Curriculum Vitae

A. Name and full address: **Dr. Bamaprasad Bag**
Colloids and Materials Chemistry Department
CSIR-Institute of Minerals and Materials Technology,
P. O.: R. R. L., Bhubaneswar-751 013, Odisha
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B. Institute affiliation: CSIR-Institute of Minerals and Materials Technology, (Formerly, Regional Research laboratory), Bhubaneswar

C. Present position: Senior Scientist (CSIR) and Asst. Professor (AcSIR)

D. Date of Birth : 14-05-1975

E. Gender : Male

F. Academic Qualification

Sl. No.	Degree	Subjects	Board / University	Year
1.	Ph. D.	Chemistry	Indian Institute of Technology, Kanpur	2005
2.	M. Phil.	Inorganic chemistry	University of Hyderabad, Hyderabad	2000
3.	M. Sc.	Chemistry	University of Hyderabad, Hyderabad	1998
4.	B. Sc.	Chemistry (H), Physics, Math.	Ravenshaw (Autonomous) college, Cuttack, Orissa	1995
5.	+2	Physics, Mathematics, Chemistry, Biology.	Council of Higher Secondary Education, Orissa	1992
6.	10^{th}	Science, Literature, Mathematics	Board of secondary Education, Orissa	1990

Post Doctoral Research Experience:

Research Topic: Constitutional Dynamic and adaptive molecules
Supervisor: Prof. Jean-Marie Lehn,
Institut de Science et d'Ingénierie Supramoléculaires,
Universite de Strasbourg, France.
Duration: 14-07-2011 to 13-07-2012

Academic details:

- **Ph. D.** (2005): Department of Chemistry, Indian Institute of Technology Kanpur.
  Title: "*Transition Metal Ion Induced Fluorescence Modulation in Cryptand and Acyclic Receptor Based Signaling Systems*."
  Supervisor: Prof. Parimal K. Bharadwaj

- **M. Phil.** (Chemistry, 2000): School of Chemistry, University of Hyderabad.
  Title: "*Structural and Fluorescence Studies of Some Ligands and Their Complexes*".
  Supervisor: Prof. P. S. Zacharias

- **M. Sc.** (Chemistry, 1998): School of Chemistry, University of Hyderabad.
  Project title: "*Asymmetric Epoxidation by using Chiral Reagents*"
  Supervisor: Prof. D. Basavaiah.

G. **Work experience** (in chronological order).

Positions held	Name of the Institute	Period
Scientist	CSIR-Institute of Minerals and Materials Technology, Bhubaneswar	01-11-2006 to 31-10-2010
Sr. Scientist	CSIR-Institute of Minerals and Materials Technology, Bhubaneswar	01-11-2010 till date
Assistant Professor	Academy of Scientific and Industrial Research (AcSIR), CSIR, New Delhi	January, 2011 -Till date

H. **Research Experience/Interests**

- Host-guest chemistry for molecular recognition
- fluorescence signaling and bio-imaging
- Metal ion detection, Cyto-/Phyto-toxicological assessment of bio-accumulation
- Luminescent and colourant particles
- Self-healing and adaptive polymer with luminescent marker

I. **Thesis/Dissertation Supervised**:

Ph. D. (Chemical Sciences): **04** (awarded); **04** (continuing under AcSIR, IMMT)
M. Sc.: **09** (Nine)

Doctoral thesis (Awarded):

- ***Rhodamine-B based chemosensors for detection of mercury ion and their applications*** (Dr. Ajoy Pal, 2015, AcSIR, Role: Supervisor)

- ***Rhodamine based luminescent probes for metal ion detection through FRET mediated signaling*** (Dr. Biswonath Biswal, 2015, AcSIR, Role: Sopervisor)

- ***Synthesis and reactivity of some functional coordination compounds*** (Dr. Prakash Dhar, 2017, Utkal University, Role: Co-supervisor)

- ***Synthesis and Characterization of carbon quantum dots/ Reduced graphene oxides for electrochemical energy storage applications*** (Dr. Aneeya Kumar Samantara, 2017, AcSIR, Role: Co-supervisor).

M. Sc. dissertations:

- *Synthesis of aminoethyl -rhodamine derivatives for detection of metal ions* (Nivedita Barik, 2015)
- *Studies on bio-absorption and bioimaging of lead, mercury and copper ions in microalgae Scenedesmus sp. And Chlorella sp. using rhodamine based probes* (Pragnasmita Mohapatra, 2015)
- *In-vitro analysis of effect of mercury in Desmodium gangeticum, its uptake potential and rhodamine based bioimaging for mercury detection* (Monalisha Konar, 2015)
- *Synthesis of stable cis-isomer of 4-(4-Hydroxyphenylazo)-pyridine in the crystalline form.* (Arpan Manta, 2013).
- *Synthesis of rhodamine-terpyridine conjugate as chemosensor* (Suryadipta Hazra, 2013)
- *Synthesis of a rhodamine-6G derivative as chemosensor for Hg(II)ion* (Shraban Kumar Sahoo, 2013)
- *Synthesis of some rhodamine and naphthalene based derivatives as metal ion sensor* (Suvendu Kumar Barik, 2013)
- *Performance of microbial fuel cells for electricity generation and wastewater treatment: influence of inoculum Source* (P. Panda, 2009).
- *Studies on development of in-situ microbial fuel cell cum paddy rice field for electricity generation* (P. Rout, 2009).

J. **List of publications**:

Sl. No.	Author(s)	Title of the paper	Name of the Journal	Year, volume page(s)
43.	D. Mallick, B. Biswal, M.Thirunavoukkarasu, R. Mohanty and B. Bag	Signalling probes appended with two rhodamine derivatives: inter-component preferences, Fe(III)-ion selective fluorescence responses and bio-imaging in plant species	*New J. Chem.*	**2017**, 41, 15144-15156
42.	B. Biswal, A. Pal and B. Bag	Two-step FRET mediated metal ion induced signalling responses in a probe appended with three fluorophores	*Dalton Trans.*	**2017**, 46, 8975-8991
41.	B. Biswal, D. Mallick and B. Bag	Signaling preferences of substituted pyrrole coupled six-membered rhodamine spirocyclic probes for Hg^{2+} ion detection	*Org. Biomol. Chem.*	**2016**, 14, 2241-2248
40.	K. C. Behera and B. Bag	Switch in 'turn-on' signaling preferences from Fe(III) to Hg(II) as a function of solvent and structural variation in rhodamine based probes	*Dye Pigm.*	**2016**, 135, 143-153
39.	B. Biswal, D. Mallick, M.Thirunavoukkarasu, R. Mohanty and B. Bag	A pyridine and pyrrole coupled rhodamine derivative for Co(II) ion detection and its imaging application in plant tissues	*Sens. Actuator. B*	**2016**, 232, 410-419
38.	P. C. Behera, B. Bag and M. Ghosh	Anti-urolithiatic activity of hydrogenated naphthol isolated from *Aerva lanata* (L.) Juss. flower extract	*Ind. J. Trad. Knowl.*	**2016**, 15, 453-459

37.	T. K. Behera, S. C. Sahu, B. Satpati, B. Bag, K. Sanjay and B. K. Jena	Branched platinum nanostructures on reduced graphene: an excellent transducer for nonenzymatic sensing of hydrogen peroxide and biosensing of xanthine	*Electrochim. Acta*	**2016**, 206, 238-245
36.	A. K. Samantara, S. Maji, A. Ghosh, B. Bag, R. Dash and B. K. Jena	Good's buffer derived highly emissive carbon quantum dots: excellent biocompatible anticancer drug carrier	*J. Mater. Chem. B*	**2016**, 4, 2412-2420
35.	A. Pal and B. Bag	Dual mode signaling responses of a rhodamine based probe and its immobilization onto a silica gel surface for specific mercury ion detection	*Dalton Trans.*	**2015**, 44, 15304-15315
34.	P. C. Dhar, A. Pal, P. Mohanty and B. Bag	Colorimetric detection of Cu(II) ion with a 1,3-bis-azachalcone	*Sens. Actuator. B*	**2015**, 219, 308-314
33.	B. Biswal and B. Bag	Photophysical investigations of a FRET-based bifluorophoric conjugate and its Hg(II) specific ratiometric 'turn-on' signaling	*J. Photochem. Photobiol. A*	**2015**, 311, 127-136
32.	V. Nagarajan and B. Bag	pKa Modulation in rhodamine based probes for colorimetric detection of picric acid	*Org. Biomol. Chem.*	**2014**, *12*, 9510-9513
31.	A. Pal and B. Bag	A rhodamine based "off-on" probe for selective detection of Hg(II) and subsequent L-proline and 4-hydroxyproline discrimination	*RSC Adv*.	**2014**, *4*, 10118-10122
30.	A. K. Samantara, S. C. Sahu, B. Bag, B. Jena and B. K. Jena	Photoelectrocatalytic oxidation of NADH by visible light driven plasmonic nanocomposites	*J. Mater. Chem. A*	**2014**, *2*, 12677-12680
29.	B. Biswal and B. Bag	Switching selectivity between Pb^{2+} and Hg^{2+} ions through variation of substituents at xanthene end; 'turn-on' signalling responses by FRET modulation	*RSC Adv*.	**2014**, *4*, 33062-33073
28.	N. R. Panda, B. S. Acharya, P. Nayak and B. Bag	Studies on growth morphology, UV absorbance and luminescence properties of sulphur doped ZnO nanopowders synthesized by the application of ultrasound with varying input power	*Ultrasonic. Sonochem*.	**2014**, *21*, 582-589
27.	B. Biswal and B. Bag	Preferences of rhodamine coupled (aminoalkyl)-piperazine probes towards Hg(II) ion and their FRET mediated signaling	*Org. Biomol. Chem*.	**2013**, *11*, 4975-4992
26.	A. Pal, B. Bag, M.Thirunavoukkarasu, S. Pattanaik and B. K. Mishra	Solvent mediated tuning of selectivity in a rhodamine based probe and bioimaging for Pb(II) detection in plant tissues	*RSC Adv*.	**2013**, *3*, 18263-18266
25.	A. K. Yadav, P. Panda and B. Bag	The Performance Improvement of Microbial Fuel Cells Using Different Waste-Sludge as an Inoculum	*Energy Sour. A*,	**2013**, *35*, 1828-1835
24.	B. Bag and B. Biswal	Alteration of selectivity in rhodamine based probes for Fe(III) and Hg(II) ion induced dual mode signalling responses	*Org. Biomol. Chem.*	**2012,** *10*, 2733-2738
23.	A. Pal and B. Bag	Hg(II) ion specific dual mode signalling in a thiophene derivatized rhodamine based probe and their complexation co-operativity	*J. Photochem. Photobiol. A*	**2012,** *240*, 42-49
22.	S. K. Pradhan, B. Satpati, B. Bag T. Sharda	Structural and Optical Characterization of Thick and Thin Polycrystalline diamond Films deposited by Microwave Plasma Activated CVD	*Bull. Mater. Sci.*	**2012**, *35*, 1–5

21.	S. Majumder, D. Paramanik, V. Solanki, B. Bag and S. Varma	Bandgap tailoring of rutile TiO_2, 110… via surface patterning with electron cyclotron resonance sputtering	*Appl. Phy. Lett.*	**2011**, *98*, 053105, 1-5
20.	B. Bag and A. Pal	Rhodamine based probes for metal ion induced chromo-/ fluorogenic dual signaling and their selectivity towards Hg(II) ion	*Org. Biomol. Chem.*	**2011**, *9*, 4467-4480
19.	B. Bag, B. Das and B. K. Mishra	Geometrical Optimization of Xanthate Collectors with Copper ions and their Response to Flotation	*Miner. Engg.*	**2011**, *24*, 760-765.
18.	J. Mohapatra, D. K. Mishra, P. K. Mishra, B. P. Bag, S. K. Singh	Enhancement of Ferromagnetism in nanocrystalline $Zn_{1-x}Cu_xO$ ($0.03 \leq x \leq 0.07$)	*NANO: Brief Rep. Rev.*	**2011**, *6*, 387–393
17.	B. Bag, A. Pal, and B. Biswal	Alteration in metal ion induced fluorescence signaling responses of benzofurazan appended acyclic amino-receptor through its structural modification	*J. Lumin.*	**2011**,*131*, 1121-1130
16.	A. Rana, M. Bera, D. Chowdhuri, B. Bag, R. J. Butcher, S. Dalai	3D purely inorganic lead azide coordination polymer constructed by exclusive *end-to-end* azido binding	*J. Mol. Str.*	**2011**, *990*, 102-109
15.	B. Bag and A. Pal	Water induced chromogenic and fluorogenic signal modulation in bi-fluorophore appended acyclic amino-receptor system	*Org. Biomol. Chem.*,	**2011**, *9*, 915-925
14.	D. Behera, B. Bag and R. Sakthivel	Synthesis, Characterization and Photoluminescence property of modified Titania	*Ind. J. Pure Appl. Phys.*	**2011**, *49*, 754-758
13.	D. Sahu, B. S. Acharya, B. Bag, T. Basanta and R. K. Gartia	Probing the surface states in Nano ZnO powder synthesized by sonication method: Photo and Thermoluminescence studies	*J. Lumin.*,	**2010,** *130*, 1371-1378
12.	B. Bag, B. Das, B. K. Mishra	Geometrical Optimization of Structure of Carboxylic Acids vis-à-vis their Effectiveness towards Iron Ore Floatation	*Miner. Metallur. Process.*	**2009**, *26*, 226-232
11.	K. K. Sadhu, B. Bag, P. K. Bharadwaj	Transition Metal-Induced Fluorescence Resonance Energy Transfer in a Cryptand Derivatized with Two Different Fluorophores	*Inorg. Chem.*	**2007**, *46*, 8051-8058
10.	K. K. Sadhu, B. Bag, P. K. Bharadwaj	A Multi-receptor Fluorescence Signaling System Exhibiting Enhancement Selectively in Presence of Na(I) and Tl(I) Ions	*J. Photochem. Photobiol. A,*	**2007**, *185*, 231-238
9.	B. Bag, P. K. Bharadwaj	Effect of Methylation to an Ethylenediamine Receptor-Based Fluorescence Signaling System: Solvent Dependence, Metal Ion Selectivity and Photophysical Studies	*J. Lumin.*,	**2007**, *126*, 27-36
8.	B. Bag, P. Mukhopadhyay, and P. K. Bharadwaj	Fluorescence Signaling Systems with a Cryptand Receptor Incorporating Electron-withdrawing Groups: Metal Ion Specificity and Solvent Dependence	*J. Photochem. Photobiol. A,*	**2006**, *181*, 215-225
7.	B. Bag, P. Mukhopadhyay, P. K. Bharadwaj	Translocation of a Metal Ion in a Laterally Non-Symmetric Aza Cryptand	C*urr. Sci.*,	**2006**, *9*, 1166-1175
6.	B. Bag, P. K. Bharadwaj	Attachment of Electron-Withdrawing 2,4-dinitrobenzene Groups to a Cryptand Based Receptor for Cu(II)/H^+ Specific Exciplex and Monomer Emissions	*Org. Lett.*	**2005**, *7*, 1573-1576
5.	B. Bag, P. K. Bharadwaj	Perturbation of the PET Process in "Fluorophore–Spacer-–Receptor" Systems Through Structural Modification: Transition Metal Induced Fluorescence Enhancement and Selectivity	*J. Phys. Chem. B*	**2005**, *109*, 4377-4390

4.	B. Bag, P. K. Bharadwaj	Fluorescence Enhancement of A Signaling System in the Simultaneous Presence of A Transition and An Alkali Metal Ions: A Potential AND Logic Gate	*Chem. Commun.*	**2005**, 513-515
3.	B. Bag, P. K. Bharadwaj	Fluorescence Enhancement with Different Ionic Inputs in a Cryptand-based Multi-Receptor Signaling System	*J. Chem. Sci.,*	**2005**, *117*, 145-151
2.	B. Bag, P. K. Bharadwaj	Cryptand Based Fluorescent Signaling Systems: High Enhancement with Transition, Inner-Transition as well as Heavy Main-Group Metal Ions	*J. Lumin.*,	**2004**, *110*, 85-95
1.	B. Bag, P. K. Bharadwaj	Attachment of an Electron–Withdrawing Fluorophore to a Cryptand for Modulation of Fluorescence Signaling	*Inorg. Chem.*	**2004**, *43*, 4626-4630.

K. **Book Chapters/General articles**

Sl. No.	Author(s)	Title of the Chapter	Name of the Book/edited volumes, year, page
1.	B. Bag and P. K. Bharadwaj	Transition Metals-Based Nanomaterials for Signal Transduction	*Encyclopedia of Nanoscience and Nanotechology* **2004**, *10*, 519
2.	B. Bag and P. K. Bharadwaj	Fluorescent PET Signaling Systems for the Detection of Transition /Heavy Metal Ions of Biological and Environmental Importance	*Photo/Electrochemistry & Photobiology in the Environment, Energy and Fuel*, **2007**, 201 (ISBN: 978-81-308-0159-9)

L. **Presentation/involvements in Conference/ Symposium**:

Sl. No	Authors	Title of the article	Date /Year	Name of the Conference	Venue
31.	K. C. Behera, B. Bag	Detection of water component in organic solvent through photophysical signaling	Jan. 3-8, 2018	14th DAE-BRNS Biennial Trombay Symposium on Radiation & Photochemistry (TSRP-2018)	BARC, Mumbai
30.	B. Bag	Chemosensing with rhodamine based probes: Detection of bio-accumulated metal ions in plant species	July 13-16, 2017	21st Chemical Research Society of India (CRSI) National and 11th CRSI-RSC Symposium in chemistry(CRSI-NSC)	IICT, Hyderabad
29.	B. Bag	A tri-fluorophoric chemosensor and its metal ion induced two-step FRET based signaling (Invited oral presentation)	March 2-4, 2017	12th National Symposium on Radiation and Photochemistry (NSRP-2017)	Manipal University, Manipal
28.	K. C. Behera, V. Nagarajan, K. Sanjay and B. Bag	Selective Detection of Picric Acid among Nitro-Aromatics with Rhodamine Based Probes: The pKa Driven Colorimetric Signaling	Feb. 02-05, 2017	20th Chemical Research society of India (CRSI) National and 11th CRSI-RSC Symposium in chemistry(CRSI-NSC)	Gauhati University, Guwahati
27.	S. K. Mishra and B. Bag	Alkylated Rhodamine Hydrazide Based Probes For Selective Cu(II) Detection: Effect Of Alkyl Chain Length And Solvent Medium	Feb. 02-05, 2017	20th Chemical Research society of India (CRSI) National and 11th CRSI-RSC Symposium in chemistry(CRSI-NSC)	Gauhati University, Guwahati
26.	D. Mallick and B. Bag	Metal ion induced photophysical behaviour in bis-Rhodamine derivatives: FRET modulation and effect of linker	Feb. 24-26, 2017	International Conference on Recent advances in Material Chemistry (RAMC-2017)	Utkal University, Bhubaneswar

25.	K. C. Behera and B. Bag	Xanthene based probes for metal ion detection: Role of signaling subunits and their contributions in selectivity	Feb. 24-26, 2017	International Conference on Recent advances in Material Chemistry (RAMC-2017)	Utkal University, Bhubaneswar
24.	B. Bag	Amino-alkyl-rhodamine derivatives as chemo-sensors for mercury ions	Sept. 4-8, 2016	2nd International Caprica Conference on Chromogenic and Emissive Materials (IC3EM 2016)	Caprica, Lisbon, Portugal
23.	B. Bag	Rhodamine functionalized silica: Organic-inorganic hybrid materials for selective mercury ion detection and subsequent extraction	Nov. 14, 2015	National Seminar on Recent Advancement in Material Sciences 2015 (RAIMS-15) (Invited contribution)	Department of Chemistry, VSSUT, Burla, Odisha,
22.	K. C. Behera, K. Sanjay, B. Bag	Amplified photophysical signals of N,N-dimethyl aminoethyl rhodamine for Hg(II) ion detection	July 23-25, 2015	10th Mid-Year Chemical Research society of India (CRSI) Symposium in chemistry	NIT, Trichy
21.	D. Mallick, B. Biswal, K. Sanjay, B. Bag,	Metal ion induced FRET modulation in a bis-Rhodamine derivative	July 23-25, 2015	10th Mid-Year Chemical Research society of India (CRSI) Symposium in chemistry	NIT, Trichy
20.	B. Bag	Attended /Involved	Nov. 19-21, 2015	Challenges in Organic Materials and Supramolecular Chemistry (ISACS18), RSC	Indian Institute of Science, Bangalore.
19.	B. Bag	Attended /Involved	July 3-5, 2015	International conference on Supramolecular Chemistry…and beyond !!	Institut de Science et d'ingénierie supramoléculaires, Université de Strasbourg, Strasbourg, France
18.	B. Bag	Signaling of substituted amino-alkyl-rhodamines with Hg(II) ion selectivity: stereo-electronic and medium contributions	Nov. 14-15, 2014	Recent Trends in Chemical Sciences (RETICS-2014) (Invited Contribution)	Sambalpur University, Sambalpur
17.	B. Bag, A. Pal	A rhodamine based probe with Visible and NIR output signaling for respective Hg(II) and Cu(II) ion detection	Feb. 05-08, 2015	9th CRSI-RSC joint symposium and 17th-CRSI NSC symposium in chemistry	National Chemical Laboratory, Pune
16.	B. Bag	Attended /Involved	Feb. 26-28, 2014	International conference on emerging materials and processes (ICEMP-2014)	CSIR-IMMT, Bhubaneswar
15.	B. Bag	Substituted amino-alkyl-Rhodamines, tuning their selectivity towards mercury ion detection and applications	Feb. 06-09, 2014	8th CRSI-RSC joint symposium and 15th-CRSI NSC symposium in chemistry	IIT Bombay, Mumbai
14.	A. Pal, B. Bag	Rhodamine coupled silica for selective detection of Hg(II) ion and subsequent differentiation of proline derivatives	Aug. 12-13, 2013	International conference on frontiers in energy, environment, health, and materials research" (EEMR-2013)	CSIR-IMMT, Bhubaneswar

13.	B. Bag	Rhodamine derivatives for Hg(II) ion detection	Mar. 24, 2013	National Seminar on Material Chemistry and Catalysis (MCC-V), (Invited Contribution)	North-Orissa University, Baripada, Odisha;
12.	B. Bag	Supramolecular design of probes for detection and remediation in pharmaceutical domain	Sept. 24, 2012	Impetus to organic synthesis: Approaches for Pharmaceutical chemistry (Invited Contribution)	BIT-Mesra, Ranchi
11.	B. Bag	Rhodamine derivatives: Fluorescent colourant probes for selective metal ion detection	Oct. 11-12, 2012	National Symposium on Functional Application of Colourants (NSFAC), (Invited contribution)	Institute of Chemical Technology, Mumbai
10.	B. Bag, A. Pal	Rhodamine based probes for selective mercury ion detection in solution as well as on surface modified silica support	Jan. 31-Feb. 03, 2013	7^{th} CRSI-RSC and 15^{th}-CRSI-NSC	Banaras Hindu University (BHU), Varanasi
9.	B. Bag	Chemosensors for mercury ion: Exploiting structure-function correlation and rationalization of signaling probes	Mar. 16-17, 2013	(Invited contribution) Recent Trends in Chemical Sciences (RETICS-2013)	Sambalpur University, Odisha
8.	B. Bag	Attended/involved	Dec.15-17, 2011	ESF-COST High-Level Research Conference on Supramolecular Approaches in Systems Chemistry	Institute de Science et d'Ingenierie Supramoleculaire, Universite de Strasbourg, France
7.	A. Pal, B. Bag	Rhodamine based Probe for selective Hg(II) ion detection through chromo- and fluorogenic signal modulation	04-06 Feb., 2011	13^{th}-CRSI-NSC	NISER Bhubaneswar
6.	B. Biswal, B. Bag	FRET mediated dual channel signaling with metal ions in a tren- based probe appended with three fluorophores	04-06 Feb., 2011	13^{th}-CRSI-NSC	NISER Bhubaneswar
5.	P. Dhar, B. Bag	Metal–metformin complexes and their enhanced hypoglycemic activities	04-06 Feb., 2011	13^{th}-CRSI-NSC	NISER Bhubaneswar
4.	B. Bag, A. Pal, B. Biswal	Chromogenic and Fluorogenic Signaling Probe for Water	Oct. 01-03, 2010	Molecules, Supramolecules and Materials	IIT Kanpur
3.	B. Bag	"Fluorescence Signal Modulation: as Sensors and Chemical Logics"	Feb. 19-21, 2010	Recent Trends in Chemical Sciences (RETICS-2010) (Invited contribution)	Sambalpur University, Sambalpur
2.	A. K. Yadav, P. Panda, P. Rout, S. Behara, A. K. Patra. S.K. Nayak, B. Bag	Entrapment of algae for wastewater treatment and bioelectricity generation in Microbial fuel cell	Sept. 24-26, 2009	proceeding of XVIIth International Conference on Bioencapsulation	Groningen, Netherlands
1.	B. Bag	Molecular Engineering: the futuristic domain in Chemistry	Dec. 22-23, 2009	CSIR Program on Youth for Leadership in Science CPYLS-2009	CSIR-IMMT, Bhubaneswar

N. **Research projects as Principal Investigator**.

Sl. No.	Title of the Project	Period	Funding Agency
1	Luminescent Signaling Probe Materials for metal ions and Chemical Logic action	Oct. 2007-Oct. 2010	DST, New Delhi (Fast-Track scheme)
2	Development and Optimization of Microbial Fuel Cell and biosensors	June 2007-Oct. 2009	CSIR-IMMT (in house)
3	Chromogenic and Fluorogenic probes for selective Mn(II) ion detection (phase -1)	Aug. 2010 –July 2011	CSIR, New Delhi
4	Geometrical optimization of organic molecules and their structure-function correlationship in optical properties and ore flotation	Aug. 2010 –July 2011	CSIR-IMMT (in house)
5	Chromogenic and Fluorogenic probes for selective Mn(II)/Hg(II) ion detection (Phase II)	Oct. 2012 – Oct. 2013	CSIR-IMMT (in house)
6	Rhodamine and hemicyanine based chemosensors for detection of neutral and charged species of environmental and biological relevance	Aug. 2013 –Aug. 2017	SERB, New Delhi

O. **Membership in Societies**

- Member, Royal Society of Chemistry (No.: 558291)
- Member, American Chemical Society (No.: 30304909)
- Life member of Indian Society for Radiation and Photochemical Sciences(L472)
- Life member of Chemical Research Society of India (LM-1339).
- Life member of The Indian Science Congress Association (LM-L14408).
- Life member of Luminescence Society of India (LM-587).
- Life member of Indian Crystallographic Association (LM-452)
- Life Member of Indian Institute of Mineral Engineers (LM-841)

BAMAPRASAD BAG