1. Name	**DR. PULAKESH BERA**
2. Residential Address	**Bhumisuta Apartment, 154/3 Mohendra Bhattacharya Road, Santragachi, Howrah-711104, West Bengal.** **e-mail: pbera.pbc.chem@gmail.com**

3. Educational Qualification

Exam passed	**Institute/ University**	**Major Subjects**	**Year**		
Ph. D.	*University of Calcutta*	Coordination Chemistry	2000		
M. Sc.	*University of Kalyani*	Chemistry (Inorganic spl.)	1991		
B. Sc.	*Vidyasagar University*	Chemistry (Hons.) Physics, Mathematics	1989		

4. (a) Present position hold	Associate Professor of Chemistry, Panskura Banamali College (Govt aided) Affiliated to Vidyasagar University, Midnapore, West Bengal.
5. (c) Date of joining to the post	03.03.1997
6. Post Doctoral Research Experience:	**Korea Research Institute of Chemical Technology (KRICT)(Sep. 2007 to Sep. 2009)**
7. Teaching Experiences	**20 years**

8. Ph. D Thesis Title: "Studies in the transition metal complexes of heterocyclic thiosemicarbazones and related ligands"

9. Post Doctoral Research work: Synthesis and characterization of nanomaterials for optoelectronics devices and theranostic applications.

10. Participation in WORKSHOP, SEMINAR AND SYMPOSIUM : National: 15; International: 10

11. Research Projects

No.	Funding Agency with Ref.	Title of the Project	Number of Research Fellow	Remark
(i)	**UGC minor (**PSW 078 dated 03.03.2005)	"Synthesis and spectroscopic characterization of palladium (II) complexes with pyrazolyl thiosemicarbazones and dithiocarbazates"	**Nil**	**Completed minor**
(ii)	**CSIR major project** (Sanc.no.: 01(2534)/11/EMR-II Dated 12.12.2011)	Single Molecular Precursor Route to Synthesis of Semiconductor Nanocrystals for Photovoltaic Application	**JRF(1), Research Astt.(1)**	**Completed**
(iii)	**UGC major Project F. No. 42-280/2013 (SR) dated 12.3.2013**	"Design, development and characterization of mesoporous functional metal–organic framework (MOF)"	**Project Fellow(1)**	**Ongoing Project**
(iv)	**CSIR major project** (Sanc.no.: Ref. project No. 1(2858)/16/EMR-II Dt. 12.5.2016)	**"**Development of Functional Homo and Hetero Structured Inorganic Nanomaterials from Novel Single-source Precursors for Potential Applications"	**SRF(1)**	**Ongoing Project**

12. Ph. D Guidance: 03 (Registered for degree) and 02 (Working, Registration due)

13. Publications Dr. Pulakesh Bera

(i) **A pyrazolyl based thiolato single-source precursor for the selective synthesis of isotropic copper deficient copper(I) sulfide nanocrystals: Synthesis, optical and photocatalytic activity,** *Gopinath Mondal, Ananyakumari Santra, Pradip Bera, Moumita Acharjya, Sumanta Jana, Dipankar Chattopadhyay, Anup Mondal, Sang Il Seok, Pulakesh Bera,* Accepted Manuscript. J. of Nanoparticle Research, July 2016

(ii) Catechol oxidase mimetic activity of copper(I) complexes of 3,5-dimethyl pyrazole derivatives: Coordination behavior, X-ray crystallography and electrochemical study

Ananyakumari Santra, Gopinath Mondal, Moumita Acharjya, Pradip Bera, Anangamohan Panja, Tarun K. Mandal, Partha Mitra, Pulakesh Bera, Polyhedron, 2016, 113, 5-15. Doi: 10.1016/j.poly.2016.03.05

(iii) **New pyrazolyl dithioate function in the precursor for the shape controlled growth of CdS nanocrystals: optical, photocatalytic activities**
Gopinath Mondal, Moumita Acharjya, Ananyakumari Santra, Pradip Bera, Sumanta Jana[b], Nimai Chand Pramanik, Anup Mondal and Pulakesh Bera, New J Chemistry, 2015, 39, 9487-9496.

(iv) **Single-source mediated facile electrosynthesis of p-Cu_2S thin films on TCO (SnO2:F) with enhanced photocatalytic activities**
Gopinath Mondal, Sumanta Jana, Ananyakumari Santra, Moumita Acharjya, Pradip Bera, Dipankar

Chattopadhyay, Anup Mondal and Pulakesh Bera, RSC Advance, 2015, 5, 52235-52242, DOI: 10.1039/c5ra06102d.

(v) **Precursor-driven selective synthesis of hexagonal chalcocite (Cu_2S) nanocrystals: structural, optical, electrical and photocatalytic properties** Gopinath Mondal, Pradip Bera, Ananyakumari Santra, Sumanta Jana, Tarak Nath Mandal, Anup Mondal, Sang Il Seok and Pulakesh Bera, ***New J. Chem.***, 38, 4774-4782, 2014. DOI: 10.1039/c4nj00584h

(vi) **Photocatalytic activity of galvanically synthesized nanostructure SnO_2 thin films**
Sumanta Jana, Bibhas Chandra Mitra, Pulakesh Bera, Moushumi Sikdar, Anup Mondal**, *Journal of Alloys and Compounds,*** 602, 42-48, 2014. http://dx.doi.org/10.1016/j.jallcom.2014.02.182

(vii) Nickel oxide thin film from electrodeposited nickel sulfide thin film: peroxide sensing and photo-decomposition of phenol

Sumanta Jana, Subhasis Samai, Bibhas C. Mitra, Pulakesh Bera and Anup Mondal, ***Dalton Trans.,*** 43, 13096-13104, 2014. DOI: 10.1039/c4dt01658k

(viii) Synthesis, characterization and electrocatalytic activity of SnO_2, Pt-SnO_2 thin films for methanol oxidation

Sumanta Jana, Gopinath Mondal, Bibhas Chandra Mitra, Pulakesh Bera and Anup mondal, ***Chemical Physics***, 439, 44-48, 2014. Available online – 14 May, 2014

(ix) Synthesis of isotropic PbS nanoparticles from the single source precursor, highly coordinative lead complex of S-methyl dithiocarbazate, $[Pb\{S=C(SCH_3)NHNH_2\}(NO_3)_2]$
Gopinath Mondal, Ananyakumari Santra, Sang Il Seok and Pulakesh Bera, ***J. Nanoscience Letter,*** 4, 35-39, 2014

(x) Nanocrystalline copper sulfide of varying morphologies and stoichiometries in a low temperature solvothermal process using a new single-source molecular precursor
Pulakesh Bera and Sang Il Seok, *Soild State Sciences, 14, 1126-1132, 2012, Available online 7 June 2012*. http://dx.doi.org/10.1016/j.solidstatesciences.2012.05.027

(xi) **Facile ammine-assisted synthesis of β-In_2S_3 nanostructures from a new single-source precursor derived from S-methyl dithiocarbazate**
Pulakesh Bera and Sang Il Seok, *Journal of Nanoparticle Research, 13, 1889-1896, 2011, Available online 6 May 2010*. DOI 10.1007/s11051-010-9940-31.12

(xii) **Synthesis of nanocrystalline CdS from cadmium(II) complex of S-benzyldithio carbazate as a precursor**

Pulakesh Bera, Chong-Hyeak Kim and Sang Il Seok, *Solid State Sciences*, 12, 1741-1747, 2010. doi:10.1016/j.solidstatesciences.2010.07.024

(xiii) **Synthesis, characterization and coordinating properties of a NNS donor system, 5-Methyl-3-formylpyrazole-3-pyrrolidinylthiosemicarbazone (HMPzPyr), and it's cobalt(III), nickel(II) and copper(II) complexes**
Pulakesh Bera* and Nitis Chandra Saha, *Journal of Indian Chemical Society*, 87, 919-926, 2010.

(xiv) **Facile synthesis of nanocrystalline wurtzite Cu–In – S by amine-assisted decomposition of precursors**

Pulakesh Bera and Sang Il Seok, *Journal of Solid State Chemistry*, 183, 1872-1877, 2010. doi:10.1016/j.jssc.2010.06.006

(xv) **High-yield synthesis of quantum-confined CdS nanorods using a new dimeric cadmium(II) complex of S-benzyldithiocarbazate as single-source molecular precursor**

Pulakesh Bera, Chong-Hyeak Kim, Sang Il Seok, *Solid State Sciences,* 12, 532-535, 2010. doi:10.1016/j.solidstatesciences.2009.12.020

(xvi) **Cu_2S-deposited mesoporous NiO photocathode for a solar cell**

Jae Hui Rhee, Yong Hui Lee, Pulakesh Bera and Sang Il Seok, *Chemical Physics Letters*, 477, 345-348, 2009. doi:10.1016/j.cplett.2009.07.014

(xvii) **Synthesis, spectroscopy and thermal behavior of new lead(II) complexes derived from S-methyl/benzyldithiocarbazates (SMDTC/SBDTC): X-ray crystal structure of [Pb(SMDTC)$(NO3)_2$]**

Pulakesh Bera, Chong-Hyeak Kim, Sang Il Seok, *Inorganica Chimica Acta*, 362, 2603-2608, 2009. doi:10.1016/j.ica.2008.11.027

(xviii) **Synthesis and Spectroscopic Characterization of New Iron(III) Complexes of S-Alkyl/Aryl Dithiocarbazates of 5-Methyl-3-Formylpyrazole and 5-Methyl-3-Formylpyrazolyl-thiosemicarbazones**

P. Bera*, I. C. Baek, S. I. Seok and N. Saha, *Russian Journal of Coordination Chemistry*, 35(7), 526-533, 2009. DOI: 10.1134/S1070328409070100

(xix) **Synthesis, spectroscopic characterization and thermal behavior of cadmium(II) complexes of S-methyldithiocarbazate (SMDTC) and S-benzyldithiocarbazate (SBDTC): X-ray crystal structure of $[Cd(SMDTC)_3]$ $2NO_3$**

Pulakesh Bera, Chong-Hyeak Kim and Sang Il Seok, *Polyhedron*, 27, No. 17, 3433-3438, 2008. doi:10.1016/j.poly.2008.07.039

(xx) **Synthesis and spectral properties of palladium(II) complexes derived from 5-methyl-3-formylpyrazole thiosemicarbazones and S-alkyl/aryl dithiocarbazates**

Pulakesh Bera, *Journal of Indian Chemical Society*, 84, 544-547, 2007

(xxi) **Electrochemical studies on copper(II) complexes of ^{4}N- alkyl/arylthiosemicarbazones and S-alkyl/aryl dithiocarbazates of 5-methyl-3-formylpyrazole**

Pulakesh Bera* and Nityananda Saha, *Journal of Indian Chemical Society*, 84, 227-229, 2007

(xxii) **Synthesis, characterization and coordination properties of 5-methyl-3-formylpyrazole ^{4}N-benzylthiosemicarbazone(HMPzNB): Cobalt(III), nickel(II), and Copper(II) complexes with NNS donor system**

Pulakesh Bera* and Nityananda Saha, *Journal of Indian Chemical Society*, 84, 130-134, 2007

(xxiii) **Synthesis and spectroscopic characterisation of cobalt(III) complexes with *S*-benzyl-*β*-*N*-(5-methylpyrazole-3-yl)methylenedithiocarbazate (H_2L): X-ray structures of $[Co(HL)_2]NO_3$·EtOH (1) and $[Co(HL)(L)]·H_2O$ (2)**

Pulakesh Bera, Ray J. Butcher, Siddhartha Chaudhuri, Nityananda Saha, *Polyhedron*, 21, 1–6, 2002. doi:10.1016/S0277-5387(01)00933-0

(xxiv) **New iron(III) complexes with thiosemicarbazones derived from 5-methyl-3-formylpyrazole**

Pulakesh Bera, Nityananda Saha, Sanjay Kumar, D. Banerjee and R. Bhattacharya, *Transition Metal Chemistry*, 24, 425-430 (1999). doi: 10.1023/A:1006919018997

(xxv) **Synthesis and spectral characterization of chloro{S-benzyl-*β*-N-(5-methylpyrazole-3-yl)ethoxymethylenedithiocarbazato}copper(II): Derived from S-benzyl-*β*-N-(5-methylpyrazole-3-yl)ethoxymethylenedithiocarbazide**

Pulakesh Bera, Ray J Butcher and Nityananda Saha, *Chemistry Letters*, 559-560, 1998.

(xxvi) **Synthesis, spectroscopy and X-ray crystal structure of a copper(II) complex with potentially therapeutic S-benzyl dithiocarbazate of 5-methyl-3-formyl pyrazole : a novel instance of copper(II) promoted nucleophilic substitution on azomethine function**

P Bera, R. J. Butcher and N. Saha, *Journal of Inorganic Biochemistry*, 67(1), 68, 1997. doi:10.1016/S0162-0134(97)89949-7

(xxvii) **Synthesis and spectroscopic characterisation of cobalt(Ill) complexes with S-benzyl dithiocarbazate of 5-methyl-3-formyl pyrazole (HMPzSB) : X-ray crystal structure of [Co(MPzSB)$_2$]Cl**

Anita Mitra, Tapati Banerjee, P. Roychowdhury, Siddharth Chaudhuri, Pulakesh Bera and Nityananda Saha, *Polyhedron*, 16(21), 3735-3742, 1997.

Patent Work

Korean patent no. 0940009 registered in the year 2010.