

CURRICULUM VITAE

Dr. Satya Narayan Sahu

Address:

Government College Balrampur
Tehsil-Balrampur, Distt-Balrampur-Ramanujganj
Chhattisgarh-497119

Email: satyasahuiitd@gmail.com

Mobile no.: +91-6260734192

Date of Birth: 26/ 12/ 1985

Sex: Male

Nationality: Indian



Academic Details:

Examination passed (Year)	University	Subjects	Marks (%) / CGPA
B.Sc (Hons) (2009)	Banaras Hindu University, Varanasi, Uttar Pradesh, India	Geology, Botany, Chemistry	67.38
M.Sc (2011)	Indian Institute of Technology, Delhi, India	Chemistry	7.122/10
Ph.D (2016)	University of Delhi, Delhi, India	Chemistry	

Topic of Ph.D. Thesis:

**“SYNTHESIS OF FUNCTIONALIZED THIOPHENES AND
N-ARYLATED PIPERIDONES FROM 2H-PYRAN-2-ONES”**

Award and Fellowship:

- ❖ Qualified National Eligibility Test for **UGC-JRF** (December 2010) held by Council of Scientific & Industrial Research (CSIR, New Delhi, India).

Research Publications:

1. **Sahu, S. N.**; Singh, S.; Shaw, R.; Shally, Ram, V. J.; Pratap, R. “One-pot and step-wise synthesis of thieno[3,2-*c*]pyridin- 4-ones” *RSC Adv.* **2016**, 6, 85515.
2. Singh, S.; Panwar, R.; Yadav, P.; Althagafi, I.; **Sahu, S. N.**; Pratap, R. “Precursor directed regioselective synthesis of partially reduced benzo[*e*]indene through oxidative cyclization and benzo[*h*]quinolines” *RSC Adv.* **2015**, 5 (24), 18335.
3. **Sahu, S. N.**; Gupta, M. K.; Singh, S.; Yadav, P.; Panwar, R.; Kumar, A.; Ram, V. J.; Kumar, B.; Pratap, R. “One pot synthesis of tetrasubstituted thiophenes:[3 + 2] annulations strategy” *RSC Adv.* **2015**, 5 (46), 36979.
4. **Sahu, S. N.**; Gupta, M. K.; Jadhav, T.; Yadav, P.; Singh, S.; Misra, R.; Pratap, R. “Substituent

- dependent tunable fluorescence in thieno[3,2-*c*]pyrans” *RSC Adv.* **2014**, 4 (100), 56779.
- Yadav, P.; Singh, S.; **Sahu, S. N.**; Hussain, F.; Pratap, R. “Microwave assisted base dependent synthesis of partially reduced chromenes, isochromenes, phenanthrenes” *Org. Biomol. Chem.* **2014**, 12 (14), 2228.
 - Singh, S.; Yadav, P.; **Sahu, S. N.**; Althagafi, I.; Kumar, A.; Kumar, B.; Ram, V. J.; Pratap, R. “Synthesis of 1-amino-2-aryl/acetylnaphthalenes through a base mediated one pot inter and intramolecular C–C bond formation strategy” *Org. Biomol. Chem.* **2014**, 12 (26), 4730.
 - Singh, S.; Yadav, P.; **Sahu, S. N.**; Sharone, A.; Kumar, B.; Ram, V.J.; Pratap, R. “Unprecedented metal-free chemoselective synthesis of arylated benzo[*h*]quinolines” *SYNLETT* **2014**, 25 (18), 2599.
 - Yadav, P.; Shaw, R.; Panwar, R.; **Sahu, S.N.**; Kumar, A.; Pratap, R. “A base –Mediated 6-exo-dig Carbocyclization Strategy for the synthesis of Functionalized biaryl Compounds” *Asian J. Org.Chem.* **2017**, 6, 1394-1397.

Conferences and Workshops:

- 20th ISCB International conference on “Chemistry and medicinal plants in translational medicine for healthcare” held on 1st-4th march 2014, organized by Department of Chemistry, University of Delhi-Delhi.
Poster presented: “*L*-proline catalysed regioselective synthesis of pyranothiophene”
- “One day symposium on emerging trends in translational research in india” held on 12 April 2014, organized by school of basic sciences, Shiv Nadar University, Uttar Pradesh.
Poster presented: “*L*-proline catalysed Regioselective synthesis of pyranothiophene”
- Attended workshop on scientific communication conducted by IIT Indore (12-13, December 2014).
- International conference in “drug discovery Research” (CCDDR 2015) held on 23rd-25th November 2015, organised by Department of Chemistry, Malaviya National Institute of Technology Jaipur, Rajasthan.
Poster presented: “One pot synthesis of tetrasubstituted thiophenes : [3 + 2] annulation strategy”

Employment and Duties:

Year	Organization	Designation	Nature of Duties
Mar. 2012-Mar. 2014	University of Delhi, Delhi, India	Junior Research Fellow	Research (Doctoral)
Apr. 2014- Jul. 2016	University of Delhi, Delhi, India	Senior Research Fellow	Research (Doctoral)
Aug 2016-Feb 2017	Lingaya’s University	Assistant Professor	Teaching
April 2017-Aug 2017	ICAR-IARI, New Delhi	Research Associate	Research
Sep 2017- till date	Government College Balrampur, Chhattisgarh	Assistant Professor	Teaching and Research

Research Experience:

- ❖ Utilization of ketenedithioacetal for construction of various kinds of biological important molecules and studied its physical properties.
- ❖ Worked on reactions occurring in water.
- ❖ Research work of mine is based on the amalgam of synthetic and medicinal chemistry. Our group worked

on various fused thiophenes (thieno[3,2-*c*]pyrans, thieno[3,2-*c*]pyridines *etc*) using suitable functionalized 2*H*-pyran-2-one by base catalyzed Michael reaction using carbon, nitrogen, and sulfur nucleophile separately. Apart from synthesis we also studied its electronic and fluorescence properties. Some of the synthesized compounds have been evaluated for their anticancer activity. We further utilized thieno[3,2-*c*]pyrans for making congested tetrasubstituted thiophenes through ring transformation strategy. Furthermore the versatility of 2*H*-pyran-2-one has been further explored for preparation of congested *N*-arylated piperidones (dihydrophenanthrene, hexahydrobenzo[*c*]phenanthrene, tetrahydrobenzo[*f*]isoquinoline, dihydrobenzo[*h*]quinoline *etc*) *via* ring transformation strategy. For the elucidation of structure of synthesized compounds various spectroscopic technique were utilized.

I hereby declare that all the information given above is true to the best of my knowledge.

Satya Narayan Sahu