

# CURRICULUM VITÆ

## SUBHAS KHAJANCHI

Assistant Professor,  
Department of Mathematics  
Bankura University  
West Bengal, India  
Contact No.: +91-9804941439  
Email:subhaskhajanchi@gmail.com



## PERSONAL PROFILE:

Name: Subhas Khajanchi  
Father Name: Rabindra Nath Khajanchi  
Date of Birth: Oct. 07, 1987  
Sex: Male  
Marital status: Single  
Nationality: Indian

## ACADEMIC ACHIEVEMENTS:

Examination	Year of passing	Board/University	Institute
PhD	2016	---	Indian Institute of Technology Roorkee
M.Sc. (Applied Maths)	2010	Jadavpur University	Jadavpur University
B.Sc. (Mathematics Hons.)	2008	Jadavpur University	Jadavpur University
Higher Secondary	2005	WBCHSE	Nimpith R K Vidyabhavan
Matriculation	2003	WBBSE	Moukhali C.F.Vidyamandir

## RESEARCH INTEREST:

- Glioma Growth and Invasion
- Cancer Dynamics
- Ecological Modeling
- Spatio-Temporal Pattern Formation.

## PREVIOUS EXPERIENCES:

### A. Research Experience

Duration	Organisation	Area(s)
Ph.D thesis titled <b>Mathematical Modeling of Malignant Brain Tumor with T11 Target Structure</b> under the supervision of <b>Dr. Sandip Banerjee</b> in the Department of Mathematics, IIT Roorkee	Indian Institute of Technology Roorkee	Mathematical Biology

### B. Teaching Experience

Duration	Organization	Area(s)
15.09.2015 till date	Assistant Professor, Department of Mathematics, Bankura University, India.	Applied Mathematics.
09.03.2015 – 14.09.2015	Assistant Professor, Department of Mathematics, Dinabandhu Andrews College, University of Calcutta, India.	Both Pure and Applied Mathematics.

## LIST OF PUBLICATIONS:

1. **Subhas Khajanchi** and D. Ghosh, The combined effects of optimal control in cancer remission, *Applied Mathematics and Computation* 271 (2015) 375-388.
2. **Subhas Khajanchi**, Bifurcation analysis of a delayed mathematical model for tumor growth, *Chaos Solitons & Fractals* 77 (2015) 264 - 276.
3. S. Banerjee, **Subhas Khajanchi** and S Chaudhuri, A mathematical model to elucidate brain tumor abrogation by immunotherapy with T11 target structure, *PLOS ONE*, 10(5) 2015: e0123611. doi:10.1371/journal.pone.0123611.
4. **Subhas Khajanchi** and S. Banerjee, Stability and bifurcation analysis of delay induced tumor immune interaction model, *Applied Mathematics and Computation* 248 (2014) 652 – 671.
5. **Subhas Khajanchi**, Dynamic behavior of a Beddington-DeAngelis type stage structured predator-prey model, *Applied Mathematics and Computation* 244 (2014) 344 - 360.
6. **Subhas Khajanchi** and S. Banerjee, Global stability of a tumor immune interaction model, *Mathematical Sciences International Research Journal* 2 (2) (2013) ISSN 2278 – 8697. (Conference Paper).

7. S Nandi, **Subhas Khajanchi**, AN Chatterjee and PK Roy, Insight of viral infection of *Jatropha Curcas* plant (Future Fuel): A control based mathematical study, *Acta Analysis Functionalis Applicata* 13 (4) (2011) 366 – 374.

### **SUBMITTED WORK:**

1. **Subhas Khajanchi**, Sandip Banerjee, Quantifying the role of Immunotherapeutic Drug T11 Target Structure in Progression of Malignant Gliomas: Mathematical Modeling and Dynamical Perspective.
2. **Subhas Khajanchi**, D Ghosh, F Denis, C Letellier, How can a chaotic cancer model be influenced by multiple delays?
3. **Subhas Khajanchi**, Bifurcations and oscillatory dynamics in a Tumor-immune interaction model. (Accepted in BIOMAT 2015)

### **SCHOLARSHIPS AND AWARDS:**

1. Received National Merit-Cum-Scholarship in M.Sc. (2008-2010).
2. Qualified Graduate Aptitude Test in Engineering (GATE) in the year 2011.
3. National Eligibility Test for Lectureship (NET-Dec. 10).

### **MEMBERSHIP:**

1. Society of Industrial and Applied Mathematics (*SIAM*) - Yearly.
2. Society for Mathematical Biology (SMB) – Student Membership.
3. Indian Statistical Institute (*ISI*), Kolkata - Life Member.

### **REVIEWERS:**

1. Applied Mathematics and Computation (Elsevier).
2. Chaos, Solitons and Fractals (Elsevier).
3. International Journal of Bifurcation and Chaos (World Scientific).
4. Chaos: An Interdisciplinary Journal of Nonlinear Science (AIP).
5. PLoS ONE

## **CONFERENCE/WORKSHOP ATTENDED:**

1. **BIOMAT 2015, 15<sup>th</sup> International Symposium on Mathematical and Computational Biology**, Indian Institute of Technology Roorkee, Uttarakhand, India, during 2<sup>nd</sup> -6<sup>th</sup> November, 2015. Contributed Talk.
2. **“Physics and Applied Mathematics Researchers’ Meet – 2015”**, Indian Statistical Institute (ISI) Kolkata, Physics and Applied Mathematics Unit (PAMU) during 18<sup>th</sup> – 20<sup>th</sup> March, 2015. (Short Contributory Talk).
3. **“International Conference on Mathematical Modeling and Computer Simulation (ICMMCS)”**, Indian Institute of Technology Madras (IITM), Department of Mathematics during 8<sup>th</sup> – 10<sup>th</sup> December, 2014. (Paper Presentation).
4. **“3<sup>rd</sup> International Symposium on Complex Dynamical Systems and Applications (CDSA - 2014) ”**, Indian Statistical Institute Kolkata, Jointly Organized by Agricultural and Ecological Research Unit & Physics and Applied Mathematics Unit during 10<sup>th</sup> – 12<sup>th</sup> March, 2014. (Paper Presentation).
5. **"Indo-Canadian Workshop on Mathematics of Infectious Diseases"**, Indian Institute of Technology Roorkee (IITR), Department of Mathematics during 20<sup>th</sup>-22<sup>nd</sup> January 2014.
6. **"Workshop on Nonlinear Differential Equations: Dynamics of Complex Systems (NDEDCS-2013)"** under the auspices of National Program on Differential Equations: Theory, Computation and applications (NPDE-TCA), University of Calcutta, Department of Mathematics, during 23<sup>th</sup>-28<sup>th</sup> Sept. 2013.
7. **“Workshop on Nonlinear Dynamics in Biology”**, Indian Institute of Science (IISc), Bangalore, Department of Mathematics during 8<sup>th</sup> - 13<sup>th</sup> July 2013.
8. **"Summer School on Mathematics of Infectious Diseases, York University, Toronto, Canada**, Department of Mathematics and Statistics, during 19<sup>th</sup>-27<sup>th</sup> May 2013.
9. **"Advance Level Workshop on Differential Equations in Ecology and Epidemiology"** under the auspices of National Program on Differential Equations: Theory, Computation and applications(NPDE-TCA), Indian Institute of Technology Roorkee (IITR), Department of Mathematics during 10<sup>th</sup>-14<sup>th</sup> Oct. 2012.
10. **"Workshop on Adaptive Finite Element Method (AFEM)"**, Indian Institute of Space Science and Technology (IIST), Trivandrum, Kerala, Department of Mathematics during 16<sup>th</sup> - 25<sup>th</sup> March 2011.

**11. "National Conference on Mathematics and its Application (NCMA)",** Jadavpur University, Department of Mathematics during 13<sup>th</sup>-14<sup>th</sup> January 2010.