

Dr. B. M. Sargar
M. Sc., Ph. D. (Inorganic Chemistry)
Associate Professor & M. Sc. Co ordinator
Department of Chemistry,
Jaysingpur College, Jaysingpur
Date of Appointment : 2nd September 2003



Research Guide

Total no Working students for Ph. D.: 06

Area of Research Interest: Material Science, Analytical Chemistry

Research Project:

1. Solvent extraction of Cr(VI) with High molecular weight amine: separation of Cr(VI) from waste effluent from Jayanti Nala in Kolhapur City, Shivaji University, Kolhapur Rs. 10000/- (Completed).
2. Synthesis and Characterisation of ZnO nanoparticles, UGC (WRO), Pune Rs. 70000/- (Completed).
3. Synthesis and Characterisation of metal oxide coated silica nanoparticles for organic applications, funded by UGC, 2015, Rs. 70000/- (Completed)
4. Synthesis and Characterisation of PbTe thin film by electrodeposition unit, UGC, 2015, Rs. 150000/- (completed).

List of Publications

- 1 Solvent extraction separation and spectrophotometric determination of Sb(III) with 1-(4'-bromo phenyl) 4,4,6-trimethyl (1h,4h) pyrimidine-2-thiol.
G.B. Kolekar, B.M. Sargar, M.A. Anuse
Chemical and Environmental Research, 9 (2000) 37-46.
- 2 Liquid-liquid extraction study of tellurium (IV) with N-n-octylaniline in halide medium and its separation from real samples
B M Sargar, M A Anuse,
Talanta 55 (3),(2001) 469-478
- 3 Rapid solvent extraction of Tin (IV) with high molecular weight amine from hydrochloric acid solution. BM Sargar, MA Anuse
Journal of the Chinese Chemical Society 50 (4), (2003) 841-848.
- 4 Selective liquid-liquid extraction of antimony (III) from hydrochloric acid media by N-n-octylaniline in xylene.
BM Sargar, MM Rajmane, MA Anuse
Journal of the Serbian Chemical Society 69 (4), (2004) 283-298.
- 5 Highly selective liquid- liquid extraction of Niobium(V) from halide media with high molecular weight amine.
MM Rajmane, BM Sargar, MA Anuse
Revue Roumaine de Chimie, 49 (6) (2004) 531-537.
- 6 Solvent extraction separation of Germanium (IV) with N-n-octylaniline as an extractant.
BM Sargar, MA Anuse,
Journal of Analytical Chemistry, 60 (5) (2005) 404-408.

- 7 Solvent extraction separation of zirconium (IV) from succinate media with N-n-octylaniline.
MM Rajmane, BM Sargar, SV Mahamuni, MA Anuse
Journal of the Serbian Chemical Society 71 (3), (2006) 223-234
- 8 Sequential separation of selenium (IV) from tellurium (IV) by solvent extraction with Nn octylaniline: Analysis of real samples.
BM Sargar, SV Mahamuni, MA Anuse
Journal of Saudi Chemical Society 15 (2), (2011) 177-185
- 9 Development of a Reliable Analytical Method for Liquid Anion-Exchange Extraction and Separation of Neodymium (III)
BN Kokare, GS Kamble, BM Sargar, MA Anuse
The Scientific World Journal 2012.
- 10 Highly Porous ZnO Nanoparticles for LPG Gas Sensor.
BM Sargar
International Journal of Science and Research 5 (9) (2016) 1275-1279
- 11 The selective ethanol gas sensing performance of CdO_{1-x}ZnO_x nanocomposite.
AK Sharma, SS Potdar, KS Pakhare, BM Sargar, MV Rokade, NL Tarwal
Journal of Materials Science: Materials in Electronics 28 (4), (2017) 3752-3761.
- 12 Highly porous web network of Mn doped ZnO for ammonia gas sensor.
AKS K S Pakhare, B M Sargar , S. S. Potdar
International Journal of Engineering Research and Application 7 (9) (8) (2017), 06-14.
- 13 Influence of bath temperature on Tin Oxide LPG sensor.
KS Pakhare, BM Sargar
International journal of current engineering and scientific research,4(9),(2017) 84-91.
- 14 Studies On LPG Sensing Behaviour Of Cs Doped Phosphomolybdic Acid By Hydrothermal Route.
SRM S. N. Nadaf, V. A. Kalantre, B. M. Sargar, K. S. Pakhare
Aarhat Multidisciplinary International Education Research Journal 7 (Vi), (2017) 1-4.
- 15 Facile Synthesis of Nano-Diced SnO₂-ZnO Composite by Chemical Route for Gas Sensor Application,
KS Pakhare, BM Sargar, SS Potdar, AK Sharma, UM Patil,
Journal of Electronic Materials 48 (10), (2019) 6269-6279.
- 16 X-Ray Diffraction Characteristics of Zinc Oxide Thin Film by Advanced Spray Pyrolysis Technique.
CK Nanhey, BM Sargar
International Journal of Engineering, Applied and Management Sciences Paradigms 54(2) (2019) 72-75.
- 17 Influence of bath temperature on microstructure and NH₃ sensing properties of chemically synthesized CdO thin films.
AK Sharma, SS Potdar, MA Yewale, DB Shirgaonkar, KS Pakhare
Materials Science-Poland 37 (1), (2019) 25-32.

List of Publications in proceeding

- 18 BN Kokare, AS Sartape, BM Sargar, SS Bandgar, SS Kolekar, MA Anuse Liquid anion-exchange extraction and separation of neodymium Proceedings of DAE-BRNS biennial symposium on emerging trends in separation
- 19 SV Mahamuni, CP Mane, BM Sargar, MM Rajmane, MA Anuse Amine extraction of lead (II) and zirconium (IV) with succinate media Proceedings of DAE-BRNS theme meeting on emerging trends in separation
- 20 BM Sargar Extraction separation of some toxic metals,(2002) Kolhapur
- 21 K. S. Pakhare, R.D Tasgaonkar, B.D. Bhosale, S.N. Zende, B.M. Sargar, Synthesis and characterization of SnO₂ by CBD method for LPG gas sensor, Proceeding of International conference on Advances in Materials Science, Raje Ramrao Mahavidyalay, Jath (ISBN 978-93-5254-490-5).
- 22 K S Pakhare, & B M Sargar, Synthesis and characterization of ZnO nanorod by CBD method, International Journal of Research and Analytical Reviews(UGC Approved Research Journal:43602), International Conference on Advances in Pure and Applied Sciences ICAPAS-2019, 218-221.