

# Curriculum Vitae

**Arunabha Adhikari**  
**Associate Professor**  
**Department of Physics**  
**West Bengal State University**  
**24 Parganas (North)**



(1) **Address:** (i) **University :**

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(ii) **Residence:**

Flat A2, Shobhanalaya Apartment,  
H/I -33, Shachindralal Sarani,  
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(2) **Area of Specialization** : *Computational Neuroscience, Computational Physics, Ion Channels (Patch Clamp), Neural Network, Image Processing, Non-linear Dynamics.*

(3) **Date of Birth** : 29<sup>th</sup> Sptember, 1962

(4) **Details of Past Services** :

Employer	Post Held	From	To
Saha Institute of Nuclear Physics	SRF	August 1987	December, 1992
Indian Institute of Science, Bangalore	Project Officer and Research Associate	December 1992	July 1995
Saha Institute of Nuclear Physics	Research Associate	July 1995	September 1995
University of Saarland, Germany	Research Associate	October 1995	November 1996
Saha Institute of Nuclear Physics	Research Associate	December 1996	May 1997
Gobardanga Hindu	Lecturer and	May 7 1997	December 22 2005

College	Senior Lecturer		
West Bengal University of Technology	Reader	23 December 2005	On Lien from February 3, 2009

#### (5) Academic Qualifications

Exams Passed	Board / University	Subjects	Year	Division / Class
<b>S.F. or Equivalent</b>	West Bengal Board Of Secondary Edn	Sanskrit (Third Language), Maths (addl)	1978	First Division
<b>H.S. or Equivalent</b>	West Bengal Council Of H.S. Edn	Beng, Eng, Math, Phys, Chem, Biol (addl)	1980	First Division
<b>Bachelor's Degree</b>	University of Calcutta	Physics (Hons), Chem, Math	1983	Second Class
<b>Master's Degree</b>	University of Calcutta	Physics, Particle Phys (Elective), Biophysics (Special)	1985	First Class
<b>Research Degree</b>	<b>Ph.D. :</b> Univ of Calcutta	Physics	1994	
<b>Others (Diploma / Certificate etc.)</b>	<b>Post M.Sc. Associateship:</b> Saha Institute of Nuclear Physics	Biological Sciences	1987	

#### (6) Teaching Experience:

##### (a) Under Graduate level:

1. Physics (Hons) and (Gen) 1997-2005
2. Engineering Physics 2005-2009

##### (b) Post-graduate Level :

1. In Post M.Sc Associateship Course, Saha Institute of Nuclear Physics, Calcutta, 1995 and in 1997
2. In M.Sc. and Post M.Sc. Diploma in Bioinformatics, Department of Molecular Biology and Biophysics, Calcutta University in the since 2004 till date
3. M.Tech. (Bioinformatics) West Bengal University of Technology, since 2006 2009 And M. Tech (Computer Science) West Bengal University of Technology, in 2006 and 2007
4. . M.Sc. (Physics): West Bengal University of Technology in 2008-till date

5. Ph.D. Coursework in West Bengal State University – 2010- till date

**(7) Publications:**

1. *Theoretical Simulation of Calcium Action Potential in Squid Giant Synapse: Ph.D. Thesis submitted to the University of Calcutta in March 1993*
2. *Theoretical Simulation of Calcium Action Potential in Squid Giant Synapse: The Rising Phase, Indian Journal of Physics, 748, 505-516 (1991)*
3. *Theoretical Simulation of Calcium Action Potential in Squid Giant Synapse: The Plateau Termination: J. Biol. Phys. 18, 151-165 (1991)*
4. *Theoretical Simulation of Calcium Action Potential in Squid Giant Synapse: Repetitive Simulation: J. Biol. Phys., 19, 71-84 (1993)*
5. *Kinetic Characterization of Rat Brain type IIA sodium channel  $\alpha$ -subunit stably expressed in a somatic cell line. J. Physiol., 488, 633-645 (1995)*
6. *A large Conductance  $Ca^{2+}$  activated  $K^{+}$  channel in  $\alpha T3-1$  pituitary gonadotrophs, Current Science, India, 70, 349-853 (1996)*
7. *Classification of Ultrasonography Images of Human Fatty and Normal Livers using GLCM Texture features. Currents Trends in Technology and Science, Vol3, Issue 4, 2014*
8. *Thermal decomposition of a molecular material  $\{N(n-C_4H_9)_4[FeIIFeIII(C_2O_4)_3]\}_\infty$  leading to ferrite : A reaction kinetics study J. Serb. Chem. Soc. 78 (4) 523–536 (2013)*

**IEEE Proceedings:**

1. Corroborating the subjective classification of ultrasound images of normal and fatty human livers by the radiologist through texture analysis and SOM: S. Mukherjee, A Chakraborty, K. Ghosh, M. Roy, A. Adhikari, S. Mazumder, Proceedings of ADCOM, 2007, Guwahati, 18-21 December, 2007, p 197.

**Conference Proceedings:**

1. Single and Multiple layer perceptron architecture scheme for classification of ultrasound images of human livers: Nicedita Neogi, A Adhikari, M Roy and S Mazumdar, Proceedings of the XVI National Symposium on Ultrasonics, Kochi, December 17, 2007-December 19, 2007