

**Proforma for information to be provided by the Teaching/ Academic/  
Research Staff**



1. Name: Dr. Ashok Kumar Basak
2. Designation: Assistant Professor
3. Academic Qualifications:

Sr.	Degree	Institution	Year
1	B.Sc.	Gauhati University, Guwahati, Assam	1999
2	M.Sc.	Gauhati University, Guwahati, Assam	2001
3	Ph.D.	Indian Institute of Chemical Technology, Hyderabad	2008

4. Area of Specialization: (brief writeup, 200 words): Natural product synthesis, Asymmetric organocatalytic reaction, Green chemistry, Medicinal chemistry.
5. Contact Information: E-mail: [akb31377@gmail.com](mailto:akb31377@gmail.com); [akbasak.chem@bhu.ac.in](mailto:akbasak.chem@bhu.ac.in)  
Mobile: +91-8003225365
6. Projects Undertaken as Principal Investigator:

1	UGC Start-up Grant	" Palladium catalyzed asymmetric synthesis"	2016-2018	6.0 Lakhs
2	SERB Young Scientist Research Grant	" Synthesis of trifluoromethyl containing heterocycles"	2015-2018	21.7 Lakhs

7. Awards/ Recognitions if any:
  - Young Scientist Research Grant, 2015
  - R.N. Sharma Memorial Award, 2004
  - Junior Research Fellow, December 2001
  - National Merit Scholarship, 1993
8. List of 10 major Publications: (in order of importance)
  - "Wittig Ylide Mediated Decomposition of N-Sulfonylhydrazones to Sulfinates" DeepikaChoudhary, VineetaKhatri, **Ashok K. Basak**; *Organic Letters***2018**, 20, 1703-1706.
  - "Enantioselective synthesis of Tatanans A-C and reinvestigation of their glucokinase-activating properties" Xing Xiao, Jeffry J. Jackson, **Ashok K. Basak**, Joseph M. Bowler, Brian G. Miller, ArmenZakarian; *Nature Chemistry***2013**, 5, 410-416.
  - "Anoganocatalytic asymmetric Nazarov cyclization" **Ashok K. Basak**, Naoyuki Shimada, William F. Bow, David A. Vici, Marcus A. Tius; *Journal of American Chemical Society***2010**, 132, 8266-8267.

- "Organocatalytic asymmetric *aza-Nazarov cyclization* of *anazirine*" Naoyuki Shimada, Bradley O. Ashburn, **Ashok K. Basak**, William F. Bow, David A. Vivic, Marcus A. Tius; *Chemical Communications* **2010**, *46*, 3774-3775.
- "Enamine-iminium ion *Nazarov cyclization* of  *$\alpha$ -ketoenones*" William F. Bow, **Ashok K. Basak**, Anais Jolit, David A. Vivic, Marcus A. Tius; *Organic Letters* **2010**, *12*, 440-443.
- "Interrupting the *Nazarov cyclization* with *indoles*" **Ashok K. Basak**, Marcus A. Tius; *Organic Letters* **2008**, *10*, 4073-4076.
- "An aldol approach to the synthesis of the *antitubercular agent erogorgiaene*" J.S. Yadav, **A.K. Basak**, P. Srihari; *Tetrahedron Letters* **2007**, *48*, 2841-2843.
- "Efficient halogenation of aromatic systems using *N-halosuccinimides* in ionic liquids" J.S. Yadav, B.V.S. Reddy, P.S.R. Reddy, **A.K. Basak**, A.V. Narsaiah; *Advanced Synthesis and Catalysis* **2004**, *346*, 77-82.
- "Three-component coupling reactions in ionic liquids: An improved protocol for the synthesis of 1,4-dihydropyridines" J.S. Yadav, B.V.S. Reddy, **A.K. Basak**, A.V. Narsaiah; *Green Chemistry* **2003**, *5*, 60-63.
- "[*Bmim*]*BF*<sub>4</sub> ionic liquid: A novel reaction medium for the synthesis of  $\beta$ -amino alcohols" J.S. Yadav, B.V.S. Reddy, **A.K. Basak**, A. Venkat Narsaiah; *Tetrahedron Letters* **2003**, *44*, 1047-1050.

9. Additional Information/ Achievements: NIL

10. Full List of Publications:

#### 2018

- "Ag-Nanoparticles-Embedded Filter Paper: An Efficient Dip Catalyst for Aromatic Nitrophenol Reduction, Intramolecular Cascade Reaction, and Methyl Orange Degradation" Mohini Mourya, Deepika Choudhary, **Ashok Kumar Basak**, Chandra Shekhar Pati Tripathi, Debanjan Guin, *Chemistry Select* **2018**, *3*, 2882-2887.
- "Wittig Ylide Mediated Decomposition of *N*-Sulfonylhydrazones to Sulfinates" Deepika Choudhary, Vineeta Khatri, **Ashok K. Basak**; *Organic Letters* **2018**, *20*, 1703-1706.
- "[4+3]-Annulation of 3-Cyano-4-Aryl-2-Iminochromenes with 1,2-Diaminobenzene: An Access to Novel Chromenobenzodiazepines" Mohini Mourya, Himanshu Sharma, Yogesh C. Joshi, **Ashok K. Basak**; *SynOpen* **2018**, *2*, 128-132

#### 2017

- "Diisopropylazodicarboxylate mediated selective dehydrogenation of 2-amino-3-cyano 4*H*-chromenes" Himanshu Sharma, Mohini Mourya, Debanjan Guin, Yogesh C. Joshi, Mahabeer P. Dobhal, **Ashok K. Basak**; *Tetrahedron Letters* **2017**, *58*, 1727-1732.

- "Transition metal and base free coupling of N-tosylhydrazones with 1,3-dicarbonyl compounds" Deepika Chaudhury, Chanchal Agrawal, Vineeta Khatri, Ranjit Thakuria, **Ashok K. Basak**; *Tetrahedron Letters* **2017**, *58*, 1132-1136

## 2015

- "Iodine mediated synthesis of coumarins from chromenes" Himanshu Sharma, Mohini Mourya, Lokesh K. Soni, Debanjan Guin, Yogesh C. Joshi, Mahabeer P. Dobhal, **Ashok K. Basak**; *Tetrahedron Letters* **2015**, *56*, 7100-7104.
- "Isolation and structure elucidation of two new compounds from stem bark of *Prosopis cineraria*" Lokesh K. Soni, **Ashok K. Basak**, Pradeep Parasher, Mahabeer P. Dobhal; *Chemical Science Review and Letters* **2015**, *4*, 777-782.

## 2013

- "Enantioselective synthesis of Tatanans A-C and reinvestigation of their glucokinase-activating properties" Xing Xiao, Jeffry J. Jackson, **Ashok K. Basak**, Joseph M. Bowler, Brian G. Miller, Armen Zakarian; *Nature Chemistry* **2013**, *5*, 410-416.
- "Microwave assisted palladium-catalyzed synthesis of phthalazinones and pyridopyridazinones" K. Penta Rao, **Ashok K. Basak**, Prasant K. Deb, Somesh Sharma, L. Krishnakant Reddy; *Tetrahedron Letters* **2013**, *54*, 3694-3696.
- "Microwave assisted efficient aminocarbonylation of N-tosylhydrazones with molybdenum hexacarbonyl and amines" K. Penta Rao, **Ashok K. Basak**, Amancha Raju, Vikas S. Patil, L. Krishnakant Reddy; *Tetrahedron Letters* **2013**, *54*, 5510-5513.

## 2010

- "An organocatalytic asymmetric Nazarov cyclization" **Ashok K. Basak**, Naoyuki Shimada, William F. Bow, David A. Vicić, Marcus A. Tius; *Journal of American Chemical Society* **2010**, *132*, 8266-8267.
- "Organocatalytic asymmetric Nazarov cyclization of anazirine" Naoyuki Shimada, Bradley O. Ashburn, **Ashok K. Basak**, William F. Bow, David A. Vicić, Marcus A. Tius; *Chemical Communications* **2010**, *46*, 3774-3775.
- "Enamine-iminium ion Nazarov cyclization of  $\alpha$ -ketoenones" William F. Bow, **Ashok K. Basak**, Anais Jolit, David A. Vicić, Marcus A. Tius; *Organic Letters* **2010**, *12*, 440-443.

## 2008

- "Interrupting the Nazarov cyclization with indoles" **Ashok K. Basak**, Marcus A. Tius; *Organic Letters* **2008**, *10*, 4073-4076.
- "IBX/I<sub>2</sub> mediated oxidation of alkenes and alkynes in water: a facile synthesis of  $\alpha$ -iodo ketones" Jhillu S. Yadav, Basu V. Subba Reddy, Ashutosh P. Singh, **Ashok K. Basak**; *Tetrahedron Letters* **2008**, *4*

9,5880-5882.

- "Dess-Martin periodinane promoted oxidative coupling of Baylis-Hillman adducts with silylenolethers: a novel synthesis of cis-fused dihydropyrans" J.S. Yadav, B. V. SubbaRaddy, S.S. Mandal, **A.K. Basak**, C. Madhavi, A.C. Kunwar; *Synlett* **2008**, 1175-1178.
- "Boron trifluoride-diethyl etherate complex mediated allylation of Baylis-Hillman adducts: A facile synthesis of 1,5-dienes" J. S. Yadav, B. V. SubbaRaddy, S. S. Mandal, **A. K. Basak**, C. Madhavi, A. C. Kunwar *Synthesis* **2008**, 1943-1947.
- "A facile synthesis of pyrazolines from Baylis-Hillman adducts" J.S. Yadav, A.P. Singh, D.C. Bhuniya, **A. K. Basak**, P. Srihari; *Chemistry Letters* **2008**, 37, 624-626.
- "One-pot oxidative allylation of Morita-Baylis-Hillman adducts with allyltrimethylsilane promoted by Dess-Martin periodinane/boron trifluoride-diethyl ether complex" Jhillu S. Yadav, B.V. Subba Reddy, Ashutosh P. Singh, **Ashok K. Basak**; *Synthesis* **2008**, (3), 469-473.

## 2007

- "An aldol approach to the synthesis of the antitubercular agent ergosterol" J.S. Yadav, **A.K. Basak**, P. Srihari; *Tetrahedron Letters* **2007**, 48, 2841-2843.
- "Zinc mediated propenylation of Baylis-Hillman acetates" P. Srihari, A.P. Singh, **A.K. Basak**, J.S. Yadav; *Tetrahedron Letters* **2007**, 48, 5999-6001.
- "IBX/Sc(OTf)<sub>3</sub>-promoted one-pot oxidative conjugate addition of allyltrimethylsilane to Baylis-Hillman adducts" J.S. Yadav, B.V. SubbaReddy, A.P. Singh, **A.K. Basak**; *Tetrahedron Letters* **2007**, 48, 7546-7548.
- "First one-pot oxidative Michael reaction of Baylis-Hillman adducts with indoles promoted by iodoxybenzoic acid" J.S. Yadav, B.V.S. Reddy, A.P. Singh, **A.K. Basak**; *Tetrahedron Letters* **2007**, 48, 4169-4172.
- "Microwave accelerated S<sub>N</sub>2' reaction of Baylis-Hillman acetates: A comparative study of conventional heating versus microwave irradiation" J.S. Yadav, B.V. SubbaReddy, **A.K. Basak**, A. VenkatNarsaiah; *Journal of Molecular Catalysis A: Chemical* **2007**, 274, 105-108.

## 2006

- "Iodoxybenzoic acid (IBX): An efficient and novel oxidizing agent for the aromatization of 1,4-dihydropyridines" J.S. Yadav, B.V.S. Reddy, **A.K. Basak**, G. Baishya, A. VenkatNarsaiah; *Synthesis* **2006**, 451-454.
- "Niobium pentachloride: An efficient catalyst for the selective acetylation of alcohols and phenols" J.S. Yadav, A.V. Narsaiah, B.V.S. Reddy, A.K. Basak, K. Nagaiah; *Journal of Molecular Catalysis A:*

*Chemical***2006**,255, 78-80.

- "Indiumtribromide: Anefficientcatalystforthesilylationofhydroxylgroupsbyactivationof hexamethyldisilazane" J.S.yadav,B.V.S.Reddy,**A.K.Basak**,G.Baishya,A.V.Narsaiah;*Synt hesis* **2006**, 3831-3834.

## 2005

- "Niobiumpentachloride: Anefficientcatalystfortheselectiveacetylationofaminesandthiolsun der mild conditions" J.S.Yadav,A.V.Narsaiah,**A.K.Basak**,P.R.Goud, D.Sreenu,K.Nagaiah;*Journal of MolecularCatalysis A:Chemical***2005**, 230,107-111.
- "FirstexampleoftheC-alkylationofindoleswithBaylis-Hillmanacetates" J.S.Yadav,B.V.S.Reddy,**A. K. Basak**, A. VenkatNarsaiah, A. Prabhakar, B.Jagadeesh; *Tetrahedron Letters* **2005**, 46, 639-641.

## 2004

- "Cadmiumchloride: Anefficientcatalystforone-potsynthesisof3,4-dihydropyrimidin-2(1H)- ones" A. VenkatNarsaiah, **A. K. Basak**,K. Nagaiah;*Synthesis* **2004**,1253-1256.
- "Recyclable2ndgenerationionicliquidsasgreensolventsfortheoxidationofalcoholswithhypervalent iodine reagents" J.S.Yadav,B.V.S.Reddy,**A.K.Basak**,A.VenkatNarsaiah;*Tetrahedron***2004**, 60, 2131-2135.
- "PhosphanecatalyzedKnoevenagelcondensation: Afacilesynthesisofacyanoacrylatesandα-cyanoacrylonitriles" J.S.Yadav,B. V.S.Reddy, **A. K. Basak**,B.Visali, A.V.Narsaiah; *EuropeanJournal of OrganicChemistry***2004**, 546-551.
- "EfficienthalogenationofaromaticsystemsusingN-halosuccinimidesinionicliquids" J.S.Yadav,B.V.S.Reddy,P.S.R.Reddy,**A.K.Basak**,A.V.Narsaiah;*AdvancedSynthesisandCatalysis***2004**,346,77-82.
- "Baeyer-Villigeroxidationsinionicliquids. Afacileconversionofketonestoestersandlactones" J.S. Yadav,B.V.S.Reddy,**A.K.Basak**,A.V.Narsaiah;*ChemistryLetters***2004**,33,248-249.
- "Aneco-friendlysynthesisofelectrophilicalkenescatalyzedbydimethylaminopyridineundersolventfree conditions" A.VenkatNarsaiah,**A.K.Basak**,B.Visali,K.Nagaiah;*Syntheticcommunications***2004**,34, 2893-2901.

## 2003

- "Aza-Michaelreactionsinionicliquids. Afacilesynthesisofβ-aminocompounds" J.S.Yadav,B.V.S.Reddy,**A. K. Basak**,A.V. Narsaiah;*Chemistry Letters* **2003**,32, 988-989.
- "[Bmim]PF<sub>6</sub>andBF<sub>4</sub> ionicliquidsasnovelandrecyclablereactionmediaforaromaticamination" J.S. Yadav,B.V.S.Reddy,**A.K.Basak**,A.VenkatNarsaiah; *TetrahedronLetters***2003**,44,2217-

2220.

- "Three-component coupling reactions in ionic liquids: An improved protocol for the synthesis of 1,4-dihydropyridines" J.S. Yadav, B.V.S. Reddy, **A.K. Basak**, A.V. Narsaiah; *Green Chemistry* **2003**, *5*, 60-63.
- "[Bmim]BF<sub>4</sub> ionic liquid: A novel reaction medium for the synthesis of  $\beta$ -amino alcohols" J.S. Yadav, B.V.S. Reddy, **A.K. Basak**, A. Venkat Narsaiah; *Tetrahedron Letters* **2003**, *44*, 1047-1050.

Date: 09-July-2018

Place: Varanasi



Signature