

REFERENCES

1. N.Yogarathnam, "Rubber industry should develop a vision for 2022", <http://www.dailynews.lk/2012/02/13/bus08.asp>, Feb 2012.
2. N.Yogarathnam, "Sri Lanka's rubber industry needs 21st century thinking" <http://www.topssrilanka.com/article42764-sri-lankas-rubber-industry-needs-21st-century-thinking.html>, May 16, 2012.
3. U.K. Niyogi, "Additives for rubbers", Polymer additives and compounding, Polymer Science, Division of material Science, Shri Ram Institute for Industrial Research, July 23, 2007.
4. History of natural rubber, The international rubber research and development board, <http://r0.unctad.org/infocomm/anglais/rubber/characteristics.htm#origine>,
5. K.F.Heinisch, "Dictionary of Rubber", <http://r0.unctad.org/infocomm/anglais/rubber/characteristics.htm>, 1974.
6. Dr. W. Resing, FPRI, "Production Processing and Properties", Natural Rubber 17, 1st quarter, p.3, 2000.
7. S.Mihara, "Reactive processing of silica reinforced tire rubber", Ph.D Thesis, Univ. of twente, Enschede, Netherland, pp.11-28, 2009.
8. K.Subramaniam, Fundamentals of Rubber Technology, pp. 82-94, 2002.
9. M.J.Wang, S.Wolff, and J.B. Donnet, "Rubber Chemistry and Technology", 64, p. 714, 1991.
10. S.J Monte, G. Superman and P.F. Bruins, "Rubber Chemistry and Technology", 48, p.7091, 1975.
11. F. Thurn, K. Burmester, J. Pochert and S. Wolff (to Degussa), US Pat.3,873,489, 25 May 1975.
12. F. Thurn and S. Wolff, Kautsch. Gummi Kunstst., 28, p.733, 1975.
13. B.Rattanasupa, "The development of rubber compound based on NR and EPDM for playground rubber mat", MSc Thesis, Graduate School, Univ. Kasetsart, p. 24, 2007.

14. H.Cai, S.L.,Tian, G.,Wang, and J. Wang, “Reinforcement of natural rubber latex film by ultra fine calcium carbonate”, Journal of applied Polymer Science, 87: pp. 952-985, 2003.
15. S.Manrosha, A.B., “Effect of nano calcium carbonate on the mechanical properties of latex film”, Journal of Applied Polymer Science, 96, pp. 1550-1556, 2005.
16. G. Deng, M.C., N.Ao, D.Yan and Z. Zheng, “CaCO₃/natural rubber latex nanometer composite and its properties”, Journal of Applied Polymer science, 101, pp. 3442-3447, 2006.
17. S.Varghese, K.G.G. Apsotolov, A.A., Karger – J. Koksiss, “Morphology and mechanical properties of layered silicate reinforced natural and polyurathene rubber blends produced by latex compounding”. Journal of Applied Polymer Science. 92, pp. 543- 538, 2003.
18. Paramoch Rangsunvigit, P.I., Nachanart Na – ranong, “Mixed surfactants for silica modification by admicellar polymerization using a continuous stirred tank reactor”. Chemical Engineering, 136, pp. 288-294, 2008.
19. T.Seckin, A.Giltek, Y.Onal, M.G.Icduygu, “Polymethacrylic acid and methacryloxypropyltrimethoxy silane / clay nanocomposites prepared by in – situ polymerization”. Turk J Chem, 26, pp. 925 – 937, 2002.
20. T.F. Brown and Y. Cohen, “Polymer – Grafted silica: A screening system for polymeric adsorption resin development”. Ind. Eng. Chem. Res, 32, no. 4, pp. 716 – 725, 1993.
21. K. Suzuki, S.S., Chappel . C., Siddiqui. J.A., Offenbrite, “Modification of porus silica particles with poly (acrylic acid)”. Polymers for advanced technologies, 11, no.2, pp. 92 – 97, 2000.
22. Van Nguyen, W.Y. Yoram cohen, “Graft polymerization of vinyl acetate on silica”. Journal of applied polymer science, 87, no.2, pp.300-310, 2003.
23. S. Mann, and H. Colfen, “Higher – order organization by Mesoscale self – assembly and transformation of hybrid nanostructures”, Angew. Chem. Int. ed.42, no. 21, pp. 2350 – 2365, 2003.
24. F.Caruso, “Nano engineering of Particle Surfaces”. Advanced Materials, 13, no. 1, p. 12, 2001.
25. D.C. Edwards, “Review polymer – filler interaction in rubber reinforcement”. Materials science, 25, no. 10, pp. 4175 – 4185, 1990.

26. Sanjaya. K Sharma, and A. Mudhoo, “A Hand book of Applied Biopolymer Technology: Synthesis, degradation and Applications” Royal society of chemistry, *www.rsc.org*, 2011.
27. P.K. Dutta, J.Dutta , and V.S. Trioathi, “Chitin and chitosan: chemistry, properties and applications”, *Journal of scientific and industrial research*, 63, pp. 20 – 31, January 2004.
28. J. Synowieki, and N. A. Al-Khateeb, “Production, Properties and some new Applications of Chitin and its Derivatives”, *Critical Reviews in Food Science and Nutrition*, pp.145-171, 2003.
29. J. Nunthanid, S. Puttipipatkachorn, K. Yamamoto, and G.E Peck, “Physical Properties and Molecular Behavior of Chitosan Films”. *Drug Dev Ind Pharm.*, 27, no2, pp.143-157, 2001.
30. V. Savant, and J.A. Torres, *American Chitoscience Society* 1, pp. 1-4, 1995.
31. G. Borchard, and H.E. Junginger , “Modern drug delivery applications of chitosan”. *Adv Drug Del Rev.*, 52, no.2, p. 103, 2001.
32. J. Karlsen, and O. Skaugrud, “Excipient Properties of chitosan”. *Manuf Chem.*, 62, pp. 18-19, 1991.
33. A.K. Singla, and M. Chawla, “Chitosan: some pharmaceutical and biological aspects - an update”, *J-Pharm Pharmacol.*, 53, no. 8, pp. 1047-1067, 2001.
34. P.A.Sanford, “Chitosan: commercial uses and potential applications”, in G.Skjak-Braek, T.Anthonsen, and P.Sanford, (eds), “Chitin and Chitosan-Sources”, *Chemistry, Biochemistry, Physical Properties and Applications*, Elsevier, London, pp. 51-70, 1989.
35. Q. Li, E.T. Dunn, E.W. Grandmaison , and M.F.A. Goosen, “Applications and Properties of Chitosan”. *J Bioact Compat Polym.*, 7, pp. 370-397, 1992.
36. I. Genta, P. Perugini, and F. Pavanetto, “Different molecular weight chitosan microspheres: Influence on drug loading and drug release”. *Drug Dev Ind Pharmacy*. 24, pp. 779-784, 1998.
37. R.A.A. Muzzarelli, *Chitin*, Pergamon Press, Oxford, 1977.
38. A. Baxter, M. Dillon, K.D.A. Taylor, and G.A.F. Roberts, ”Improved method for i.r. determination of the degree of N-acetylation of chitosan”. *Intl J Biol Macromol.*, 14, pp. 166-169, 1992.

39. J. Li, J.F. Revol, and R.H. Marchessault, "Effect of degree of Deacetylation of Chitin on the Properties of Chitin Crystallites", *J Appl Polym Sci.*, 65, no. 2, pp. 373-380, 1997.
40. S. Mima, M.Miya, R. Iwamoto, and S. Yoshikawa, "Highly Deacetylated Chitosan and Its Properties", *J Appl Polym Sci.*, 28, no. 6, pp. 1909-1917, 1983.
41. L. Pranee, H. Chuen, C. Suwalee, and F.S. Willium, "Effect of Chemical Treatment on the Characteristics of Shrimp Chitosan," *Journal of Metals, Materials and Minerals*, 12, pp. 11-18, 2002.
42. L. Zouhour, S. Salah, S.Saloua, and E.A.Amor," Extraction and characterization of chitin and chitosan from crustacean by-products-biological and physicochemical properties", *African journal of biotechnology*, 10, no. 4, pp. 640-647, 2010.
43. V. Kathleen, and K. Paul, "Structure analysis and degree of substitution of chitin, chitosan and dibutylchitin by FT-IR spectroscopy and solid state ¹³C NMR", *Carbohydrate polymers*, 58, pp. 409-416, 2004.
44. H.S.Katz, J.V.Milewski, "Hand book of fillers for plastics", p. 170, 1987.
45. E.Ft Vansant, P. Voort, and K.C Vrancken, "Characterization and chemical modification of the silica surface", 93, p. 10, 1995.



University of Moratuwa, Sri Lanka.
 Electronic Theses & Dissertations
www.lib.mrt.ac.lk