



SARAT CENTENARY COLLEGE, DHANIAKHALI, HOOGHLY, WB
TEACHER PROFILE

NAME: DR. SATYABRATA BHATTACHARYA	
DESIGNATION: ASSISTANT PROFESSOR	
DEPARTMENT: PHYSICS	
ACADEMIC QUALIFICATIONS: M.SC(PHYSICS), PH.D, B.ED	
CONTACT INFO.: satyabratab@sccollegednk.ac.in	

DATE OF JOINING	04 - 04 - 2017 (F.N)
SPECIALIZATION	DIGITAL IMAGE PROCESSING(M.Sc), QUANTUM BROWNIAN MOTION (Ph.D)
TEACHING INTEREST	STATISTICAL MECHANICS, CLASSICAL MECHANICS, QUANTUM MECHANICS, ELECTRONICS
TEACHING EXPERIENCE	3 YEARS 5 MONTHS
AWARD & FELLOWSHIP	GOLD MEDALIST (M.SC), NET, GATE
MEMBERSHIP	MEMBER: INDIAN STATISTICAL INSTITUTE- COUNCIL, KOLKATA

RESEARCH INTEREST: THEORETICAL MODELS, TRANSPORT PHENOMENA IN COMPLEX SYSTEMS, INHOMOGENEOUS SYSTEMS, SYSTEM-RESERVOIR MODEL
RESEARCH EXPERIENCE: FROM 2007 TO 2011 AS A RESEARCH FELLOW IN BENGAL ENGINEERING AND SCIENCE UNIVERSITY SHIBPUR
SEMINAR/ WORKSHOP PARTICIPATION
PUBLICATIONS

SELECTED PUBLICATIONS:

- (1) Time dependent current in a nonstationary environment: A microscopic approach, Journal of Mathematical Physics, 49, 063302 (2008).
- (2) Directed motion in a periodic potential of a quantum system coupled to a heat bath driven by a colored noise, Physical Review E , 78, 021123 (2008).
- (3) Phase induced current in presence of non-equilibrium bath: A quantum approach, Journal of Chemical Physics, 129, 124708 (2008).
- (4) Investigation of noise-induced escape rate: A quantum mechanical approach, J. Stat. Physics, 136, 733 (2009).
- (5) Quantum transport in a periodic symmetric potential of a driven quantum system, Physical Review E , 80, 041127 (2009).
- (6) Phase induced transport of a Brownian particle in a periodic potential in the presence of an external noise: A semiclassical treatment, Journal of Mathematical Physics, 52, 073302 (2011).
- (7) A semiclassical approach to study multiplicative noise induced rate processes from a metastable state, Physica A, 390, 2880(2011)

RESEARCH PROJECT/COLLABORATION/GUIDANCE: NIL
COMPLETED CERTIFICATE COURSE: ONE THREE WEEKS ORIENTATION PROGRAM FROM UGC HRDC, PT.RSU, RAIPUR
COMPUTER SKILLS: FORTRAN 77, C, C++, LATEX.

ANY OTHER INFORMATION/ADDITIONAL RESPONSIBILITY: CONVENER, TENDER AND PURCHASE COMMITTEE; JOINT CONVENER, ADMISSION IMPLEMENTATION COMMITTEE FOR 2019-20 AND 2020-21 SESSIONS ; MEMBER, COLLEGE WEBINAR ORGANIZING COMMITTEE; MEMBER, IQAC, SARAT CENTENARY COLLEGE.