



Ketan C. Kuperkar

Current Position	Assistant Professor.
Address (O)	Department of Applied Chemistry, Sardar Vallabhbhai National Institute of Technology (SVNIT), Dumas Road, Ichhanath, Surat-395007, GUJARAT (INDIA). (Joined SVNIT: September 2, 2013).
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Qualifying Degree	Ph.D. (Physical Chemistry) on “ Molecular interactions of Surfactant in aqueous solutions ” under the supervision of Professor P. Bahadur, Department of Chemistry, Veer Narmad South Gujarat University, Surat in July 2010.
Birth Date & Place	June 20, Mumbai, MAHARASHTRA (INDIA).

A. Fellowships/Awards:

1. Postdoctoral Research Fellowship awarded by High Energy Accelerator Research Organization (KEK), J-PARC, JAPAN under the project entitled “**Hierarchical structure of soft matter induced by addition of charges**” of Dr. Hideki Seto. (01/05/2012 to 30/06/2013).
2. Research Associateship awarded by Board of Research in Nuclear Sciences (BRNS), BARC - Mumbai under the scheme 2010/37C/31/BRNS and project entitled “**Oil Solubilization in Block Copolymeric Micelles**” of Dr. P. Bahadur. (05/03/2011 to 21/04/2012).
3. Direct Senior Research Fellowship awarded by Council for Scientific and Industrial Research (CSIR), Govt. of India, New Delhi under the scheme 09/1008/ (0001)/2010/EMR-I and project entitled “**Salt induced micellar transitions in aqueous solution of Cationic Surfactants**”. (01/04/2010 to 22/7/2010).
4. Senior Research Fellowship awarded by Council for Scientific and Industrial Research (CSIR), Govt. of India, New Delhi under the scheme 01(2068)/06/EMR-II and project entitled “**Interaction of Surfactants in Mixed Micelle: Effect of various Additives, Chain Length, pH and Micelle Charge Density**” of Dr. P. Bahadur. (06/05/2008 to 31/12/2009).

B. Other Achievements:

1. Dr. B. K. Vaidya Chemistry prize for 1st Rank in Physical Chemistry awarded by Chancellor of Gujarat.
2. State level first prizes in Gujarat Science Congress Conference for Best Oral presentations in 2010 and 2011.
3. Prizes in various competitions organized by Rotract Club of Surat Community, Literary and Debating Society, MTB Arts, Akhil Bharatiya Vidyarthi Parishad, V.N.S.G. University, Surat and United Nations Youth Organization (UNYO).
4. Certificates in oral/poster presentations at National/International Conferences.
5. Delivered several Invited talks in JAPAN and KOREA.
6. Reviewer for many Scientific Research Journals.

C. Books / Book Chapter / Reviews written:

Gemini Surfactants as Metal Corrosion Inhibitors - A Review, **K. Kuperkar**
(Published in Household Products and Cleaning – Today, UK, 2011).

D. Teaching Experience:

1. As Assistant Professor in Physical Chemistry at Shroff S. R. Rotary Institute of Chemical Technology (S.R.I.C.T.), Valia, Ankleshwar, GUJARAT (INDIA) from 03-07-13 to 31-08-13.

E. Memberships:

Life Member of Indian Society for Surfactant Science and Technology (ISSST), Kolkata, INDIA.

F. Research Experience:

Area of Interest: Material Science, Soft Condensed Matter (*Surfactants* and *Polymers*).

My work involves:

Surfactant synthesis and its characterization to examine the nanostructure dynamics using highly sophisticated physico-chemical techniques viz. light and neutron scattering, microscopy, etc.

G. List of Publications:

1. PEO-PPO based star-block copolymer T904 as pH responsive nanocarriers for quercetin: Solubilization and release study, A. Parmar, A. Bahadur, **K. Kuperkar**, P. Bahadur European Polymer Journal 49(1) (2013) 12-21.
2. Phenol solubilization in the Aqueous Pluronic[®] Solutions: Investigating the Micellar Growth and Interaction as a Function of Pluronic[®] Composition, R. Ganguly, **K. Kuperkar**, P. Parekh, V.K. Aswal and P. Bahadur. J. Colloid Interface Science 378 (2012) 118–124.
3. Spectral and Scattering Microstructural Investigation in Cationic Gemini Surfactants (12-s-12) induced by p-toluidine. N. Dharaiya, A. Patriati, **K. Kuperkar**, E. G. R. Putra and P. Bahadur. Colloids Surfaces A 396 (2012) 1-7.
4. Microstructural Study of CTAB/1-Butanol/Salt/Water System: SANS and 2D-NOESY Analysis. **K. Kuperkar**, A. Patriati, E. G. R. Putra, D.G. Marangoni and P. Bahadur. Can. J. Chem. 90(3) (2012) 314-320.
5. Surface-Active Properties and Antimicrobial Study of Conventional Cationic and Synthesized Symmetrical Gemini Surfactants. **K. Kuperkar**, J. Modi and K. Patel. J. Surfact. Deterg. 15(1) (2012) 107-115.
6. Formation and growth of gemini surfactant (12-s-12) micelles as a modulate by spacers: A thermodynamic and small-angle neutron scattering (SANS) study. S. Chavda, **K. Kuperkar** and P. Bahadur. J. Chem. Engg. Data. 56 (5) (2011) 2647–2654.
7. Effect of n-alkanols/salt on the Cationic Surfactant Micellar System in their Aqueous Solutions – A Dynamic Light Scattering Study. **K. Kuperkar**, J. Mata and P. Bahadur. Colloids Surfaces A 380 (2011) 60-65.
8. Formation and Growth of Micelles in Dilute Aqueous CTAB Solutions in the presence of NaNO₃ and NaClO₃. **K. Kuperkar**, L. Abezgauz, K. Prasad and P. Bahadur. J. Surfact. Deterg. 13(3) (2010) 293-303.
9. Effect of Counterions on Micellization and Micellar Growth in Aqueous Cetyl pyridinium chloride solutions. L. Abezgauz, **K. Kuperkar**, P. A. Hassan, O. Ramon, P. Bahadur and D. Danino. J. Colloid Interface Sci. 342 (2010) 83-92.
10. Structural Investigation of Viscoelastic Micellar Water/CTAB/NaNO₃ Solution. **K. Kuperkar**, L. Abezgauz, D. Danino, G. Verma, P. A. Hassan, V. K. Aswal, D. Varade and P. Bahadur. Pramana - J. Phys. 71(5) (2008) 1.
11. Viscoelastic Micellar Water/CTAB/NaNO₃ Solutions: Rheology, SANS and CryoTEM Analysis. **K. Kuperkar**, L. Abezgauz, D. Danino, G. Verma, P. A. Hassan, V. K. Aswal, D. Varade and P. Bahadur. J. Colloid Interface Sci. 323 (2008) 403-409.
12. Micellization and Interaction Properties of Aqueous Solutions of Mixed Cationic and Nonionic Surfactants. T. Joshi, B. Bharatiya, and **K. Kuperkar**. J. Disp. Sci. Tech. 29(2008) 3.