

Name: **M. V. Badiger**

Division: Polymer Science and Engineering

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- Education and experience
- Ph.D. (University of Bombay, Bombay)
 - Post-docs at University of Strathclyde, Glasgow, UK; Humboldt Fellow at University of Mainz, Germany
 - 20 years of research experience in the area of : Polymer Hydrogels, Water-Soluble Polymers, Associating Polymers and Hydrophobically Modified Polymers
- Achievements
- 57 papers in International Journals
 - 2-US Patents
 - 3-students completed Ph.D. & 4 are currently working for Ph. D.
- Research subjects:
- Polymer Science
 - Materials Science
- Research Areas
- Synthesis and characterization of Stimuli-sensitive Hydrogels
 - Application of hydrogels in Bio-separations, Tissue Engineering, Bio-medical fields etc.
 - Structure and Dynamics of hydrogels by Solid-State NMR spectroscopy and rheological measurements
 - Controlled drug delivery systems based on Hydrogels
 - Synthesis, Characterization and Rheology of Hydrophobically Modified/Associating Polymers for applications in Industrial Thickeners
- Recent publications
1. Hydrophobically Modified Poly (Vinyl Alcohol) Using Alkoxy-Substituted Methyl Gallate: Synthesis and Rheology
Aarti S. Shedge, Prakash P. Wadgaonkar, Ashish K. Lele and Manohar V. Badiger, J. *Polym. Sci. Part-b, polym. Phys.*, 48, p1054 (2010)
 2. Volume Transition of PNIPAM in a Non-ionic Surfactant Hexagonal Mesophase
V. J. Jijo, Kamendra P. Sharma, R. Mathew, Samruddhi Kamble, P. R. Rajamohanan, T. G. Ajithkumar, M. V. Badiger, and Guruswamy Kumaraswamy
MACROMOLECULES, 43, p4782 (2010)
 3. Synthesis and characterization of Thermo-sensitive graft copolymers of carboxy methyl guar and poly(n-isopropyl acrylamide), Nivika R. Gupta, Pallavi P. Ghute and Manohar V. Badiger, **CARBOHYDRATE POLYMERS**, 83, p74 (2011)
 4. Abrupt Shear Thickening of Aqueous Solutions of Hydrophobically Modified Poly(N,N'-dimethyl acrylamide-co-acrylic acid)
Ashis Lele, Aarti Shedge, Manohar Badiger, Prakash Wadgaonkar and Christophe Chassenieux, **MACROMOLECULES**, 43, p10055 (2010)
 5. Controlled release of nutrients to mammalian cells cultured in shake flasks, Swati Hegde, Tejal Pant, Ketaki Pradhan, Manohar Badiger and Mugdha Gadgil, **BIOTECHNOLOGY PROGRESS**, 28, p188 (2012)