

## CURRICULUM VITAE

### DR. SUBHAS CHANDRA BHAT

*Associate Professor in Chemistry (WBES)*

*Government College of Education, Banipur, North 24-Parganas, West Bengal, India.*

*Ph. D. in Chemistry (2006) from University of Calcutta*

*Ph.D.in Education (2017) from University of Calcutta*

**Email: [-scbhat1865@gmail.com](mailto:-scbhat1865@gmail.com)**

**Mobile: 9433476776**

**1. Address: (i) College: Government College of Education, Banipur, North 24-Parganas, W.B.;**

**Phone- 03216-237034**

**(ii) Residence :( Permanent and Present): 30/6/1, Thakur Ramakrishna Lane, Howrah- 711104, W.B. Phone. No. - 033-26773062(Land), Mobile- 09433476776**

**4. Date of Birth : 01. 08. 1965**

**5. Date of Joining at a Govt. aided school, Howrah Vivekananda Institution, Howrah, (HS School) as Assistant Teacher in Chemistry 29.10.1992 and served till 17.01.2000.**

**6. Date of joining in W.B.E.S. (i) As Lecturer: 18. 01. 2000; (ii) Date of confirmation: 18. 01. 2003;**

**(iii) As Lecturer (Sr. Scale)/ Assistant Prof. AGP-7000/- 18.01.2006**

**7. TEACHING EXPERIENCE :( In School, In Government Colleges/University):**

<b>Course</b>	<b>Duration (Year/Month)</b>
I) P.U./U.B./H.S. (WBBSE/ WBCHSE)	29.10. 1992 – 17.01. 2000.(Howrah Vivekananda Institution Aided School)

II) Degree (Pass)	
III) Degree (Honours) -B. Ed. Course	18. 01. 2000 – On wards
IV) Post Graduate -M. Ed. Course	21.09 2006- 13.08.2013
V) M. Phil. Course in Education under NSOU	21.09.2006- 13.08.2013
VI)ODL B.Ed. Course IGNOU/ NSOU	2006- 2014
VII) MA in Education NSOU	2009 – onwards

### 8. ACADEMIC QUALIFICATIONS:

Exam. Passed	Board/University	Subjects	Year	Division/Class
S.F. or Equivalent	W.B.B.S.E. (Pancharul S.H. Vidyamandir, Howrah)	Beng., Eng., Math., P. Sc. L. Sc. Hist., Geo., W. Edn. Math(Addl).	1982	1 st. (67.33%)
H.S. or Equivalent	W.B.C.H.S.E (Baishnabchak M.C. High School, Midnapur)	Beng., Eng., Math., Phys., Chem., Bio Sc.(Addl).	1984	1 <sup>st</sup> (64.20%)
Bachelor's Degree B. SC. B.ED.	Calcutta University (RKMV, Belurmath) Calcutta University (Uluberia College, Howrah)	Chemistry(Hons), Physics (p), Math(p)Eng.(Addl). Education, Mental Measurement, L. Sc. Math(method)	1987  1991	2 <sup>nd</sup> (50.88%)  2 <sup>nd</sup> (58.80%)

Master's Degree  M. SC.  M. ED.	Calcutta University  (Presidency College, Kolkata)  Calcutta University  (David Hare Training College, Kolkata)	Chemistry  Inorganic(special)  Education, Special Education, Environmental & Population Education	1989  2004	2 <sup>nd</sup> (58.50%)  1 <sup>st</sup> (62.33%)
Research Degree Ph. D. in Chemistry	Calcutta University	TITLE:- ' Studies of Management of Chromium(VI) and Lead(II) Contaminated Industrial Effluent using Sorption Method'	Ph. D. degree awarded on.  11. 07.2006	Ph. D. awarded
Ph. D. in Education	Calcutta University	TITLE: Awareness of Environmental Pollution among the Secondary Students in Relation to their Concepts and Aptitude in Science- A Critical Review	Ph. D. degree awarded on.  07. 09.2017	Ph. D. awarded
Others (Diploma/Certifi cate )etc. NET	UGC –CSIR  INDIA	Chemical Science	December , 1990	Qualified
Kobid (Hindi)	Wardha Rastra Bhasha Prachar Samity, Warda, Gujrath	Hindi	1993	Qualified
Science Journalist	All Bengal Science Association, Jadavpur, Kolkata	Science Journalism	1992	Qualified

**9. Area of specialization:**

- i) **Ph. D. in Chemistry under University of Calcutta Inorganic Chemistry (in M. Sc.), Thesis on Environmental & Analytical Chemistry Toxic elements' ( Like As, F, Cr, Pb )removal from drinking and waste water**

- ii) **Ph.D. in Education under Education Department under University of Calcutta, Thesis on environmental education.**
- iii) **Environmental Education(in M.Ed.), Education for children with Special Need (in M. Ed.) under University of Calcutta.**

**10. Author of Text Books:**

- i) Research Methodology and Statistics in Education (for Research students, from Aaheli Publication, Kolkata)
- ii) Measurement and Evaluation in Education (Vol.-I & II) (For B.Ed. Students from Aaheli Publication, Kolkata)
- iii)Physical Science Teaching Methodology (Vol.-I & II) (For B.Ed. Students from Aaheli Publication, Kolkata)
- iv)Teacher Education. (For B.Ed. Students from Aaheli Publication, Kolkata)
- v)Action Research in Education ( from SCERT, W.B.)

**11. Research Guidance:**

- i) Guided Forty four (44) students in M. Phil. In Education Dissertation thesis in different filed of Educational Research under NSOU, W.B.
- ii) Supervising one Ph.D. Student in Human Development Dept. under C.U. on Psychology, Nutrition and Education.

**12. Community Activities:**

- i) Popularizing Natural Sciences in Schools and Colleges.
- ii) Popularizing interdisciplinary (Language Science-Natural Science-Social Science) approach of teaching in Schools and Colleges.

**13. SEMINARS, CONFERENCES, SYMPOSIA, WORKSHOP ETC. ATTENDED AND PAPER PRESENTED**

NAME	SPONSORING AGENCY	PLACE AND DATE
------	-------------------	----------------

1. Orientation Programme(OP)	UGC-Academic Staff College, Calcutta University.	University Science College, Rajabazar, Calcutta, Feb. 09,2005 – Mar. 8, 2005.
2. Refresher Course on Chemistry(RC)	UGC-Academic Staff College, Calcutta University	University Science College, Rajabazar, Calcutta, Dec.20, 2005 – Jan. 9, 2006.
3. Refresher course on Chemistry(RC)	UGC-Academic Staff College, Calcutta University	University Science College, Rajabazar, Calcutta, Aug.22, 2008 – Sept. 11, 2008.
4. Refresher Course on Education(RC)	UGC-Academic Staff College, Calcutta University	University Science College, Rajabazar, Calcutta, Nov.18, 2008 – Dec08, 2008.
5 . Refresher Course( Summer Special)	UGC-ASC-HRDC, Calcutta University	University Science College, Rajabazar, Calcutta, May.23. 2015 – June,15, 2015.
5. Paper presented at 42 <sup>nd</sup> Annual Convention of Chemist – 2005	Indian Chemical Society, Kolkata	Dept. of Chemistry, Viswabharati University, Feb. 9 – 13, 2006.
6. Paper participated on 'Human Dimensions of environmental Issues and Creative Education.'	UGC and Siliguri B.Ed. College	Siliguri B.Ed. College, Apr. 19 - 20, 2005.
7. Participated in seminar on 'Vocation Oriented Syllabus in the Secondary Level- Need of the time.'	David Hare Training College(D.H.T.C.),Kolkata	D.H.T.College, Kolkata, Mar. 28, 2004.
8. Participated in workshop on, "Implementation of Revised B.ED. Syllabus."		
9. Research Paper presented at 40th Annual convention of Chemist.	West Bengal Government College Teachers Association(WBGCTA)	Sanskrit College, Kolkata, June.12-13, 2004
10. Participated in seminar on :Globalisation : Its Impact on Indian Society.		
11. Participated in seminar on "Is Reading habit on the wane?"	Indian Chemical Society, Kolkata	Bundelkhand University, Jhansi, U.P. Dec. 23 –27, 2003.
12. Participated at Training on Instructional Strategies in Science at Secondary Level.	UGC., WBGCTA., Presidency College, Kolkata	Derozio Hall, Presidency College, Kolkata. Feb.-15, 2003.
13. Participated in National Seminar on 'Teaching Chemistry'	5 WBGCTA, Presidency College, Kolkata	Derozio Hall, Presidency College, Kolkata. Apr.-26, 2003.

#### **14. RESEARCH EXPERIENCE AND TRAINING:**

- i) **Doctorate: Ph.D. Degree in Chemistry Awarded on Title - Studies of Management of Chromium(VI) and Lead(II) Contaminated Industrial Effluents using Sorption Method from University of Calcutta**
- ii) **Ph.D. in Education: : Awareness of Environmental Pollution among the Secondary Students in Relation to their Concepts and Aptitude in Science- A Critical Review**
- iii) **Post Doctorate: Supervising Forty Four Research in various Educational Research field.**

#### **Guided 50 M.Phil. in Education students of Netaji Subhas Open University .**

Author of a Book titled as Research Methodology and Statistics in Education and many other teachers training books.

Acting as Co-Supervisor of few Ph.D. students of different universities.

#### **15. Research Publications:**

- i) Seven(7)Research papers in Chemistry in Different International Journals.
- ii) Twelve(12) Research articles published on Education in different National and International journals and Seminar proceedings of ISSN/ISBN standard.

#### **16. Any other relevant information/**

Research Guidance with particulars:

- i) In Educational Research for M. Phil in Education 44 Students Under Netaji Subhas Open University- Institute of Advanced Studies( NSOU-IASE) in Education at David Hare Training College.
- ii) Acted as Editor in Publishing IASE Fifteen (15) Publications on Seminars and Workshops on Different Field of Education Publications as Coordinator of IASE, West Bengal, from 2007- 2010 at David Hare Training College, Kolkata-19

#### **17. INNOVATIONS AND CONTRIBUTIONS IN TEACHING ( for Teacher Training /Art Colleges)**

- i) Design of Curriculum: **Participated in Workshops at David Hare Training College, Kolkata. West Bengal Board of Madrasah Education.**
- ii) Teaching Methods: **Participated in Seminars at David Hare Training College, Howrah Bijoy Krishna Girls College, R. K. M. Sikshyana Mandira, Belurmath.**
- iii) Laboratory Experiments: **Done in B. Ed., M. Ed. And M. Phil. Course on Education, Environmental Education and Science Education.**
- iv) Evaluation Methods: **Done in B. Ed., M. Ed. & M. Phil. Course on Education, West Bengal Board of Madrasah Education.**
- v) Preparation of Resource Materials: **Participated in New C. U. – B. Ed. Course Workshop, W. B. Board Madrasah Education.**
- vi) Participation in local/state/National/International art Exhibitions/Games : **Participated in College Games and Sports**

- vii) Assignment of Art Work by government or any other agency.
- viii) Any other : Attached with **All India Science Teachers Association, Science Communicators Forum, All India Children Science Congress 2007-2013(As Evaluator).**

**18. PARTICIPATION IN CORPORATE LIFE.**

- i) Co-curricular activities :**Participated in all College Co- Curricular Activities**
- ii) Enrichment of Campus life: **Visited College Students Hostel and Play Ground for different activities and discussions**(Hostel, sports, Games, cultural Activities).
- iii) Student's Welfare and Discipline : **Participated in different discussions for this purposes**
- iv) Professional Organization of Teachers: **Actively involved in all activities of West Bengal Government College Teachers Association.**  
( e.g. Indian Philosophical Association etc.)
- v) Have Training on NCC and NSS
- vi) Was a Champion athlete of Calcutta University PG section, 1988& 1989
- vii) Best Student Award "Swami Tejasananda Memorial Award" from RKM Vidhyamandira, Belurmath, 1988.

Acted as coordinator of IASE - NSOU M.Phil. course at David Hare Training College ,Kolkata from 2009 to 2013).

Acted as coordinator of IQAC of Government College of Education Banipur from 2014 to 2021.

**Signature of the Teacher with Designation.**

**Experience :**

1. As Assistant Teacher- in Howrah Vivekananda Institution, Howrah 29.10.1992-17.01.2000).
2. As Lecturer and Sr. Lecturer/ Assistant Professor (WBES)- 18. 01.2000- till date)
3. Research Experience – since 1989 in Chemistry and in Education since -2006
4. Published Research Article- 20 ( Chemistry and Education)
5. Guided 50 M. Phil in Education students under NSOU

Certified that all the entries made in this document are checked and verified properly and found to be correct.

**Principal/ Officer-in-Charge.**

**LIST OF PUBLISHED PAPERS**

**ON CHEMISTRY**

1. **Removal of Trace Chromium(VI) from Contaminated water: Biosorption by Ipomea Aquatica: Subhas Chandra Bhat, Saswati Goswami and Uday Chand Ghosh;** Journal of Environ. Science & Engg.; Vol.47, No.4; pp. 316-321, October 2005; ISSN No-0367827X.
2. **Synthetic hydrous titanium(IV) oxide(HTO): Adsorptive removal of lead(II) from the contaminated industrial waste water: Subhas Chandra Bhat, Saswati Goswami,**

- Snigdha Palchoudhuri( Mukhopadhaya) Biswaranjan Manna and UdayChand Ghosh; Journal of Indian Chemical Society; Vol.82,pp. 632-636, July 2005; ISSN No. 0194522.
3. **Studies on Management of Lead (II) contaminated industrial waste water by *Pistia Strateotes*:** U.C. Ghosh, M. Dasgupta, **S.C. Bhat** , B.R. Manna & S Palchoudhuri; Journal of Industrial Pollution Control; Vol. 19(1); pp.1-8; 2003; ISSN No. -0970-2083.
  4. **Studies on Management of Chromium (VI)- contaminated industrial waste effluent using hydrous Titanium Oxide(HTO):**Uday Chand Ghosh, Manotosh Dasgupta, Sushanta Debnath and **Subhas Chandra Bhat**; Water, Air and Soil Pollution, Kluwer Academic Publishers,Netherland; Vol. 143, pp. 245-256, 2003;ISSN No. 0049-6979.
  5. **Studies on Removal and Recovery of Chromium (VI) and Chromium(III) from water by Hydrate Zirconium Oxide:** U.C. Ghosh, M. Dasgupta, **S.C. Bhat** and B. Manna; Chem. Environ. Res.; Vol. 10(3&4), pp. 321-324, 2001. ISSN No. -0971-2151.
  6. **Studies on Removal of Arsenic(VI) from water using Hydrate Zirconium Oxide:** U.C. Ghosh, M. Dasgupta, **S.C. Bhat** and B. Manna; Chem. Environ. Res.; Vol.8(1&2), pp. 51-54, 1999. ISSN No. -0971-2151.
  7. **Crystalline Hydrous Ferric Oxide : An Adsorbent for Chromium(VI) - Contaminated Industrial Wastewater Treatment:** Saswati Gosami, **Subhas Chandra Bhat**, Uday Chand Ghosh; Water Environment Research, Vol.78, No. 9; pp.986, 2006; ISSN No. 1061-4303.

## ON EDUCATION

1. **Environmental Pollution –specific Science Concepts Among The School Students of West Bengal:** **Subhas Chandra Bhat**, Kamal Krishna De and Malay Kumar Sen; Indian Journal of Applied Research; Vol.4(9); pp.156-160, September,2014; ISSN No. 2249-555X.
2. **Pollution Awareness among the Upper Primary Students of West Bengal:** **Subhas Chandra Bhat**, Kamal Krishna De and Malay Kumar Sen; IOSR journal of Humanities And Social Science; Indian Journal of Vol.19(12) Ver.-V; pp.1-7, December,2014; ISSN No. 2279-0845.
3. **Aptitude in Science among the Upper Primary Students in Relation to Awareness of Environmental Pollution:** **Subhas Chandra Bhat**, Kamal Krishna De and Malay Kumar Sen; Indian Journal of Applied Research, Vol.5(4); pp.172-177, April,2015; ISSN No. 2249-555X.
4. **“Population Education”- a Unique way to Quality of Life:** **Subhas Chandra Bhat** Sikshachintan, A Journal of Education; Vol.5, pp.33-39, August, 2011 ISSN No.-0973-5461.
5. **A Study on the Environmental Awareness of the Students of Higher Secondary Courses in Relation to Their Chosen Stream of Study:** **Subhas Chandra Bhat**; Evolving Horizons: An Interdisciplinary Journal of Education, Humanities, Social and Environmental Sciences; Vol.1 pp. 177-183, October 2012, ISSN No. 2319-6521.
6. **Changed of Educational Status of South 24-Parganas District in West Bengal Between 2013 and 2016:** Sudip Kumar Pal and **Subhas Chandra Bhat**; Indian Journal of Applied Research, Vol.7(4); pp.509-512, April,2017; ISSN No. 2249-555X.



7. **Possible Ways to Global Sustainable Development: Subhas Chandra Bhat;** Harvest (Online); Bi –Annual Journal , Spl. Environmental issue; Vol.1, pp.60-62, 2017; ISSN No. 2456-6551.
8. **A study on status of elementary education of North 24-Parganas district in West Bengal :** Sudip Kumar Pal and **Subhas Chandra Bhat;** The Research Journal of Social Sciences; Vol.9 number 8, pp. 310-317; August 2018. ISSN No. 0025-1348.
9. **Innovative Science Teaching in Enhancing the Skills Interdisciplinary Approach in Learning Process: Dr. Subhas Chandra Bhat;** BOSON, A Science Journal; Vol.IV; pp.17-19, 2017; ISSN No. 2349-2686.
10. **Prof. Ashima Chatterjee: The ‘Tereshkova’ in Indian Chemistry: Subhas Chandra Bhat;** Vigyan Sikshak, Annual Journal of All India Science Teachers’ Association, Kolkata, W.B.; Vol-2, pp.30-32, June, 2018.
11. **Effectiveness of Peace and Value Education in Modern World- A Critical Overview-** Dr. Subhas Chandra Bhat, Published in Edited Book Titled Relevance of Peace and Value education in the Modern World, by Dr. N. Mitra ( Chanda) and Dr. R Basak ( Dasgupta), N.B. Publication, Gaziabad, India, (2020). ISBN- 978-93-89324-84-8.
12. **Impact of Economic Activities on Environment and Vice Versa: A critical analysis-** Dr. Subhas Chandra Bhat, Published in Edited Book Titled Environmental Issues: A Multidisciplinary Approach by Dr. S. Mishra and Dr. N. Mitra ( Chanda), A.B.S. Books, Delhi, India, (2021). ISBN- 978-81-951369-6-4..

**Published about 15 Research Articles in Chemistry and environmental science and more than 30 Research Articles in Education in different national and International journals.**

**Acted as coordinator of IASE ,WB at David Hare Training College, Kolkata from 2006 to 2013 and organised more than 20 seminars and workshops acted as Editor of such related publications.**

### **SEMINAR, CONFERENCE, CONVENTION AND WORKSHOP PRESENTATIONS:**

1. **Mission Sustainability: Through Environmental Education- A Critical Review: Subhas Chandra Bhat;** Proceedings of Sequel to UGC- Sponsored National Seminar; Department of B.Ed. Uluberia College, Uluberia, Howrah -711315, pp.59-62; 1<sup>st</sup> & 2<sup>nd</sup> March, 2017, ISBN 978-81-928627-5-0.
2. **Life Skill Education: Essentiality in every level of Education: Dr. Subhas Chandra Bhat** and Srijib Kumar Patra; Proceedings of UGC sponsored state level seminar on Necessity of life skill education for secondary, Higher Secondary & B.Ed. Level Students, Gopal Chandra Memorial College of Education, New Barracpore, Kolkata-700131; 19<sup>th</sup> and 20<sup>th</sup> September, 2013.
3. **Interdisciplinary Approaches in Total Education System: Dr Subha Chandra Bhat,** Proceedings of UGC sponsored state level seminar on Emerging Trends in Contemporary Education: Implications for 21<sup>st</sup> Century- A Sequel; Department of B.Ed. Uluberia

College, Uluberia, Howrah -711315, pp.59-62; 1<sup>st</sup> &2<sup>nd</sup> March, 2017, ISBN 978-81-928627-5-0.

4. **Curriculum and Evaluation in Physical Science- a New way to Look: Subhas Chandra Bhat;** Glimpse: A Collection of selected Lecture Delivered under Remedial Coaching Programme; Shimurali Sachinandan College of Education, Shimurali, Nadia; ISBN No. 978-81-922902-3-2.
5. **Management In Teacher Education: Perspective & Prospect: Dr. Subhas Chandra Bhat;** Proceedings of the UGC sponsored National Seminar on Management in Teacher Education Perspective & Prospects; Fakir Chand College, B.Ed. Section Diamond Harbour, South 24- Parganas, W.B. 24<sup>th</sup> & 25<sup>th</sup> September, 2010.
6. **Judicious Management of Science and Technologies for Effective Teaching Training: Dr Subhas Chandra Bhat;** Souvenir of the National Seminar on Science and Technology in Teachers' Training Programme; 28<sup>th</sup> February & 1<sup>st</sup> March, 2011; Jagdish Chandra Basu Sikshak Sikshan Mahavidyalaya, Kolkata-700075.
7. **Quality Education –Innovation Teaching Strategies in Natural Sciences: Dr. Subhas Chandra Bhat;** Proceedings of The National Level Seminar Sponsored by UGC on Quality Education: An Attempt to evolve Innovative Teaching Strategies and Evaluative Techniques in the Perspective of Modern School Education ( Secondary and Higher Secondary Level), B.Ed. Department, Bijoy Krishna Girls; College, Howrah.
8. **Water Pollution –A tremendous Threat to life -Get Rid off: Dr. Subhas Chandra Bhat;** Proceedings of the UGC Sponsored Seminar on Human Dimensions of Environmental Issues and Creative Education, 19<sup>th</sup> & 20<sup>th</sup> April, 2005; Siliguri B.Ed. College, Darjeeling-734433.
9. **Studies on Removal and recovery of Trace amount Chromium(VI) by hydrated Zirconium Oxide: Subhas Chandra Bhat;** International Conference on Chemistry, Industry and Environment (ICCIE-98) ; 9-11<sup>th</sup> February, 1998, Department of Applied Chemistry, Aligarh Muslim University, Aligarh-202002, India.
10. **Hydrated Titanium Oxide(HTO)- a scavenger for lead from water: Uday Chand Ghosh and Subhas Chandra Bhat;** Thirty eighth Annual Covention of Chemists, 2001 by Indian Chemical Society at Jai Narain Vyas University, Jodhpur, Rajasthan, 26-29<sup>th</sup> December, 2001.
11. **Studies on treatment of trace Cr(VI) Removal by Ipomea Aquatica : Subhas Chandra Bhat;** 42<sup>nd</sup> Annual Covention of Chemists, 2005 by Indian Chemical Society and Department of Chemistry, Visva-Bharati University, Santiniketan, West Bengal, 9<sup>th</sup>-13<sup>th</sup> February, 2006.