



**Name:** Dr. Sushama Mohan Kale

**Designation:** Assistant Professor

### Academic Background

Degree	Subject	Year	University
Ph.D.	Chemistry - Catalysis	2003	NCL, S.P. Pune University
M.Sc.	Inorganic Chemistry	1993	S.P. Pune University
B.Sc.	Chemistry	1991	S.P. Pune University

### Experience

Position	Organisation	Period
Assistant Professor	P.E. Society's Modern College of ASC, Ganeshkhind, Pune.	July 2005 -
Research Associate	Institute of Bioinformatics and Biotechnology (IBB), SPPU, Pune.	Nov 2003 – Aug 2004
Senior Research Fellow (SRF)	National Chemical Laboratory, Pune.	Apr 1997 – Mar 2000
Project Assistant	National Chemical Laboratory, Pune.	May 1994 – Mar 1997

### Patents

- 1) An improved process for the preparation of halocumenes. *A. P. Singh and S. M. Kale*, **US Patent No. 5,892,138 (1999)**.
- 2) An improved process for the preparation of halocumenes. *A. P. Singh and S. M. Kale*, **Indian Patent No. 422/DEL/1997**

## Selected Publications

1. Selective chlorination of 4-chlorotoluene using zeolite catalyst. *A .P. Singh, S. Sharma and S. M. Kale, Journal of Molecular Catalysis, A: Chemical*, 127 (1997) 101.
2. Para-selective chlorination of bezyl chloride to 4-chlorobenzyl chloride over zeolite catalysts. *A. P. Singh, S. M. Kale, Catalysis Today*, **49 (1999) 245.**
3. Chlorinikaran Abhikriyaon me Zeolite Utprerak ka Yogdan. *S. M. Kale and A. P. Singh* Proceedings of the National seminar on “Catalysis and Environment ” (in Hindi, held at NCL, Pune) (Oct. 1999) 3.
4. Para-selective chlorination of cumene with sulfuryl chloride over zeolite catalysts. *S. M. Kale and A. P. Singh, Applied Catalysis*, 228 (2002) 1.
5. Selective preparation of 4,4'-dichloridiphenylmethane over zeolite K-L catalyst using sulfuryl chloride. *S. M. Kale and A. P. Singh, Journal of Molecular Catalysis, A: Chemical*, 184. (2002) 399.
6. Liquid phase bromination of ethyl benzene over zeolite catalysts. *A. P. Singh and S. M. Kale, Bulletin of Catalysis Society of India*, **1 (2002) 73.**

## Courses Taught

- **M.Sc. – Organic Chemistry**

- 1) Molecular Symmetry and Chemistry of p-block Elements
- 2) Co-ordination Chemistry and Bioinorganic Chemistry
- 3) Practical – Inorganic Chemistry

- **T.Y. B.Sc. – Chemistry**

- 1) Inorganic Chemistry
- 2) Analytical Chemistry
- 3) Industrial Chemistry

## Organizational Work

- **Internal Examination Committee** (2009 – 13, 2018 -19) – Member and In-charge
- **Prospectus Committee** (2009 -13, 2018 - ) – Member and In-charge
- **Environmental Studies Course Committee** (2019 - ) – Asst. Coordinator
- **Document Validation and Verification** (2017 - ) – Document Officer