

REFERENCES

- Abdou-Sabet, S., Puydak, R.C. and Rader, C.P., (1996). Dynamically vulcanized thermoplastic elastomers. *Rubber chemistry and technology*, 69(3), pp.476-494.
- Abu-Abdeen, M., and Elamer, I., (2010). Mechanical and swelling properties of thermoplastic elastomer composites. *Materials & Design* 31.2 (2010), pp.808-815.
- Ahmad, A., Mohd, D. and Abdullah, I., (2004). Mechanical properties of filled NR/LLDPE blends.
- Akovali, G. ed., (2001). *Handbook of composite fabrication*. iSmithers Rapra Publishing.
- Amin, M., (1997). *Curing Characteristics and Properties of Epoxidized Natural Rubber (ENR)* (Doctoral dissertation, Universiti Sains Malaysia).
- Antunes, C.F., Van Duin, M. and Machado, A.V., (2012). Effect of crosslinking on morphology and phase inversion of EPDM/PP composites. *Materials Chemistry and Physics*, 133(1), pp.410-418.
- Anandhan, S., De, P.P., De, S.K., and Bhowmick, A.K., (2003) "Thermoplastic elastomeric blend of nitrile rubber and poly(styrene-co-acrylonitrile) I. Effect of mixing sequence and dynamic vulcanization on mechanical properties", *Journal of Applied Polymer Science*, 88(8), 1976-1987.
- Anon (2016). Plantation Sector Statistical Pocket Book, Ministry of Plantation Industries, Colombo 2.
- Asaletha, R., Kumaran, M.G. and Thomas, S., (1998). Transport behaviour of aliphatic hydrocarbons through dynamically crosslinked natural rubber/polystyrene composites. *Polymers & polymer composites*, 6(6), pp.357-371.
- Asaletha, R., Kumaran, M.G. and Thomas, S., (1999). Thermoplastic elastomers from composites of polystyrene and natural rubber: morphology and mechanical properties. *European Polymer Journal*, 35(2), pp.253-271.
- Baker, A.M.M., Mead, J., (2000). "Thermoplastics, in Modern Plastics Handbook", McGraw-Hill, Inc.
- Banghua, Z., Guang, W., Qingye, Z., Guangjie, H., Moudao, S. and Ying, Z., (1996). Study on the compatibility of pvc/nbr (hnbr)/hdpe composites (II) the effects of compatibilizers on the morphology of composites. *Polymeric materials science & engineering*

Bengtsson, M., Gatenholm, P., & Oksman, K., (2005). The effect of crosslinking on the properties of polyethylene/wood flour composites. *Composites Science and Technology*, 65(10), pp.1468-1479.

Bengtsson, M., Gatenholm, P., & Oksman, K., (2005). The effect of crosslinking on the properties of polyethylene/wood flour composites. *Composites Science and Technology*, 65(10), pp.1468-1479.

Betinngyte et al-(2012). "Influence of Calcium Carbonate Fillers on the Properties of Recycled Poly(ϵ -caprolactone) Based Thermoplastic Polyurethane". *Material Science*, 18(3), pp.243 – 249.

Bonner, J.G. and Hope, P.S., (1993). Compatibilisation and reactive compositeing. In *Polymer composites and alloys*, pp.46-74. Springer, Dordrecht.

Bosshard A.W. And Schlumpf, H.P., (1987). "Fillers and reinforcements in plastics additives 2/e", R. Gachter and H. Muller, Eds., Hanser Publishers, New York, pp.407-420.

Brydson, J.A., "Plastics Materials", 6/e, Butterworth-Heinemann, Oxford, (1995).

Callaghan, T.A., Takakuwa, K., Paul, D.R. and Padwa, A.R., (1993). Polycarbonate-SAN copolymer interaction. *Polymer*, 34(18), pp.3796-3808.

Cao, X.V., Ismail, H., Rashid, A.A. and Takeichi, T., (2012). Kenaf powder filled recycled high density polyethylene/natural rubber biocomposites: The effect of filler content. *International Journal of Integrated Engineering*, 4(1).

Carmen I. W. C, Cleide M.M , Sergio R.T, and Raquel S.M., (2009). "Morphology and crystallization behavior of the PP/PET nanocomposites," *Journal of Applied Polymer Science*, vol. 111, no. 1, pp. 29–36.

Carvalho, A.J.F., Job, A.E., Alves, N., Curvelo, A.A.S. and Gandini, A., (2003). Thermoplastic starch/natural rubber composites. *Carbohydrate Polymers*, 53(1), pp.95-99.

Chodák, I., (1995). Properties of crosslinked polyolefin-based materials. *Progress in Polymer Science*, 20(6), pp.1165-1199.

Coran, A.Y., (1994). Vulcanization. *Science and technology of rubber*, 2, pp.339-385.

Craig, I. H., & White, J. R., (2006). Mechanical Properties of photo-degraded recycled photo

Daniel I. and Ishai O., "Engineering Mechanics of Composite Materials", Oxford University Press Inc., USA, 1994.

Dahlan, H.M., Khairul Zaman, M.D. and Ibrahim, A., (2000). Liquid natural rubber (LNR) as a compatibilizer in NR/LLDPE blends. *Journal of applied polymer science*, 78(10), pp.1776-1782.

Dluzneski, P. R., (2001). Peroxide vulcanization of elastomers. *Rubber chemistry and technology*,

Doufnoune, R., Haddaoui, N. and Riahi, F., (2008). Effects of coupling agents on the tensile properties of calcium carbonate filled LDPE compatibilized with maleic anhydride-g-LDPE (Part I). *International Journal of Polymeric Materials*, 57(4), pp.295-318.

Elshereksi, N.W., Ghazali, M.J., Muchtar, A. and Azhari, C.H., (2017). Studies on the effects of titanate and silane coupling agents on the performance of poly (methyl methacrylate)/barium titanate denture base nanocomposites. *Journal of dentistry*, 56, pp.121-132.

Feng. L, Nan-ying. N and Long. C., (2009). Effects of compatibilizers on the mechanical properties of low density polyethylene/Lignin blends. *Polymer science* Vol.27.

Gajanayake, R., Chinthaka, S.D.M. and Egodage, S., (2012), November. Effect of blend composition on physicochemical properties of natural rubber/linear low density polyethylene blend. In Proceedings of International Polymer Science and Technology Symposium (Vol. 1).

Gajanayake, G.K.R.P., (2014). *Effect of Composition on Physicochemical Properties of Linear Low Density Polyethylene/Natural Rubber Blends* (Doctoral dissertation, University of Sri Jayewardenepura, Nugegoda).

Gelos Manias, E.A. and Utracki, L.A., (2014). *Thermodynamics of Polymer Composites* 4.

George, S., George, J., Thomas, S. In *Handb. Eng. Polym. Mater.* Cheremisinoff, N.P., Dekker (Ed.) (1997) New York, pp. 667±684.

Ghosh, A.K. Sen, and P. Kay (1992)., *polymer*, 33, 744.

Ghosh, P., Chattopadhyay, B. and Sen, A.K., (1998). Modification of low density polyethylene (LDPE) by graft copolymerization with some acrylic monomers. *Polymer*, 39(1), pp.193-201.

Głogowska, K. and Majewski, Ł., (2017). The effect of selected natural fillers on the mechanical properties of low-density polyethylene. *Czasopismo Techniczne*, 2017(Volume 10), pp.155-166.

Gorilovskii, M.I., (2005). Investigations of crystallinity and thermal stability in pipes produced from different types of polyethylene, *Plasticheskie massy. Struktura I svoistva*, 4, pp.9-12.

Goyanes, S., Lopez, C.C., Rubiolo, G.H., Quasso, F. and Marzocca, A.J., (2008). Thermal properties in cured natural rubber/styrene butadiene rubber composites. *European Polymer Journal*, 44(5), pp.1525-1534.

Grady, B.P. and Cooper, S.L., (1994). Thermoplastic elastomers. In *Science and Technology of Rubber (Second Edition)*, pp. 601-674.

Gorter, T. and Reinders, A.H., (2012). A comparison of 15 polymers for application in photovoltaic modules in PV-powered boats. *Applied energy*, 92, pp.286-297.

Harogopad, S. B., & Aminabhavi, T. M. (1991). Interactions of substituted benzenes with Holden, G., (2000). *Understanding thermoplastic elastomers*. Hanser Verlag.

Hrdlicka, Z., Kuta, A. and Hajek, J., (2010). Thermoplastic elastomer blends based on waste rubber and low-density polyethylene. *Polimery*, 55(11-12), pp.832-838.

<http://www.nocil.com/Downloadfile/DTechnicalNote-VulcanizationDec10.pdf>. Vulcanization & Accelerators - Nocil Limited [accessed Dec 11 2018]

<http://www.chemsystems.com> (25th of November 2017)

<http://www.zorge.com> (21st of November 2017)

<http://www2.ups.edu/faculty/hanson/Spectroscopy/IR/IRfrequencies.html> Visited 23rd January 2017.

https://www.researchgate.net/publication/270439409_Peroxide_vulcanization_of_natural_rubber_Part_I_Effect_of_temperature_and_peroxide_concentration [accessed Dec 11 2018].

Ibrahim, A. and Dahlan, M., (1998). Thermoplastic natural rubber composites. *Progress in Polymer Science*, 23(4), pp.665-706.

- Jansen, P., Gomes, A.S. and Soares, B.G., (1996). The use of EVA-containing mercapto groups in natural rubber-EVA composites. II. The effect of curing system on mechanical and thermal properties of the composites. *Journal of Applied Polymer Science*, 61(4), pp.591-598.
- Johnson, T. and Thomas, S., (1999). Natural rubber/epoxidised natural rubber-25 composites: morphology, transport phenomena and mechanical properties. *Journal of materials science*, 34(13), pp.3221-3239.
- Jorgensen, M., Norrman, K. and Krebs, F.C., (2008). Stability/degradation of polymer solar cells. *Solar Energy Materials and Solar Cells*, 92(7), pp.686-714.
- Joseph, A.M., George, B., Madhusoodanan, K.N. and Alex, R. (2016). The current status of sulphur vulcanization and devulcanization chemistry: *Devulcanization. Rubber Science*, 29(1), pp.62-100
- Karger-Kocsis, J., Mészáros, L., & Bárány, T., (2013). Ground tyre rubber (GTR) in thermoplastics, thermosets, and rubbers. *Journal of Materials Science*, 48(1), pp.1-38.
- Katbab A.A, M, Anaraki S.M, Nazokdast H., (2012). Polypropylene/NBR Thermoplastic Elastomers Mechanics, Rheology, Crystallinity, Polymer Engineering Department, AmirkabirUniversity, Tehran, Iran.
- Kattas, L., Gastrock, F., Levin, I. and Cacciatore, A., (2000). Plastic additives. *Modern Plastics Handbook; Harper, CA, Ed.; McGraw-Hill*, pp.4-1.
- Keskkula, H., Paul, D.R., (1996). "Polymer Composites, in Kirk Othmer Encyclopedia of Chemical Technology", John Willey & Sons Inc.
- Kim, Y., Cho, W.J., Ha, C.S. and Kim, W., (1995). The control of miscibility of PP/EPDM composites by adding Ionomers and applying dynamic vulcanization. *Polymer Engineering & Science*, 35(20), pp.1592-1599.
- Koning, C., Van Duin, M., Pagnouille, C. and Jerome, R., (1998). Strategies for compatibilization of polymer composites. *Progress in Polymer Science*, 23(4), pp.707-757.
- Kormin, S., Kormin, F., Beg, M.D.H. and Piah, M.B.M., (2017), August. Physical and mechanical properties of LDPE incorporated with different starch sources. In *IOP Conference Series: Materials Science and Engineering* (Vol. 226, No. 1, p. 012157). IOP Publishing.

Koshy, A.T., Kuriakose, B., Thomas, S. and Varghese, S., (1993). Studies on the effect of composite ratio and crosslinking system on thermal, X-ray and dynamic mechanical properties of composites of natural rubber and ethylene-vinyl acetate copolymer. *Polymer*, 34(16), pp.3428-3436.

Krupa, I. and Luyt, A.S., (2002). Cross-linking of LDPE/wax composites in the presence of dicumyl peroxide. *South African Journal of Chemistry*, 55.

Kruželák, J., Sýkora, R. and Hudec, I., 2017. Vulcanization of rubber compounds with peroxide curing systems. *Rubber chemistry and technology*, 90(1), pp.60-88.

Kumar, C.R., Fuhrmann, I. and Karger-Kocsis, J., (2002). LDPE-based thermoplastic elastomers containing ground tire rubber with and without dynamic curing. *Polymer degradation and stability*, 76(1), pp.137-144.

Kruželák, J., Sýkora, R. and Hudec, I., (2014). Peroxide vulcanization of natural rubber. Part I: effect of temperature and peroxide concentration. *Journal of Polymer Engineering*, 34(7), pp.617-624.

Le Guennec, P., Travers, J.P. and Nicolau, Y.F., (1993). Comparative study of spin dynamics in polybithiophene and poly (3-methylthiophene). *Synthetic metals*, 55(1), pp.672-676.

Liu, S.Q., Gong, W.G. and Zheng, B.C., 2014. The effect of peroxide cross-linking on the properties of low-density polyethylene. *Journal of Macromolecular Science, Part B*, 53(1), pp.67-77.

Mahapram, S. and Poompradub, S., (2011). Preparation of natural rubber (NR) latex/low density polyethylene (LDPE) blown film and its properties. *Polymer Testing*, 30(7), pp.716-725.

Manson, J.A., (2012). *Polymer composites and composites*. Springer Science & Business Media.

Mazaid, N.A., Nashar, D.E and Sadek, E.M., (2009). The effect of a Silane coupling agents on properties of rice husk-filled maleic anhydride compatibilized natural rubber/low-density polyethylene composite. *Journal of polymer Science* 4(2), pp.22-31

Maziad, N.A., El-Nashar, D.E. and Sadek, E.M., (2009). The effects of a silane coupling agent on properties of rice husk-filled maleic acid anhydride compatibilized natural rubber/low-density polyethylene composite. *Journal of Materials Science*, 44(10), pp.2665-2673.

Manaila, E., Craciun, G., Stelescu, M.D., Ighigeanu, D. and Ficai, M., (2014). Radiation vulcanization of natural rubber with polyfunctional monomers. *Polymer Bulletin*, 71(1), pp.57-82.

Mazumdar, S., (2001). *Composites manufacturing: materials, product, and process engineering*. CrC press.

Mohamed, R. M., (2005). Properties Of Rubber Composites Based On Natural Rubber Loaded With Different Fillers And Cured By Gamma Radiation. *Journal of botany Science of Ain Shams University*. 9(2), pp.253-270.

Mohamed, R.M., (2011). *Properties of rubber composites based on natural rubber loaded with different fillers and cured by gamma radiation* (Doctoral dissertation, Ain Shams University).

Moldovan, Z., Ionescu, F., Litescu, S., Vasilescu, I. and Radu, G.L., (2008). EPDM-HDPE composites with different cure systems mechanical and infrared spectrometric properties. *Journal of Applied Sciences*, 8(1), pp.86-94.

Monte, S.J., Titanate Coupling Agents, in “Functional Fillers for Plastics”, Wiley-Vch Verlag GmbH & Co. KgaA, Weinheim, (2005).

Monticelli, O., Bocchini, S. and Frache, A., (2012). Simple Route for the Preparation of Composites Based on PA6 and Partially Exfoliated Graphite. *Journal of Nanomaterials*. 8(5), pp.42-47.

Montoya M., Tomba J.P., Carella J.M., Gobernado-Mitre M.I. (2004). *Euro. Poly. Jo.*, 40,p.2757

Munusamy, Y., Ismail, H., Mariatti, M. and Ratnam, C.T., (2008). Ethylenevinyl acetate/natural rubber/organoclay nanocomposites: effect of sulfur and peroxide vulcanization. *Journal of Reinforced Plastics and Composites*, 27(16-17), pp.1925-1945. Liu, N.C., Huang, H. *Gaofenzi Cailiao Kexue Yu Gongcheng* (1996) 12, pp. 1±8.

Muzzy, J. D., (2009) *Thermoplastics Properties*. 1st Edition. Georgia Institute of Technology, Atlanta, USA. Chapter 3

Nakamura, Y., Nishida, M. and Fukuda, T., (2012). Mechanical Properties Of Silane-Treated Silica Particle-Filled Polyisoprene Composites Influence of The Alkoxy Group Mixing Ratio in Silane Coupling Agent Containing Mercapto Group. *Journal of rubber research*. 10(4), pp. 79-86.

Nakason, C., Nuansomsri, K., Kaesaman, A. and Kiatkamjornwong, S., (2006). Dynamic vulcanization of natural rubber/high-density polyethylene composites: effect of compatibilization, composite ratio and curing system. *Polymer Testing*, 25(6), pp.782-796.

Naskar, K. and Noordermeer, J.W., (2003). Dynamically vulcanized PP/EPDM composites: Effects of different types of peroxides on the properties. *Rubber chemistry and technology*, 76(4), pp.1001-1018.

Natural Rubber. Available from <http://en.wikipedia.org/wiki/Rubber> on 11th of January 2013.

Noriman, N. Z., & Ismail, H. (2012). Effect of epoxidized natural rubber on thermal properties, fatigue life, and natural weathering test of styrene butadiene rubber/recycled acrylonitrile-butadiene rubber (SBR/NBRr) composites. *Journal of Applied Polymer Science*, 123(2), pp.779-787.

Naderi, G., Nouri, M.R., Mechrabzadesh, M., and Bakhshandeh G.R., (1999) “Studies on dynamic vulcanization of PP/NBR thermoplastic elastomer blends”, *Iranian Polymer Journal*, 8(1), pp.37-42.

O’Connor G E and Fath MA., (1981) Thermoplastic elastomers, Part I: Can TPEs compete against thermoset rubbers, *Rubber World* 185, pp.25–29.

Onyeagoro , G.N and Enyiegbulam, M.E., (2012).Studies on reactive compatibilization and dynamic vulcanization of polypropylene/epoxidized natural rubber blends filled with carbonized dika nutshell. Vol 2.TT

Padhiyar, S. and Shah, D., (2008). Effect of Silanes As Crosslinking Agent With The NBR Rubber. *Journal of Polymer Science*. 14(2), pp.221-234.

Parameswaranpillai, J., Thomas, S. and Grohens, Y., (2014). Polymer composites: state of the art, new challenges, and opportunities. *Characterization of Polymer Composites*, pp.1-6.

Patel, G.V., Patel, H.B., Sharma, P., Patel, H.A. and John, N., (2006). A study on grafting of natural rubber and nitrile rubber on thermoplastic low density polyethylene using maleic anhydride and acrylic acid. *Int. J. Polymer. Mater*, 55(6), pp.413-424.

Paul, D. R., & Barlow, J. W. (1980). Polymer composites. *Journal of Macromolecular Science—Reviews in Macromolecular Chemistry*, 18(1), pp.109-168.

Pechurai, W., Nakason, C. and Sahakaro, K., (2008). Thermoplastic natural rubber based on oil extended NR and HDPE composites: Composite compatibilizer, phase inversion composition and mechanical properties. *Polymer Testing*, 27(5), pp.621-631.

Petrović, Z.S., Budinski-Simendić, J., Divjaković, V. and Škrbić, Ž., (1996). Effect of addition of polyethylene on properties of polypropylene/ethylene-propylene rubber composites. *Journal of applied polymer science*, 59(2), pp.301-310.

Pipattananukul, N., Ariyawiriyanan, W. and Kawahara, S., (2014). Thermal Behavior of Vulcanized Deproteinized Natural Rubber Nano-composites. *Energy Procedia* 56, pp.634-640.

Plastics, Polymerization and Rubber. Available from www.xiameter.com (Accessed on 11th of January 2013)

Pocius, A.V., “Adhesion and Adhesives Technology”, Hanser Publishers, New York, (1997)

.

Pocius, A.V., (2012). *Adhesion and Adhesives Technology: An Introduction*. Carl Hanser Verlag GmbH Co KG.

Poolsawat, K., Jangchud, I., Ritvirulh, C. and Pinyocheep, P., (2011). Effects of viscosity on properties of thermoplastic natural rubber (TPNR) Prepared from natural rubber (NR) and low density polyethylene (LDPE). In 49. *Kasetsart University Annual Conference*, Bangkok (Thailand), 1-4 Feb 2011.

Pracella, M., Haque, M.M.U. and Alvarez, V., (2010). Functionalization, compatibilization and properties of polyolefin composites with natural fibers. *Polymers*, 2(4), pp.554-574.

Preparation of rubber blends (1999). Available from <http://www.mgutheses.org> (Accessed on 10th of January 2013)

Rani, J., (1999). Development of Polybutadiene (BR)-Polyethylene (LDPE) Blend Based Microcellular Soles for Low-Temperature Applications.

Rader Ch P., (2003) Thermoplastic elastomers, in Rubber Technology Special Topics (Eds. Baranwal K and Stephens H) *Rubber Div, ACS*, Ch. 13, pp. 415–433.

Radheshkumar, C. and Karger-Kocsis, J., (2002). Thermoplastic dynamic vulcanisates containing LDPE, rubber, and thermochemically reclaimed ground tyre rubber. *Plastics, rubber and composites*, 31(3), pp.99-105.

Radusch, H.J. and Pham, T., (1996). Morphology formation in dynamic vulcanized PP/EPDM composites. *Kautschuk Gummi Kunststoffe*, 49(4), pp.249-256.

Raja, N.H.B.R. N., (2009). Preparation, Characterization and properties of organoclay and filled natural rubber nano composites. pp.8-24.

Rao, C. N. R., Venkataraghavan, R., & Kasturi, T. R. (1964). Contribution to the infrared spectra of organosulphur compounds. *Canadian journal of chemistry*, 42(1), pp.36-42.

Rector, Y. P., (2006). *Polymers Characteristics, Applications and Processing*. 2nd Edition. <http://www.virginia.edu/bohr/mse209/chapter16.htm> and University of Virginia. Chapter 16.

Reuvekamp, L.A.E, Brinke, J.W and Van, P.J., (2002). Effect of mixing condition reaction of TESPT silane coupling agent during mixing with silica filler and tire rubber.

Rocha, M.C.G., Leyva, M.E. and Oliveira, M.G.D., (2014). Thermoplastic elastomers blends based on linear low density polyethylene, ethylene-1-octene copolymers and ground rubber tire. *Polímeros*, 24(1), pp.23-29.

Rothon, R.N, *Particulate-filled Polymer Composites*, Rapra Technology Ltd, 2nd Edition, pp.178-190.

Rubin I. I., "Handbook of Plastic Materials and Technology", John Wiley and Sons Inc., New York, (1990).

Saci, H., Bouhelal, S., Bouzarafa, B., López, D., & Fernández-García, M. (2016). Reversible crosslinked low density polyethylenes: structure and thermal properties. *Journal of Polymer Research*, 23(4), pp.1-9.

Sampath W.D.M, Egodage S.M and Edirisinghe D.G., (2013). Evaluation of Dynamic Vulcanization of Natural Rubber and Low Density Polyethylene Composite. Proceeding of the RubberCon 2013, Bangkok on 16-18 December 2013, Thailand.

Scobbo Jr, J.J. and Goettler, L.A., (2003). Applications of polymer alloys and composites. In *Polymer Composites Handbook*, pp. 951-976. Springer Netherlands.

Seymour, R.B. and Carraher Jr, C.E., (1984). *Thermal Properties of Polymers. In Structure—Property Relationships in Polymers*, pp. 83-93. Springer US.

Shah B.L, Matuana L.M and Heiden P.A (2005). Novel coupling agents for PVC/wood-flour composites, *Journal of Vinyl and Additive Technology*, vol. 11, no. 4, pp.160–165.

Sia, C .S., (2008). Effect of polystyrene – modified natural rubber on the properties of Polypropylene/polystyrene composites. pp.11-24.

Siong, S.C., (2008). Effects of polystyrene modified natural rubber on the properties of polypropylene/polystyrene blends.

Siri-Upathum, C. and Punnachaiya, S., (2007). Radiation cross-linking of small electrical wire insulator fabricated from NR/LDPE composites. *Nuclear Instruments and Routes in Physics Research Section B: Beam Interactions with Materials and Atoms*, 265(1), pp.109-113.

Soares¹, B. G. Santos¹, D. M. Sirqueira², A. S., (2008). A novel thermoplastic elastomer based on dynamically vulcanized polypropylene/acrylic rubber blends. *Polymer Letters Vol.2, No.8* (2008) 602–613.

Srilathakutty, R, Joseph, R., and George, K.E, (1999). Studies on microcellular soles based on natural rubber/polyethylene composites. *Journal of Materials Science*, 34(7), pp.1493-1495.

Steppek, J., and H. Daoust., (1983). Additives for Plastics. *Polymer/Properties and Applications 5*. Springer-Verlag, New York, pp.84.

Subramaniam, K., *Basic Chemistry and Technology of Industrial Polymers* (2012), 1st Edition, pp.86-111.

Sukhanova, T.E., Baklagina, Y.G., Kudryavtsev, V.V., Maricheva, T.A. and Lednický, F., (1999). Morphology, deformation and failure behaviour of homo-and copolyimide fibres: 1. Fibres from 4, 4'-oxybis (phthalic anhydride)(DPhO) and p-phenylenediamine (PPh) or/and 2, 5-bis (4-aminophenyl)-pyrimidine (2, 5PRM). *Polymer*, 40(23), pp.6265-6276.

Sundaram, K., (1982). Antioxidants-a research report. Technical Report NASA Ames Research Center, Moffett Field, CA., USA.

Teoh, P.Y., Erfeida, A.M., Cao, X.V., Lan, U. and Ngoc, D., (2014). Effects of Filler Incorporation Routes on Mechanical Properties of Low Density Polyethylene/Natural Rubber/Silica (LDPE/NR/Si) Composites. In *Applied Mechanics and Materials* (Vol. 679, pp. 154-157). Trans Tech Publications.

Tillekeratne, L.M.K, Nugewella, A and Seneviratne, W.M.G., (2003). Handbook of rubber, Vol. 2, Processing, Rubber Research Institute of Sri Lanka, Dartonfield, Agalawatta.

Thitithammawong, A., Uthaipan, N. and Rungvichaniwat, A., (2012). The effect of the ratios of sulfur to peroxide in mixed vulcanization systems on the properties of dynamic vulcanized natural rubber and polypropylene composites. *Songklanakarin Journal of Science & Technology*, 34(6).

Thitithammawong, A and Uthaipan, N., (2012). The effect of the ratios of sulfur to peroxide in mixed vulcanization systems on the properties of dynamic vulcanized natural rubber and polypropylene blends. *Songklanakarin J. Sci. Technol.* 34 (6), pp.653-662.

Utracki, L.A. and Favis, B.D., (1989). *Polymer alloys and composites* (Vol. 4, pp. 121-185). Marcel Dekker: New York.

Wang, S., Jiugao, Y. and Jinglin, Y., (2005). Compatible thermoplastic starch/polyethylene composites by one-step reactive extrusion. *Journal of Polymer International.* 54(2), pp. 279–285

Wang, W., Wu, Q. and Qu, B., (2003). Mechanical properties and structural characteristics of dynamically photocrosslinked PP/EPDM composites. *Polymer Engineering & Science*, 43(11), pp.1798-1805.

White J.R, Rubber Technologist's Handbook., (2001), Rapra Technology Ltd, 1st Edition, pp. 195-201.

Wickramaarachchi, W.V.W.H., Walpalage, S. and Egodage, S.M., (2016). Identification of the Polyethylene Grade Most Suitable for Natural Rubber-Polyethylene Composites used for Roofing Applications. *Engineer: Journal of the Institution of Engineers, Sri Lanka*, 49(4).

Willis, C.L., Halper, W.M. and Handlin, D. L., "Elastomer-modified sheet moulding
Wypych, O. P., (2006). *Silane Coupling Agents Connecting Across Boundaries*. 3rd Edition.
Gelest Inc. Australia, pp.144.

Yilmaz and Gokhun., (2008). Effect of titanate coupling agents on low density polyethylene
and polypropylene blends and composites.

Zeid, M.A., Rabie, S.T., Nada, A.A., Khalil, A.M. and Hilal, R.H., (2008). Effect of gamma
and UV radiation on properties of EPDM/GTR/HDPE composites. *Polymer-Plastics
Technology and Engineering*, 47(6), pp.567-575.

Zeid, M.M.A., (2007). Radiation effect on properties of carbon black filled NBR/EPDM rubber
composites. *European Polymer Journal*, 43(10), pp.4415-4422.

Zhu, S., Guo, Y., Chen, Y., Su, N., Zhang, K., & Liu, S., (2016). Effects of the incorporation
of nano-bamboo charcoal on the mechanical properties and thermal behavior of bamboo-plastic
composites. *BioResources*, 11(1), 2684-2697.