



**Name: Shuvendu Chakraborty**

**Designation: Associate Professor**

**Qualifications: MSc. MBA, PhD**

**Joining Date: 17.02.2020**

**Nature of Association: Regular**

**Email ID: [shuvendu.chakraborty@sxuk.edu.in](mailto:shuvendu.chakraborty@sxuk.edu.in)**

## ***Biographical Sketch***

- Over 18 years of teaching experience in Mathematics and Managerial Statistics.

### **ACADEMIC BACKGROUND:**

- PhD from IEST, Shibpur
- MBA from Sikkim Manipal University
- M.Sc. From IEST, Shibpur
- B.Sc. from Calcutta University

## ***Areas of Specialisation and Research***

Operation research, Statistical Computing, Astrostatistics, Multivariate Analysis.

**Associateship:** Visiting Associate of IUCAA, Pune, India for 6 years (2011-1016).

**PhD. Guidance: Degree Received (01) Ongoing (04)**

## ***Teaching Experience***

**HALDIA INSTITUTE OF TECHNOLOGY**

**Associate Professor**

**SEACOM ENGINEERING COLLEGE**

**Vice Principal**

**UNIVERSITY OF CALCUTTA**

**Visiting Faculty (Department of MBA)**

## ***Administrative Responsibility***

- Director, IQAC, St. Xavier's University Kolkata
- Acted as Vice principal & Head Of Department of Mathematics in Seacom Engineering College.
- Spearheaded as Officer-In-Charge of MAKAUT semester examination 2007-2008, supervisor of WBJEEM AIEEE examination 2014, and Examination Cell Member of MAKAUT Semester examination 2006 to 2015.
- Departmental coordinator at Haldia institute of technology.

- Hostel Superintendent at Haldia institute of technology.
- Member of NAAC, NBA documentation committee at Haldia Institute of Technology.

## Publications

### Book(s) Authored:

- (2011) “**Theory Behind the Present Accelerating Universe**” (**S Chakraborty**), Lambert Academic Publishing, Germany, ISBN: 978-3- 8465-4064-0.

### Book Chapters:

- (2024) “**Applications of Cellular Automata in Water Informatics**”. (**S. Sarkar, P.K., Mukherjee, S. Chakraborty**). Water Informatics for Water Resource Management. Springer, Singapore. Pg: 71-82

### Article published in journals:

- (2009) “**Effect of modified Chaplygin gas in Anisotropic Universe**”, Astrophysics and Space Science, (**S Chakraborty**, U Debnath), Vol. 321 (1), Pp. 53-56, and ISSN: 1572- 946X.
- (2010) “**Higher Dimensional Cosmology with Normal Scalar Field and Tachyonic Field**”, International Journal of Theoretical Physics, (**S Chakraborty**, U Debnath), Vol. 49 (8), Pp. 1693-1698. ISSN: 1572-9575.
- (2010) “**The Role of a Chameleon Field in an Anisotropic Universe with Logamediate and Intermediate Scenarios**”, International Journal of Modern Physics A, (**S Chakraborty**, U Debnath), Vol. 25 (24), Pp. 4691-4701. ISSN: 1793-656X.
- (2010) “**A Anisotropic Universe with Hessence Dark Energy**” International Journal of Modern Physics D, (**S Chakraborty**, U Debnath), Vol. 19 (13), Pp. 2071-2078. ISSN: 1793-6594.
- (2011) “**An Emergent Scenario in Anisotropic Universe**” International Journal of Theoretical Physics, (**S Chakraborty**, U Debnath), Vol. 50 (1), Pp. 80-87. ISSN: 1572-9575.
- (2011) “**Brans-Dicke Theory in an Anisotropic Model with a Viscous Fluid**” Gravitation and Cosmology, (**S Chakraborty**, U Debnath), Vol.17 (3) Pp. 280-283. ISSN: 202-2893.
- (2011) “**Correspondence between Electro-Magnetic Field and other Dark Energies in Non-linear Electrodynamics**” International Journal of Modern Physics D, (S Maity, U Debnath, **S Chakraborty**) Vol.20 (12) Pp. 2337–2350. ISSN: 1793-6594.
- (2011) “**Dilaton Dark Energy Model in  $f(R)$ ,  $f(T)$  and Horava-Lifshitz Gravities**” International Journal of Theoretical Physics, (PB Khatua, **S Chakraborty**, U Debnath) Vol. 51 (2), Pp. 405-417. ISSN: 1572-9575.
- (2012) “**The Effects of Tachyonic and Phantom Fields in the Intermediate and Logamediate Scenarios of the Anisotropic Universe**” International Journal of Theoretical Physics, (**S Chakraborty**, U Debnath), Vol. 51(4), Pp. 1224–1238. ISSN: 1572-9575.
- (2012) “**Role of Chameleon Field in presence of Variable Modified Chaplygin gas in Brans-Dicke Theory**” Canadian Journal of Physics, (**S Chakraborty**, U Debnath) Vol. 90 (2), Pp. 131-135. ISSN: 1208-6045.
- (2012) “**Higher Dimensional Cosmology with Some Dark Energy Models in Emergent, Logamediate and Intermediate Scenarios of the Universe**” International Journal of Theoretical

- Physics,( C Ranjit, **S Chakraborty**, U Debnath) Vol. 51(7), Pp. 2180-2207. ISSN: 1572-9575.
- (2012) “**Statefinder Parameters for Different Dark Energy Models with Variable G Correction in Kaluza- Klein Cosmology**” International Journal of Theoretical Physics, (**S Chakraborty**, U Debnath, M Jamil, R Myrzakulov) Vol. 51(7), Pp. 2246-2255. ISSN: 1572-9575.
  - (2012) “**Variable G Correction for Dark Energy Model in Higher Dimensional Cosmology**” Canadian Journal of Physics, (**S Chakraborty**, U Debnath, M Jamil) Vol. 90 (4), Pp. 365-371. ISSN: 1208-6045.
  - (2012) “**Observational Constraints of Modified Chaplygin Gas in Loop Quantum Cosmology**” European Physical Journal C, (**S Chakraborty**, U Debnath, and C Ranjit) Vol. 72(8), Pp. 2101.ISSN: 1434-6052.
  - (2013) “**Role of Entropy-Corrected New Agegraphic Dark Energy in Horava- Lifshitz Gravity**” International Journal of Theoretical Physics, (PB Khatua, **S Chakraborty**, U Debnath), Vol. 52(2). Pp. 2654-667. ISSN: 1572-9575.
  - (2013) “**Variable Modified Chaplygin Gas in Anisotropic Universe with Kaluza-Klein Metric**” International Journal of Theoretical Physics, (C Ranjit, **S Chakraborty**, U Debnath), Vol. 52(3), Pp. 2654–667. ISSN: 1572-9575.
  - (2013) “**Observational Study of Higher Dimensional Magnetic Universe in Nonlinear Electrodynamics**” Astrophysics Space science, (C Ranjit, **S Chakraborty**, U Debnath) Vol. 346(1), Pp. 291-299. ISSN: 1572-946X.
  - (2013) “**Dynamical System Analysis for Anisotropic Universe in Brans-Dicke Theory**” International Journal of Theoretical Physics, (J Bhadra, **S Chakraborty**, U Debnath) Vol. 52(9), Pp. 3353–3365. ISSN: 1572-9575.
  - (2013) “**Observational Constraints of Homogeneous Higher Dimensional Cosmology with Modified Chaplygin Gas**” European Physical Journal – Plus, (**S Chakraborty**, U Debnath, C Ranjit) Vol. 128(5) Pp. 53- 61, ISSN: 2190-5444.
  - (2020) ” **Finding Service Quality Dimensions and Measuring Service Quality Gaps: A Study on Service Quality of Indian Banks**” MUDRA: Journal of Finance and Accounting (S Ghosh, **S Chakraborty**) Vol. 7(2) Pp. 89-104, ISSN: 2347-4467.
  - (2020) “**Identification of Product Quality Dimensions and their Impact on Consumer Satisfaction: A Study of Juice Brands of India**” Journal of Management Research, (**S Chakraborty**, S Ghosh) Vol. 20 (4) Pp. 211-224, ISSN: 0972-5814.
  - (2021) “**Reconstructions of gravity from type ordinary and entropy-corrected holographic and Pilgrim dark energy models**” International Journal of Modern Physics A (R Ghosh, U Debnath, **S Chakraborty**) Vol- 36 (29), 2150198, ISSN : 0217-751X.
  - (2022) “**Study of anisotropic universe in presence of DBI-essence, phantom and tachyonic fields**” International Journal of Modern Physics A , (U Debnath, **S Chakraborty**, S Maity, A Pradhan) Vol. 37 (36), Pp. 2250198, ISSN: 1793-656X.
  - (2023) “**COVID-19 and stress of Indian youth: An association with background, on-line mode of teaching, resilience and hope**” Journal of Affective Disorders Reports, (S Deb, N Dorji, S Kar, AM Sunny, S Deb, S Ghosh, **S Chakraborty**) Vol. 12 Pp. 100502.
  - (2024) “**Wolfram’s cellular automata model for unhealthy gas leakage detection**” International Journal of Information Technology (Singapore), (S Sarkar, M Chatterjee, S Saha, **S Chakraborty**), DOI:10.1007/s41870-024-01904-z

## Patent

- (2023) “**A Multi-Criteria Decision Making System Based On Fuzzy Logic For Electric Vehicles**” , ( B S Mahapatra S Golui , G S Mahapatra, M K Mondal, M B Bera, **S Chakraborty**, A S Mahapatra, S Koley, P P Acharjya) The Patent Office Journal No. 46/2023 (page no. 77356).
- (2024) “**Gas Leakage Detection System And Method Using Single-Length Cycle Two attractor Cellular Automata Model**” ( Sutapa Sarkar, Mourjya Chatterjee, Swarnava saha, **Shuvendu Chakraborty**, Wasim Akram Shaikh, Biplab Mahapatra, Manoj Kumar Mondal) The Patent Office Journal No. 51/2024 (page no. 120843).
- (2024) “**Entropy Based Region Reducing Genetic Algorithm For Reliability Redundancy Allocation In Interval Environment**” ( Biplab Sinha Mahapatra, Ghanshaym Sinha Mahapatra, Santanab Giri, Manoj Kumar Mondal, Mihir Baran Bera, Gourisankar RoyMahapatra, **Shuvendu chakraborty**, Debashis Ghosh, Sutapa Sarkar) The Patent Office Journal No. 51/2024 (page no. 120844).