

### KAZI NAZRUL UNIVERSITY ASANSOL

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### **Data Obtained From Faculty-members for** <u>12B</u> (Academic Performance)

1. Name (Block Letter): DR. ARABINDA MALLICK

2. Department: Chemistry

3. Current Designation: Assistant Professor

4. Address for Communication (Present): Vill & Post –Sutra, Purba Bardhaman,

W.B. 713513

5. Address for Communication (Permanent): Do

6. Contact Number: 9475123105

7. Contact Mail (Personal and Institutional): ampcju@yahoo.co.in

8. Research Degree:

Degree	Name of the University	Date of Award
Ph. D.	Jadavpur University	05.06.2006

## 9. Published Papers in Journals:

Sl. No.	Article Title	Journal with page no	ISSN/IS BN No. ISSN:	Referr ed/No n Referr ed	No. of Co autho rs	Wheat her you are the main author	Date of Public ation
51	A Newly Developed Highly Selective Zn2+- AcO- ion-pair Sensor Through Partner Preference: Equal Efficiency under Solitary and Colonial Situation	Dalton Transiction 47, 7059-7069	Elsevier 1477- 9226	Ref	03	YES (Corres pondin g Author)	2018
50	Multifunctional Logic Applications of a Single Molecule: A Molecular Photo-Switch Performing as Simple and Complex Gates, Memory Element, and a Molecular Keypad Lock	Chemistry Select 3, 5277-5282	Wiley 2365- 6549	Ref	03	YES (Corres pondin g Author)	2018
49	Shipment of a Photodynamic Therapy Agent in model membrane: A Photophysical Approach	Chem. Phys. Lipids 210, 122-128	Elsevier 0009- 3084	Ref	03	YES (Corres pondin g Author)	2018
48	Theory after Experiment on the sensing mechanism of a newly developed sensor molecule: Converging or diverging?	Chem. Phys. Lett. 689, 199-205	Elsevier 0009- 2614	Ref	04	YES (Corres pondin g Author)	2017

47	A Strategic Design Strategy of an Opto- Chemical Security Device with Resettable and Reconfigurable Password Based Upon Dual Channel Two-in- One Chemosensor Molecule, 2017,7, 42811	Scientific Reports 7, 42811-42817	Nature	Ref	02	YES (Corres pondin g Author)	2017
46	Interaction Behavior Between Active Hydrogen Bond Donor- Acceptors as a Binding Motif for Anion Recognition: Spectroscopic Studies and Theoretical Validation	Chemistry Select 2, 2815-2821	Wiley 2365- 6549	Ref	03	YES (Corres pondin g Author)	2017
45	A Molecular Lock with Hydrogen Sulphate as Key and Fluoride as hand: Computing Based Insights on the Functioning Mechanism	Chemistry Select 1,5547-5553	Wiley 2365- 6549	Ref	04	YES (Corres pondin g Author)	2016
44.	Computational Study on the Ion Interaction of Ellipticine: A theoretical Approach Towards Selecting Appropriate Anions	Chem. Phys. Lett. 634, 29 – 36.	Elsevier 0009- 2614	Ref	01	YES (Corres pondin g Author)	2015
43	Effect of Surfactant Chain Length on Photoinduced Electron Transfer on Surfactant Bilayer Protected Carbon Nanoparticles	Mat. Lett. 141, 252-254.	Elsevier 0167- 577X	Ref	03	No	2015
42	Binding interaction of	RSc. Adv.	RSC	Ref	03	YES	2014

	a newly developed bisindole drug molecule with alpha cyclodextrin: face to face shielding of indole hoop	4,38206-38212				(Corres pondin g author)	
41	Photophysical, NMR and Density Functional Studies on the Ion Interaction of Norharmane: Proton transfer Vs Hydrogen bonding	RSc. Adv. 4, 16274 - 16280	RSC	Ref	03	YES (Corres pondin g author)	2014
40	pH triggered reversible photoinduced electron transfer to and from carbon nanoparticles	Chem. Comm. 50, 6890-6892	RSC 1359- 7345	Ref	02	No	2014
39	Formation of extended probecyclodextrin nanotubular supra structures: Endogenous Surfactants Triggered on-Demand release	Chem. Phys. Lett. 580,82-87	Elsevier 0009- 2614	Ref	02	YES (Corres pondin g author)	2013
38	FRET-based characterization of surfactant bilayer protected core-shell carbon nanoparticles: Advancement toward carbon nanotechnology	Chem. Comm. 49, 7648-7650.	RSC 1359- 7345	Ref	03	No	2013
37	Photophysical and Photodynamical Study of Fluoroquinolone Drug Molecule in Bile Salt Aggregates	Photochem. Photobiol. 88,1248-1255	APS 1751- 1097	Ref	02	No	2012

36	A Newly Developed	Analyst	RSC	Ref	03	YES	2011
	Ratiometric Fluoride ion Sensor: Photophysical, NMR and Density Functional Studies	137, 1247-1251	0003- 2654			(Corres pondin g author)	
35	Norharmane: Old Yet Highly Selective Dual Channel Ratiometric Fluoride and Hydrogen Sulfate Ion Sensor	Analyst 136, 275-277	RSC 0003- 2654	Ref	04	YES (Corres pondin g author)	2011
34	Fluorescence photoswitching of a diarylethene perylenebisimide dyad based on intramolecular electron transfer	Photochem. Photobiol. Sci. 9, 181-190	RSC 1474- 905X	Ref	06	No	2010
33	Ratiometric spectroscopic response of pH sensitive probes: A new strategy for multidimensional sensing of inorganic anions	Chem. Phys. Lett., 484, 168-172	Elsevier 0009- 2614	Ref	02	YES (Corres pondin g author	2010
32	Photophysics of Norharmane in solution phase: From homogeneous to microheterogeneous environments	J. Photochem. Photobiol. C. Photochem. Rev., 11, 47-57.	Elsevier 1389- 5567	Ref	02	YES	2010
31	Rotational relaxation dynamics of a betacarboline analougue in cyclodextrin nanocavity: How does the cavity size	J. Mol. Struct. 934, 91-95.	Elsevier 0022- 2313	Ref	Singl e	YES	2009

	barricade the molecular rotation?						
30	Probe-induced self aggregation of γ cyclodextrins: Formation of elongated nanotubular suprastructures	J. Phys. Chem. C 112, 9600-9603.	ACS 1932- 7445	Ref	02	No	2008
29	Effect of surfactant chanlength on the binding interaction of a biological photosensitizer with cationic micelles	J. Phys. Chem. B 112, 3684-3692.	ACS 1520- 5207	Ref	02	No	2008
28	Supramolecular inclusion in cyclodextrins: A pictorial spectroscopic demonstration	J. Chem. Edu. 89, 429-432	ACS 1938- 1728	Ref	01	No	2008
27	Application of anionic micelles for dramatic enhancement in quenching based fluorosensing efficiency	J. Colloid Interface Sci. 320, 9-14.	Elsevier 0021- 9797	Ref	02	No	2008
26	Photophysics of a cationic biological photosensitizer in anionic micellar environments:  Combined effect of polarity and regidity	J. Phys. Chem. B 111, 11169-11176	ACS 1520- 5207	Ref	02	No	2007
25	Effect of cyclodextrin nanocavity confinement on the photophysics of a β-carboline analogue: A spectroscopic study	J. Phys. Chem. B 111, 7401-7408.	ACS 1520- 5207	Ref	03	No	2007

24	Surfactant chainlength	Langmuir	ACS	Ref	04	No	2007
	dependent modulation of prototropic transformation of a biological photosensitizer: Norharmane in anionic Micelles	23, 4842-4848.	1520- 5827				
23	resonance energy transfer from tryptophan to 3-acetyl-4-oxo-6,7-dihydro-12H indolo-[2,3-a]quinolozine in human serum albumin	J. Chem. Sci. 119, 1-6.	IAS 0973- 7103	Ref	02	YES (Corres pondin g Author)	2007
22	Binding interaction of a biological photosensitizer with serum albumins: A biophysical study	Biomacromolecul es 8, 920-927.	ACS 1526- 4602	Ref	02	No	2007
21	Fluorescence resonance energy transfer from TX-100 to 3-acetyl-4-oxo-6,7- dihydro-12H indolo- [2,3-a]quinolozine in pre-micellar and micellar environments	J. Mol. Liq. 130, 48-51.	Elsevier 0167- 7322	Ref	04	YES (Corres pondin g Author)	2007
20	Photoprocesses of electronically excited molecules in confined liquid environments: An overview	J. Photochem. Photobiol. C. Photochem. Rev., 8, 109-127.	Elsevier 1389- 5567	Ref	02	YES	2007
19	Effect of nanocavity confinement on the rotational relaxation dynamics: 3-acetyl-4-oxo-6,7-dihydro-12H indolo-[2,3-a]	J. Chem. Phys. 125, 044516.	AIP 0021- 9606	Ref	04	YES (Corres pondin g Author)	2006

	quinolizine in micelles						
18	Fluorometric and isothermal titration calorimetric studies on binding interaction of a telechelic polymer with sodium alkyl sulfates of varying chain length	Langmuir 22, 3514-3520	ACS 1520- 5827	Ref	04	No	2006
17	Synthesis, Structural and fluorescence characterisation of three new Nickel, Zinc and Cadmium complexes with the N, N, O – Tridentate Schiff base N-2-pyridylmethylidene-2-hydroxy-phenylamine;	Polyhedron 25, 1753-1762.	Elsevier 0277- 5387	Ref	03	No	2006
16	Surfactant induced modulation of fluorosensor activity: A simple way to maximize the sensor efficiency	J. Am. Chem. Soc. 128, 3126-3127	ACS 1520- 5207	Ref	05	YES	2006
15	7-Hydroxy-4-methyl- 8-(4'-methyl- piperazine-1'-yl) methyl coumarin: an efficient probe for fluorescence resonance energy transfer to a bioactive indoloquinolizine system	J. Lumines. 118, 165-172.	Elsevier 0022-2313	Ref	03	YES	2006
14	Photophysical studies of 7-hydroxy-4- methyl-8-(4'- methylpiperazine- 1'yl)methylcoumarin: a new fluorescent	J. Photochem. Photobiol. A: Chem 177, 55-60.	Elsevier 1010- 6030	Ref	01	No	2006

	chemosensor for zinc and nickel ions in water						
13	Spectroscopic investigation on the interaction of ICT probe 3-acetyl-4-oxo-6,7-dihydro-12H indolo-[2,3-a]quinolozine with serum albumins	J. Phys. Chem. B 109, 14683- 14690.	ACS 1520- 5207	Ref	02	YES	2005
12	Photophysical study of 3-acetyl-4-oxo-6,7-dihydro-12H indolo-[2,3-a] quinolizine in biomimetic reverse micellar nanocavities: a spectroscopic approach	J. Phys. Chem. B 109, 14675-14682	ACS 1520- 5207	Ref	04	YES	2005
11	Interaction of pyrene- end-capped poly(ethyleneoxide) with Bovine Serum Albumin and Human Serum Albumin in aqueous buffer medium: A fluorometric study	J. Photochem. Photobiol. B: Biol. 80, 217-224.	Elsevier 1011- 1344	Ref	01	No	2005
10	Photophysics in motionally constrained bioenvironment: Interaction of norharmane with bovine serum albumin	Photochem. Photobiol. 81, 419-424.	APS 1751- 1097	Ref	01	YES	2005
9	Photophysical studies on multichromophoric cyclotriphosphazene. Trinuclear excimer formation in hexakis(2-	Tet. Lett. 46, 3089-3092.	Elsevier 0040- 4039	Ref	02	No	2005

	naphthyloxy)cyclotrip hosphazene						
8	Encapsulation of norharmane in cyclodextrin: Formation of 1:1 and 1:2 complexes	J. Photochem. Photobiol. B: Biol., 78, 215-221.	Elsevier 1011- 1344	Ref	02	YES	2005
7	Differential encapsulation of pyrene-end-capped poly(ethylene oxide) by cyclodextrins in aqueous solutions. A fluorometric study;	Ind. J. Chem. A 43, 2265-2273	Other 0975- 0975	Ref	01	No	2004
6	Photophysics of pyrene-end-capped poly(ethyleneoxide) in aqueous micellar environments	J. Mol. Liq. 115, 113-120	Elsevier 0167- 7322	Ref	01	No	2004
5	Intramolecular charge transfer in organized assemblies: Fluorescence of 3-acetyl-4-oxo-6,7-dihydro-12H indolo-[2,3-a] quimolizine in reverse micelles	J. Surface Sci. Technol. 20, 255-265	ISSST 0976- 9420	Ref	01	YES	2004
4	Constrained photophysics of 3- acetyl-4-oxo-6,7- dihydro-12H indolo- [2,3-a] quinolizine in micellar environments: A spectrofluorometric study	J. Colloid. Interface Sci. 278, 215-223	Elsevier 0021- 9797	Ref	02	YES	2004
3	Fluorometric investigation of interaction of 3-acetyl-4-oxo-6,7-dihydro-12H indolo-	Biophys. Chem. 112, 9-14.	Elsevier 0301- 4622	Ref	03	YES	2004

	[2,3-a] quinolizine with bovine serum albumin						
2	Photophysics of norharmane in micellar environments: A fluorometric study	Biophys. Chem. 109, 261-270.	Elsevier 0301- 4622	Ref	01	YES	2004
1	Photophysics of 3- acetyl-4-oxo-6,7- dihydro-12H indolo- [2,3-a] quinolizine : Emission from two states	Chem. Phys. Lett 371, 688 - 693.	Elsevier 0009- 2614	Ref	03	YES	2003

No of Publication: 51; Total Citation: 2261; Average Citation: 44.33, h-index: 26, i-10 index; 38

## 10. Articles/Chapters Published in Edited Volume:

Sl.	Name of	Name of Edited	ISBN	No of	Whether	Date of
No	Article/chapter	Volume, Editor and	No	Co-	you are	Publication
		Publisher		author	the main author	
1	Fluorosensors for Detection of Analytes: From Synthesis to Application", 245-260	Photo/Electrochemistry & Photobiology in the Environment, Energy and Fuel (PEPEEF '2007), Research Signpost, India, Chapter 7, Editor: Satoshi Kaneco, Japan	978-81- 308- 0159-9	02	YES	2007
2	Probe cyclodextrin interaction: Simple complexation to nanotube formation, 237-251.	Treatise on Photophysiology, Imagination Printers; India Editors: C. Haldar and P. Basu,	ISBN 978-81- 921414- 1-1	03	NO	2011
3	A Constant	A Tribute to Peoples	978-81-	01	YES	2015

Source Which	Man : A.P.J Abdul	929996-		
Truly Inspire	Kalam Who served our	9-2		
Trary mapric	Nation Through his life			
15-16	& Works			
	Publisher:			
	Raghunathpur College			
	Ed. Dr. Bhaskar.			
	Biswas			

#### 11. Full Papers in Conference Proceedings: NIL

Sl. No	Title with	Details of	ISSN/ISBN	No of Co-	Whether	Date of
	Page No	Conference	No	author	you are the	Publication
		Publication			main	
					author	

#### 12. Published Books or Edited Volume: NIL

Sl. No.	Title	Book or	Publisher &	Whether	No of	Whether	Date of
		Edited	ISBN No.	Peer	Co-	you are	Publication
		Volume	(I.	Reviewed	author/s	the main	
			International			author	
			II. National				
			III.				
			Regional)				

## $13. \ \textbf{Papers Presented in Conferences/Seminars/Workshops/ \ Symposia:}$

Sl.	Title of the Paper	Title of the	Organising	Whether	Date of
No	Presented	Conference/Seminar	Authority	International/	presenting
		/Symposia		National/	the Paper
				State/Region	
				al/University	
				/	
1	A newly Developed	24 <sup>th</sup> State Science	WBDST	State	Feb, 28,
	optochemical	Congress			2017
	Molecular Lock with				
	resettable and				
	reconfigurable				
	password: A rational				
	design Strategy				
2	A newly Developed	1 <sup>st</sup> Regional Science	WBDST	Regional	Nov, 7-
	optochemical	Congress			8, 2016
	Molecular Lock with				6, 2010

	resettable and reconfigurable password: A rational design Strategy				
3	Encapsulation of norharmane in cyclodextrin: Formation of 1:1 and 1:2 complexes	Recent Advances in Photosciences	Indian Photobiolo gy Society	National	Aug, 09,2008
4	Photophysical study on the interaction of a biological photosensitizer with transport proteins	Structure and Dynamics: From Micro to Macro	University of Calcutta	International	Dec, 14- 16, 2006
5	Photophysical study of a biological photosensitizer in micellar environments	Surfactants, Emulsion and Biocolloids (NATCOSEB XII- 2005)	ISSST and Manipur University	National	Nov, 9-11, 2005
6	Photohysics of Norharmane in micellar environments	Photosciences for the Millennium (NASPHOM- 2005)	Sambalpur University	National	Feb, 19- 21, 2005
7	Surfactant chain length dependent protoptropic transformation of a bio- logical photosensitizer	Soft Matter (ICSM-2004	ISSST and Jadavpur University	International	Nov, 18- 20, 2004
8	Interaction of a beta carboline analogue with proteins	Recent Trens in Research on Photosciences	Jadavpur University	National	Jan, 30, 2004
9	Fluorescence resonance energy transfer from tx- !00 to beta carboline analogue	Surfactants, Emulsion and Biocolloids (NATCOSEB XI- 2003	ISSST and UICT, Mumbai	National	Dec 11- 13, 2003

## 14. Organising Seminar/Conference/Symposia:

Sl.	Whether	Theme of the	Whether	Funding	Date of the
No	you are	Conference/Seminar	International/Nati	Authority	Conference/Se
	Convenor/C	/Symposia	onal/Regional/Sta	-	minar/Symposia

	o-convenor		te/University		
			Level		
1.	YES	A Tribute to A.P.J.	State Level	Institution	Sep, 11, 2015
		Abdul Kalam			
2	YES	Recent Advances in	National Level	UGC	24-25 Nov,
		Chemistry for better			2016
		Tomorrow			
3.	YES	Science at Popular	State Level	Institution	Dec, 13, 2017
		Level			
4	YES	Recent Trends in	National Level	Joint	26-27 Aug,
		Chemistry		Council of	2018
				Science	
				Education	
				Panel	

## 15. Invited Lectures/Chairing the Session or Presentation for Conferences/Seminar/Symposia etc:

Sl.	Title of the	Title of the	Organizing	Whether	Date of
No	Lecture/Acade mic Session	Conference/Semi	Authority	International/Nati onal/State/Region	Conference /Seminar/S
	inc Session	nai		al/University/Coll	ymposia
				ege Level	
1	Surfactant	Current Trends	Deshbandhu	National Level	Nov, 25-
	Induced	in Chemistry	Mahavidyalaya		26, 2011
	Modulation of		Chittaranjan,		
	Fluorosensor		WB, India,		
	Activity: An				
	Alternative				
	Strategy				
2	Resource	National	Indian	National Level	Dec, 12-14,
2	Person for the	conference on	Photobiology	Ivational Level	2013
	Poster Session	Photosciences:	Society &		2010
	1 Oster Bession	Contemporary	Department of		
		Challenges and	Chemistry, J.U.		
		future	Chemistry, J.O.		
		Perspectives			
		Terspectives			
3	Fluorosensor	Recent	Chemical	National Level	Aug, 13,
	Research: Our	Progresses in	Research		2014
	Efforts both in	Chemistry	Society of		
	strategy and		India (Kolkata		
	searching		Chapter) &		
	utility		S.K.B.		
	molecules		University,		

			Purulia		
4	Chairperson in a Scientific Session	Recent Advances in Chemistry	Indian Academy of Science & Raghunathpur College	National Level	Aug, 21- 22, 2014
5	Science in the	A Peoples Man :A.P.J Abdul Kalam	Raghunathpur College, Purulia	State Level	Oct, 15, 2015
6.	Chemical input based molecular Lock	own way: its	Saldiha College, Bankura	National Level	Aug, 31, 2017
7.	Optochemical Devices: A new Avenue	NATCOSEB 2017	Sambalpur University	National Level	Nov, 1— 12, 2017

## 16. Ongoing Projects/Consultancies: Nil

Sl.	Title	Agency	Period	Grant/Amount
No				Mobilized (Rs)

## 17. Completed Projects/Consultancies:

Sl.	Title	Agency	Period	Grant/Amount
No				Mobilized (Rs.)
	Indole Based Receptor for Ion and	UGC	2.0 Years	4,45,000.00
1	Molecule Recognition:			
	Spectroscopic and Computational			
	Studies			
2	Photophysical Study of	UGC	1.5 Yrs	1,76,500.00
	Biologically Relevant Molecules			
	in Confined Environments			
3	Spectroscopic Studies of	Osaka	Bilateral	1500000.00 Yen
	Ratiometric Fluorogenic Probes	University,	Programme	
	for the Selective Detection of	Japan	(3.0 Yrs)	
	Biological Relevant Species			

## 18. Received Research Fellowship/ Awards:

Sl. No	Title	Funding Authority	Period	Grant/Amount Mobilized (Rs)
1	Junior Research Fellowship	DST, Govt. of India	2002- 2004	
2	Best Poster Presentation Award	Indian Photobiology Society	2005	
3	Senior Research Fellowship	CSIR, Govt. of India	2004- 2005	
4	Post-Doctoral Research Fellowship	Florida State University, USA	2006	
4	JSPS Post-Doctoral Research Fellowship	JSPS, Govt. Japan	2007- 2008	
5	Invited Visiting Researcher	Osaka University, Japan	2014	
6	Outstanding Paper Presentation Award	1 <sup>st</sup> Regional Science Congress (WBSSCT)	2016	
7	Best Presentation Award in Chemistry	25 <sup>th</sup> State Science Congress (WBSSCT)	2017	

## 19. Academic Staff College Organised Orientation/ Refresher Courses Attended:

Name of the Courses	Place	Duration From	Sponsoring Authority
Orientation	ASC, The University of	Jan, 11- Feb 7, 2011	UGC
Programme	BUrdwan		
Summer School	ASC, The University of	Sep, 05-25, 2013	UGC
	BUrdwan		
Winter School	UGC-HRDC, University	Feb, 02 -22, 2017	UGC
	of Calcutta		

# 20. Training Courses, Teaching-Learning-Evaluation Technology Programmes, Faculty Development Programme:

Sl.	Programme/Course	Duration	Organising	Period
No			Authority	
1				

#### 21. Research Guidance:

Sl. No	Name of the Research	Title of the	Date of Thesis	Date of Degree
	Student	Thesis/Dissertation	Submission	Awarded
1	Dr. Soumen Mandal	Fluorescent	20.01.2017	13.04.2017
		Carbon		
		Nanoparticles:		

	Prospect in excited	
	State Dynamics	

22. Any other Information: Nil