

Curriculum Vitae

Dr. Amol Sitaram Pawar

C-101, Shree Vighnaharta Apt.,

Plot No.1039/40, Sector 7,

Koparkhairane Navi Mumbai,

400709

Maharashtra State, INDIA.

Tel. +91- 9221026908

Email: amol.sp@somaiya.edu / amolpawarchem@gmail.com



Education

2010- 2016

Ph. D. in Chemistry (Viva-Sept.2016)

Department of Chemistry, University of Mumbai

Topic: “Studies on transition metal complexes as precursors to Metal chalcogenide nanoparticles and thin films”.

Ph. D. Course work

Qualified examination on surface spectroscopy and analytical instrumental techniques.

Training in Analytical instruments including NMR, FT-IR, XRD, and TGA with A+ grade.

State Eligibility Test (SET)

2010

Conducted by Pune university in September 2009

2005-2007

Master of Science (M. Sc.) in Chemistry

Specialization subject: Inorganic Chemistry

Class: 2nd class

College/University: Mumbai University

2002-2005

Bachelor of Science (B. Sc.) in Chemistry

Subjects: Chemistry

Class: 1st class College/University: Y. C. College Satara, Shivaji university, Kolhapur.

CAREER OBJECTIVE

- ❖ A dedicated professional with the drive to succeed, be it as an individual or as part of a team, looking for challenging career in chemistry.
- ❖ I Believe in integrity; have short learning curve; Self-confidence, Hard Work and loyalty are my greatest assets.

ACADEMIC EXPERIENCE

- ❖ Presently working at K. J. Somaiya College of Science and Commerce, Vidyavihar as an Assistant professor from January 2016 - till date.
- ❖ Worked at Department of Chemistry, University of Mumbai as an Assistant professor (Visiting Faculty) from 2011- 2013.
- ❖ Worked as Expert for practical examination conducted for M.Sc. (Inorganic Chemistry) at Department of Chemistry, University of Mumbai, Mumbai.
- ❖ Worked at Arts and Science college Kinhavali Tal- Shahapur Dist-Thane as an Assistant professor in Department of Chemistry from 2009-2010.

AWARDS AND HONORS

- ❖ **Research fellowship** awarded by DST-PURSE (2011-2013)
- ❖ **UGC-Non NET BCUD fellowship** (2013-2015)

Research

2010- 2015

Ph. D. in Chemistry under the supervision of Prof. S. S. Garje from Department of Chemistry, University of Mumbai, INDIA.

Area of Work:

Synthesis of single source molecular precursors, Preparation of metal chalcogenide nanoparticles, Growth of single crystals, Deposition of metal chalcogenide thin films on glass substrate using Aerosol assisted chemical vapour deposition (AACVD) method, Synthesis of carbon based (CNTs) metal chalcogenide nanocomposites and Applications of metal chalcogenide nanoparticles and nanocomposites as a photocatalysts for the degradation of organic dyes.

2006-2007

M. Sc. Project work under the supervision of Prof. B. H. Mehta from Department of Chemistry, University of Mumbai, INDIA.

Area of Work:

Analysis of copper from Brass alloy by different methods.

Organizational Activity

- 2011** Volunteer in International conference on supramolecular chemistry and Nanomaterials (ICSN-2011) held at Dept. of Chemistry, University of Mumbai during 14th -16th February 2011.
- 2014** Volunteer in National conference on advances in synthetic in material chemistry, (NCASMC-2014) held at Dept. of Chemistry, University of Mumbai during 10th -11th March 2014.
- 2015** Volunteer in National conference on advances and innovations in chemical sciences, (NCAICS-2015) held at Dept. of Chemistry, University of Mumbai during 12th -13th February 2015.

Areas of Interest

- ❖ **Synthesis of single source precursors**
- ❖ **Coordination chemistry**
- ❖ **Synthesis of metal chalcogenide nanoparticles and thin films**
- ❖ **Nanoparticles and nanocomposite material synthesis and their applications in photocatalysis.**

Presentation at conferences

- 1** Synthesis, characterization and photocatalytic degradation studies of metal chalcogenides and their carbon based composites.
Amol S. Pawar and Shivram S. Garje, 27th Research Scholar Meet (RSM-2015) Mumbai India, 20-21 February 2015.
- 2** Preparation of Cobalt Sulfide Nanocrystallites using Co(II) Thiosemicarbazone Complexes as Single-molecule Precursors.
Amol S. Pawar and Shivram S. Garje, International symposium, (ISMC-2012)

BARC, Mumbai, INDIA, 11 – 15 December 2012 (E-63).

- 3 Photocatalytic degradation of methylene blue using CdS nanocrystallites and O-MWCNT supported CdS composite under UV radiation.

Amol S. Pawar and Shivram S. Garje, 2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014) Kolhapur, India, 13-15 January 2014 (PE-01).

- 4 Synthesis and characterization of cobalt sulfide nanocrystallites and its use as catalyst for photodegradation of Methylene blue.

Amol S. Pawar and Shivram S. Garje, 16th CRSI National Symposium in Chemistry IIT Bombay India, 7-9 February 2014 (P-445).

- 5 Photocatalytic Degradation of Crystal Violet using CdS Nanocrystallites and CdS-OMWCNT Composite under UV Light Irradiation.

Amol S. Pawar and Shivram S. Garje, International symposium, (ISMC-2014) BARC, Mumbai, INDIA, 9 – 13 December 2014 (C-114).

- 6 Synthesis and characterization of CdS nanoparticles and their photocatalytic activity for the degradation of organic dyes

Sonali T. Palkar, **Amol S. Pawar** and Shivram S. Garje, National Conference on Advances and Innovations in Chemical Sciences (NCAICS-2015) Mumbai India, 12-13 February 2015 (PP-16).

- 7 PbS nanoparticles as a catalyst in the photocatalytic degradation of Methylene blue and Crystal violet.

Sneha R. Godage, **Amol S. Pawar** and Shivram S. Garje, National Conference on Advances and Innovations in Chemical Sciences (NCAICS-2015) Mumbai India, 12-13 February 2015 (PP-17).

Publications

- 1 Synthesis and characterization of antimony carboxylates.
Charu Vatsa, **Amol S. Pawar** and Shivram S. Garje, *International Journal of Chemical Studies* **1**(3) (2013) 73.
- 2 Synthesis of Co₉S₈ and CoS nanocrystallites using Co (II) thiosemicarbazone complexes as single source precursors.
Amol S. Pawar and Shivram S. Garje, *Bull. Mater. Sci.* **38** (2015) 1843-1850.
- 3 Preparation of CdS nanoparticles from thiosemicarbazone complexes: Morphological influence of chloro and iodo ligands
Amol S. Pawar, Siphamandla C. Masikane, Sixberth Mlowe, Shivram S. Garje and Neerish Revaprasadu, *Eur. J. Inorg. Chem.* (2016) 366-372.
- 4 Synthesis and characterization of CdS nanocrystallites and OMWCNT-supported cadmium sulfide composite and their photocatalytic activity under UV light irradiation
Amol S. Pawar, Shivram S. Garje and Neerish Revaprasadu, *Mater. Chem. Phys.* **183** (2016) 366-374.
- 5 Zinc thiosemicarbazone complexes: single source precursors for alkylamine Capped ZnS nanoparticles.
Amol S. Pawar, Sixberth Mlowe, Shivram S. Garje, Matthew P. Akerman and Neerish Revaprasadu, *Inorg. Chim. Acta.* **463** (2017) 7-13.
- 6 Cadmium Chloride and Cadmium Iodide Thiosemicarbazone Complexes as Single Source Precursors for CdS Nanoparticles.
Siphamandla C. Masikane, Sixberth Mlowe, **Amol S. Pawar**, Shivram S. Garje and Neerish Revaprasadu, *Inorg. Chim. Acta.* (Submitted).
7. Pb(II) halide cinnamaldehyde thiosemicarbazone complexes as single source Precursors for oleylamine-capped PbS nanoparticles.
Siphamandla Masikane, Sixberth Mlowe, Charles Gervas, Neerish Revaprasadu, **Amol S. Pawar** and Shivram S. Garje, *J. Mater Sci: Mater Electronics* (2017)
doi:[10.1007/s10854-017-8056-2](https://doi.org/10.1007/s10854-017-8056-2).
8. Synthesis of bis (dipyrrolidine dithiocarbamate) cadmium (II) complex and its use as a single-source precursor for the preparation of CdS nanocrystallites and thin films.

Amol S. Pawar, Shivram S. Garje and Neerish Revaprasadu, J. Alloy Compd. (submitted).

9. Growth of Cobalt Oxide Nanoparticles using Single Source Precursors and their Photocatalytic Activity for the Degradation of Methylene blue

Amol S. Pawar and Shivram S. Garje, *Bull. Mater. Sci.*(submitted).

Lab Skills

- ❖ Well trained in synthesis of transition metal complexes ranging from milligram to gram scale.
- ❖ Well trained in growth of single crystal of single source precursors.
- ❖ Adequate knowledge in structure elucidation of molecular precursors through NMR, FT-IR, TGA.
- ❖ Adequate experience in handling instruments like Spectrophotometer, XRD, FT-IR, TGA, BET.
- ❖ Well trained in synthesis metal chalcogenide nanoparticles and carbon based nanocomposites and their characterization using different techniques such as XRD, SEM, EDX, TEM, BET, Raman.
- ❖ Basic knowledge of computer skills such as Chemdraw, Origin, Processor, Sci-finder, Photoshop, Coral Draw, MS Office.

Personal Information

Name	Amol Sitaram Pawar
Gender	Male
Date of Birth	02/01/1984
Marital Status	Married
Languages Known	English, Hindi and Marathi
Nationality	Indian
Contact No.	+91-9221026908
Hobbies	Reading books

References

Prof. S. S. Garje
Ph.D.- BARC, INDIA
Currently at,
Department of Chemistry,
University of Mumbai,
Kalina, Santacruz (E), Mumbai,
INDIA.
Tel. No. +91- 9969382865
E-mail: ssgarje@yahoo.com

Prof. M. M. V. Ramana
Ph.D. -University of Mumbai
Currently at,
Department of Chemistry,
University of Mumbai,
Kalina, Santacruz (E), Mumbai,
INDIA.
Tel. No. +91- 8767032849
E-mail: mmvramana@yahoo.co.in

Declaration

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

Amol S. Pawar