

List of Publications- Dr. Vijayabaskar

1. **V.Vijayabaskar**, M.Stephan, S.Kalaivani, S.Volke, G.Heinrich-, H. Dorschner , A.K.Bhowmick and U. Wagenknecht “Influence of temperatures on the crosslinking of nitrile rubber by electron beam irradiation ”, Radiation Physics and Chemistry , 77,511 (2008).
2. **V.Vijayabaskar** and A.K.Bhowmick, “Electron beam modification and crosslinking: Influence of nitrile rubber and carboxyl contents and level of unsaturation on structure and properties of nitrile rubber”, Radiation Physics and Chemistry , 75 , 779 (2006).
3. **V.Vijayabaskar**, Rakesh Gupta, P.P Chakrabarti and A. K. Bhowmick, “Prediction of Properties of Rubber by using Artificial Neural Networks” Journal of Applied Polymer Science , 100, 2227 (2006).
4. **V.Vijayabaskar** and A.K.Bhowmick, “Dynamic mechanical analysis of electron beam radiated Nitrile Rubber vulcanizates network – some unique features ” Journal of Material Science, 40, 2823 (2005).
5. **V. Vijayabaskar**, V.K. Tikku, S. Bhattacharya and A.K.Bhowmick, “Structural modification of acrylic elastomer by electron beam irradiation”, Radiation Physics and Chemistry, 71(5), 1045 (2004)
6. **V. Vijayabaskar**, Francis Rene Costa and A.K.Bhowmick, “Influence of electron beam irradiation as one of the mixed crosslinking systems on the structure and properties of Nitrile rubber”, Rubber Chemistry and Technology, **77**, 624 (2004).
7. **V. Vijayabaskar** and A.K.Bhowmick “Electron Beam Modification of Nitrile Rubber in presence of Polyfunctional Monomers”, Journal of Applied Polymer Science, 95, 435 (2004).
8. **V. Vijayabaskar** and Dr,G,S,Desai, “Cycle time reduction of high solid alkyds using statistical technique”, Paint India, 11(6), 59, (2001).
9. **V. Vijayabaskar**, “Molecular Modeling–A tool for Polymer Synthesis in Coating Industry”, Paint India, 11(3), 39, (2001).
10. Rumiya Pervin, Soumya Mondal, Luna Goswami, **V. Vijayabaskar** and Abhijit Bandyopadhyay “Statistically Designed High and Low Methyl Acrylate (MA) Containing EMA-Ethylene-Octene Copolymer Double Network Hybrids: Interesting Contrast in Physico-mechanical, Rheological and Electrical Properties”, Polymers & Polymer Composites 23 , 2, 77 (2015)

11. Rumiya Pervin, Luna Goswami, **V. Vijayabaskar** and Abhijit Bandyopadhyay “Optimization of engineering and solvent resistive behavior of high vinyl acetate content EVA-modified poly(ethylene-*co*-1-octene) interpenetrating network blends using taguchi orthogonal array”, Journal of Applied Polymer Science, 126, 6, 1993 (2012).
12. R. Janardhanan, **V. Vijayabaskar**, B. S. R Reddy “ Synthesis and characterisation of sulfonated dimeric malenised soya fatty acid: a novel Gemini surfactant”, Journal of Surface Science and Technology, 28, 163 (2012)
13. R. Janardhanan, **V. Vijayabaskar**, B. S. R Reddy “Preparation of a new itaconate based amphoteric surfactant for fatliquor applications” Journal of the American Leather Chemists Association 107, 7, 231, (2012).
14. R. Janardhanan, **V. Vijayabaskar**, B. S. R Reddy “Effect of specific additives on the degree of sulfonation and its influence on leather fatliquoring” Journal of the American Leather Chemists Association, 107, 9, 279, 2012.
15. R. Janardhanan, **V. Vijayabaskar**, B. S. R Reddy “Performance of sulfonated dimeric malenised soya fatty acid as a leather fatliquor” Journal of the American Leather Chemists Association, 107, 4, 128, 2012
16. S. Kalaivani, **V. Vijayabaskar**, M.Thunga, M. Stephan, H. Dorschner , A.K. Bhowmick and U. Wagenknecht “Effect of Irradiation Temperatures on Nitrile Rubber Nano-Composites”, Plastic Rubber and Composites , 38, 39 (2009).
17. A.K.Bhowmick and **V.Vijayabaskar**, “Electron Beam curing of Elastomers”, Rubber Chemistry and Technology, 79, 402 (2006).
18. S. Patel, A. Bandyopadhyay, **V. Vijayabaskar** and Anil. K. Bhowmick “ Effect of Acrylic Copolymer and Terpolymer Composition on the Properties of *In-situ* Polymer/ Silica Hybrid Nanocomposites” Journal of Material Science , 41, 927 (2006)
19. S. Patel, A. Bandyopadhyay, **V. Vijayabaskar** and Anil. K. Bhowmick “Preparation and Properties of New In-situ Acrylic Copolymer/Terpolymer- Clay Hybrid Nanocomposites”, Rubber Chemistry and Technology , 79, 720 (2006).
20. S. Patel, A. Bandyopadhyay, **V. Vijayabaskar** and Anil. K. Bhowmick “Effect of Microstructure of Acrylic Copolymer / Terpolymer on the Properties of Silica Based Nanocomposites Prepared By Sol-Gel Technique”, Polymer,46, 8079 (2005)

Details of the patents filed and accepted

1. Crosslinking of Elastomers at Elevated Temperatures, M.Stephan, **V.Vijayabaskar**, S.Kalaivani, S.Volke , H. Dorschner , , G.Heinrich and A.K. Bhowmick ; A German Patent granted (Patent Number, DE 10 2006 041 871. , IPF Dresden).
2. A new route for the synthesis of Polymeric fatliquor , **V. Vijayabaskar**, S. Ramakrishnan , S.R.K. Subramanian, J.K. Basu, Gunjan, Animesh Chattopadhyay , & S. Ravikumar An Indian Patent No. 282682 , granted Mar 2009.
3. Hyper branched acrylic copolymers as retaining and chrome fixing agents in leather processing, **V. Vijayabaskar**, S. Ramakrishnan S.R. K. Subramanian, J.K. Basu, K.Nagarajan, Animesh Chattopadhyay , & S. Ravikumar ; An Indian Patent No. 286195, granted Dec 2010.