



**Name** :Sarbani Chakraborty

**Designation** : Associate Professor .

**Qualifications** :M.Sc,Ph.D

### **Experience**

- i) St.Xavier's College , Kolkata (1995-2009)
- ii) Visiting Fellow (honorary) The Queen's University, Belfast, UK,2005.
- iii) West Bengal State University (2009 - )

**Courses Taught** : Mechanics, Ordinary Differential Equations and Special Functions, Continuum Mechanics , Differential Equations and Dynamical Systems, Mathematical Biology.

### **Administrative and Professional Experience :**

- i) Head of the Department of Mathematics,WBSU, 2013-15.
- ii) Member, BRS, Mathematics,WBSU , 2011 onwards.
- iii) Convener , BRS, Mathematics, WBSU, 2013-15.
- iv) Member, UGBOS ,Mathematics, WBSU,2009-2016 , 2021 - .
- v) Convener ,UGBOS , Mathematics ,WBSU,2015
- vi) Member, PG Board of Studies, A.P.C College, 2018-2021.
- vii) Member, UGBOS ,Calcutta University, 2019 - .

**Membership of academic bodies:** Life Member, Calcutta Mathematical Society.

**Areas of Research Interest** : Wave propagation in solid media, Smart materials, Thermo Mechanical Interactions in Solids, Nonlinear Problems of Elasticity, Mathematical Ecology and Biology, Nonlinear Dynamics.

**Selected Publications :**

1. On Love-Type magnetoelastic surface waves (S Chakraborty and M.Chattopadhyay )Trans ASME ,J.Appl.Mechanics,535,June 1998.
2. On distortion of waves in a nonlinear magnetoelastic conductor.Arch.Mech.Stos.,50,6,1047,1998. (S.Chakraborty)
3. The existence of Surface shear waves in a finitely conducting magnetoelastic half-space (M. Chattopadhyay, S.K. Chakraborty and S Chakraborty ) Int J Applied Electromagnetics and Mechanics,10,381-389,1999.
4. On nonlinear waves in elastic conductors under a magnetic field. (S.Chakraborty)Arch Mech Stos 54,1,3-13,2002.
5. Magneto-Elastic SH type waves in a Two-Layered Infinite plate (B.P. Barik and S Chakraborty) Int J Adv Appl Math and Mech , 2(1)128-134.,2014.
6. On Steady-State Response of a Magnetoelastic Half-Space to a moving normal load(with B P Barik) IOSR Journal of Mathematics Vol 11 , Issue 2 Ver IV (Mar-Aprl 2015),47-51.
7. Magnetoelastic SH type waves in a conducting layer sandwiched between two conducting half-spaces.(Sarvani Chakraborty and Bishnupada Barik,)Bull Cal Math Soc, 109(1)75-84, 2017.
8. Propagation of Rayleigh-waves in Functionally-graded magneto-electro-elastic half-space (S.Chakraborty, P.Mondal ) 2019 Int Conference on Ubiquitous and emerging concepts on Sensors and Transducers(UEMCOS)2019.pp1-5 doi:10.1109/UEMCOS465808.2019.9221538(IEEE).
9. Effect of magnetic field on the existence of Stoneley waves (Bishnupada Barik, Sarvani Chakraborty) Journal of the Calcutta Mathematical Society,18(1),121-138 ,2022.
10. Study of Dynamical Behaviour of a delayed stage-structured Predator-Prey model with disease in prey (DebashisDas,Sarvani Chakraborty) Int J Mathematics,Engineering and Management Sciences, Vol7, No.4,503-524, 2022.