

Curriculum Vitae

Name:

Dr. Basudeb Haldar

Current Position:

Associate Professor in Chemistry
Department of Chemistry (UG & PG)
Vivekananda Mahavidyalaya, Burdwan
27.10.2006 – Till date

**Previous
Employment:**

Assistant Teacher (PGT) in Chemistry
Salkia Hindu High School
Salkia, Howrah
01.04.2006-26.10.2006

Education

Ph.D: Bio-Physical Chemistry, Jadavpur University, Kolkata in 2006.

M.Sc: Chemistry under The University of Burdwan, 1999- 2001.

B. Sc: Chemistry (Honours) under Burdwan Raj College, The University of Burdwan, 1996-99.

Awards

- ✓ Senior Research Fellowship from Council of Scientific and Industrial Research, Govt. of India in 2004.
- ✓ Junior Research Fellowship from Council of Scientific and Industrial Research, Govt. of India in 2002.
- ✓ Scored in Graduate Aptitude Test in Engineering (GATE – 2002) for chemistry with percentile 94.10 and All India Rank (AIR) 152.
- ✓ Research Fellowship from Department of Science and Technology, Govt. of India in 2002.
- ✓ National Merit Scholarship (1993) from MHRD, Govt of India in Madhyamik Examination (Rank 126th)



Chronological List of Publication of Dr. BASUDEB HALDAR

List of Research Articles Published in International/National Journals:

- 1) *Dual macro-cyclic component based logic diversity*
M. Karar, P. Pal, S. Pal, **B. Haldar**, A. Mallick, T. Majumdar
Dyes and Pigments, 174 (2020) 108060 (1-6) Elsevier (International)
- 2) *Facile production of crystalline silver nanoemulsion using aqueous extracts of putranjiva (drypetes Roxburgii): synthetic protocol optimization through precursor, extract concentration and temperature variation study*
B. Haldar, K. M. Haldar
Journal of Emerging Technologies and Innovative Research, 6 (2019) 208-216 JETIR (National)
- 3) *Multifunctional logic applications of a Single Molecule: A Molecular Photo-Switch Performing as Simple and Complex Gates, Memory Element, and a Molecular Keypad Lock*
M. Karar, P. Shit, **B. Haldar**, A. Mallick, T. Majumdar
Chemistry Select, 3 (2018) 5277 – 5282 Pub: Wiley Online Library (International)
- 4) *A Strategic Design of an OptoChemical Security Device with Resettable and Reconfigurable Password Based Upon Dual Channel Two-in-One Chemosensor Molecule*
T. Majumdar, **B. Haldar**, A. Mallick
Scientific Reports 7 (2017) 42811 | DOI: 10.1038/srep42811 Pub: Nature (International)
- 5) *Binding interaction of a newly developed bisindole drug molecule with α -cyclodextrin: face to face shielding of indole hoops*
A. Mallick, T. Majumdar, **B. Haldar**, U. K. Roy
RSC Advances, 4 (2014) 38206–38212. Pub: The Royal Society of Chemistry (International)

- 6) *Photophysical, NMR and density functional study on the ion interaction of norharmane: proton transfer vs. hydrogen bonding*
A. Mallick, U. K. Roy, T. Majumdar, **B. Haldar**, S. Pratihar
RSC Advances, 4 (2014) 16274–16280. Pub: **The Royal Society of Chemistry (International)**
- 7) *Formation of Extended Probe-Cyclodextrin Nanotubular Supra Structures: Endogenous Surfactants Triggered on-Demand Release*
A. Mallick, **B. Haldar**, U. K. Roy
Chemical Physics Letters; 580 (2013) 82–87. Pub: **Elsevier (International)**
- 8) *Fabrication, Characterization and Mosquito Larvicidal Bioassay of Silver Nanoparticles Synthesized from Aqueous Fruit Extract of Putranjiva, Drypetes roxburghii (Wall.)*
K. M. Haldar, **B. Haldar**, G. Chandra
Parasitology Research; 112 (2013) 1451-1459. Pub: **Springer (International)**
- 9) *A newly developed highly selective ratiometric fluoride ion sensor: Spectroscopic, NMR and density functional studies.*
A. Mallick, U. K. Roy, **B. Haldar**, S. Pratihar
Analyst; 137 (2012) 1247-1251. Pub: **The Royal Society of Chemistry (International)**
- 10) *Ratiometric spectroscopic response of pH sensitive probes: An alternative strategy for multidimensional sensing.*
D. Sarkar, A. Mallick, **B. Haldar**, N. Chattopadhyay
Chemical Physics Letters; 484 (2010) 168–172. Pub: **Elsevier (International)**
- 11) *Supramolecular inclusion in cyclodextrin: A pictorial demonstration.*
B. Haldar, A. Mallick, N. Chattopadhyay
Journal of Chemical Education; 85 (2008) 429-432. Pub: **American Chemical Society (International)**
- 12) *Fluorescence resonance energy transfer from tryptophan to 3-acetyl-4-oxo-6,7 dihydro-12H-indolo-[2,3-a]quinolizine in human serum albumin,*

P. Das, A. Mallick, **B. Haldar**, N. Chattopadhyay

Journal of Chemical Science; 119 (2007) 77-82. Pub: **Indian Academy of Sciences (National)**

- 13) *Effect of cyclodextrin nanocavity confinement on the photophysics of a β -carboline analogue: A spectroscopic study.*

P. Das, A. Chakrabarty, **B. Haldar**, A. Mallick, N. Chattopadhyay

Journal of Physical Chemistry B; 111 (2007) 7401-7408. Pub: **American Chemical Society (International)**

- 14) *Surfactant chain-length dependent modulation of prototropic transformations of a biological photosensitizer : Norharmane in anionic micelle.*

A. Chakrabarty, A. Mallick, **B. Haldar**, P. Purkayastha, P. Das, N. Chattopadhyay

Langmuir; 23 (2007) 4842-4848. Pub: **American Chemical Society (International)**

- 15) *Binding interaction of a biological photosensitizer with serum albumins: A biophysical study*

A. Chakrabarty, A. Mallick, **B. Haldar**, P. Das, N. Chattopadhyay

Biomacromolecules; 8 (2007) 920-927. Pub: **American Chemical Society (International)**

- 16) *Fluorescence resonance energy transfer from TX-100 to 3-acetyl-4-oxo-6,7 dihydro-12H-indolo-[2,3-a]quinolizine in pre-micellar and micellar environments*

P. Das, A. Mallick, P. Purkayastha, **B. Haldar**, N. Chattopadhyay

Journal of Molecular Liquids; 130 (2007) 48-51. Pub: **Elsevier (International)**

- 17) *Fluorometric and Isothermal Titration Calorimetric Studies on Binding Interaction of a Telechelic Polymer and Sodium Alkyl Sulfates of varying Chainlength*

B. Haldar, A. Chakrabarty, A. Mallick, M.C. Mandal, P. Das, N. Chattopadhyay

Langmuir; 22 (2006) 3514-3520. Pub: **American Chemical Society (International)**

- 18) *Surfactant induced modulation of fluorosensor activity: A simple way to maximize the sensor efficiency*

A. Mallick, M.C. Mandal, **B. Haldar**, A. Chakrabarty, P. Das, N. Chattopadhyay

Journal of American Chemical Society; 128 (2006) 3126-3127. Pub: **American Chemical Society (International)**

(a) ***Journal of American Chemical Society (Addition/Correction)***; 128 (2006) 10629-10629.

19) *Effect of nanocavity confinement on the rotational relaxation dynamics: 3-acetyl-4-oxo-6,7 dihydro-12H indolo-[2,3-a] quinolizine in micelles*

P. Das, A. Mallick, A. Chakrabarty, **B. Haldar**, N. Chattopadhyay

Journal of Chemical Physics; 125 (2006) 044516. Pub: **American Institute of Physics (International)**

20) *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*

A. Mallick, **B. Haldar**, S. Sengupta, N. Chattopadhyay

Journal of Luminescence; 118 (2006) 165-172. Pub: **Elsevier (International)**

21) *Spectroscopic investigation on the interaction of ICT probe 3-acetyl-4-oxo-6,7 dihydro-12H indolo-[2,3-a]quinolizine with serum albumins*

A. Mallick, **B. Haldar**, N. Chattopadhyay

Journal of Physical Chemistry B; 109 (2005) 14683-14690. Pub: **American Chemical Society (International)**

22) *Photophysical study of 3-acetyl-4-oxo-6,7 dihydro-12H indolo-[2,3-a]quinolizine in biomimetic reverse micellar nanocavities: a spectroscopic approach*

A. Mallick, **B. Haldar**, S. Maiti, S.C. Bera, N. Chattopadhyay

Journal of Physical Chemistry B; 109 (2005) 14675-14682. Pub: **American Chemical Society (International)**

23) *Interaction of pyrene-end-capped poly(ethylene oxide) with Bovine Serum Albumin and Human Serum Albumin in aqueous buffer medium: A Fluorometric Study*

B. Haldar, A. Mallick, N. Chattopadhyay

Journal of Photochemistry & Photobiology B: Biology; 80 (2005) 217-224. Pub: **Elsevier (International)**

24) *Photophysical studies on multichromophoric cyclotriphosphazenes: Trinuclear excimer formation in hexakis(2-naphthyloxy) cyclophosphazene*

N. Chattopadhyay, **B. Haldar**, A. Mallick, S. Sengupta

Tetrahedron Letters; 46 (2005) 3089-3092. Pub: **Elsevier (International)**

- 25) *Encapsulation of norharmane in cyclodextrins: Formation of 1:1 and 1:2 complexes*

A. Mallick, **B. Haldar**, N. Chattopadhyay

Journal of Photochemistry & Photobiology B: Biology; 78 (2005) 215-221. Pub: **Elsevier (International)**

- 26) *Intramolecular charge transfer in organized assemblies: Fluorescence of 3-acetyl-4-oxo-6,7-dihydro-12H indolo-[2,3-a] quinolizine in reverse micelles*

A. Mallick, **B. Haldar**, N. Chattopadhyay

Journal of Surface Science and Technology; 20 (2004) 255-265. Pub: Indian Society for Surface Science and Technology, India (**National**)

- 27) *Constrained photophysics of 3-acetyl-4-oxo-6,7 dihydro-12H indolo-[2,3-a] quinolizine in micellar environments: A spectrofluorometric study*

A. Mallick, **B. Haldar**, S. Maiti, N. Chattopadhyay

Journal of Colloid and Interface Science; 278 (2004) 215-223. Pub: **Elsevier (International)**

- 28) *Differential encapsulation of pyrene-end-capped poly (ethyleneoxide) by cyclodextrins in aqueous solutions. A fluorometric study*

B. Haldar, A. Mallick, P. Purkayastha, H. D. Burrows, N. Chattopadhyay

Indian Journal of Chemistry A; 43 (2004) 2265-2273. Pub: NISCAIR-CSIR (**National**)

- 29) *Photophysics of pyrene-end-capped poly (ethyleneoxide) in aqueous micellar environments*

B. Haldar, A. Mallick, N. Chattopadhyay

Journal of Molecular Liquids; 115 (2004) 113-120. Pub: **Elsevier (International)**

- 30) *Photophysics of 3-acetyl-4-oxo-6,7 dihydro-12H indolo-[2,3-a]quinolizine: Emission from two states*

A. Mallick, S. Maiti, **B. Haldar**, P. Purkayastha, N. Chattopadhyay

Chemical Physics Letters; 371 (2003) 688-693. Pub: **Elsevier (International)**

Publications in Seminar/Conference Proceedings:

- 1) *The Cyclodextrin nanotubular structures: A case study with 3,3-bis(indolyl)-4-chlorophenylmethane with β -cyclodextrin*
B. Haldar

Ed. Vol. Proceedings of UGC Sponsored National Seminar on “Recent Developments in Green Chemistry”, Organised by Gushkara Mahavidyalaya Gushkara, West Bengal, India on 22.03. 2015 (pp 35-44) **ISBN: 978-93-5235-543-3**

Publications as Book Chapters:

- 1) *Naked eye' Nanoparticle Based Colorimetric Sensing: A spotlight on Detection of Hg²⁺ Ion*
B. Haldar

From Structure to Reactivity: Current Trends in Chemistry, 2016 (pp 106-123) Ed. U. K. Roy, Deshbandhu Mahavidyalaya & Shreelipi Prakashani, **ISBN: 987-81-929996-3-0**

Research Project:

Sl. No.	Title	Agency	Period	Grant / Amount mobilized (Rs. lakh)
1.	Study of Excited State Photoprocesses in Different Microheterogeneous Environments	UGC	29.10.2009 – 30.04.2011	Rs. 1,70,410/-

Other activity:

Reviewer of Scientific Journals

1. Langmuir (American Chemical Society)
2. Journal of Luminescence (Elsevier)
3. Journal of King Saud University-Science (Elsevier)
4. The Scientific World Journal (Hindawi Publishing Corporation)
5. Journal of Biomaterials and Nanobiotechnology (Scientific Research – Open Access))
6. Journal of Nanomaterials & Molecular Nanotechnology (Global Research)

Citation of Published Articles till date

	All	Since 2016
<u>Citations</u>	1399	418
<u>h-index</u>	18	12
<u>i10-index</u>	23	14

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