

BIO-DATA

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3. Date of Birth: 31/12/1980

4. Academic Qualifications (Starting from Graduation onwards):

S.No.	Degree	Year	Subjects	University/Institution	% of marks
1.	BSc	2001	Chemistry (Hons.), Phys., Math.	Visva-Bharati	76.8
2.	MSc	2003	Chemistry, (Physical Chemistry Special)	Visva-Bharati	76.1
3.	PhD	2008	Ultrafast dynamics	IACS, Kolkata	--
4.	JSPS Post Doc.	2008 to 2010	Non-linear spectroscopy at air/water interface	RIKEN, Wako-shi, Saitama, JAPAN	--

5. Ph.D thesis title, Guide Name, Institute/Organization/University, Year of Award,

Thesis Title: Study of Biological and Surfactant Assemblies Using Ultrafast Laser Spectroscopy

Guide name: Professor Kankan Bhattacharyya

Institute: Indian Association for the Cultivation of Science, Jadavpur, Kolkata-32, WB, India

Year of Award: 2008

6. Work Experience (in chronological order)

S. No.	Position held	Name of the Institute	From	To	Pay Scale
1	Assistant Professor	Burdwan Raj College, Burdwan, WB, India	September 2006	November 2008	PB-3 15600-39100
2	JSPS Post-doctoral fellow	RIKEN, Wako-shi, Saitama, Japan	November 2008	November 2010	JSPS fellowship
3	Assistant Professor	Burdwan Raj College, Burdwan, WB, India	November 2010	April 2012	PB-3 15600-39100
4	Assistant Professor	Visva-Bharati University	April 2012	Contd.	PB-3 15600-39100

7. Professional recognition/ awards/prize/Certificate, fellowships received by the applicant:

S. No.	Name of Award	Awarding Agency	Year
1	JRF NET	CSIR, India	2002
2	GATE	IIT	2003
3	JSPS post-doctoral fellowship	JSPS, Japan	2008

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

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
65	Sayani Hui, Sahil Azam, Subhajit Dutta, Sudip Kumar Mondal ,* Partha Mahata*	Selective Recognition Behavior of Arginine and Histidine Using an Anionic Luminescent Metal-Organic Material Stabilized by Cationic Amine: Steady State and Time-Resolved Luminescence Studies	European Journal of Inorganic Chemistry	In press	In press	2025
64	Sahil Azam, Subhajit Dutta, Sayani Hui, Narayan Ch Jana, Bidraha Bagh, Partha Mahata*, Sudip Kumar Mondal *	Highly selective recognition of l-tyrosine by perceiving huge luminescence turn-on of a cobalt (II) based metal-organic compound at physiological pH	Inorganica Chimica Acta	576	122455	2025
63	Prakash Majee, Arpita Bid, Debal Kanti Singha, Chhatan Das, Partha Mahata*, Sujit Sankar Panja, Sudip Kumar Mondal *	Terbium doped heterometallic metal-organic compound with carboxylate and imidazole-containing ligands for naked-eye detection of nitro containing antibiotics	New Journal of Chemistry	49	7852-7860	2025
62	Sourav Sarkar, Subhajit Dutta, Sahil Azam, Debal Kanti Singha, Sudip Kumar Mondal ,* Partha Mahata*	Design and synthesis of a series of rare-earth coordination polymer-based phosphors: Exploration of the white light emission property	ACS Applied Optical Materials	2	2509-2518	2024
61	Bipul Mondal, Priyanka Manna, Debal Kanti Singha, Prakash Majee, Sahil Azam, Subhajit Dutta, Sourangshu Halder, Tapas Ghosh, Sudip Kumar Mondal ,* Partha Mahata*	pH-Independent Selective Formation of VO ₂ ⁺ Motif Incorporating a Family of Hydrazone Ligands: Synthesis, Structure, and Luminescence-Based Sensing Studies toward Selective Metal Ions	Inorganic Chemistry	63	22203-22213	2024
60	Debabrata Saha, Prakash Majee, Debal Kanti Singha, Subhajit Dutta, Sahil Azam, Sayani Hui, Partha Mahata*, Sudip Kumar Mondal *	Resonance energy transfer aided detection of nitroaromatics in aqueous medium by a luminescent Mn based metal-organic framework	Inorganica Chimica Acta	571	122244	2024
59	Debal Kanti Singha, Prakash Majee, Sourav Sarkar, Sudip Kumar Mondal , *Partha Mahata*	Full colour luminescence tuning including white light from a mixed lanthanide activated metal-organic complex	Inorganica Chimica Acta	571	122224	2024

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
58	Sourav Sarkar, Pooja Daga, Sudip Kumar Mondal ,* Partha Mahata*	Functional Three-Dimensional Ce-Based Coordination Polymer: Synthesis, Structure, and Selective Sensing of Lysine and Arginine Based on the Luminescence Turn-On Effect	Crystal Growth & Design	24	4748-4757	2024
57	Tamanna Mallick, Abhijit Karmakar, Moumita Kar, Sourav Dutta, Sudip Kumar Mondal , Debabrata Mandal, Anup Pramanik, Naznin Ara Begum*	Carbazole-decorated fluorescent CdS quantum dots: A potential light-harvesting material	Journal of Physics and Chemistry of Solids	164	110603	2022
56	Sourav Sarkar, Debal Kanti Singha, Prakash Majee, Pooja Daga, Sudip Kumar Mondal ,* Partha Mahata*	Stabilization of CO ₂ as zwitterionic carbamate within a coordination polymer (CP): synthesis, structure and anion sensing behaviour of a Tb-CP composite	CrystEngComm	24	5890-5899	2022
55	Pooja Daga, Sayani Hui, Sourav Sarkar, Prakash Majee, Debal Kanti Singha, Partha Mahata*, Sudip Kumar Mondal *	pH dependent sensitization of europium in a hydrogen bonded three-dimensional metal-organic compound with (4 ⁹ 6 ⁶) ₂ (4 ⁴ 6 ²) ₃ topology: luminescence titration and time-resolved studies	Materials Advances	3	1182-1190	2022
54	Prakash Majee, Debal Kanti Singha, Pooja Daga, Sayani Hui, Partha Mahata*, Sudip Kumar Mondal *	Photophysical studies of a room temperature phosphorescent Cd (ii) based MOF and its application towards ratiometric detection of Hg ²⁺ ions in water	CrystEngComm	23	4160-4168	2021
53	Pooja Daga, Priyanka Manna, Prakash Majee, Debal Kanti Singha, Sayani Hui, Ananta Kumar Ghosh, Partha Mahata*, Sudip Kumar Mondal *	Response of a Zn(II)-based metal-organic coordination polymer towards trivalent metal ions (Al ³⁺ , Fe ³⁺ and Cr ³⁺) probed by spectroscopic methods	Dalton Transactions	50	7388-7399	2021
52	Sayani Hui, Prakash Majee, Debal Kanti Singha, Pooja Daga, Sudip Kumar Mondal ,* Partha Mahata	pH response of a hydroxyl-functionalized luminescent metal-organic framework based phosphor	New Journal of Chemistry	45	9394-9402	2021
51	P Daga, S Sarkar, P Majee, DK Singha, S Hui, P Mahata,* SK Mondal *	A selective detection of nanomolar-range noxious anions in water by a luminescent metal-organic framework	Materials Advances	2	985-995	2021

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
50	P Majee, P Daga, DK Singha, D Saha, P Mahata,* SK Mondal*	A lanthanide doped metal-organic framework demonstrated as naked eye detector of a trace of water in organic solvents including alcohols by monitoring the turn-on of luminescence	Journal of Photochemistry and Photobiology A: Chemistry	402	112830	2020
49	P Daga, P Majee, DK Singha, P Manna, S Hui, AK Ghosh, P Mahata,* SK Mondal*	Dramatic luminescence signal from a Co(II)-based metal-organic compound due to the construction of charge-transfer bands with Al ³⁺ and Fe ³⁺ ions in water: steady-state and time-resolved spectroscopic studies	New Journal of Chemistry	44	4376-4385	2020
48	DK Singha, P Majee, S Hui, SK Mondal* , P Mahata*	Luminescent metal-organic framework-based phosphor for the detection of toxic oxoanions in an aqueous medium	Dalton Transactions	49	829-840	2020
47	DK Singha, P Majee, SK Mondal* , P Mahata*	Detection of pesticide using the large stokes shift of luminescence of a mixed lanthanide co-doped metal-organic framework	<i>Polyhedron</i>	158	277-282	2019
46	P Majee, DK Singha, SK Mondal* , P Mahata*,	Effect of charge transfer and structural rigidity on divergent luminescence response of a metal organic framework towards different metal ions: luminescence lifetime decay experiments and DFT calculations.	<i>Photochemical & Photobiological Sciences</i>	18,	1110-1121	2019
45	A Maji, P Majee, DK Singha, AK Ghosh, SK Mondal* , P Mahata*,	Trace-level and selective detection of uric acid by a luminescent Zn (II) based 1D coordination polymer in aqueous medium.	<i>Journal of Photochemistry and Photobiology A: Chemistry</i>	365	125-132	2018
44	DK Singha, P Majee, S Mandal, SK Mondal* , P Mahata*,	Detection of Pesticides in Aqueous Medium and in Fruit Extracts Using a Three-Dimensional Metal-Organic Framework: Experimental and Computational Study.	<i>Inorganic chemistry</i>	57	12155-12165	2018
43	DK Singha, P Majee, SK Mondal* , P Mahata*	A luminescent cadmium based MOF as selective and sensitive iodide sensor in aqueous medium.	<i>Journal of Photochemistry and Photobiology A: Chemistry</i>	356	389-396	2018
42	S Naaz, S Poddar, SP Bayen, MK Mondal, D Roy, SK Mondal , P Chowdhury*, SK Saha	Tenfold enhancement of fluorescence quantum yield of water soluble silver nanoclusters for nano-molar level glucose sensing and precise determination of blood glucose level	<i>Sensors and Actuators B: Chemical</i>	255	332-340	2018

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41	P Majee, DK Singha, SK Mondal* , P Mahata*	Solvent Dependent Luminescence Sensing of Nitro-Explosives by a Terbium-Based Metal-Organic Complex	<i>ChemistrySelect</i>	3(2)	683-689	2018
40	DK Singha, P Majee, SK Mondal* , P Mahata*	Highly Selective Aqueous Phase Detection of Azinphos-Methyl Pesticide in ppb Level Using a Cage-Connected 3D MOF	<i>ChemistrySelect</i>	2 (20)	5760-5768	2017
39	DK Singha, P Majee, SK Mondal* , P Mahata*	Selective Luminescence-Based Detection of Cd ²⁺ and Zn ²⁺ Ions in Water Using a Proton-Transferred Coordination Polymer-Amine Conjugate Pair	<i>ChemistrySelect</i>	2 (11)	3388-3395	2017
38	P. Mahata, * SK Mondal* , DK Singha, and P. Majee	Luminescent rare-earth-based MOFs as optical sensors	<i>Dalton Transactions</i>	46	301-328	2017
37	DK Singha, P Majee, SK. Mondal* , P. Mahata*	pH-Controlled Luminescence Turn-On Behaviour of a Water Soluble Europium-Based Molecular Complex	<i>European Journal of Inorganic Chemistry</i>	2016	4631–4636	2016
36	SP Bayen, MK Mondal, S Naaz, SK Mondal , P Chowdhury*	Design and sonochemical synthesis of water-soluble fluorescent silver nanoclusters for Hg ²⁺ sensing	<i>Journal of Environmental Chemical Engineering</i>	4 (1)	1110-1116	2016
35	N. Sing, S. Roy, P. S. Guin, K. Mahali, P. Majee, SK Mondal* , P. Mahata, P. S. Sengupta, P. Mondal*	A Co (II) complex of a vitamer of vitamin B 6 acts as a sensor for Hg ²⁺ and pH in aqueous media	<i>New Journal of Chemistry</i>	40 (7)	6396-6404	2016
34	DK Singha, P Majee, SK Mondal* , P Mahata*	A Eu-Doped Y-Based Luminescent Metal–Organic Framework as a Highly Efficient Sensor for Nitroaromatic Explosives	<i>European Journal of Inorganic Chemistry</i>	2015	1390-	2015
33	DK Singha, P Majee, SK Mondal* , P Mahata*	Visible Detection of Explosive Nitroaromatics Facilitated by a Large Stokes Shift of Luminescence Using Europium and Terbium Doped Yttrium Based MOFs	<i>RSC Advances</i>	5	102076-	2015
32	S K. Mondal , K. Inoue, S. Yamaguchi, T. Tahara*	Anomalous Effective Polarity of an Air/Liquid-Mixture Interface: A Heterodyne-Detected Electronic and Vibrational Sum Frequency Generation Study	<i>Physical Chemistry Chemical Physics</i>	17	23720	2015

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31	D K Singha, S. Bhattacharya, P. Majee, SK Mondal* , M. Kumar, P. Mahata*	Optical Detection of Submicromolar Levels of Nitro Explosives by a Submicron Sized Metal–Organic Phosphor Material	<i>Journal of Material Chemistry A</i>	2	20908-	2014
30	SK Mondal , S. Yamaguchi, T. Tahara*	Molecules at the Air/Water Interface Experience a More Inhomogeneous Solvation Environment than in Bulk Solvents: A Quantitative Band Shape Analysis of Interfacial Electronic Spectra Obtained by HD-ESFG	<i>Journal of Physical Chemistry C</i>	115	3083-	2011
29	S. Yamaguchi, H. Watanabe, SK Mondal , A. Kundu, T. Tahara*	“Up” versus “down” alignment and hydration structures of solutes at the air/water interface revealed by heterodyne-detected electronic sum frequency generation with classical molecular dynamics simulation	<i>Journal of Chemical Physics</i>	135	194705-	2011
28	Subhadip Ghosh, Shantanu Dey, Ujjwal Mandal, Aniruddha Adhikari, Sudip Kumar Mondal and Kankan Bhattacharyya	Ultrafast Proton Transfer of Pyranine in a Supramolecular Assembly: PEO-PPO-PEO Triblock Co-polymer and CTAC	<i>J. Phys. Chem. B</i>	111	13504-	2007
27	Subhadip Ghosh, Sudip Kumar Mondal , Kalyanasis Sahu and Kankan Bhattacharyya	Ultrafast Photoinduced Electron Transfer from Dimethylaniline to Coumarin Dyes in SDS and TX-100 Micelles	<i>J. Chem. Phys.</i>	126	204708	2007
26	Ujjwal Mandal, Aniruddha Adhikari, Shantanu Dey, Subhadip Ghosh, Sudip Kumar Mondal and Kankan Bhattacharyya	Excitation Wavelength Dependence of Solvation Dynamics in a Supramolecular Assembly: PEO-PPO-PEO Triblock Co-Polymer and SDS	<i>J. Phys. Chem. B</i>	111	5896	2007
25	Kalyanasis Sahu, Sudip Kumar Mondal , Subhadip Ghosh, and Kankan Bhattacharyya	Ultrafast Dynamics in Biological Systems and in Nano-Confined Environments	<i>Bull. Chem. Soc. Jpn.</i>	80	1033	2007
24	Sudip Kumar Mondal , Subhadip Ghosh, Kalyanasis Sahu, Pratik Sen, and Kankan Bhattacharyya	Excited State Proton Transfer of Pyranine to Acetate in Methanol	<i>J. Chem. Sci.</i>	119	71	2007

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23	Sudip Kumar Mondal , Subhadip Ghosh, Kalyanasis Sahu, Ujjwal Mandal, and Kankan Bhattacharyya	Ultrafast fluorescence resonance energy transfer in a reverse micelle: excitation wavelength dependence	<i>J. Chem. Phys.</i>	125	224710	2006
22	Sudip Kumar Mondal , Kalyanasis Sahu, Subhadip Ghosh, Pratik Sen and Kankan Bhattacharyya	Excited State Proton Transfer from Pyranine to Acetate in β -Cyclodextrin and Hydroxypropyl β -Cyclodextrin	<i>J. Phys. Chem. A</i>	110	13646	2006
21	Subhadip Ghosh, Sudip Kumar Mondal , Kalyanasis Sahu and Kankan Bhattacharyya	Ultrafast Electron Transfer in a Nanocavity. Dimethylaniline to Coumarin Dyes in Hydroxypropyl β -Cyclodextrin	<i>J. Phys. Chem. A</i>	110	13139	2006
20	Soma Samaddar, Amit Kumar Mandal, Sudip Kumar Mondal , Kalyanasis Sahu, Kankan Bhattacharyya and Siddhartha Roy	Solvation Dynamics of a Protein in the Pre Molten Globule State	<i>J. Phys. Chem. B</i>	110	21210	2006
19	Subhadip Ghosh, Kalyanasis Sahu, Sudip Kumar Mondal , Pratik Sen and Kankan Bhattacharyya	A Femtosecond Study of Photoinduced Electron Transfer from Dimethylaniline to Coumarin Dyes in a CTAB Micelle	<i>J. Chem. Phys.</i>	125	054509	2006
18	Kalyanasis Sahu, Subhadip Ghosh, Sudip Kumar Mondal , Bankim Chandra Ghosh, Pratik Sen, Durba Roy, Kankan Bhattacharyya	Ultrafast fluorescence resonance energy transfer in a micelle	<i>J. Chem. Phys.</i>	125	044714	2006
17	Pratik Sen, Subhadip Ghosh, Sudip Kumar Mondal , Kalyanasis Sahu, Durba Roy, Kankan Bhattacharyya and Keisuke Tominaga	A Femtosecond Study of Excitation Wavelength Dependence of Solvation Dynamics in a Vesicle	<i>Chemistry- An Asian Journal</i>	1-2	188	2006
16	Pratik Sen, Subhadip Ghosh, Kalyanasis Sahu, Sudip Kumar Mondal , Durba Roy and Kankan Bhattacharyya	A Femtosecond Study of Excitation Wavelength Dependence of Solvation Dynamics in a PEO-PPO-PEO Triblock Copolymer Micelle	<i>J. Chem. Phys.</i>	124	204905	2006

S. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
15	Kalyanasis Sahu, Sudip Kumar Mondal , Subhadip Ghosh, Durba Roy, and Kankan Bhattacharyya	Temperature Dependence of Solvation Dynamics and Anisotropy Decay in a Protein. ANS in Bovine Serum Albumin	<i>J. Chem. Phys.</i>	124	124909	2006
14	Sudip Kumar Mondal , Durba Roy, Kalyanasis Sahu, Saptarshi Mukherjee, Arnab Halder and Kankan Bhattacharyya	Study of Partially Folded States of Cytochrome C by Solvation Dynamics	<i>J. Mol. Liq.</i>	124	128	2006
13	Kalyanasis Sahu, Sudip Kumar Mondal , Subhadip Ghosh, Durba Roy, Pratik Sen and Kankan Bhattacharyya	Femtosecond Study of Partially Folded States of Cytochrome C by Solvation Dynamics	<i>J. Phys. Chem. B</i>	110	1056	2006
12	Pratik Sen, Durba Roy, Sudip Kumar Mondal , Kalyanasis Sahu, Subhadip Ghosh and Kankan Bhattacharyya	Fluorescence Anisotropy Decay and Solvation Dynamics in a Nanocavity: Coumarin 153 in Methyl β -Cyclodextrins	<i>J. Phys. Chem. B</i>	109	9716	2005
11	Kalyanasis Sahu, Sudip Kumar Mondal , Durba Roy, Rana Karmakar and Kankan Bhattacharyya	Study of Interaction of a Cationic Protein with a Cationic Surfactant using Solvation Dynamics. Lysozyme:CTAB	<i>Chem. Phys. Lett.</i>	413	484	2005
10	Durba Roy, Sudip Kumar Mondal , Kalyanasis Sahu, Subhadip Ghosh, Pratik Sen and Kankan Bhattacharyya	Temperature Dependence of Anisotropy Decay and Solvation Dynamics of Coumarin 153 in β -cyclodextrin Aggregates	<i>J. Phys. Chem. A</i>	109	7359	2005
9	Sudip Kumar Mondal , Kalyanasis Sahu, Pratik Sen, Durba Roy, Subhadip Ghosh and Kankan Bhattacharyya	Excited state proton transfer of pyranine in a β -cyclodextrin cavity	<i>Chem. Phys. Lett.</i>	412	228	2005
8	Sudip Kumar Mondal , Durba Roy, Kalyanasis Sahu, Rana Karmakar and Kankan Bhattacharyya	Hydration dynamics of 4-aminophthalimide in a substituted β -cyclodextrin nanocavity	<i>J. Photochem. Photobiol. A: Chem</i>	173	334	2005

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7	Soumi Guha, Kalyanasis Sahu, Durba Roy, Sudip Kumar Mondal , Siddhartha Roy, and Kankan Bhattacharyya	Slow Solvation Dynamics at the Active Site of an Enzyme: Implications for Catalysis	<i>Biochemistry</i>	44	8940	2005
6	Kalyanasis Sahu, Durba Roy, Sudip Kumar Mondal , Rana Karmakar and Kankan Bhattacharyya	Study of protein-surfactant interaction using excited state proton transfer	<i>Chem. Phys. Lett.</i>	404	341	2005
5	Kalyanasis Sahu, Sudip Kumar Mondal , Durba Roy, Rana Karmakar and Kankan Bhattacharyya	Slow solvation dynamics of 4-AP and DCM in bin ary mixtures	<i>J. Photochem. Photobiol. A:Chem.</i>	172	180	2005
4	Durba Roy, Rana Karmakar, Sudip Kumar Mondal , Kalyanasis Sahu and Kankan Bhattacharyya	Excited state proton transfer from pyranine to acetate in a CTAB micelle	<i>Chem. Phys. Lett.</i>	399	147	2004
3	Pratik Sen, Durba Roy, Kalyanasis Sahu, Sudip Kumar Mondal , Kankan Bhattacharyya	Hydration dynamics of a protein in the presence of urea and sodium dodecyl sulfate	<i>Chem. Phys. Lett.</i>	395	58	2004
2	Kalyanasis Sahu, Durba Roy, Sudip Kumar Mondal , Arnab Halder, and Kankan Bhattacharyya	Study of Solvation Dynamics in an Ormosil: CTAB in a Sol-Gel Matrix	<i>J. Phys. Chem. B</i>	108	11971	2004
1	Saptarshi Mukherjee, Kalyanasis Sahu, Durba Roy, Sudip Kumar Mondal and Kankan Bhattacharyya	Solvation dynamics of 4-aminophthalimide in dioxane–water mixture	<i>Chem. Phys. Lett.</i>	384	128	2004

9. Books/Reports/Chapters/General articles etc.

S. No.	Title	Author's Name	Publisher	Year of Publication
1.	Study of Biological Assemblies by Ultrafast Fluorescence Spectroscopy <i>Reviews in Fluorescence 2007</i> Book Chapter..	S. K. Mondal , K. Sahu and K. Bhattacharyya*	Springer	2009

10. Details of the Research projects

Project No.	Title	Funding Agency	Period	Amount in Rs. (Lakhs)	No. of Papers Published	No. of Manpower Trained
F. 20-5(17)/2012(BSR) Dated 30 March 2013	Start-up Grant	UGC	2013-2016	6.00	4	-
SB/FT/CS-138/2014 dated 25/02/2016	Detailed Mechanistic Study of Chemical Sensing by Fluorescent Materials	DST-SERB	2016-2019	24.84	16	2 Ph D student
01(3087)/21/EMR-II dated 13-08-2021	Photophysics of New Lanthanide Containing and Some Other Metal Organic Compounds and its Application Towards Optical Devices	CSIR	2021-2024	20.00	12	1 Ph. D. Student