

## REFERENCES

1. Alexandre M. & Dubois P. (2000). Polymer-layered Silicate nanocomposites preparation, properties and uses of a new class of materials. *Mater. Sci. Eng.* 28(2) : 51-63.
2. Aprem A.S., Jacob A. & Pal S.N. (2006). Natural rubber latex-layered silicate nanocomposites with excellent permeation resistance and mechanical properties, in: Latex 2006. *Proceedings of the 4<sup>th</sup> conference on Latex and Latex based products*, Frankfurt, Germany, 24-25 January , Rapra Technology, Frankfurt, Germany pp. 25-30.
3. Aprem A.S., Joseph K., Mathew A.P. & Thomas S. (2000). Sorption and diffusion of acrylonitrile monomer through crosslinked nitrile rubber. *Journal of Applied Polymer Science* 78(5): 941-952.
4. Aranda P. & Ruiz-Hitzky E. (1992). Poly (ethylene oxide) -silicate intercalation materials. *Chem mater* 13(4); 674-685.
5. Arellano R., Bradley J. & Sussman G. (1992). Prevalence of latex sensitization among hospital employees occupationally exposed to latex gloves. *Anesthesiology* 77(2):905-908.
6. Awang S., Vivaygananathan K., Shamsul Bhari A.R. & Amir Hashim M.Y. (2006). Effect of nano-sized fillers on prevulcanized natural rubber latex film properties, In: Latex 2006. *Proceedings of the 4<sup>th</sup> conference on Latex and Latex based products*, Frankfurt, Germany, 24-25 January, Rapra Technology, Frankfurt, Germany pp. 149-161
7. Aziz N.A.A. (1993). Chlorination of gloves. Paper No. 5 of the *Latex Protein Workshop of the International Rubber Technology Conference*, June 1993, Kuala Lumpur, Malaysia.
8. Baur X., Ammon J., Chen Z., Beckmann U. & Czuppon A.B. (1993). Health risk in hospitals through airborne allergens for patients pre-sensitised to latex. *Lancet*, 34(3):1148-1149.
9. Beezhold D. & Beck W.C. (1992). Surgical glove powders bind latex antigens. *Arch Surg*, 12(2):1354-1357.
10. Bich N.N. & Tiang N. T. H. (2010). Rinsing methods for the removal of extractable protein from natural rubber latex films. *Asian workshop on polymer processing Conference* , December 2010, Hanoi, Vietnam pp. 120-132

11. Bishop R.O. (1927). *Malayan Agricultural Journal* 15,27.
12. Blackley D.C. (1997). *Polymer Lattices Science and technology*. 2<sup>nd</sup> edition, volume 2, pp. 26. Chapman & Hall. London, UK.
13. Blow S. (1998). In: *Handbook of Rubber Technology*, Editor, Blow S., Galgotia Publication Ltd, New Delhi, p 483.
14. Brindley G.W. (1980). *Crystal structure of clay minerals and their X-ray identification*. 3<sup>rd</sup> edition, pp. 495. Mineralogical Society. London, UK.
15. Brown R.H., Schauble J.F. & Hamilton R.G. (1998). Prevalence of latex allergy among anesthesiologists: identification of sensitized but asymptomatic individuals. *Anesthesiology* 89(6):292-299.
16. Sussman G.L., Beezhold D.H. & Kurup V.P. (2002). Allergens and natural rubber proteins. *Allerg Clin Immunol* 110(4):S33-9.
17. Cai H.H., Li S.D., Rian T.G., Wang H.B. & Wang J.H. (2003). Reinforcement of natural rubber latex film by ultrafine calcium carbonate. *Journal of Applied Polymer Science* 87(6): 982-985.
18. Cassidy P.E., Aminabhavi T.M. & Thompson C.M. (1983). Water permeation through elastomers & plastics, *Rubber Chemistry and Technology* 56(3): 594-618.
19. Dick J.S. (2001). Editor, *Rubber Technology: Compounding and testing for Performance*, Hanser publishers, p523.
20. Eirich F.R. (1978). Editor, *Science and Technology of Rubber*, Academic Press, New York, p633
21. Ellis B. & Welding G.N. (1964). Estimation from swelling of the structural contribution of chemical reactions to the vulcanization of natural rubber. II. Estimation of equilibrium degree of swelling. *Rubber Chemistry and Technology* 37(2): 571-575.
22. Ellis H. (1990). *The hazards of surgical glove dusting powder*. *Surgery, Gynecology & Obstetrics*, Vol 171: 521527,
23. Flory P.J. & Rhener J.R. (1943). Statistical mechanics of cross-linked polymer networks. II. swelling. *Journal of Chemical Physics* 11(11): 521-526.
24. Franta I. (1989). Editor, *Elastomers and Rubber Compounding Materials*, Elsevier, New York, p588.
25. Galimberti M. (2011). *Rubber-clay nanocomposites; Science, technology and applications*. John Wiley and Sons Inc. Hoboken, New Jersey.

26. Giannelis E.P., Krishnamoorti R. & Manias E. (1999). Polymer-silicate nanocomposites: model systems for confined polymers and polymer brushes. *Adv. Polymer Sci.* 138(2):107-118.
27. Giannelis E.P. (1996). Polymer layered silicate nanocomposites *Adv Mater* 8:29.
28. Giercksky K.E., Qvist H., Giercksky T.C., Warloe T. & Nesland J.M. (1994). Multiple glove powder granulomas masquerading as peritoneal carcinomatosis. *J. Amer. Coll. Surgeons* 179(5): 299-304.
29. Greenland D.J. (2003). Adsorption of Poly(vinyl alcohols) by montmorillonite *J. Colloid Sci.* 18(4):647-657.
30. Hauser E.A. & Dewey B. (1941). Industrial and Engineering chemistry,33,127.
31. Heilman D.K., Jones R.T., Swanson M.C., & Yunginger J.W. (1996). A prospective, controlled study showing that rubber gloves are the major contributor to latex aeroallergen levels in the operating room. *J. Allergy Clin. Immunol.* 98(6):325-330.
32. Holmdahl L., Risberg B., Beck D.E., Burns J.W., Chegini N., diZerga G.S. & Ellis H. (1997). Adhesions: Pathogenesis and Prevention Panel Discussion and Summary. *Eur J Surg*, 163(5): 56-62.
33. Hunt T.K., Slavin J.P. & Goodson W.H. (1994). Starch powder contamination of surgical wounds. *Arch. Surg.* 129(3): 825-828.
34. Jacob A., Kurian P. & Aprem A.S. (2008). Transport properties of natural rubber latex layered clay nanocomposites. *Journal of Applied Polymer Science* 108(4): 2623-2629.
35. Jäger D. & Baur X. (1990). Latex specific proteins as inhalative allergens causing bronchial asthma and shock during surgery. *Clin Exp Allergy*, 20(6) (abstract).
36. Kaczmarek R.G., Moore R.M. & McCrohan J. (1991). Glove use by health care workers: results of a tri-state investigation. *Am. J. Inf. Cont.* 19(1):228-232.
37. Kaczmarek R.G., Silverman B.G. & Gross T.P. (1996). Prevalence of latex-specific IgE antibodies in hospital personnel. *Annals of Allergy* 76(4): 51-56.
38. Kemp A.R. & Straitiff W.G. (1940). Journal of physical chemistry,44,788.
39. Khew M.C. & Ho C.C. (1997). Chlorination of Natural Rubber Latex Films. *Proceedings of the International Natural Rubber Conference*, Kuala Lumpur 1997, pp. 100-103.

40. Khinnava R.S. & Aminabhavi T.M. (1991). Diffusion & sorption of organic liquids through polymer membranes.I. Polyurethane verses *n*-alkanes. *Journal of Applied Polymer. Science.* 42(8): 2321-2328.
41. Kibby T. & Akl M. (1997). Prevalence of latex sensitization in a hospital employee population. *Annals of Allergy* 78(1): 41-44.
42. Kojima Y., Usuki A., Kawasumi M., Okada A., Fukushima Y., Kurauchi T. & Kamigaito O. (1993). Mechanical properties of nylon 6-clay hybrid. *J. Mater. Research* 8(5): 1185-1189.
43. Krishnamoorthi P., Vaia R.A. & Giannelis E.P. (1996). Structure and dynamics of polymer- layered silicate nanocomposites *Chem. Mater.* 8(2):1728.
44. Kujala V., Pirilä T., Niinimäki A. & Reijula K. (1995). Latex-induced allergic rhinitis in a laboratory nurse. *J of Laryngology and Otology*, 109(7):1094-1096.
45. Lagier F., Vervloet D. & Lhermet I, (1992). Prevalence of latex allergy in operating room nurses. *J. Allergy Clin Immunol.* 90(4):319-322.
46. Lan T., Kaviratna P.D. & Pinnavaia T.J. (1995). Mechanism of clay tactoid exfoliation in epoxy – clay –nanocomposites. *Chem Mater* 7:2144-2150.
47. LeBaron P.C., Wang Z. & Pinnavaia T.J. (1999). Polymer-Layered silicate nanocomposites: an over view *Appl Clay Sci* 15(1):11.
48. Mathew S. & Varghese S.(2005). Natural rubber latex-based nanocomposites with layered silicates. *Journal of Rubber Research* 8(1): 1-15.
49. Mathew S., Varghese S., Rajammal G. & Thomas P.C. (2007). Dipping characteristics of layered silicates-natural rubber latex nanocomposites. *Journal of Applied Polymer. Science.* 104(1): 58-65.
50. McLelland J., Shuster S., & Matthews J.N.S. (1991). Irritants increase the response to an allergen in allergic contact dermatitis. *Arch Dermatol*, 127(6):1016-1019.
51. Medalia A.I. & Kraus G. (1994). *Science and Technology of Rubber*, Eds, Mark J.E., Erman B. & Eirich R.F., Academic Press, New York p 387.
52. Moir G.F.J & Tata S.J (1960) Journal of the Rubber Research Institute of Malaya, 16,155
53. Nakade S., Kuga A., Hayashi M. & Tanaka Y. (1997). Highly Purified Natural Rubber IV. Preparation and Characteristics of Gloves and Condoms. *Journal of Natural Rubber Research* 12(1): 33-42.

54. Ng, T.S. (1960). *Proceedings of the natural rubber Research Conference*, Kualalumpur 1960, P,809.
55. Norrish K. (1972). Forces between clay particles. *Proceedings of the 4<sup>th</sup> international clay conference*. (eds. J.M. Serratosa & A. Sanchez). Madrid, Spain. 23-30 June. University of Madrid, Madrid, Spain. pp. 375-383.
56. Ownby D.R., Ownby H.E., McCullough J.A. & Shafer A.W. (1994). The prevalence of anti-latex IgE antibodies in 1000 volunteer blood donors. *J. Allergy Clin. Immunol.*, 93(2):282.
57. Pendle T.D. & Gorton A.D.T. (1980). Dipping with natural rubber latex, *NR Technical Bulletine*. The Malaysian Rubber Producers Research Association. 15(4)-12.
58. Pisati G., Baruffini A., Bernabeo F. & Stanizzi R. (1994). Bronchial provocation testing in the diagnosis of occupational asthma due to latex surgical gloves. *Eur Respir J.* 7(8):332-336.
59. Qutubuddin S. & Fu X. (2001). *Polymer-Clay Nanocomposites: Synthesis and Properties, Nano-Surface Chemistry*, Editor, Rosoff, M., Marcel Dekker, p 653.
60. Rathnayaka U.N., Walpalage S., Siriwardana S., Amarasiri A. & De Silva U.K. (2013) Natural rubber latex-clay nanocomposite: use of montmorillonite clay as an alternative for conventional CaCO<sub>3</sub>. *Journal of the National Science Foundation of Sri Lanka* 41(4): 293-302.
61. Ray S.S. & Okamoto M. (2003). Polymer/layered silicate nanocomposites: a review from preparation to Processing. *Progress in Polymer Science*. 28(11):1539-1641.
62. Roe C.P & Ewart R.H. (1942) Journal of the American Chemical Society, 64,202
63. Rothon R. (1995). Editor, *Particulate-Filled Polymer Composites*, Longman Scientific & Technical, New York, p 371.
64. Ruhl C.M., Urbanic J.H., Foresman P.A., Cox M.J., Rodeheaver G.T., Zura R.D. & Edlich R.F. (1994). A new hazard of corn starch, an absorbable dusting powder. *The J Emerg Med.* 12(3): 1114.
65. Schlozman Jr. W.W. (2002). Surfactant Treatment Reduces Both Allergen Content and Cure Efficiency of *Hevea* Latex. *Trends in New Crops and New Uses*, Janick J. and Whipkey A. (eds.). ASHS Press, Alexandria, VA, United States.
66. Seneviratne W.M.G., Chandrasekara S. & Tillekeratne L.M.K. (2005). Methods of Removal of Leachable Proteins from Natural Rubber Lattices/latex Products.

*Preprints of Papers, International Natural Rubber Conference, India 2005, pp. 356-363.*

67. Stephen R., Alex R., Cherian T., Varghese S., Joseph K. & Thomas S. (2006). Rheological behaviour of nanocomposite of natural rubber and carboxylated styrene butadiene rubber lattices and their blends. *Journal of Applied Polymer Science* 101(4):2355-2362.
68. Stephen R., Varghese S., Joseph K., Oommen Z. & Thomas S. (2006). Diffusion and transport through nanocomposites of natural rubber(NR), carboxylated styrene butadiene rubber(XSBR) and their blends. *Journal of Membrane Science* 282(1-2):162-170.
69. Subramanian k., *Fundamentals of Rubber Technology* (2002).
70. Swanson M.C., Bubak M.E., Hunt L.W., Yunginger J.W., Warner M.A. & Reed C.E. (1994). Clinical aspects of allergic disease: Quantification of occupational latex aeroallergens in a medical centre. *J Allergy Clin Immunol.* 94(2):445-451.
71. Tomazic V.J., Shampaine E.L., Lamanna A., Withrow T.J., Adkinson Jr. N.F. & Hamilton R.G. (1994). Corn starch powder on latex products is an allergen carrier. *J. Allergy Clin Immunol.*, 93(5):751-758.
72. Usuki A., Kojima Y., Kawasumi M., Okada A., Kurauchi T. & Kamigaito O. (1993). Swelling behaviour of montmorillonite cation exchanged for  $\infty$  amino acids by caprolactam. *J. Mater. Res.* 8(5):1174-1178.
73. Vaia R.A., Price G., Ruth P.N., Nguyen H.T. & Lichtenhan J. (1999). Polymer/layered silicate nanocomposites as high performance ablative materials *Appl Clay Sci.* 15(12):67.
74. Valadares L.F., Leite C.A.P. & Galembeck F. (2006). Preparation of natural rubber-montmorillonite nanocomposite in aqueous medium: evidence for polymer-platelet adhesion. *Polymer* 47(2): 672-678.
75. Van den Tempel,M. (1942). Transactions of the Institution of the Rubber Industry 18,173.
76. Van der Meeren H.L.M & Van Erp P.E.J. (1986). Life-threatening contact urticaria from glove powder. *Contact Dermatitis*, 14(2):190-191.
77. Vandenplas O., Delwiche J.P., Evrard G., Aimont P., Van der Brempt X., Jamart J. & Delaunois L. (1995). Prevalence of occupational asthma due to latex among hospital personnel. *Am. J. Respir Crit Care Med.* 151(4):54-60.



78. Varghese S. & Karger-Kocsis J. (2003). Natural rubber-based nanocomposites by latex compounding with layered silicates. *Polymer* 44(17):4921-4927.
79. Vijayalakshmi K. Ph.D. Thesis (2009).
80. Wang M.J. (1998). Effect of polymer-filler and filler-filler interactions on dynamic properties of filled vulcanizates. *Rubber Chem. Technol.* 71:520-589.
81. Woods J.A., Morgan R.F., Watkins F.H. & Edlich R.F. (1997). Surgical glove lubricants: from toxicity to opportunity. *J. Emerg Med.* 15(2): 209-220.
82. Wu Y.P., Wang Y.Q., Zhang H.F., Wang Y.Z., Yu D.S., Zhang L.Q. & Yang J. (2005). Rubber-pristine clay nanocompsites prepared by co-coagulating rubber latex and clay aqueous suspension. *Composites Science and Technology* 65(7-8): 1195-1202.
83. Yariv S. & Cross H. (2002). Eds., *Organic-Clay Complexes and Interactions*, Marcel Dekker, New York,
84. Yassin M.S., Lierl M.B. & Fischer T.J. (1994). Latex allergy in hospital employees. *Ann Allergy*, 72(4):245-249.
85. Zhang L.Q., Wu Y.P., Wang Y.Q., Tian M., Jiaand Q. & Qing Q. (2006). A universal preparation method for rubber nanocomposites-latex compounding method In: Latex 2006. *Proceedings of the 4<sup>th</sup> conference on Latex and Latex based products*, Frankfurt, Germany, 24-25 January, Rapra Technology, Frankfurt, Germany pp. 20-44