



## Dr. SMITA BASU

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### FUNCTIONAL EXPERTISE

### SCHOLASTICS

- **PhD Organic Chemistry**, September 2014 from Jagiellonian University, Krakow, Poland (Exchange Student at Leipzig University, Germany).
- **1st Class first (GOLD MEDALLIST)** in M.Sc. Chemistry examination, 2005 from NEHU, Shillong.
- **1st Class** with 71.03% in B.Sc. (Chemistry, Botany, Zoology), 2003 from Dr. B. R. Ambedkar University, Agra
- **1st Division** with 77.4% in H.S.L.C. (Chemistry, Physics, Biology), 2005, CBSE

### ACHIEVEMENTS

- Presently working as the PRINCIPAL of MAWSYNRAM BORDER AREA COLLEGE, Mawsynram.
- Teaching experiences: Taught in ARMY PUBLIC SCHOOL, HAPPY VALLEY (6 MONTHS); Taught in Higher Secondary section in SHILLONG COLLEGE (3 YEARS).
- Over 9 years of experience in handling and synthesizing organic and organo tin compounds. Acquired proficiencies on the use of IR, NMR, Mössbauer spectroscopic techniques, Mass spectrometry, HPLC and single crystal X-ray crystallography.
- Made 9 publications in the last few years.
- Participated in various national and international conferences.
- Took Practical classes for students at Jagiellonian University.

## RESEARCH PUBLICATIONS

- Synthesis, characterization, cytotoxic activity and crystal structures of tri- and diorganotin (IV) complexes constructed from *beta*-{[(*E*)-1-(2-hydroxyaryl) alkylidene] amino} propionate and *beta*-{[(2*Z*)-(3-hydroxy-1-methyl-2-butenylidene)]amino}propionate skeleton, T. S. Basu Baul, C. Masharing, **S. Basu**, E. Rivarola, M. Holčapek, R. Jirásko, A. Lyčka, D. de Vos, A. Linden, *J. Organomet. Chem.*, **691** (2006) 952-965.
- Methyl 2-[(*E*)-2-(3-formyl-4-hydroxyphenyl)-1-diazenyl] benzoate, T. S. Basu Baul, **S. Basu**, E. R. T. Tiekink, *Acta Crystallogr.*, **E63** (2007) o3358.
- Synthesis, characterization of some diorganotin(IV) complexes of Schiff bases derived from a non-protein amino acid. Crystal structures of {HO<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>[N=C(H){C(CH<sub>3</sub>) CH(CH<sub>3</sub>)-3-OH]-*p*} and its di-*n*-butyltin(IV) complex (<sup>n</sup>Bu<sub>2</sub>Sn{O<sub>2</sub>CC<sub>6</sub>H<sub>4</sub>[N=C(H){C(CH<sub>3</sub>) CH(CH<sub>3</sub>)-3-OH]-*p*}<sub>2</sub>), T. S. Basu Baul, C. Masharing, **S. Basu**, C. Pettinari, E. Rivarola, S. Chantrapromma, Hoong-Kun Fun, *Applied Organometallic Chemistry.*, **22** (2008) 114-121.
- In conference proceedings: <sup>119</sup>Sn Mössbauer characterization of self-assembled organotin (IV) complexes with Schiff bases containing amino acetate skeletons, **S. Basu**, A. Mizar, T. S. Basu Baul and E. Rivarola. *Hyperfine Interactions*.
- Amino acetate functionalized Schiff base organotin(IV) complexes as anticancer drugs: synthesis, structural characterization, and in vitro cytotoxicity studies, T. S. Basu Baul, **S. Basu**, Dick de Vos, Anthony Linden, *Investigational New Drugs.*, **5** (2009) 419.
- Neutral Pentacoordinated Diorganotin(IV) Complexes Derived from ortho-aminophenol Schiff bases: Synthesis, Characterization and Molecular Structures, **Smita Basu**, Gajendra Gupta, Babulal Das and Kollipara Mohan Rao, , *J. Organomet. Chem.*, **695** (2010) 2098-2104.
- {4-[(3-Formyl-4-hydroxyphenyl)diazenyl]benzoato}triphenyltin, **Smita Basu**, Cheerfulman Masharing and Babulal Das, *Acta Cryst.* (2010). E66, m927.
- Diorganotin(IV) Complexes of Polyaromatic Azo-Azomethine Ligand Derived from Salicylaldehyde and ortho-Aminophenol: Synthesis, Characterization, and Molecular

Structures, **Smita Basu**, Cheerfulman Masharing, Babulal Das, Heteroatom Chemistry, **5** (2012) 457.

- Organocatalytic Enantioselective Vinylogous Michael Reaction of Vinylketene Silyl-N,O-Acetals, **Smita Basu**, Vaishali Gupta, Johannes Nickel, Christoph Schneider, Org. Letter, **16** (2014) 274-277.

## FELLOWSHIPS

- DST: JRF ("Exploration on organotin.....biological properties" Sanction No. : SR/S1/IC-03/2005 dated 20th september, 2005-2008).
- UGC-RFSMS (UGC Research Fellowship for meritorious students in Sciences, 2008-2010).
- MPD SCHOLARSHIP (GERMANY-POLAND):2010-2014.

## TECHNICAL SKILLS

- Over 9 years of experience in handling and synthesizing organic and organo tin compounds. Acquired proficiencies on the use of IR, NMR, Mössbauer spectroscopic techniques and single crystal X-ray crystallography.

## SOFT SKILLS

- Presentations and Public Speaking
- Training & Facilitating
- Documentation
- Event Planning and coordination
- Knowledge of handling BASICS IN COMPUTER

## PERSONAL SKILLS

- Positive Attitude, Determined, Highly Energetic
- Hard Working and Sincere
- Good decision making and analytical skills
- Able to handle people in a very efficient way

## PERSONAL DOSSIER

- Father's Name : Mr. M.K.Basu
- Husband's Name : Dr. C. Masharing
  
- Permanent Address : Villa No. 29, Country Side, NEAR IIHM,  
Mawdiangdiang, Shillong-18
- Contact Number : 09402149983/09366563017
- Date of Birth : 18 January 1983
- Marital Status : Married
- Age : 38 yrs
- Gender : Female
- Nationality : Indian
- Languages Known : English, Hindi and Bengali