

## DR. KOUSIK BHATTACHARYA

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Department	Mathematics
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Qualifications:	M.Sc., Ph.D., CSIR NET, GATE.
Teaching Experience	From August 2018
Research Experiences	Decision making in inventory management, Supply Chain Modelling, Fuzzy set theory, Leadership theory, Approximate reasoning, Lock set, Performance based game theory.

### Publications

Sl. No.	Research articles	Authors	Journal	Year	Index/ Impact factor
1	Solving an Exploitation based Marxian fuzzy EOQ Model <a href="https://doi.org/10.1504/IJMOR.2023.10058781">https://doi.org/10.1504/IJMOR.2023.10058781</a>	• S. K. De, • <b>K. Bhattacharya</b> • B. Roy	International Journal of Mathematics in Operational Research	2023	Scopus indexed
2	Decision making in two-layer supply chain with doubt fuzzy set <a href="https://doi.org/10.1080/23302674.2022.2134751">https://doi.org/10.1080/23302674.2022.2134751</a>	• B. Roy, • S. K. De, • <b>K. Bhattacharya</b>	International Journal of Systems Science: Operations & Logistics	2022	I.F.: 9.040
3	Solution of a pollution sensitive supply chain model for novel strategic fuzzy game via Bernoulli Trial <a href="https://doi.org/10.1016/j.cor.2022.105846">https://doi.org/10.1016/j.cor.2022.105846</a>	• S. K. De, • <b>K. Bhattacharya</b> , • P.P. Bhattacharya • P. K. Nayak • S. Joardar	Computers & Operations Research, ISSN: 0305-0548	2022	I.F.: 5.159
4	A fuzzy strategic game solution for a green supply chain model <a href="https://doi.org/10.1007/s10489-022-03447-x">https://doi.org/10.1007/s10489-022-03447-x</a>	• P.P. Bhattacharya • <b>K. Bhattacharya</b> • S. K. De • P. K. Nayak • S. Joardar	Applied Intelligence, ISSN: 0924-669X	2022	I.F.: 5.086
5	A pollution sensitive fuzzy EPQ model with endogenous reliability and product deterioration based on lock fuzzy game theoretic approach <a href="https://doi.org/10.1007/s00500-022-07485-y">https://doi.org/10.1007/s00500-022-07485-y</a>	• <b>K. Bhattacharya</b> • S. K. De	Soft Computing, ISSN: 1433-7479	2022	I.F.: 3.732

6	Application of fuzzy neutrosophic cone in decision making <a href="https://doi.org/10.2174/2666294901666220820180818">https://doi.org/10.2174/2666294901666220820180818</a>	<ul style="list-style-type: none"> <li>• S. K. De,</li> <li>• <b>K. Bhattacharya,</b></li> <li>• B. Roy</li> </ul>	Fuzzy Logic and Modeling in Engineering, ISSN: 2666-2949	2022	Peer reviewed
7	A Study on Pollution Sensitive Sponge Iron Based Production Transportation Model under Fuzzy Environment <a href="https://doi.org/10.31181/dmame0313052022b">https://doi.org/10.31181/dmame0313052022b</a>	<ul style="list-style-type: none"> <li>• P.P. Bhattacharya</li> <li>• <b>K. Bhattacharya</b></li> <li>• S. K. De</li> </ul>	Decision Making: Applications in Management and Engineering, ISSN: 2560-6018	2022	Scopus indexed
8	Solving an EPQ model with doubt fuzzy set: A robust intelligent decision-making approach <a href="https://doi.org/10.1016/j.knosys.2021.107666">https://doi.org/10.1016/j.knosys.2021.107666</a>	<ul style="list-style-type: none"> <li>• S. K. De,</li> <li>• B. Roy,</li> <li>• <b>K. Bhattacharya</b></li> </ul>	Knowledge-Based Systems, ISSN: 0950-7051	2021	I.F.: 8.139
9	A Pollution Sensitive Marxian Production Inventory Model with Deterioration Under Fuzzy System <a href="https://doi.org/10.1007/s10957-021-01979-9">https://doi.org/10.1007/s10957-021-01979-9</a>	<ul style="list-style-type: none"> <li>• S. K. De,</li> <li>• <b>K. Bhattacharya</b></li> </ul>	Journal of Optimization Theory and Applications, ISSN: 0022-3239	2021	I.F.: 2.249
10	Solving with Fuzzy Reasoning for a Green Production-Transportation Supply Chain Model, <a href="#">Volume-6, page:83-104</a>	<ul style="list-style-type: none"> <li>• <b>K. Bhattacharya</b></li> <li>• S. K. De</li> </ul>	International Research Journal of Basic and Applied Sciences ISBN: 2455-6718	2021	Peer reviewed
11	Solution of a pollution sensitive EOQ model under fuzzy lock leadership game approach <a href="https://doi.org/10.1007/s41066-021-00289-9">https://doi.org/10.1007/s41066-021-00289-9</a>	<ul style="list-style-type: none"> <li>• <b>K. Bhattacharya</b></li> <li>• S. K. De</li> </ul>	Granular Computing, ISSN: 2364-4974	2021	Scopus indexed
12	Three-echelon supply chain model in an imperfect production system with inspection error, learning effect, and return policy under fuzzy environment. <a href="https://doi.org/10.1080/23302674.2021.1962427">https://doi.org/10.1080/23302674.2021.1962427</a>	<ul style="list-style-type: none"> <li>• G. C. Mahata</li> <li>• S. K. De</li> <li>• <b>K. Bhattacharya</b></li> <li>• S. Maity</li> </ul>	International Journal of Systems Science: Operations & Logistics, ISSN: 2330-2674	2021	Scopus indexed

13	Solution of a Pollution Sensitive Supply Chain Model under Fuzzy Approximate Reasoning, <a href="https://doi.org/10.1002/int2.20210424">https://doi.org/10.1002/int2.20210424</a>	<ul style="list-style-type: none"> <li>• S.K. De</li> <li>• <b>K. Bhattacharya</b></li> <li>• B. Roy</li> </ul>	International Journal of Intelligent System, ISSN: 0884-8173	2021	I.F.: 8.993
14	A Robust Fuzzy Decision Making on Global Warming, <a href="https://doi.org/10.2174/2666294901999201222150703">https://doi.org/10.2174/2666294901999201222150703</a>	<ul style="list-style-type: none"> <li>• <b>K. Bhattacharya</b></li> <li>• S.K. De</li> <li>• P.K.Nayak</li> </ul>	Fuzzy Logic and Modeling in Engineering, ISSN: 2666-2949	2020	Peer reviewed
15	Pollution Sensitive Global Crude Steel Production–Transportation Model under the effect of Corruption Perception Index, <a href="https://doi.org/10.1007/s12597-020-00498-x">https://doi.org/10.1007/s12597-020-00498-x</a>	<ul style="list-style-type: none"> <li>• <b>K. Bhattacharya</b></li> <li>• S.K.De</li> <li>• A. Khan</li> <li>• P.K.Nayak</li> </ul>	OPSEARCH, ISSN: 0030-3887	2020	Scopus indexed
16	A Robust Two Layer Green Supply Chain Modelling under Performance Based Fuzzy Game Theoretic Approach, <a href="https://doi.org/10.1016/j.cie.2020.107005">https://doi.org/10.1016/j.cie.2020.107005</a>	<ul style="list-style-type: none"> <li>• <b>K. Bhattacharya</b></li> <li>• S.K.De</li> </ul>	Computers and Industrial Engineering, ISSN: 0360-8352	2020	I.F.: 7.18
17	Decision making under intuitionistic fuzzy metric distances, <a href="https://doi.org/10.22121/AOTP.2020.250749.1043">https://doi.org/10.22121/AOTP.2020.250749.1043</a>	<ul style="list-style-type: none"> <li>• <b>K. Bhattacharya</b></li> <li>• S.K.De</li> </ul>	Annals of Optimization Theory and Practice, ISSN: 2588-3666	2020	Peer reviewed
18	Solution of an EPQ model for imperfect production process under game and neutrosophic fuzzy approach, <a href="https://doi.org/10.1016/j.asoc.2020.106397">https://doi.org/10.1016/j.asoc.2020.106397</a>	<ul style="list-style-type: none"> <li>• S.K. De</li> <li>• P.K. Nayak</li> <li>• A. Khan</li> <li>• <b>K. Bhattacharya</b></li> <li>• F. Smarandache</li> </ul>	Applied Soft Computing, ISSN: 1568-4946	2020	I.F.: 8.263

### Book Chapter

Sl. No.	Research articles	Authors	Book	Year	Index
1	Solution of a Pollution-Based Economic Order Quantity Model Under Triangular Dense Fuzzy Environment. <a href="https://doi.org/10.1002/9781119906391.ch21">https://doi.org/10.1002/9781119906391.ch21</a>	<ul style="list-style-type: none"> <li>• P.P. Bhattacharya</li> <li>• <b>K. Bhattacharya</b></li> <li>• S. K. De</li> <li>• P.K. Nayak</li> <li>• S. Joardar</li> <li>• K. Das</li> </ul>	Optimization Techniques in Engineering (pp.345-362)	2023	Peer reviewed
2	Intuitionistic Fuzzy Metrics and Its Application <a href="https://doi.org/10.1007/978-981-19-8194-4">https://doi.org/10.1007/978-981-19-8194-4</a>	<ul style="list-style-type: none"> <li>• <b>K. Bhattacharya</b></li> <li>• S. K. De</li> </ul>	Applied Mathematics and Computational Intelligence, Springer Nature	2023	Peer reviewed

3	A mathematical approach for a comparative study of dengue disease between India and other countries based on WHO report	<ul style="list-style-type: none"> <li>• S. Maity</li> <li>• S. P. Mondal</li> <li>• <b>K. Bhattacharya</b></li> <li>• S. K. De</li> </ul>	Biotechnology and Nature, Kabitika, ISBN 978-93-87602-66-3	2018	Peer reviewed
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### Paper presentation in seminars

1.	<b>Two-day International Conference</b> on “SCIENCE, TECHNOLOGY AND MANAGEMENT(ICSTM-2023)” organized by Department of Physics, Mathematics, Computer Science and Commerce at <b>EGRA SARADA SHASHI BHUSAN COLLEGE</b> in collaboration with Department of Computer Science & Application, <b>PRABHAT KUMAR COLLEGE, CONTAI</b> on 25-26 April, 2023
2.	<b>Two days International Webinar</b> on “INTERNATIONAL CONFERENCE ON APPLIED MATHEMATICS AND COMPUTATIONAL INTELLIGENCE (ICAMCI-2020)” organized by Department of Applied Mathematics at <b>NATIONAL INSTITUTE OF TECHNOLOGY, AGARTALA</b> on 23-24 December 2020.
3.	<b>Two days State Level Seminar</b> organized by Department of Mathematics at <b>SIDHO KANHO BIRSHA UNIVERSITY</b> on 12-13 February 2020
4.	<b>Three days International Seminar</b> on “SYSTEMATIC APPROACH TO MODERN SCIENCES AND ITS PHILOSOPHICAL IMPACTS” organized by Department of Mathematics at <b>BAJKUL MILANI MAHAVIDYALAYA</b> on 6-8 February 2020.
5.	<b>2- Day National Seminar</b> on “RECENT ADVANCES IN MATHEMATICS” organized by Department of Mathematics (UG & PG) at <b>MIDNAPORE COLLEGE (AUTONOMOUS)</b> on 26-27 July 2019.

### *Seminar/Workshop attained:*

- (i) **2- Day UGC Sponsored Workshop** on “*Quantum Information Theory*” organized by Department of Physics (UG & PG) and Department of Mathematics (UG & PG) at **Midnapore College** on 20-21 March 2014.
- (ii) **One- Day National Seminar** on “*Mathematics and Its Implication on Real Life*” organized by Department of Mathematics (UG & PG) at **Panskura Banamali College** on 27<sup>th</sup> March 2015.
- (iii) **2- Day UGC Sponsored National Seminar** on “*Recent Trends in Cosmology & Future Challenges*” organized by Department of Physics (UG & PG) at **Prabhat Kumar College, Contai** on 03-04 December 2015.
- (iv) **2- Day National Seminar** on “*Uses of Statistics in the Analysis of Socio-Economic Development: Contemporary issues in*” organized by Department of Economics and Department of Statistics at **Midnapore College (Autonomous)** on 07-08 November 2016.
- (v) **Teacher’s Enrichment National Level Workshop** on “*Mathematics and Its Recent Advancements*” organized by Department of Mathematics (UG & PG) at **Midnapore College (Autonomous)** on 30-31 October 2018.
- (vi) **One Day International Webinar** on “*Better Understanding of Pandemic Covid-19*” organized by IQAC, **Kharagpur College** on 23<sup>rd</sup> June 2020.
- (vii) **International Web-Conference** on “*Complex Analysis and Differential Geometry: Revisiting (IWCADGR-2020)*” organized by Department of Mathematics, **Sidho-Kanho-Birsha University** on 29-30 June 2020.
- (viii) **One Day National Webinar** on “*Recent Trends in Mathematics and Its Applications*” organized by Department of Mathematics, **Kharagpur College** on 29<sup>th</sup> July 2020.

- (ix) **Two-day National Level Multidisciplinary Webinar** on “*Role of Guidance and Career Counselling in the perspective of Present Pandemic Situation of Covid-19*” organized by **Mankar College** on 5-6 August 2020.
- (x) **Two-day Orientation Program** on “*Blood Donor’s Motivation*” organized by NSS Unit, **Kharagpur College** on 22-23 August 2020.
- (xi) **One Day National Webinar on “Covid-19 & National Lockdown: Some Socio-Economic Dimensions”** organized by Department of Economics, **Kharagpur College** on 26<sup>th</sup> August 2020.
- (xii) **Webinar** on “*Character is the base of career and sustaining achievements in life*” organized by Electronics and Communication Engg. Department, **Brainware Group of Institutions** on 29<sup>th</sup> September 2020.
- (xiii) **Virtual International Conference on “Soft Computing Techniques and Cost Optimization for Inventory Modeling (SCTCOIM 2020)”** organized by Department of Mathematics, **Techno India University** on 10-11 October 2020.
- (xiv) **One Day National Webinar on “MATLAB and Its Applications”** organized by Department of Mathematics, **Kharagpur College** on 17<sup>th</sup> October 2020
- (xv) **One Day National Webinar on “Modelling and Solving Graph Colouring Problems Using GRIN Software”** organized by PG & Research Department of Mathematics, **Theivanai Ammal College for Women (Autonomous), Villupuram** on 26<sup>th</sup> May 2021.
- (xvi) **One Day National Webinar on “Body's fight against harmful invaders: How we fight Corona Virus And for how long?”** organized by **Indian National Science Academy (INSA) Kolkata Chapter** in association with **Kharagpur College (IQAC & UBA Unit)** on 9<sup>th</sup> June 2021.
- (xvii) **Two Day International Webinar on “Emerging Trends in Sustainable Supply Chain Management”** organized by **Gujrat University** and **University of Delhi** on 12-13 June 2021.
- (xviii) **Two Day National Webinar on “A Few Basic Foundational Aspects of Mathematics”**, organized by Department of Mathematics, **Sree Chaitanya College, Habra** on 18<sup>th</sup> and 25<sup>th</sup> June, 2021.
- (xix) **One day digital conference on “Satellite Praxes Through Mathematical Techniques”** organized by Department of Mathematics, **Gujrat University** on 10 July, 2021.
- (xx) **One-Day State Level Webinar on “‘Academic’ and ‘Administrative Responsibilities’ of College Teachers in Connection with Different Accreditation Process of the Institute”** organized by Department of Basic Sciences & Humanities, **Ramkrishna Mahato Government Engineering College, Purulia** on 17<sup>th</sup> July, 2021.
- (xxi) **Two Day Workshop on ‘NAAC Revised Accreditation Framework (Raf)’** organized by IQAC, **Chandrakona Vidyasagar Mahavidyalaya** on 24-25 February, 2023