

Faculty Profile

Name: **Karabi Dutta Choudhury**
Designation: **Professor**
Department/Centre: **Mathematics**

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Educational Qualifications:

M.Sc in Mathematics, Jadavpur University (1989);

Ph.D in Operations Research, Jadavpur University (2002).

Diploma in Computer applications, ECIT, Hyderabad. (2004-05).

Areas of Interest: Inventory Modelling in Operations Research

Work Experience:

Name of the Organization	Designation	Period		Nature of Post (permanent/temporary/Ad-hoc/contractual etc.)
		From	To	
Karimganj College, Krimganj	Lecturer, Sr. Lecturer	1991	2006	Permanent
G.C. College, Silchar	Selection Grade Lecturer, Associate Professor	2006	2009	Permanent
Assam University, Silchar	Reader, Associate Professor, Professor	2009	Till date	Permanent
Albert Einstein School of Physical Sciences, Assam University, Silchar	Dean	2023	2026	Tenure based

Projects: [In chronological order with the recent one at the last. Mention shall be made if the project is ongoing or completed]

Project Title	Awarding Agency	Period	Amount Sanctioned	Ongoing/ Completed
DST-FIST	DST, Govt. of India	Five years	24.50 lakh	Completed
DST-FIST	DST, Govt. of India	Five years	34.00 lakh	Ongoing

Consultancy/International Collaboration: [In chronological order with the recent one at the last]

Details	Year	Remark (if any)
1) Department of Mathematics, BITS, Pilani, Dubai	2019, 2023, 2023	Published papers
2) Department of Mathematics, University of Lincon, UK.	2012	Written joint project
3) International Journal of Production Economics and other journals. (Elsevier Publication)	Till date	Reviewer of Scientific Journals

Publications in Peer Reviewed Journals/Book Chapters

Sl. No.	Author(s)	Title	Name of the Journal	Year of Publication	SCI	Impact factor
1.	Abhibasu Sen & Karabi Dutta Choudhury	Forecasting the Crude Oil prices for last four decades using deep learning approach	Resources Policy 88 (2024) 104438	20 November 2023	SCI	5.634 (web of Science) 8.018 (Scopus)
2.	Abhibasu Sen & Karabi Dutta Choudhury	Effect Of Green Technology Investment On Crude Oil Inventory System – A Case Study Based On ONGC Data	Yugoslav Journal of Operations Research DOI: https://doi.org/10.2298/YJOR230415025S ; 1-24	October 2023	SCI	1.302 (Scopus)
3	Abhibasu Sen & Karabi Dutta Choudhury	A case study of Gulf Securities Market in the last 20 years: A Long Short-Term Memory approach	<i>Statistica Neerlandica</i> . DOI: 10.1111/stan.12309 1–31.	17 May, 2023	SCI	1.19 (web of Science)
4.	Abhibasu Sen & Karabi Dutta Choudhury	An Analysis of Crude Oil Prices in the Last Decade (2011-2020): With Deep Learning Approach	PLOS ONE https://doi.org/10.1371/journal.pone.0268996 ; 1-32	9 March, 2023	SCI	3.24 (web of Science) 3.582 (Scopus)
5.	Abhibasu Sen, Karabi Dutta Choudhury	Machine Learning Algorithms In Correct Prediction Of Negative Oil Price- A Case Study	<i>J. Assam Acad. Math.</i> Vol.11(2021), pp:1-12 ISSN 2229-3884	2021	Non SCI	NA
6.	Abhibasu Sen, Karabi Dutta Choudhury	On the co-movement of crude, gold prices and stock index in the Indian market	<i>Int. J. of Financial Engineering</i> © World Scientific Publishing Company DOI: 10.1142/S242478632050036X Vol. 7, No. 3 (2020) 2050036 (26 pages)	2020	Non SCI	0.4

Sl. No.	Author(s)	Title	Name of the Journal	Year of Publication	SCI	Impact factor
7.	Nandita Dutta, Karabi Dutta Choudhury , S.S. Nath, M. Dutta Choudhury	The water - level dependent inventory model developed to the reference of Sonbeel lake	Bulletin of Pure and Applied Sciences Section - E - Mathematics & Statistic	2019	Non SCI	4.895
8.	Tapan Kumar Datta, Prasanta Nath & Karabi Dutta Choudhury	A hybrid carbon policy inventory model with emission source-based green investments.	OPSEARCH	2019	SCI	2.106 Scopus
9.	Lukendra Kakati, Dhruba Prasad Barua, Karabi Dutta Choudhury	Analysis of magnetic effect on blood flow in stenosed artery for a two-layered pulsatile flow model with body acceleration and slip at wall	<i>International Journal of Mathematical Sciences</i> Vol. 18, Nos. 1-2, January-June 2019, pp. 85-108, Serials Publications	2019	SCI	1 Scopus
10.	Nandita Dutta, K Dutta Choudhury , M. Dutta Choudhury, S S Nath	Hydro power generation: A case study of Sonbeel	International Journal of Innovations in Engineering and Technology (IJJET) http://dx.doi.org/10.21172/ijiet.134.07 Volume 13 Issue 4 July 2019, ISSN: 2319-1058	2019	SCI	1.23 Scopus
11.	Lukendra Kakati , Nazibuddin Ahmed, Karabi Dutta Choudhury	Mathematical Modeling of Blood Flow through an Inclined Axially Non-Symmetric Stenosed Catheterized Artery with Body Acceleration	International Journal of Applied Engineering Research ISSN 0973-4562 Volume 13, Number 21 pp. 15290-15298 Published by Research India Publications. http://www.ripublication.com	2018	SCI	1.3 Scopus

Sl. No.	Author(s)	Title	Name of the Journal	Year of Publication	SCI	Impact factor
12.	Lukendra Kakati , Dhruba Prasad Barua, Nazibuddin Ahmed, Karabi Dutta Choudhury	MHD Pulsatile Slip flow of Blood through Porous Medium in an Inclined Stenosed Tapered Artery in Presence of Body Acceleration.	Advances in Theoretical and Applied Mathematics, Volume 12, Number 1,pp 15-38. ISSN: 0973-4554,	2017	NonSCI	NA
13	Nandita Dutta & K. Dutta Choudhury	A Review on Inventory Modeling For Water Resource Management	IOSR Journal of Mathematics (IOSR-JM) Volume 13, Issue I Ver. V PP 16-21 e-ISSN: 2278-5728, p-ISSN :2319-765X	2017	Non SCI	3.97 (2022)
14.	Dutta, A. K., Basnet, D.K., Dutta Choudhury, K. and Barbhuiya, S. R.	Generalized Interval Valued Fuzzy Ideals of KU-Algebra	Int. J. of Math. And Statistics. (accepted) ISSN 0974-7117 (Print), ISSN 0973-8347 (Online)	2017	NonSCI	2.387 (27.12.23)
15.	Hazarika, D. & Dutta Choudhury, K.	Doubt Cubic H-ideals of BG-Algebra,	Int. J. of Mathematics Trends and Technology, 41:2, pp 164-176.	2017		
16.	Dutta, A. K., Barbhuiya, S. R., Dutta Choudhury, K. and Basnet, D.K	t-intuitionistic Fuzzy H-ideals of BCK-algebras	Bulletin of Pure and Applied Sciences Vol.,(Math and Stat.), 36E(2),1-10. 0970-6577	2017		
17.	Dutta, A. K., Barbhuiya, S. R. and Dutta Choudhury, K	Translations and Multiplications of Cubic Subalgebras and Cubic Ideals of BCK/BCI-algebras	Sohag J. Math. 4(3), 75-86. http://dx.doi.org/10.18576	2017		
18.	Dutta, A. K., Basnet, D.K., Dutta Choudhury, K. and Barbhuiya, S. R.	Generalized Doubt Fuzzy Structure of BG-algebra,	International Journal of Mathematics And its Applications, 5(3-A), 91-104. ISSN: 2347-1557	2017		

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19.	Dutta, A. K., Basnet, D.K., Dutta Choudhury, K. and Barbhuiya, S. R.	Direct Product of General Doubt Intuitionistic Fuzzy Ideals of BCK/BCI algebras with Respect to Triangular Binorm	International Journal of Mathematics and its Applications, 5(4- B), 247-257. ISSN: 2347-1557	2017		
20.	Dutta, A. K., Basnet, D.K., Dutta Choudhury, K. and Barbhuiya, S. R.	Translations and Multiplications of Jun's Cubic Sets in Cubic Subalgebras and Cubic Filters of CI-Algebras	Int. J. of Adv. in Appl. Math. and Mech. (accepted). ISSN: 0973-0184	2017		
21	Barbhuiya, S. R., Dutta, A. K., Dutta Choudhury, K.	(\tilde{I}, s) -cubic structure in CI- Algebras	Journal of New results in Science, no.6 ISSN: 1304-7981	2016	NonSCI	NA
22.	Lukendra Kakati, Dhruva Prasad Barua, Nazibuddin Ahmed and Karabi Dutta Choudhury	Hydromagnetic Slip Flow of Blood through Porous Medium with Time Dependent Permeability, Pulsatile Pressure and Body Acceleration	Theoretical Mathematics & Applications, vol 6, no.1, 2016, 99-130. ISSN: 1792-9687(print), 1792-9709(Online)	2016		
23.	Hazarika, D. & Dutta Choudhury, K	$(\epsilon, \epsilon \vee q)$ -Q-Fuzzy Subgroups and Normal Subgroups	IOSR-JM, 12:6(vi) pp 23-33, e-ISSN: 2278-5728, p-ISSN: 2319-765X.	2016		
24.	S. R. <i>Barbhuiya</i> & K. Dutta Choudhury	Fuzzy translations and fuzzy multiplications of interval-valued doubt fuzzy ideals of BF-algebras	Advanced Trends in Mathematics, Vol. 3, pp 1-15	2015		
25.	S. R. Barbhuiya & K. Dutta Choudhury	$(\epsilon, \epsilon \vee q)$ - Fuzzy ideals of d-algebra	<i>International Journal of Mathematical Trends and Technology (IJMTT)</i> . V9:16-26	May 2014		
26.	K. Dutta Choudhury, Sumit Saha, and Mantu Das	A Note on Inventory Model.	Mathematical Sciences and their Applications: Recent Advances. 104-111.	2013		
27.	Sumit Saha, K. Dutta Choudhury and Mantu Das	An Inventory Model for Non-deteriorating Items with Non-linear Time Dependent Demand Rate	Mathematical Sciences and their Applications: Recent Advances. 112-120	2013		

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28.	B. Karmakar, K Dutta Choudhury	Inventory models with ramp-type demand for deteriorating items with partial backlogging and time-varying holding cost	Yugoslav Journal of Operations Research ISSN: 0354-0243 EISSN: 2334-6043 24 (2)	2013		
29.	K Dutta Choudhury, B Karmakar, M Das, TK Datta	An inventory model for deteriorating items with stock-dependent demand, time-varying holding cost and shortages	OPSEARCH, 1-20. ISSN:0030-3887 EISSN:0975-0320	2013	SCI	Web of Science (1.4) Springer-Verlag
30.	B. Karmakar , K. Dutta Choudhury	Inventory models with two-component demand rate and nonlinear holding cost with shortages.	Assam University Journal of Science and Technology	2012		
31.	M.D. Choudhury, P Chetia, K Dutta Choudhury , AD Talukdar	Atherogenic effect of Arecoline: A computational study.	Bioinformation 8 (5), 229	2012		
32.	K Dutta Choudhury , TK Dutta	Ordering and Pricing Policy for Multi-quality Product with Dual Storage Facility.	Assam University Journal of Science and Technology 4 (2), 17-21.	2009		
33.	TK Datta, K Paul	An inventory system with stock-dependent, price-sensitive demand rate.	Production planning & control 12 (1), 13-20. ISSN:0953-7287 EISSN:1366-5871	2001		Web of Science(6.1) Informa UK (Taylor & Francis)
34.	TK Datta, K Paul , AK Pal	Demand promotion by upgradation under stock-dependent demand situation—a model.	International Journal of Production Economics 55 (1), 31-38. ISSN: 0925-5273 EISSN: 1873-7579	1998	SCI	Web of Science(9.8) Elsevier
35.	K Paul , TK Datta, KS Chaudhuri, AK Pal	An inventory model with two-component demand rate and shortages.	Journal of the Operational Research Society, 1029-1036. ISSN: 0160-5682 EISSN: 1476-9360	1996	SCI	Web of Science(2.7)

Books Authored/Edited Books :

Authors	Title of the Book	ISBN	Publisher Details	Authored/Edited
Karabi Dutta Choudhury, T.K. Datta	<i>Some Inventory problems and solutions.</i>	ISBN 97893- 81991-589. .	Swastik Publisher, New Delhi. 2009	Authored
Karabi Dutta Choudhury,	<i>Recent Trends in Mathematical Sciences.</i>	ISBN 97893- 81991-596.	Swastik Publisher , New Delhi. 2009	Edited
Karabi Dutta Choudhury, Devajyoti Biswas, Sumit Saha	<i>Recent Advances in Mathematical Sciences and their applications</i>	ISBN: 98781- 8487-1913	Narosa Publishing House, New Delhi. 2013	Edited

Peer Reviewed Publications in Proceedings of National/International Conference/Workshop/ Symposium

Authors	Title of the Paper	Name of the Program and Organizer	Publisher Details	ISBN/ISSN
K. Dutta Choudhury, Sumit Saha, and Mantu Das	A Note on Inventory Model. 104-111.	Recent Advances in Mathematical sciences and their applications, Organised by Deptt. of Mathematics, Assam University, Silchar	Narosa Publishing House, New Delhi. 2013	ISBN: 987- 88487-191-3
Sumit Saha , K. Dutta Choudhury, and Mantu Das	An Inventory Model for Nondeteriorating Items with Non-linear Time Dependent Demand Rate, 112-120	Recent Advances in Mathematical sciences and their applications, Organised by Deptt. of Mathematics, Assam University, Silchar	Narosa Publishing House, New Delhi. 2013	ISBN: 987- 88487-191-3

Details of Ph.D degree awarded (Under the supervision of the faculty):

Sl. No.	Name of the Scholar	Title of the Thesis	Year of award
1.	Biplab Karmakar	A Few Inventory Problems and Solutions	06.09.2013
2.	Mantu Das	Mathematical modelling in Inventory Management with special reference to Demand and Lotsize	13.05.2014
3.	Saidur Rahman Barbhuiya	A Study of Abstract algebras in Fuzzy settings	03.08.2016
4.	Devanjan Hazarika	On Fuzzy Algebraic Structures	14.12.2017
5.	Ananta Kr. Dutta	A Study On Some Topic On Fuzzy Algebraic Structure	12.10.2018
6.	Lukendra Kakati	Mathematical Modeling Of Blood Flow Through Non-Uniform Arteries With Emphasis To Cardiovascular Diseases With Or Without Magnetic Field	03.10.2019
7.	Nandita Dutta	Decision Making In Water Management of Sonbeel by Using Inventory Modelling - A Case Study	12.07.2022
8.	Abhibasu Sen	A Study Of Price Movements Across Various International Markets Using Differentm Mathematical Tools	20.12.2023
9.	Ankita Gupta		Persuing