CURRICULUM VITAE OF DR SUSANTA GHOSH

1. Name: Dr. Susanta Ghosh

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4. Institution: VISVA-BHARATI (A Central University)

5. Date of Birth: 16.07.1968

6. Gender: Male

7. Academic Qualification

S. No.	Degree	Year	Subject	University/Institution
1	B.Sc.	1990	Chemistry (Honours)	The University of Burdwan
2	M.Sc.	1993	Chemistry (Physical)	Visva-Bharati (A Central University)
3	Ph.D.	1998	Chemistry (Physical)	Indian Institute of Technology, Bombay

8. Work experience (in chronological order)

S. No.	Position held	Name of the Institute	From	To
1	Postdoctoral Fellow	Technion-Israel Institute of Technology, Haifa	02.06.1998	15.09.2001
2	Postdoctoral Fellow	Northeastern University, Boston, USA	12.01.2002	24.01..2003
3	Fellow Scientist	Central Glass & Ceramic Research Institute, Kolkata	12.05.2003	13.11.2004
4	Lecturer of Chemistry	Visva-Bharati University	16.11.2004	21.04.2010
5	Visiting Scientist	The George Washington University, Washington DC, USA	09.02.2009	08.02.2010
6	Reader, Integrated Science	Visva-Bharati University	22.04.2010	21.04.2013
7	Associated Professor, Integrated Science	Visva-Bharati University	22.04.2013	Till Date

9. Professional Award, Fellowship

S. No.	Name of Award	Awarding Agency	Year
1	JRF	IIT, Bombay	1994
2	SRF	IIT, Bombay	1996

10. Publications (List of papers published in SCI Journals in year wise descending order)

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1	Bikash Mandal, I. Basumallick and Susanta Ghosh	Synthesis of highly dispersed FePO4 cathode material for rechargeable lithium battery	Advanced Materials Proceedings	Accepted	--	2016
2	Basu M. Daas, Debalina Das, Susanta Ghosh	Ethanol electro-oxidation by Pt/r(GO-ZSM)/graphite foil	Advanced Materials Proceedings	1(2)	156-160	2016
3	Basu M. Daas and Susanta Ghosh	Fuel cell applications of chemically synthesized zeolite modified electrode (ZME) as catalyst for alcohol electro-oxidation - A review	Journal of Electroanalytical Chemistry	783	308–315	2016
4	Bikash Mandal, I. Basumallick and Susanta Ghosh	Synthesis, characterization and electrochemical studies on novel Li_2MZrO_4 (M = Fe, Mn) cathode material for lithium-ion battery	Advanced Materials Letters	7 (2)	150 – 155	2016
5	Bikash Mandal, I. Basumallick and Susanta Ghosh	Electrochemical studies on Li^+/K^+ ion exchange behaviour in $K_4Fe(CN)_6$ cathode material for Li, K-ion battery	J. Chemical Sciences	127 (1)	141-148	2015
6	Debalina Das, I Basumallick and *Susanta Ghosh*,	Methanol and Ethanol Electro-oxidation on to Platinum Loaded Reduced Graphene Oxide Surface for Fuel Cell Application	*British Journal of Applied Science and Technology*	7 (6)	630-641	2015
7	Pradip K Ghosh, Bikash Mandal, *Susanta Ghosh*, I Basumallick	Synthesis and Study of Corrosion Protection Efficiency of Silica Nanoparticles on Aluminium	*British Journal of Applied Science and Technology*	5 (2)	198-209	2015
8	Bikash Mandal, I. Basumallick and Susanta Ghosh	Synthesis, Characterization and Electrochemical Studies on $Li_4Fe(CN)_6$ as Cathode Material for Lithium Batteries	*International Research Journal of Pure & Applied Chemistry*	5(1)	30-42	2015
9	Debalina Das, *Susanta Ghosh* and I Basumallick	Electrochemical Studies on Glucose Oxidation in an Enzymatic Fuel Cell with Enzyme Immobilized on to Reduced Graphene Oxide Surface	*Electroanalysis*	26 (11)	2408-2418	2014
10	Bikash Mandal, I. Basumallick and Susanta Ghosh	One Pot Synthesis of Zr^{4+}doped Carbon Coated $LiFePO_4$ Cathode Material for Rechargeable Li-ion Battery	*British Journal of Applied Science & Technology*	4 (10)	1509-1519	2014
11	Abhik Chatterjee, Susanta Ghosh, I.Basumallick	Electro Oxidation Study of Isopropanol In Surfactant Media	*Research and review in electrochemistry*	4(4)	136-139	2013
12	Subhodip Ghosh, Someswar Chatterjee, Moitree Chatterjee, Susanta Ghosh and I. Basumallick	A microbial fuel cell for starch oxidation	ECS Transactions	41 (11)	37-43	2012

13	Abhik Chatterjee, Moitrayee Chatterjee, Susanta Ghosh, I.Basumallick	Electro-oxidation of isopropanol on to Pt loaded carbon felt surface modified by polyaniline	*International Journal of Emerging Science*	2(1)	123-133	2012
14	Abhik Chatterjee, Moitrayee Chatterjee, Susanta Ghosh, I.Basumallick	Electro-oxidation of ethanol and isopropanol onto Pt-Sn and Pt-Ni surfaces	*Int. Journal of current research and review*	4(2)	13-20	2012
15	Abhik Chatterjee, Moitrayee Chatterjee, Susanta Ghosh, I.Basumallick	Electro-Oxidation Of Ethanol And Isopropanol Onto Ternary Pt-Sn-Ni Surface	*Chemical Technology: An Indian Journal*	6(4)	197-201	2011
16	M. Farmand, D. Jiang, B. Wang, *S. Ghosh*, D.E. Ramaker and S. Licht	Super-iron nanoparticles with facile cathode charge transfer	*Electrochemistry Communication*	13 (9)	909-912	2011
17	S. Licht, *S. Ghosh*, B. Wang, D. Jiang, J. Asercion and H. Bergmann	Nanoparticles Facilitated Charge Transfer and Voltage of a High Capacity VB_2 Anode	*Electrochemical and Solid-State Letters*	14 (6)	A83-A85	2011
18	S. Licht, O. Chitayat, H. Bergmann, A. Dick, H. Ayub, *S. Ghosh*,	Efficient STEP production of hydrogen	*Int. J. Hydrogen Energy*	35 (20)	10867 – 10882	2010
19	S. Licht, B. Wang, *S. Ghosh*, H. Ayub, D. Jiang, J. Ganley	A new solar carbon capture process: solar thermal electrochemical photo (STEP) carbon capture	*J. Phys. Chem. Lett.*	1	2363 - 2368	2010
20	M. Chatterjee, A. Chatterjee, *S. Ghosh* and I. Basumallick	Electro-oxidation of ethanol and ethylene glycol on carbon supported nano Pt and Pt-Ru catalyst in acid solution,	*Electrochimica Acta*,	54 (28)	7299 – 7304	2009
21	Moitrayee Chatterjee, Susanta Ghosh, Pranesh Chowdhury and I. Basumallick	Synthesis of Pt Nano Electrocatalyst For Methanol Oxidation Using Polymer Template	Elec. Chem. Soc. Transactions	19(27)	87-95	2009
22	G. Brahmachari, *S. Ghosh*, S. Mondal, S.K. Jash, L.C. Mandal and A. Mondal	Cyclic voltammetric studies with plant extracts of some traditionally used Indian medicinal plants to evaluate their antioxidant potential	Biochemistry – An Indian Journal	3(1)	32-35	2009
23	B. C. Dalui, I.N. Basumallick and *S. Ghosh*	Zinc-Poly(aniline) rechargeable battery assembled with aqueous electrolyte	*Indian J. Chem. Tech*	15(6)	576-580	2008
24	M.Chatterjee, S. Ghosh and I. N. Basumallick	Fabrication and Characterization of Nano Electrocatalyst (Pt) for Methanol Electro Oxidation	*Elec. Chem. Soc. Transactions*,	16(2)	497-505	2008
25	M. Chatterjee, *S. Ghosh*, I. N. Basumallick,	A novel method of platinum electrodeposition from surfactant bath	*Research and Reviews in Electrochemistry*	1	64-67	2008
26	A. Chatterjee, *S. Ghosh* and I. N. Basumallick	Poly(aniline) modified spongy carbon felt as anode material for ethanol fuel cell	*Research and Reviews in Electrochemistry*	1	4-8	2008

27	P. Chowdhury, B. Saha, B. Singha, *S. Ghosh* and I. N. Basumallick	Effect of acrylic acid doping on the properties of chemically synthesized poly-aniline	*J. Indial Chemical Society*	84	1-5	2006
28	I.Basumallick, P. Roy, A. Chatterjee, A.Bhattacharya, S. Chatterjee and *S. Ghosh*	Organic polymer gel electrolyte for lithium-ion battery	*J. Power Sources*	162 (2)	797 – 799	2006
29	*S. Ghosh*, W. Wen, R.C. Urian, V. Srinivasa-murthi, W.M. Reiff, S. Mukerjee, V. Naschitz and S. Licht	The reversible behavior of $K_2Fe(VI)O_4$ in aqueous media: *In-situ* ^{57}Fe Mössbauer and Synchrotron X-ray spectroscopy studies	*Electrochem. Solid-State Lett.*	6 (12)	A260 – A264	2003
30	S. Licht, V. Naschitz and *S.Ghosh*,	Silver Mediation of Fe(VI) Charge Transfer:Activation of the K_2FeO_4 Super-iron Cathode	*J. Phys. Chem., B*	106(23)	5947-5955	2002
31	S. Licht and *S. Ghosh*,	High Power $BaFe(VI)O_4/MnO_2$ Composite Cathode Alkaline Super-Iron Batteries	*Journal of Power Sources*	109(2)	465-468	2002
32	S. Licht, *S.Ghosh,* H. Tributsch and S. Fiechter	High Efficiency Solar Energy water splitting to generate Hydrogen fuel: Probing RuS_2 Enhancement of Multiple Band Electrolysis	*Solar Energy Materials and Solar Cells*	70(4)	471-480	2002
33	S. Licht, *S. Ghosh* and V. Naschitz	Hydroxide activated $AgMnO_4$ alkaline cathodes, alone and in combination with Fe(VI) super-iron, $BaFeO_4$	*Electrochem. Solid-State Lett.*	4(12)	A209-A212	2001
34	S. Licht, *S. Ghosh* and Q.F. Dong	Charge Storage Effects in Alkaline Cathodes Containing Fluorinated Graphite	*J. Electrochem. Society*	148(10),	A1072-A1077	2001
35	S. Licht, *S. Ghosh*, V. Naschitz and L. Halperin	Fe(VI) Catalyzed Manganese Redox Chemistry:Permanganate and Super-iron Batteries	*J. Phys. Chem. B*.	105(48)	11933-11936.	2001
36	S. Licht, V. Naschitz, L. Lin, J. Chen, *S. Ghosh* and B. Liu	Analysis of Ferrate (VI) compounds and Super-Iron Fe(VI) Battery Cathodes, FTIR, XRD, UV/Vis, ICP, Electrochemical and Chemical, Characterization	*J. Power Sources*	101(2)	167-176	2001
37	S. Licht, V. Naschitz, B. Liu, *S. Ghosh*, N. Halperin, L. Halperin and D.Rozen	Chemical synthesis of battery grade Super-iron barium and potassium Fe(VI) ferrate Compounds	*J. Power Sources*	99(1-2)	7-14	2001
38	S. Licht, V. Naschitz,*S.Ghosh*, L. Lin and B.Liu	$SrFeO_4$: Synthesis, Fe(VI) Characterization and the Strontium Super-iron battery	*Electrochemistry Communication*	3(7)	340-345	2001
39	S. Licht, B. Wang, *S. Ghosh,* J. Li and R. Tel-Vered	Enhanced Fe(VI) cathode conductance and charge transfer: effects on the super- iron battery	*Electrochemistry Communications*	2(7)	535-540	2000
40	S. Licht, B. Wang, *S. Ghosh*, J. Li and	Insoluble Fe (VI) compounds: effects on the	*Electrochemistry Communications*	1(11)	522-526	1999

	V. Naschitz	super-iron battery				
41	S. Licht, B. Wang and *S. Ghosh*	Energetic Iron (VI) Chemistry: The Super-Iron Battery	*Science*,	285 (5430	1039-1042	1999
42	M. Sharon and *S.Ghosh*	Study of photoelectrochemical corrosion of lead oxide in alkaline solution by the rotating ring-disk electrode technique	*J. Solid State Electrochem.*	4(1)	52-54	1999
43	M. Sharon and *S.Ghosh*	Effect of $Fe(CN)_6^{3-}$|ITO interfacial cathodic current on the efficiency of the photoelectrochemical n-PbO| $Fe(CN)_6^{3-/4-}$|ITO cell	*J. Applied Electrochemistry*	29(8)	1015-1017	1999
44	M. Sharon, I. Mukhopadhyay and *S.Ghosh*	Photoelectrochemical laser imaging on anodically prepared α-PbO thin films	*J. Solid State Electrochem.*	3(3)	141-147	1999
45	M. Sharon, Y-S. Lee, C-N. Whang and *S. Ghosh*,	Effect of platinum on the photoelectrochemical behavior of lead oxide thin film	*J. Solid State Electrochem*istry	2(6)	386-393	1998
46	I. Mukhopadhyay, *S. Ghosh* and M. Sharon	Anodic oxidation of Pb-In alloys in alkaline solution: Effect of In on electrochemical and photoelectrochemical behavior of lead oxide	*Solar Energy Materials and Solar Cells*	53(1-2)	83-94	1998
47	I. Mukhopadhyay, *S. Ghosh* and M. Sharon	Surface modification by the potential delay technique to obtain a photoactive PbO film	*Surface Science*	384(1-3)	234-239	1997

11. Conference Papers/News

(a) *S. Ghosh*, I. Mukhopadhyay and M. Sharon, eleventh International Conference on photochemical conversion and storage of Solar energy (IPS-11), July 28 – August 2, 1996, Bangalore, India, PE 25.

(b) *S. Ghosh* and M. Sharon, National Solar Energy Conversion, December 27 – 29, 1996, Jadavpur, Calcutta.

(c) *S. Ghosh*, I. Mukhopadhyay and M. Sharon, third International Meeting on new trends in photoelectrochemistry, May 11 – 14, 1997, The Aspen Lodge, Estes park, Colorado, USA.

(d) *S. Ghosh*, S. Licht and B. Wang, News of the week, The American Chemical Society, August 1, 1999, Volume 77, No. 33, *Superbattery has longer life*.

(e) W. Wen, *S. Ghosh*, R.C. Urian, W.M. Reiff, S. Mukerjee, V. Naschitz and S. Licht, 203rd ECS meeting, April 27th – May 2nd 2003, Paris, France.

(f) *S. Ghosh* and H. S. Maiti, National Seminar on 'Alternative Energy for Pollution-Free Automobiles' 6th – 7th February, 2004, IACS, Kolkata.

(g) I. N. Basumallick and *S. Ghosh*, "An overview on fuel cell development" on '42nd Annual Convention of Chemists' Department of Chemistry, Visva-Bharati, Santiniketan, February 9 – 13th 2006.

(h) M. Chatterjee, *S. Ghosh* and I. Basumallick "Fabrication and characterization of Nano Electrocatalyst (Pt) for Methanol electro-oxidation", 214th ECS Meeting, October 12th – 17th , 2008, Honolulu, HI, USA.

(i) M. Chatterjee, A.Chatterjee, *S. Ghosh* and I. N. Basumallick, "A Pt and PtRu nano catalyst for Ethanol and Ethylene Glycol Electrooxidation", International Conference on Electrochemical Power Systems, 2008, Thiruvananthapuram, India.

(j) M. Chatterjee, S. Ghosh, A. Chatterjee, *S. Ghosh*, I. N. Basumallick, "Prospects of Biofuel Cell in India", National Conference on Renewable Energy, Jodhpur, 2009, India.

(k) M. Chatterjee, *S. Ghosh*, and I. N. Basumallick, "Synthesis of Platinum Nano Electrocatalyst for Methanol Oxidation using Polymer Template", 215th ECS Meeting, San Francisco, 2009, CA, USA.

(l) Debalina Das, I. Basumallick and Susanta Ghosh, *"Electro-Chemical Studies on Glucose Oxidation in an Enzymatic Fuel Cell with Enzyme Immobilised on to Reduced Graphene Oxide Surface"*, *Eleventh ISEAC International Discussion Meet on Electrochemistry and its Applications (11th ISEAC-DM-2014),* February 20-25, 2014, Radisson Blu Hotel, Amritsar, Punjab, India.

(m) Debalina Das, I. Basumallick and Susanta Ghosh, *"Electro-Chemical Studies on Oxygen Reduction Reaction onto Ag and Ag-Ni Nano Particles Loaded Reduced Graphene Oxide Surface in Alkaline Medium",* International Conference on Energy Harvesting Storage and Conversion (IC-EEE 2015), February 5-7, 2015, Kochi, Kerala, India.

(n) Debalina Das, I Basumallick, Susanta Ghosh, "Electro Oxidation of Alcohols on to Platinum Loaded Reduced Graphene Oxide Modified Carbon-Felt Electrode", International Conference on MaterialsScience and Technology 2016 (ICMTech-2016), March 01-04, 2016, University of Delhi, Delhi, India.

(o) Bikash Mandal, Indranarayan Basumallick and Susanta Ghosh, "A Novel Aqueous Li4Fe(CN)6 Cathode and Hydrophobic Ionic Liquid Electrolyte Combined Lithium-ion Battery", ", International Conference on MaterialsScience and Technology 2016 (ICMTech-2016), March 01-04, 2016, University of Delhi, Delhi, India.

12. Other Informations

(a) Completed Projects:

(i) **"**STUDIES ON NANO-COMPOSITE ELECTRO-CATALYST FOR ETHANOL OXIDATION REACTION" sponsored by Department of Science & Technology (DST, SERC), New Delhi – 110 016. Duration: June' 2006 – May' 2009 (**Co-PI**).

(ii) "STUDIES ON CHEAPER AND ENVIRONMENTAL FRIENDLY CATHODE $LiM_xFe_{1-x}PO_4$ (M = Ti^{4+}, W^{6+}, Nd^{5+}, Zr^{4+}, Ga^{3+}, Os^{4+}, V^{3+}, etc)) FOR LITHIUM-ION BATTERY" sponsored by Council of Scientific and Industrial Research (CSIR), New Delhi– 110012.Duration: August' 2008 – July' 2011 (**PI**).

(b) PhD students:

(i) Awarded (Five)

Dr. Moitree Chatterjee,
Dr. Abhik Chatterjee,
Dr. Bharat Chandra Dalui

Dr. Bikash Mandal,
Dr. Pradip Kumar Ghosh

(ii) Ongoing (one)

Mr. Basu M Daas