# PERSONAL PROFILE

Name : **Dr. Nirmal Kumar Das** 

Designation :Assistant Professor of Chemistry

Educational Qualification: M.Sc., Ph.D

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## **EDUCATIONAL QUALIFICATIONS:**

Degree	Institution	Year	Division	Subjects	%
					Marks
Ph.D.	Bengal Engineering and		Awarded	Chemistry	
	Science University,	2012			
	Shibpur, West Bengal,				
	India.				
M.Sc.	Bengal Engineering and	2005		Applied	66.15
	Science University,		$1^{st}$	Chemistry	
	Shibpur, West Bengal,				
	India				
B.Sc.	Vidyasagar University,			Chemistry	58.15
	West Bengal, India	2003	$2^{\rm nd}$	Physics	
				Mathematics	

#### **ACADEMIC HONOURS AND AWARD:**

- 2012-2013: Postdoctoral Research Fellowship, Republic of Korea
- 2007-2012: Senior Research Fellowship by University Grant Commission (UGC) New Delhi, India.
- 2005-2007: Junior Research Fellowship by University Grant Commission (UGC) New Delhi, India.
- Dec, 2004: Qualified NET with JRF

#### **TEACHING EXPERIENCE:**

❖ 05.02.2018 to till date working as Prof. of Chemistry, Arignar Anna Govt. Arts and Science College, Karaikal, Pondicherry-609 605.

- ❖ Working as lecturer in GOVT. PLOYTECHNIC COLLEGE, SILLI, JHARKHAND (Run and managed by Techno India Group) from 05/03/2014 to 02/06/2014 date.
- ❖ Working as Assistant Prof. of Chemistry in Supreme Knowledge Foundation Group of Institution (SKFGI) in Sir J. C. Bose College of Engineering from 04/06/2014 to 02.02.2018.

#### **RESEARCH EXPERIENCE AND SKILLS:**

- Above seven years research experience in Synthetic Organic Chemistry.
- Planning, organising and implementation of research projects.
- Experience in design and multistep organic synthesis (micro and macro scale).
- Can work well in collaborative environment.
- Supervision and training of junior colleagues.
- Excellent oral and written communication skills in English.

# SEMINAR, CONFERENCE, WORKSHOP, FDP, ORIENTATION PROGRAMME

- Poster presented in International Symposium on Organic Chemistry (ISOC), 10-12 December 2009 at IACS.
- Participated in Faculty Development Workshop in SKFGI, 22-23 June,
  2015
- Participated in Faculty Development Programme from 03. 08.2017 to 07.09.2017 conducted by IITB.
- Participated in One Day Orientation Programme at Tagore Govt. Arts and Science College on 19.07.2018
- Participated in one Day National Conference, 19-20 September, 2018 on RECENT ADVANCE IN NANOTECHNOLOGY (RAN) at NIT, KKL.

 Participated in one day Symposium on EMERGING TRENDS IN CHEMISTRY (ETC-2019), on 23.09.2019 at Thiru. Vi.Ka College, Thiruvarur. Tamilnadu.

### LIST OF PUBLICATIONS:

- 1. A new rhodamine-coumarin Cu<sup>2+</sup>—selective colorimetric and 'off—on' fluorescence probe for effective use in chemistry and bioimaging along with its bound X—ray crystal structure: ShyamaprosadGoswami\*, Debabrata Sen, Avijit Kumar Das, **Nirmal Kumar Das**, KrishnenduAich, Hoong—Kun Fun, Ching KhengQuah, Anup Kumar Maity and ParthaSaha: *Sensors & Actuators: B. Chemical*, 2013, 183, 518 (Impact Factor: 6.39).
- 2. Exploring contribution of intermolecular interactions in supramolecular layered assembly of naphthyridine co-crystals: Insights from Hirshfeld surface analysis of their crystalline states: Saikat Kumar Seth\*, Nirmal Kumar Das, KrishnenduAich, Debabrata Sen, Hoong-Kun Fun and ShyamaprasadGoswami: *Journal of Molecular Structure*, 2013, 1048, 157 (Impact Factor: 2.01).
- **3.** A case study of solid state inhibition lock opening of pyridine N-oxide in dicarboxylic acid recognition: ShyamaprosadGoswami\*, **Nirmal Kumar Das**, Debabrata Sen, Hoong-Kun Fun: *Supramolecular Chemistry*, **2012**, *4*, 264 (Impact Factor: 1.67).
- **4.** A new rhodamine based colorimetric 'off–on' fluorescence sensor selective for Pd<sup>2+</sup> along with the first bound X–ray crystal structure: ShyamaprosadGoswami\*, Debabrata Sen, **Nirmal Kumar Das**, Hoong–Kun Fun and Ching KhengQuah: *Chemical Communication*, **2011**, *47*, 9101(Impact Factor: 6.16).
- 5. A highly sensitive and selective ratiometric fluorescent probed on conjugated donor–acceptor–donor constitution of 1,8-naphthyridine for Hg<sup>2+</sup>: Ajit K. Mahapatra\*, GiridhariHazra, **Nirmal Kumar Das**, PrithidipaSahoo, ShyamaprosadGoswami and H-K Fun: *Journal of Photochemistry and Photobiology A:Chemistry*, 2011, 222, 47(Impact Factor: 3.26).
- **6.** Recognition of acids involved in Krebs cycle by 9-anthrylmethyl-di(6-acetylamino-2-picolyl)amine: a case of selective fluorescence enhancement for maleic acid: ShyamaprosadGoswami\*, **Nirmal Kumar Das**, Debabrata

- Sen, JiaHao Goh, Yeap Chin Sing and Hoong-Kun Fun: *New Journal of Chemistry*, **2011**, *35*, 2811(Impact Factor: 3.07).
- 7. A highly selective triphenylamine-based indolylmethane derivative as colorimetric and turn-off fluorimetric sensor toward Cu<sup>2+</sup> detection by deprotonation of secondary amines: Ajit Kumar Mahapatra\*, GiridhariHazra, **Nirmal Kumar Das** and ShyamaprosadGoswami: *Sensors and Actuators B: Chemical*, **2011**, *156*, 456(Impact Factor: 6.39).
- 8. A naphthyridine based macrocyclic "switching on" fluorescent receptor for cadmium: ShyamaprosadGoswami\*, Nirmal Kumar Das, KrishnenduAich and Debabrata Sen: *Journal of Luminescence*, 2011, 131, 2185(Impact Factor: 2.73).
- 9. A new highly selective ratiometric and colorimetric fluorescence sensor for Cu<sup>2+</sup>with a remarkable red shift in absorption and emission spectra based on internal charge transfer: ShyamaprosadGoswami\*, Debabrata Sen and Nirmal Kumar Das: Organic Letters, 2010, 12, 856(Impact Factor: 6.49).
- **10.** Highly selective colorimetric fluorescence sensor for Cu<sup>2+</sup>: cation—induced 'switching on' of fluorescence due to excited state internal charge transfer in the red/near-infrared region of emission spectra: ShyamaprosadGoswami\*, Debabrata Sen, **Nirmal Kumar Das** and GiridhariHazra: *Tetrahedron Letters*, **2010**, *51*, 5563 (Impact Factor: 2.38).
- **11.** Metal ion based chiral fluorescence sensor selective for dihydrogen phosphate: ShyamaprosadGoswami\*, Debabrata Sen and **Nirmal Kumar Das**: *Tetrahedron Letters*, **2010**, *51*, 6707 (Impact Factor: 2.38).
- **12.** Ethylene spacer-linked *bis*—acetamidopyridine for dicarboxylic acid recognition and polymeric new wave—like anti—perpendicular arrangement of a host—guest in the solid state: ShyamaprosadGoswami\*, **Nirmal Kumar Das**, Debabrata Sen and Hoong-Kun Fun: *Supramolecular Chemistry*, **2010**, *22*, 532 (Impact Factor: 1.67).
- 13. N–(6–{2–[6–(2,2–Dimethylpropanamido)–2–pyridyl]ethyl}–2-pyridyl)–2,2–dimethylpropan–amide: H-K Fun\*, <u>Wan-Sin. Loh</u>,Nirmal Kumar Das, Debabrata Sen and ShyamaprosadGoswami. *ActaCrystallographica*: 2010, *E66*, o1960 (Impact Factor: 0.34).

- **14.** N–(6–Bromomethyl–2–pyridyl)–acetamide: Hoong-Kun Fun\*, <u>JiaHao Goh</u>, <u>Nirmal Kumar Das</u>, <u>Debabrata Sen</u> and <u>ShyamaprosadGoswami</u>: *ActaCrystallographica*, **2010**, *E66*, o2500 (Impact Factor: 0.34).
- 15. Quinoxaline-2-carbonitrile: H-K Fun\*, Ching KhengQuah, <u>Annada. C. Maity</u>, <u>Nirmal Kumar Das</u>and ShyamaprosadGoswami: *ActaCrystallographica*, 2010, *E66*, o28 (Impact Factor: 0.34).
- **16.** A Pd Catalyzed New Synthesis of N,N-Dimethyl-[1,8]-Naphthyridine-2-amines: Facile Incorporation of N,N-Dimethylamino Group From DMF in Aqueous Medium: ShyamaprosadGoswami\* and **Nirmal Kumar Das**: *Journal of Heterocyclic Chemistry*, **2009**, *46*, 324(Impact Factor: 1.24).
- **17.** 7–(2,2–Dimethylpropanamido)–2–methyl–1,8-naphthyridin–1–ium chloride monohydrate: Hoong-Kun Fun\*, Reza Kia, **Nirmal Kumar Das**, Debabrata Sen and ShyamaprosadGoswami: *ActaCrystallographica*, **2009**, *E65*, o340 (Impact Factor: 0.34).
- **18.** 2-(pyrene-1-yl)1,3-dithiane: Hoong-Kun Fun\*, S. R.jabes, Annada C. Maity, **Nirmal K. Das,**S hyamaprosadGoswami: *Crystallographica*, **2009**, *E65*, o891(Impact Factor: 0.34).
- **19.** 2,7-Dimethyl-1,8-naphthyridine: Hoong-Kun Fun\*, <u>Chin Sing Yeap</u>, <u>Nirmal Kumar Das</u> and <u>ShyamaprosadGoswami</u>: *ActaCrystallographica*, **2009**, *E65*, o1747 (Impact Factor: 0.34).
- **20.** Solid State Structural Study on Recognition of Aromatic Dicarboxylic acids by substituted Amino- pyrimidines and its Supramolecular Network: S.Goswami\*, Subrata Jana, **Nirmal Kumar Das**, H-KFun and SuchadaChantrapromma: *Journal of Molecular Structure*, **2008**, 876, 313(Impact Factor: 2.01).
- **21.** Advanced reagent for thionation: Rapid synthesis of primary thioamides from nitriles at room temperature: S.Goswami\*, Annada C. Maity, **Nirmal Kumar Das**: *Journal of Sulphur Chemistry*, **2007**, 28, 233(Impact Factor: 1.32).
- 22. TriseleniumDicyanide (TSD) as a New Cyanation Reagent: Synthesis of CyanoPterins and Quinoxalines Along with Library of Cyano N–Heterocyclic Compounds: ShyamaprosadGoswami\*, Annada C. Maity, Nirmal Kumar Das, Debabrata Sen, and SibaprasadMaity: Synthetic Communications, 2008, 39, 407(Impact Factor: 1.38).