics and the IQAC, Narasinha Dutt College, West Bengal, India** on July 3, 2020.
23. Delivered an Invited Talk on E-conference “**Open Research Problems on Supply Chain Management during Emergency Situation**” in International E - Conference on “Emerging Issues in Supply Chain Management: Interruption, Opportunities and Challenges” **organized by Department of Mathematics, Kazi Nazrul University, Asansol, 713340, India** during June 6-7, 2020.

22. Delivered an Invited Talk on **“A study about low-pollution progress based on Green Supply Chain Management”** in International Conference on “International Symposium on Industry 3.5 and Intelligent Manufacturing” **organized by National Tsing Hua University, Hsinchu, Taiwan** during September 25-26, 2019.
21. Delivered an Invited Talk on **“Ramifications of carbon footprint and sustainable energy in a smart sustainable multi-stage production system”** in International Conference on “International Conference on Innovative Applied Energy” **organized by St. Cross College, University of Oxford, UK**, during March 14-15, 2019.
20. Delivered an Invited Talk on **“Is the Second Generation Bio-fuel, a substitute of fuel?”** in “1st International Conference on Emerging Trends in Inventory, Supply Chain & Reliability Modelling (ETISCRM 2018)” **organized by the Department of Operational Research, University of Delhi, Delhi, India, and Department of Mathematics, Gujarat University, Gujarat, India** during **December 21-23, 2018**.
19. Delivered a Speech on **“Journey of Inventory Research from Ford Whitman Harris’s Inventory model (1913) to 2018”** in a “Workshop” **organized by the Department of Research & Post Graduate Studies in Mathematics & Department of Statistics, Vardhaman College, Bijnor, Uttar Pradesh, India** on **December 20, 2018**.
18. Delivered an Invited Talk in **School of Engineering & Science Tecnológico de Monterrey, Mexico**, on **“Is there any impact of the Second-Generation Biofuel on the Sustainability issue of Supply Chain Management”** during **15.08.2018**.
17. Delivered an Invited Talk in International Conference on **“A Step towards Zero Waste through Supply Chain Management”** **organized by Cheju Halla University, South Korea**, during **11. 07. 2018 – 12. 07. 2018**.
16. Delivered an Invited Talk in International Conference on “E-Commerce strategy to Cope with the Rapid Change of International trade policy” **organized by Korea E-Trade Research Institute, Chung-Ang University, South Korea**, on **“Multi-objective sustainable supply chain for 2<sup>nd</sup> generation bio-fuel with integration of triple bottom line approach”** during **25-26 May, 2018**.
15. Delivered an Invited Talk in “International Conference on Mathematics and its Applications (ICMA-2018)”, **organized by Department of Mathematics, The University of Burdwan, Golapbag, Burdwan, West Bengal, India**, on **“Analysis of sustainable production system for spare parts in automobile industry”** during **15.01.2018 - 17.01.2018**.
14. Delivered an Invited Talk in **POSTECH**, **South Korea**, on **“Controlling cellphone-waste using smart supply chain through RFID”** during **22.02.2017**.

13. Delivered an Invited Talk in International Conference on Computational Mathematics & Statistics at Department of Mathematics and Statistics, **Bansathali University, Rajasthan, India** on **“An application of basic optimization to control E-waste by RFID in smart supply chain”** during **2017.01.24 to 2017.01.26**.
12. Delivered an Invited Talk in **VIII International Symposium on Statistics and Optimization in conjunction with XXXVI-Annual Convention of Indian Society for Probability & Statistics (ISPS) and Seminar on Statistical Inference, Sampling and Optimization Techniques & Related Areas** at the **Department of Statistics & Operations Research, Aligarh Muslim University, Aligarh-202002, India** on **“An application of basic optimization to save E-waste by RFID in smart and sustainable supply chain”** during **2016.12.17 to 2016.12.19**.
11. Delivered an Invited Talk at Department of Mathematics, **Kaji Nazrul University, India** on **“Advanced Inventory System”** on **2016.12.22**.
10. Delivered a series of Invited Talks at the **Department of Mathematics and Statistics, Bansathali University, Rajasthan, India**, on **“Inventory Theory and Models”** on **2016.01.06 to 2016.01.08**.
9. Delivered an Invited Talk at Department of Industrial Engineering, **Pusan National University, Busan, South Korea** on **“Inspection errors and warranty policy for product inspection in an imperfect process”** on **2015.05.22**.
8. Delivered an Invited Talk at the **Department of Mathematics and Department of Biology, Pilvai, Shri U.P. Arts, Smt. M.G. Panchal Science & Shri V.L. Shah Commerce College, Pilvai, Gujrat, India** on **“UGC sponsored workshop on Development of research article in International Journal”** on **2014.07.01**.
7. Delivered an Invited Talk at **Kadi Sarva Vishwavidyalaya, Gandhinagar, Gujrat, India** on **“Exploring the Research Areas in Mathematics in National Workshop”** on **2014.06.30**.
6. Delivered an Invited Talk at **DST-Centre for Interdisciplinary Mathematical Science, Faculty of Science, Banaras Hindu University, Varanasi, India** on **“An Integrated Stochastic Inventory Model”** on **2014.02.20**.
5. Delivered an Invited Talk at **DST-Centre for Interdisciplinary Mathematical Science, Faculty of Science, Banaras Hindu University, Varanasi, India** on **“Optimization Technique”** on **2014.02.21**.
4. Delivered an Invited Talk at The Engineering Faculty, **Trunojoyo University Madura (UTM), Indonesia** on **“How to Write and Publish in International Journals”** on **2013.08.23**.
3. Delivered an Invited Talk at **Ubaya University, Surabaya, Indonesia** on **“How to Write and Publish Research Articles in International Journals”** on **2013.08.23**.
2. Delivered an Invited Talk at Department of Industrial Engineering, **Pusan National University, Busan, South Korea** on **“A Mathematical Approach to the Inventory Model”** on **2013.02.26**.
1. Delivered an Invited Talk at **Vidyasagar Women’s College, University of Calcutta, India** on **“An inventory model with reliability in an imperfect production process”** on **2011.12.03**.

➤ *Session Chaired*

- 11 A session in “Applied Mathematics and Computational Intelligence-2020” organized by **Mathematics Department and IEEE Student Branch, National Institute of Technology (NIT), Agartala, in Agartala, India on 23<sup>rd</sup> December 2020.**
- 10 A session in the “2019 Fall Conference” organized by **Korea Society of Industrial Engineering (KIIE), Seoul National University, in Seoul, South Korea on 8<sup>th</sup> November 2019.**
- 9 A session in “Spring 2019 Joint Conference” organized by **Korea Industrial Engineering (KIIE), The Korean Operations Research and Management Science Society (KORMSS), and the Simulation Society of Korea (SSK) in Kim Daejung Convention Center, Gwangju, South Korea from 10<sup>th</sup> -13<sup>th</sup> April 2019.**
- 8 Two sessions in “International Conference on Innovative Applied Energy” organized by **St. Cross College, University of Oxford, UK, during March 14-15, 2019.**
- 7 A session in “1st International Conference on Emerging Trends in Inventory, Supply Chain & Reliability Modelling (ETISCRM 2018)” organized by the **Department of Operational Research, University of Delhi, Delhi, India, and Department of Mathematics, Gujrat University, Gujrat, India during December, 21-23, 2018.**
- 6 A session in “International Conference on Mathematics and its Applications (ICMA-2018)”, organized by the **Department of Mathematics, The University of Burdwan, Golapbag, Burdwan, West Bengal, India, during February 2018.01.15 – 2018.01.17.**
- 5 A session in “International Conference on Advancing Frontiers in Operational Research: Towards a sustainable World (AFOR-2017)” **organized by Operational Research Society of India at Heritage Institute of Technology, Kolkata, India from 2017.12.21-2017.12.23.**
- 4 A session in “Fourth Industrial Revolution and Industrial Engineering” **organized by the Korean Institute of Industrial Engineers at KAIST, Daejon, South Korea, from 2017.11.04-2017.11.08.**
- 3 A special invited talk session in “International Conference on Computational Mathematics & Statistics at Department of Mathematics and Statistics” **organized by Bansathali University, Rajasthan, India, from 2017.01.24 to 2017.01.26.**
- 2 A session in “International Conference on Computational Mathematics & Statistics at Department of Mathematics and Statistics” **organized by Bansathali University, Rajasthan, India, from 2017.01.24 to 2017.01.26.**

- 1 A session in “The 2<sup>nd</sup> East Asia Workshop on Industrial Engineering” during **2015.11.06-2015.11.07** in Seoul, South Korea, organized by the **Korean Institute of Industrial Engineers (KIIE) and Institute for Industrial Systems Innovation (IISI), South Korea.**

➤ **Seminar Presented/Attained**

26. Two sessions in “International Conference on Innovative Applied Energy” organized by **St. Cross College, University of Oxford, UK**, during **March 14-15, 2019.**
25. A session in “1st International Conference on Emerging Trends in Inventory, Supply Chain & Reliability Modelling (ETISCRM 2018)” organized by the **Department of Operational Research, University of Delhi, Delhi, India, and Department of Mathematics, Gujrat University, Gujrat, India** during **December, 21-23, 2018.**
24. A session in “International Conference on Mathematics and its Applications (ICMA-2018)”, organized by the **Department of Mathematics, The University of Burdwan, Golapbag, Burdwan, West Bengal, India**, during **February 2018.01.15 – 2018.01.17.**
24. A paper in “International Conference on Mathematics and its Applications (ICMA-2018)”, organized by **Department of Mathematics, The University of Burdwan, Golapbag, Burdwan, West Bengal, India**, during **February, 2018.01.15 – 2018.01.17.**
23. A session in “International Conference on Advancing Frontiers in Operational Research: Towards a sustainable World (AFOR-2017)” **organized by Operational Research Society of India at Heritage Institute of Technology, Kolkata, India from 2017.12.21-2017.12.23.**
22. A paper in “International Conference on Advancing Frontiers in Operational Research: Towards a sustainable World (AFOR-2017)” **organized by Operational Research Society of India at Heritage Institute of Technology, Kolkata, India from 2017.12.21-2017.12.23.**
21. A session in “Fourth Industrial Revolution and Industrial Engineering” **organized by the Korean Institute of Industrial Engineers at KAIST, Daejon, South Korea, from 2017.11.04-2017.11.08.**
20. A paper in “Fourth Industrial Revolution and Industrial Engineering” **organized by the Korean Institute of Industrial Engineers at KAIST, Daejon, South Korea from 2017.11.04-2017.11.08.**
19. A special invited talk session in “International Conference on Computational Mathematics & Statistics at Department of Mathematics and Statistics” **organized by Bansathali University, Rajasthan, India, from 2017.01.24 to 2017.01.26.**

18. A session in “International Conference on Computational Mathematics & Statistics at Department of Mathematics and Statistics” **organized by Bansathali University, Rajasthan, India, from 2017.01.24 to 2017.01.26.**
17. A paper in “49<sup>th</sup> ORSI Convention & International Conference on Analytics in Operations Research” **during 2016.12.12-2016.12.14** in BIMTECH, Greater Noida, Delhi, India, organized by **Operational Research Society of India at BIMTECH, India.**
16. In “26<sup>th</sup> International Conference on Flexible Automation and Intelligent Manufacturing” **during 2016.06.27 – 2016.06.30** in Seoul, South Korea, organized by **Korea Science and Technology Center, South Korea.**
15. A session in “The 2<sup>nd</sup> East Asia Workshop on Industrial Engineering” **during 2015.11.06-2015.11.07** in Seoul, South Korea, organized by the **Korean Institute of Industrial Engineers (KIIE) and Institute for Industrial Systems Innovation (IISI), South Korea.**
14. A paper in “International Conference of **Korean Society of Industrial Engineering**”, on **28<sup>th</sup> October 2015** in Seoul, South Korea, organized by **KSIE, South Korea.**
13. A paper in “International Conference of **Korean Society of Industrial Engineering**” on **23<sup>rd</sup> October 2014** in Seoul, South Korea, organized by **KSIE, South Korea.**
12. In National Conference on Applied Mathematics **organized by Parul Institute of Technology, India** during 2014.06.27-2014.06.28.
11. In **Revision of UG Syllabus** in Mathematics, on 2014.03.06 organized by **Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, India.**
10. A paper in “The 2<sup>nd</sup> International Conference on Industrial Engineering and Service Science (IESS 2013)” **during 2013.08.20~2013.08.22** in Surabaya, Indonesia and organized by **Dept. of Industrial Engineering and Service Science, ITS, Indonesia, and Dept. of Decision and Information Sciences at the Charlton College of Business, University of Massachusetts Dartmouth (USA).**
9. In National Seminar on Analysis and its Applications, **organized by Calcutta Mathematical Society, India from 2011.09.06-2011.09.07.**
8. In National Seminar on Modern Trends in Higher Education **organized by Vidyasagar University Teachers’ Association, Vidyasagar University, India on 2011.04.13.**
7. In Recent Development in Applied Mathematics and its Applications **organized by the Dept. of Mathematics, Vidyasagar University, India from 2011.03.30-2011.03.31.**
6. In National Conference on Mathematics and its Applications **organized by the Dept. of Mathematics, Jadavpur University, India from 2011.01.13-2011.01.14.**

5. In Quality Assurance in Reaccredited Institution **organized by the Internal Quality Assurance Cell, Vidyasagar University, India from 2010.09.27–2010.09.28.**
4. In Prof. P.K. Ghosh Memorial Lecture, **organized by Department of Applied Mathematics, Calcutta University, India on 2010.09.22.**
3. In National Seminar on Frontiers of Mathematics and Mathematical Science, **organized by Calcutta Mathematical Society, India on 2010.09.06.**
2. In National workshop **organized by the Dept. of Mathematics, Vidyasagar University, India from 2010.03.17–2010.03.19.**
1. In National Conference on Mathematical Sciences and Applications: State of Art **organized by the Dept. of Mathematics, Jadavpur University, India from 2010.01.14–2010.01.16.**

➤ **Reviewer of Journal**

Dr. Biswajit Sarkar is the reviewer of more than 100 SSCI/SCI/SCIE indexed journals.

➤ **International Visits**

1. Dr. Biswajit Sarkar visited as a **Visiting Researcher** in **Tecnológico de Monterrey, Mexico** from **2018.08.12 to 2018.09.01.**
2. Dr. Biswajit Sarkar visited for **Post-Doctoral Fellowship** at Pusan National University, South Korea, in **2012.**

➤ **Membership of Learned Society**

1. Calcutta Mathematical Society
2. Operations Research Society of India
3. Korean Society of Industrial Engineering
4. Association of Inventory Academicians and Practitioners

➤ **Scholarships**

1. **National Scholarship** from West Bengal Council of Higher Secondary Education in the year **1999.**
2. **National Scholarship** from Jadavpur University for Rank in B.Sc. (Hons.) in Mathematics in the year **2002.**
3. **CSIR-JRF Fellowship** for National Eligibility Test in Mathematical Science in the year **2007.**

## ➤ Achievements

1. Dr. Biswajit Sarkar belongs to the **Top 2% of Scientists in Operations Research in the World** based on the **Stanford Study** in the year 2020.
2. Dr. Biswajit Sarkar is the recipient of the **International Research Award on New Science Inventions under the Best Innovation Award** organized by **ScienceFather**.
3. Dr. Biswajit Sarkar is the recipient of **Top 100 International Distinguished Researchers 2020. Green ThinkerZ**, from **India**.
4. Dr. Biswajit Sarkar is the recipient of **Top 50 International Distinguished Young Researchers 2020. Green ThinkerZ**, from **India**.
5. Dr. Biswajit Sarkar is the recipient of **Top 100 International Distinguished Educators 2020. Green ThinkerZ**, from **India**.
6. Dr. Biswajit Sarkar is the Hanyang University Academic Researcher Award recipient **as a Young Professor** for **the most productive researcher** in the year **2018** on **2019.06.14**.
7. Dr. Biswajit Sarkar has received an **AIAP Excellence Award** as a **Well contributor in research** on **21<sup>st</sup> December 2018** from **India**.
8. Dr. Biswajit Sarkar is the Hanyang University Academic Researcher Award recipient **as a Young Professor** for **the most productive researcher** in the year **2017** on **2018.02.07**.
9. Dr. Biswajit Sarkar has received **International Award** as a **Young Researcher for several international research paper publications in 2017** organized by Hanyang University, ERICA South Korea Campus from **2017.12.21-2017.12.23**.
10. Dr. Biswajit Sarkar has received **International Award as a Young Researcher for several international research paper publications in 2017** organized by the Korean Institute of Industrial Engineers at KAIST, Daejeon, South Korea on **17<sup>th</sup> October 2017**.
11. Dr. Biswajit Sarkar has received a **Bharat Vikash Award** as a **Young Scientist** on **10<sup>th</sup> December 2016** from **India**.
12. Dr. Biswajit Sarkar received a **Bronze Medal** for **Capstone Design Class** in **2016**.
13. Dr. Biswajit Sarkar **joined 1<sup>st</sup> September 2014 Hanyang University, South Korea**, as International Faculty at the Department of Industrial & Management Engineering.
14. Dr. Biswajit Sarkar has received **Best Research Paper Award at the KSIE conference, Seoul, South Korea, on 23<sup>rd</sup> October 2014**

### ➤ Best Thesis Awards

1. Dr. Biswajit Sarkar supervised **Dr. Jihed Jemai** for his Ph.D. research entitled “*Designing a multi-objective model for the transportation of the blood platelets through a sustainable healthcare supply chain management*”, which has received the **Best Thesis Award from Hanyang University in August 2019**.
2. Dr. Biswajit Sarkar supervised **Dr. Muhammad Tayyab** for his Ph.D. research entitled “*A possibilistic multi-objective optimization of a smart multi-stage production system*”, which has received the **Best Thesis Award from Hanyang University in August 2019**.
3. Dr. Biswajit Sarkar supervised **Dr. Waqas Ahmed** for his Ph.D. research entitled “*Mathematical modelling on second generation biofuel supply chain management*”, which has received the Best Thesis Award **from Hanyang University in February 2019**.
4. Dr. Biswajit Sarkar supervised **Dr. Waqas Iqbal** for his Ph.D. research entitled “*Effects of advance preservation policy on primary and secondary supply chain management*”, which has received the Best Thesis Award **from Hanyang University in August 2018**.
5. Dr. Biswajit Sarkar supervised **Dr. Salman Habib** for his Ph.D. research entitled “*A study on post-disaster management supply chain*”. It had received *the* **Best Thesis Award from Hanyang University in February 2018**.

### ➤ Research Areas

1. Operations Research & Supply Chain Management
2. Optimization by Artificial Intelligence
3. Environmental Engineering & Ecology
4. Energy & Biomathematics
5. Renewable Energy & Non-linear Programming
6. Sustainability & Reliability
7. Smart Production System & Inventory Management
8. Advanced Manufacturing System
9. Control Theory & Graph Theory

### ➤ Teaching Subjects

1. Advanced Programming
2. Advanced Inventory Management
3. Optimization by Artificial Intelligence
4. Neural Network for Optimization and Signal Processing
5. Advanced Computer Integrated Manufacturing System
6. Applied Soft Computing
7. Manufacturing System
8. Production System Modelling Analysis
9. Design, Industrial & Management Engineering
10. Application of Industrial & Management Engineering

11. Design of Experiments
12. Partial and Ordinary Differential Equation
13. Operations Research and Optimizations
14. Supply Chain Management
15. Abstract Algebra
16. Graph Theory

➤ *Refresher Course*

1. Participated in UGC sponsored Refresher course on “**Mathematical Methods: Analytical and Computational Approach**” at the **Department of Mathematics, Jadavpur University, India** during **2011.11.14 to 2011.12.03**.

➤ *Orientation Course*

1. Participated in UGC sponsored **47th Orientation course** at **Jadavpur University, India** during **2013.11.25 to 2013.12.21**.

➤ *Post-doctorate Students guidance*

<i>Scholar Names</i>	<i>University Name (Country)</i>	<i>Year</i>	<i>Present status</i>
<b>1. Dr. Rekha Guchhait</b>	Yonsei University <b>South Korea</b>	2020 – 2021	Post-doctoral researcher at Yonsei University, South Korea
<b>2. Dr. Sung Jun Kim</b>	Yonsei University <b>South Korea</b>	2019 – 2020	Post-doctoral researcher at Yonsei University, South Korea
<b>3. Dr. Sung Jun Kim</b>	Hanyang University <b>South Korea</b>	2019 – 2020	Post-doctoral researcher at Yonsei University, South Korea
<b>4. Dr. Mitali Sarkar</b>	Hanyang University <b>South Korea</b>	2017 – 2018	Post-doctoral researcher at Chung-Ang University, South Korea
<b>5. Dr. Sovan Samanta</b>	Hanyang University <b>South Korea</b>	2015 - 2016	Assistant Professor, Tamralipta Mahavidyalaya

			(Affiliated by Vidyasagar University, India)
--	--	--	--

➤ *Ph.D. Awarded/ Thesis Submitted*

<i>Scholar Names</i>	<i>Registration (Country)</i>	<i>Thesis Title</i>	<i>Status</i>	<i>Present status</i>
<b>1. Arunava Majumder</b>	Vidyasagar University, <b>India</b>	Some problems on supply chain management <b>(Applied Mathematics)</b>	Awarded on 2017.01.30	Assistant Professor LPU, India
<b>2. Bimal Kumar Sett</b>	Vidyasagar University, <b>India</b>	Modelling of some problems on production planning and inventory management <b>(Applied Mathematics)</b>	Awarded on 2017.07.27	Assistant Professor, Hooghly Mohsin College, University of Burdwan, West Bengal, India
<b>3. Muhammad Salman Habib</b>	Hanyang University, <b>South Korea</b>	A study on post-disaster management supply chain <b>(Industrial Engineering)</b>	Awarded on 2017.12.15	Assistant Professor, UET Lahore, Pakistan
<b>4. Buddhadev Mandal</b>	Vidyasagar University, <b>India</b>	Models in inventory control under different policy <b>(Applied Mathematics)</b>	Awarded on 2018.02.08	Post-doc fellow, Tecnológico de Monterrey, Mexico
<b>5. Muhammad Waqas Iqbal</b>	Hanyang University, <b>South Korea</b>	Effects of advance preservation policy on primary and secondary supply chain management <b>(Industrial Engineering)</b>	Awarded on 2018.08.31	Assistant Professor, NTU, Pakistan.
<b>6. Sung Jun Kim</b>	Hanyang University, <b>South Korea</b>	Financial Supply Chain management with transportation policy under controllable lead time <b>(Industrial Engineering)</b>	Awarded on 2018.08.31	Post-doctoral fellow, Yonsei University, South Korea

<b>7. Waqas Ahmed</b>	Hanyang University, <b>South Korea</b>	Mathematical modelling on second-generation biofuel supply chain management <b>(Industrial Engineering)</b>	Awarded on 2018.12.05	Assistant Professor, NUST, Islamabad, Pakistan
<b>8. Muhammad Omair</b>	Hanyang University, <b>South Korea</b>	Application of sustainable manufacturing system in a supply chain management <b>(Industrial Engineering)</b>	Awarded on 2018.12.05	Assistant Professor, UET Peshawar, Pakistan
<b>9. Asif Iqbal Malik</b>	Hanyang University, <b>South Korea</b>	Disruptions in production systems for machine breakdowns <b>(Industrial Engineering)</b>	Awarded on 2018.12.05	Assistant Professor, Sejong University, South Korea
<b>10. Mehran Ullah</b>	Hanyang University, <b>South Korea</b>	A closed loop supply chain management with deep decarbonization and the optimum product quality <b>(Industrial Engineering)</b>	Awarded on 2019.05.21	Assistant Professor, NUST, Islamabad, Pakistan
<b>11. Muhammad Tayyab</b>	Hanyang University, <b>South Korea</b>	A possibilistic multi-objective optimization of a smart multi-stage production system <b>(Industrial Engineering)</b>	Awarded on 2019.05.30	Assistant Professor, Lahore University of Management Science, Pakistan
<b>12. Rekha Guchhait</b>	Banasthali Vidyapith, <b>India</b>	Some problems on mathematical modeling on reverse logistic and remanufacturing in inventory control and production planning <b>(Applied Mathematics)</b>	Awarded on 2019.09.01	Post-doctoral fellow, Yonsei University, South Korea.

<b>13. Bikash Koli Dey</b>	Banasthali Vidyapith, <b>India</b>	Mathematical models on production planning and inventory management <b>(Applied Mathematics)</b>	Awarded on 2019.09.01	Post-doctoral fellow, Hongik University, South Korea.
<b>14. Jihed Jemai</b>	Hanyang University, <b>South Korea</b>	Designing a multi-objective model for a sustainable healthcare supply chain management for blood platelets delivery service <b>(Industrial Engineering)</b>	Awarded on 2020.02.18	Senior Researcher, Institute for Future Radio Engineering, South Korea
<b>15. Rizwan Khan</b>	Hanyang University, <b>South Korea</b>	Forecasting changed segments in robust processes through multiple change-point detections by using Bayesian probability <b>(Industrial Engineering)</b>	Awarded on 2020.02.18	Assistant Professor, Riphah International University, Rawalpindi, Pakistan
<b>16. Sharmila Saren</b>	Vidyasagar University, <b>India</b>	Some problems on inventory management and inventory control <b>(Applied Mathematics)</b>	Awarded on 2020.08.18	Assistant Professor, GGDC, Vidyasagar University, West Bengal, India
<b>17. Baishakhi Ganguly</b>	Banasthali University, <b>India</b>	Effects of disruptions on supply chain management <b>(Applied Mathematics)</b>	Awarded on 2021.03.20	Assistant Teacher, Lataguri Girls High School, West Bengal, India
<b>18. Bijoy Kumar Shaw</b>	Banasthali University, <b>India</b>	Some mathematical models on transportation problems in inventory management <b>(Applied Mathematics)</b>	In 2021	Thesis Submitted
<b>19. Suman Sardar</b>	Hanyang University, <b>South Korea</b>	A methodology on sustainable smart supply chain management to reduce unreliability by integrating radio frequency identification	In 2021	Thesis Submitted

		and machine learning <b>(Industrial Engineering)</b>		
<b>20. Irfanullah Khan</b>	Hanyang University, <b>South Korea</b>	Advanced operational policies for a multi-period and a multi-attribute supply chain with random demand pattern <b>(Industrial Engineering)</b>	In 2021	Thesis Submitted

➤ *Masters' Awarded Scholar*

<i>Scholar Names</i>	<i>Registration (Country)</i>	<i>Thesis Title</i>	<i>Status</i>
<b>1. Arijit Sarkar</b>	Hanyang University, <b>South Korea</b>	A fuzzy inventory model under inflation with bi-objective optimization using multithreading and partial neural network <b>(Industrial Engineering)</b>	Awarded on 2017.08.18
<b>2. Li Pan</b>	Hanyang University, <b>South Korea</b>	An imperfect serial-production system with variable production rate, setup cost reduction, random defective rate, and rework process <b>(Industrial Engineering)</b>	Awarded on 2017.08.18
<b>3. Chongwei Zhang</b>	Hanyang University, <b>South Korea</b>	Bootstrapping strategy on supply chain <b>(Industrial Engineering)</b>	Awarded on 2019.06.18

➤ *Supervisor for Masters' Scholars Guidance*

<i>Scholar Names</i>	<i>Registration (Country)</i>	<i>Thesis Title</i>	<i>Status</i>
<b>Andreas Se Ho Kugele</b>	Yonsei University, <b>South Korea</b>	Smart production for Biofuel under environmental issues	Ongoing

		<b>(Industrial Engineering)</b>	
--	--	---------------------------------	--

➤ *Supervisor for Undergraduate' Scholars Guidance*

<i>Scholar Names</i>	<i>Registration (Country)</i>	<i>Thesis Title</i>	<i>Status</i>
<b>1. Dalila Takeyeva</b>	Yonsei University, <b>South Korea</b>	AI control smart warehouse  <b>(Industrial Engineering)</b>	Ongoing
<b>2. Yudith Helen Yupanqui Flores</b>	Yonsei University, <b>South Korea</b>	Supply Chain Management  <b>(Industrial Engineering)</b>	Ongoing

➤ *Supervisor for Ph.D. Guidance*

<i>Scholar Names</i>	<i>Registration (Country)</i>	<i>Thesis Title</i>	<i>Status</i>
<b>1. Abhijit Debnath</b>	Yonsei University, <b>South Korea</b>	Nullifying wastes under a circular economy  <b>(Industrial Engineering)</b>	Ongoing
<b>2. Sahar Sohani</b>	Yonsei University, <b>South Korea</b>	Sustainable development through some smart approach  <b>(Industrial Engineering)</b>	Ongoing

➤ *Supervisor for MS & Ph.D. Guidance*

<i>Scholar Names</i>	<i>Registration (Country)</i>	<i>Thesis Title</i>	<i>Status</i>
<b>1. Han Lim</b>	Yonsei University, <b>South Korea</b>	Development of Supply chain management through Omni Channel  <b>(Industrial Engineering)</b>	Ongoing

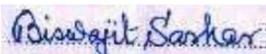
➤ Co-supervisor for Ph.D. Guidance

<i>Scholar Names</i>	<i>Registration (Country)</i>	<i>Thesis Title</i>	<i>Supervisor</i>	<i>Status</i>
<b>1. Shaktipada Bhuniya</b>	Banasthali University, <b>India</b>	Mathematical modelling on maintenance policy of supply chain management  <b>(Applied Mathematics)</b>	Prof. Sarla Pareek	Ongoing
<b>2. Sumi Kar</b>	National Institute of Technology, <b>Durgapur, India</b>	Some business strategies for supply chain management to make a sustainable framework forever.  <b>(Applied Mathematics)</b>	Prof. Kajla Basu	Ongoing
<b>3. Shubham Kumar Singh</b>	Graphic Era University	Application of Biofuel as alternative energy for environmental issues	Prof. Anand Chauhan	Ongoing

➤ Personal Profile

Father's Name                      Late **Mr. Bhim Chandra Sarkar**  
Date of Birth                        1982-08-13  
Sex                                        Male  
Marriage Status                    Married with one son  
Nationality                            Indian  
Languages Proficiency            **English, Bengali, Hindi**

**Date:** 2021-05-23  
**Place:** South Korea  
Yonsei University

  
Dr. Biswajit Sarkar  
(Associate Professor)