

References

- [1] N. Sato, S.Sato & T. Kurauchi, Fracture Mechanism of Short Glass Fibre Reinforced Polyamide Thermoplastic, in T. Hayashi, K. Kawata & S. Umekawa (Editors). Composites in Engineering; Progress in Science and Engineering of Composites, ICCM-IV, Tokyo, 1982
- [2] D.H. Bowen. Industrial applications of high performance composites. Paper presented at New Materials and Their Applications, Warwick 22-25 September 1987
- [3] S. Feih, A. P. Mouritz, Z. Mathys, & A. G. Gibson, Tensile strength modeling of glass fibre-polymer composites in fire, *Journal of Composite Materials*, **41**(2007)2387-2408
- [4] M.O.W Richardson, *Polymer Engineering Composites*, Applied Science Publishers Ltd., England, 1977
- [5] Lawrence J. Broutman and Richard H. Krock, *Modern Composite Materials*, Addison Wesley Publishing Company, United States of America, 1967
- [6] A. Bernasconi, D. Rossin & C. Armani, Analysis of the effect of mechanical recycling upon tensile strength of a short glass fibre reinforced polyamide 6,6, *Engineering Fracture Mechanics*, **74**(2007)627-641
- [7] Herman F. Mark (Editor), *Nanotechnology in Polymer Science*, Encyclopaedia of Polymer Science & Technology, Third Ed., Volume 3, John Wiley and Sons, New York, 2003

- [8] Taweechai Amornsakshai, Budsaporn Sinpatanapan, Sauvarop Bualek-Limcharoen & Wiriya Meesiri, Composite of aramid fibre (poly-m-phenylene isophthalamide)-thermoplastic elastomers (SEBS): enhancement of tensile properties by maleated-SEBS compatibiliser, *Polymer*, **40**(1999)2993-2999
- [9] Nanying Jia, Howard A. Fraenkel and Val A. Kagan, Effects of moisture conditioning methods on mechanical properties of injection moulded nylon 6, *Journal of Reinforced Plastics and Composites*, **23**(2004)729-737
- [10] P. E. McMahon & D.G. Taggart, *Composites in Engineering: Effects of Carbon Fibre Strain and Resin Characteristic on Optimum Composite Performance* in T. Hayashi, K. Kawata & S. Umekawa (Editors). Progress in Science and Engineering of Composites, ICCM-IV, Tokyo, 1982.
- [11] Erwin M. Wouterson, Freddy Y.C. Boey, Xiao Hu and Shing-Chung Wong, Effect of fibre reinforcement on the tensile, fracture and thermal properties of synthetic foam, *Polymer*, **48**(2007)3183-3191.
- [12] J. L. Thomason and M. A. Vlug, Influence of fibre length and concentration on the properties of glass fibre-reinforced polypropylene: 4. Impact properties, *Composites Part A*, **28A**(1997)277-288
- [13] X. F. Wan, Y. L. Wang, F. G. Zhou and Y. Z. Wan, Moisture absorption behaviour of carbon fibre-reinforced monomer casting nylon composites, *Journal of Reinforced Plastics and Composites*, **23**(2004)1031
- [14] M.J. Carling & J.G. Williams, Fibre length distribution effects on the fracture of short-fibre composites, *Polymer Composites*, **11**(1990)307-313

- [15] Young-Cheol Ahn & D.R. Paul, Rubber toughening of nylon 6 nanocomposites, *Polymer*, **47**(2006)2830–2838
- [16] M.I. Kohen, *Nylon Plastics*, Wiley, New York, 1973
- [17] M.G. Bader & J.F. Collins, *The Strength, Ductility & Failure of Thermoplastics Reinforced with Short-Glass Fibres*, in T. Hayashi, K. Kawata & S. Umekawa (Editors). *Composites in Engineering; Progress in Science and Engineering of Composites*, ICCM-IV, Tokyo, 1982
- [18] Sie Chin Tjong, Shi-Ai Xu, Robert Kwok-Yiu Li & Yiu-Wing Mai, Short glass fibre-reinforced polyamide 6,6 composites toughened with maleated SEBS, *Composites Science & Technology*, **62**(2002)2017-2027
- [19] V.E. Reinsch & L. Rebenfeld in “Proceedings of the ANTEC 91”, Montreal, May 1991 (Society of Plastic Engineers, 1071) pp. 2075
- [20] M.L. Shiou, S.V. Nair , P.D. Garrett & R.E. Polarrad, Effect of glass-fibre reinforcement & annealing on microstructure and mechanical behaviour of nylon 6,6, *Journal of Material Science*, **29**(1994)1973-1981
- [21] J. Paulo Davim, Leonardo R. Silva, Antonio Festas & A.M. Abrao, Machinability study on precision turning of polyamide with and without glass fibre reinforcement, *Materials and Design*, **31**(2008)2028-2035
- [22] Norbert M. Bikales (Editor) *Mechanical Properties of Polymers*, Publisher Wiley-Interscience, New York, 1971
- [23] Karin M. Almgren, Margarehta A. Kerholm, E. Kristofer Gamsted, Lennart Salmen & Mikael Lindstro, Effects of moisture on dynamic mechanical

- properties of wood fibre composites studied by dynamic FT-IR Spectroscopy, *Journal of Reinforced Plastics and Composites*, **27**(2008)1709-1721
- [24] Shiqiang Deng, Lin Ye, Yiu-Wing Mai and Hong-Yuan Liu, Evaluation of fibre tensile strength and fibre/matrix adhesion using single fibre fragmentation tests, *Composites Part A*, **29**(1998)423-434
- [25] Wassim Akkaoui & Goknur Bayram, Effects of processing parameters on mechanical & thermal properties of glass mat reinforced nylon 6 composites, *Journal of Reinforced Plastics and Composites*, **23**(2004)881-892
- [26] M. Miwa & I. Endo, Critical Fibre Length & Tensile Strength for Carbon Fibre-Epoxy Composites, *Journal of Material Science*, **29**(1994)1174-1178
- [27] J.L. Thomason & G. Kalinka, A technique for the measurement of reinforcement fibre tensile strength at sub-millimetre gauge lengths, *Composites: Part A*, **32**(2001)85-90
- [28] S.Y.Fu, B.Lauke, Y.H.Zhang & Y.W.Mai, On the post-mortem fracture surface morphology of short fibre reinforced thermoplastics. *Composites: Part A*, **36**(2005)987-994
- [29] D.P.N. Vlasveld, P.P. Parlevliet, H.E.N. Bersee & S.J. Picken, Fibre–matrix adhesion in glass-fibre reinforced polyamide-6 silicate nanocomposites, *Composites: Part A*, **36**(2005)1–11
- [30] A. Bergeret, I. Pires, M.P. Foulc, B. Abadie, L. Ferry & A. Crespy, The hygrothermal behaviour of glass-fibre-reinforced thermoplastic composites: a prediction of the composite lifetime, *Polymer Testing*, **20**(2001)753–763

- [31] S. Solomon, A. Abu Bakar, Z. A. Mohd Ishak, Y. W. Leong, U. S. Ishiaku and H. Hamada, Drop weight impact properties of injection moulded short glass fibre/short, carbon fibre/Polyamide 6 Hybrid Composites, *Journal of Reinforced Plastics and Composites*; **26**(2007)405-418
- [32] D.M. Laura, H. Keskkula, J.W. Barlow & D.R. Paul, Effect of glass fibre and maleated ethylene–propylene rubber content on tensile and impact properties of Nylon 6, *Polymer* **41**(2000)7165–7174
- [33] S.Y. Fu & C.Y. Yue, Effects of fibre length and orientation distributions on the mechanical properties of short-fibre-reinforced polymers, *Material Science Research International*, **5**(1999)74-83
- [34] John Z. Wang, David A. Dillard, Micheal P. Wolcott, Frederick A. Kamke & Garth L. Wilkes, Transient moisture effects in fibres & composites materials, *Journal of Composites Materials*, **24**(1990)994-1009
- [35] H.N. Dhakal, Z.Y. Zhang & M.O.W. Richardson, Effect of water absorption on the mechanical properties of hemp fibre reinforced unsaturated polyester composites, *Composites Science & Technology*, **67**(2007)1674-1683
- [36] ASTM Designation, E 23. ‘Standard Test Methods for Notched Bar Impact Testing of Metallic Materials’, West Conshohocken, PA, Vol.03.01
- [37] Z.Y. Zhang & M.O.W. Richardson, Low velocity impact induced damage evaluation and its effect on the residual flexural properties of pultruded GRP composites, *Composite Structures*, **81**(2007)195–201

- [38] Andrzej K. Bledzki & Omar Faruk, Creep and impact properties of wood fibre–polypropylene composites: influence of temperature and moisture content, *Composites Science and Technology*, **64**(2004)693–700
- [39] John Murphy, *Additives for Plastic Handbook*, 2nd edition, Elsevier Advanced Technology Ltd., New York, 2001. pp 280-283
- [40] Pitman, G.L., Ward, I.M. & Duckett, R.A., The effects of thermal pre-treatment and molecular weight on the impact behaviour of polycarbonate, *Journal of Material Science*, **13**(1978)2092-2104
- [41] Wysgoski, M.G. & Yeh, G.S., Microstructure and its relationship to deformation processes in amorphous polymer glasses, *Journal of Macromolecules Science Physics*, **B10**(1974)441
- [42] A.J. Kinloch & R.J. Young, *Fracture Behaviour of Polymers*, Applied Science Publishers Ltd., London, 1983
- [43] G.J. Short, F.J. Guild & M.J. Pavier, Post-impact compressive strength of curved GFRP laminates, *Composites Part A*, **33**(2002)1487–1495
- [44] B.S. Sugun & Rao, Low velocity impact characterization of glass, carbon and kevlar composites using repeated drop tests, *Journal of Reinforced Plastic Composites*, **23**(200)41583–41599
- [45] N.L. Hancox and H. Wells, *Izod impact properties of carbon fibre/glass fibre sandwich structures*, Composites, Applied Science Publishers Ltd., London, 1973

- [46] Levent Onal and Sabit Adanur, Effect of stacking sequence on the mechanical properties of glass–carbon hybrid composites before and after impact, *Journal of Industrial Textiles*, **31**(2002)255-271
- [47] G.F. Hardy, Fracture toughness of glass fibre reinforced acetal polymer, *Journal of Applied Polymer Science*, **15**(1971)853-866
- [48] Lawrence E. Nielsen, *Mechanical Properties of Polymers and Composites*, Volume 1, Marcel Dekker, Inc., New York, 1974
- [49] D.C. Philips & B. Harris, *Polymer Engineering Composites*, Applied Science Publishers Ltd., England, 1977
- [50] R.M. Turner (1972). ‘*The effect of resin ductility on composite properties*’, Proceedings of the 8th International Reinforced Plastics Conference, The Plastics Institute (UK)
- [51] M.G. Bader, J.E. Baley & Bell, (Eds. W.W. Kriegel & H. Palmour) In Material Science Research, Vol 5, *Ceramics in Severe Environments*, Plenum Press, 1972.
- [52] Z.A. Mohd Ishak, A. Ariffin, & R. Senawi, Effects of hygrothermal aging and a silane coupling agent on the tensile properties of injection moulded short glass fibre reinforced poly(butylene terephthalate) composites, *European Polymer Journal*, **37**(2001)1635-1647
- [53] Yuanxin Zhoua & P.K. Mallick, A non-linear damage model for the tensile behaviour of an injection moulded short E-glass fibre reinforced polyamide-6,6, *Materials Science and Engineering A*, **393**(2005)303–309

- [54] Mitsugu Todo, Kiyoshi Takahashi, Philippe Beguelin and H. Henning Kausch, Strain-rate dependence of the tensile fracture behaviour of woven-cloth reinforced polyamide composites, *Composites Science & Technology*, **60**(2000)763-77
- [55] X.Q. Shi, Z.P. Wang, H.L.J. Pang & X.R. Zhang, Investigation of effect of temperature and strain rate on mechanical properties of underfill material by use of microtensile specimens, *Polymer Testing*, **21**(2002)725–733
- [56] I. Levay, B. Lenkey, L. Toth, & Z. Major, The effect of testing conditions on the fracture mechanics characteristic of short glass fibre reinforced polyamide, *Journal of Material Processing Technology*, **133**(2003)143-148
- [57] J. Gamez-Perez, O. Santana, A.B. Martinez & M.L. MasPOCH, Use of extensometers on essential work of fracture (EWF) tests, *Polymer Testing*, **27**(2008)491–497
- [58] Ramin Hosseinzadeh, Mahmood Mehrdad Shokrieh, Larry Lessard, Damage behaviour of fibre reinforced composite plates subjected to drop weight impacts, *Composites Science and Technology*, **66**(2006)61–68
- [59] Deju Zhu, Mustafa Gencoglu & Barzin Mobasher, Low velocity flexural impact behaviour of glass fabric reinforced cement composites, *Cement & Concrete Composites*, **31**(2009)379–387
- [60] Tae Jin Kang and Cheol Kim, Impact energy absorption mechanism of largely deformable composites with different reinforcing structures, *Fibres and Polymers*, **1**(2000)45-54

- [61] Matthew D. Erickson, Alan R. Kallmeyer & Kenneth G. Kellogg, Effect of temperature on the low velocity impact behaviour of composite sandwich panels, *Journal of Sandwich Structures and Materials*, **7**(2005)245-264
- [62] ASTM Standard D638–80. ‘Standard Test Method for Tensile Properties of Plastics’, Part 35, pp. 228–244
- [63] A. Hassan, R. Yahya, A. H. Yahya, A. R. M. Tahir and P. R. Hornsby, Tensile, impact and fibre length properties of injection moulded short and long glass fibre-reinforced polyamide 6,6 composites, *Journal of Reinforced Plastics and Composites*, **23**(2004)969-986
- [64] ASTM standard E104, ‘Standard Recommended Practice for Maintaining Constant Relative Humidity by Means of Aqueous Solutions’, Part 41, pp.108-111
- [65] ASTM standard D 6110-04, ‘Standard Test Method for Determining the Charpy Impact Resistance of Notched Specimens of Plastics,’ Vol 08.03. pp 453-450
- [66] Noordini Mohd Salleh, Compounding & properties characterization of glass and glass/carbon hybrid fibre reinforced polyamide 6,6 composites, Master of Science Thesis, 2009, University of Malaya Kuala Lumpur
- [67] Shao-Yun Fu and Bernd Lauke, Characterization of tensile behaviour of hybrid short glass fibre/calcite particle/ABS composites, *Composites Part A*, **29A**(1998)575-583
- [68] Thomason, J.L., Structure-property relationships in glass-reinforced polyamide, part 1: The effects of fibre content, *Polymer Composites*, **27**(2006)552-562

- [69] Guralp Ozkoc, Goknur Bayramb & Erdal Bayramli, Effects of polyamide 6 incorporation to the short glass fibre reinforced ABS composites: an interfacial approach, *Polymer*, **45**(2004)8957–8966
- [70] E. Lafranche, P. Krawczak, J. P. Ciolczyk & J. Maugey, Injection moulding of long glass fibre reinforced polyamide 6-6: guidelines to improve flexural properties, *eXPRESS Polymer Letters*, **1**(2007)456–466
- [71] S.Y. Fua, B. Lauke, E. Maederb, X. Hua & C.Y. Yue, Fracture resistance of short-glass-fibre-reinforced and short-carbon-fibre-reinforced polypropylene under Charpy impact load and its dependence on processing, *Journal of Materials Processing Technology*, **90**(1999)501-507
- [72] J.L. Thomason, The influence of fibre length and concentration on the properties of glass fibre reinforced polypropylene: 7. Interface strength and fibre strain in injection moulded long fibre PP at high fibre content, *Composites: Part A*, **38**(2007)210–216
- [73] F. Rezaei, R. Yunus, N.A. Ibrahim & E.S. Mahdi, Effect of fibre loading and fibre length on mechanical & thermal properties of short carbon fibre reinforced polypropylene composites, *The Malaysia Journal of Analytical Sciences*, **11**(2007)181-188
- [74] Sushanta K. Samal, Sanjay K. Nayak & Smita Mohanty, Polypropylene nanocomposites: effect of organo-modified layered silicates on mechanical, thermal & morphological performance, *Journal of Thermoplastic Composites Materials*, **21**(2008)243-263

- [75] S.Y. Lee, I.A. Kang, G.H.Doh, W.J. Kim, J.S Kim, H.G. Yoon & Q. Wu, Thermal, mechanical & morphological properties of polypropylene/clay/wood flour nanocomposites, *eXPRESS Polymer Letters*, **2**(2008)78-87
- [76] N. Chisholm, H. Mahfuz, V. K. Rangari, A. Ashfaq & S. Jeelani, Fabrication and mechanical characterization of carbon/SiC-epoxy nanocomposites, *Composite Structures*, **67**(2005)115-124
- [77] John W. Nicholson, The Chemistry of Polymers, Woolnough Bookbinders Ltd., Irthlingborough, Northamptonshire, 1991
- [78] Ajit Ranade, (2001), MSc. Thesis, University of North Texas
- [79] Y.P. Khanna & A.C. Reimschuessel, Memory effects in polymers. Part I: Orientational memory in the molten state: Its relationship to polymer structure and influence of re-crystallization rate and morphology, *Journal of Applied Polymer Science*, **35**(1988)2259-2268
- [80] Penel-Pierron L., Depecker C., R. Séguéla & J.M. Lefebvre, Structural and mechanical behavior of nylon 6 films part I. Identification and stability of the crystalline phases, *Journal of Polymer Science Part B: Polymer Physics*, **39**(2001)484-489
- [81] Edith Turi A., Thermal characterisation of polymeric materials, Polytechnic University Brooklyn, New York, Vol. 2, 1997
- [82] Khanna Y.P. & Kuhn W.P., Measurement of crystalline index in nylons by DSC: Complexities & recommendations. *Journal of Polymer Science: Part B: Polymer Physics*, **35**(1997)2219-2231

- [83] Mahmood Mehrabzadeh & Musa R. Kamal, Melt processing of PA-66/clay, HDPE/clay and HDPE/PA-66/clay nanocomposites, *Polymer Engineering and Science*, 44(2004)1152-1161
- [84] S.Y. Lee, G.H. Doh, & I. A. Kang, Thermal behaviour of wood flour reinforced high density polyethylene (HDPE) composites, *Mokchae Konghak*, 34(2006)59-66
- [85] Ting-Cheng Li, Jianhua Ma, Min Wang, Wuiwui Chauhari Tjiu, Tianxi Liu & Wei Huang, Effect of clay addition on the morphology & thermal behaviour of polyamide 6, *Journal of Applied Polymer Science*, 103(2007)1191-1199
- [86] M. Mekawy & A.A. Abd El-Megeed, Induced changes in structural and thermal properties of polyethylene, polyamide 6 and their conjoint at high environmental temperature, *International Journal of Pure & Applied Physics*, 1(2005)207-225
- [87] Izabella Krucińska, Eulalia Gliścińska, E. Mäder & R. Häßler, Evaluation of the influence of glass fibre distribution in polyamide matrix during the consolidation process on the mechanical properties of GF/PA6 Composites, *Fibres & Textiles in Eastern Europe*, 17(2009)81-86
- [88] R. Caban & Z. Nitkiewicz, Investigations of the structure of composites of PP/GF by means of X-ray methods, *Journal of Achievements in Materials & Manufacturing Engineering*, 23(2007)55-58
- [89] K.W.Y. Wong & R. W. Truss, Effect of flyash content & coupling agent on the mechanical properties of flyash-filled polypropylene, *Composites Science and Technology*, 52(1994)361-368

- [90] J.L. Thomason, Micromechanical parameters from micro mechanical measurements on glass reinforced polyamide 6,6, *Composites Science & Technology*, **61**(2001)2007-2016
- [91] W. J. Sichina, *USA: Application Briff DSC-11*, Perkin Elmer Technical Report, 1994
- [92] Chih-Chiang Pai, Ru-Jong Jeng, Steven J. Grossman & Jan-Chan Huang, Effects of moisture on thermal and mechanical properties of nylon-6,6, *Advances in Polymer Technology*, **9**(1989)157–163
- [93] Craig Clemons and Anand R. Sanadi, Instrumented impact testing of kenaf fibre reinforced polypropylene composites effects of temperature and composition, *Journal of Reinforced Plastics and Composites*, **26**(2007)1587-1602
- [94] Marcus SchoBig, Christian Bierogel, Wolfgang Grellmann & Thomas Mecklenburg, Mechanical behaviour of glass fibre reinforced thermoplastic materials under high strain rates, *Polymer Testing*, **27**(2008)893-900
- [95] Plamen G. Malcheva, Ciprian T. Davidc, Stephen J. Pickena, & Alexandros D. Gotsis, Mechanical properties of short fibre reinforced thermoplastic blends, *Polymer*, **46**(2005)3895–3905
- [96] M.P. Foulc, A. Bergeret, L. Ferry, P. Ienny & A. Crespy, Study of hygrothermal ageing of glass fibre reinforced PET composites, *Polymer Degradation and Stability*, **89**(2005)461-470
- [97] Sushanta K. Samal, Sanjay K. Nayak & Smita Mohanty, Polypropylene nanocomposites: effect of organo-modified layered silicates on mechanical,

thermal & morphological performance, *Journal of Thermoplastic Composites Materials*, **21**(2008)243

- [98] S.P. Bao & S.C. Tjong, Impact essential work of fracture of polypropylene/montmorillonite nanocomposites toughened with SEBS-g-MA elastomer, *Composites: Part A*, **38**(2007)378-387
- [99] J. Koszkul & D. Kwiatkowski, The influence of annealing on dynamical mechanical properties of polyamide 6/ glass fibre composites, *Journal of Achievements in Materials & Manufacturing Engineering*, **19**(2006)16-19
- [100] D.M. Laura, H. Keskkula, J.W. Barlow, & D.R. Paul, Effect of glass fibre and maleated ethylene-propylene rubber content on the impact fracture parameters of nylon 6, *Polymer*, **42**(2001)6161-6172
- [101] Fares D. Alsewailem, Dynamic mechanical properties of toughened polyamide composites, *The Arabian Journal for Science & Engineering*, **33**(2008)5-16
- [102] M.L. Shiao and S.V. Nair, Effect of glass fibre reinforcement and annealing on microstructure and mechanical behaviour of nylon 6,6, *Journal of Material Science*, **29**(1994)1973-1981
- [103] J. M. Garca-Martnez, O. Laguna, S. Areso & E. P. Collar, A dynamic-mechanical study of the role of succinilfluoresceine grafted atactic polypropylene as interfacial modifier in polypropylene/talc composites: Effect of grafting degree, *European Polymer Journal*, **38**(2002)1583-1589

- [104] A. Gnatowski, & J. Koszkuł, Investigation on PA/PP mixture properties by means of DMTA method, *Journal of Materials Processing Technology*, **175**(2006)212–217
- [105] N. Chen, Ch. Wan, Y. Zhang, & Y. Zhang, Effect of nano- CaCO₃ on mechanical properties of PVC and PVC/Blendex blend, *Polymer Testing*, **23**(2004)169–174
- [106] M. J. John and R. D. Anandjiwala, Chemical modification of flax reinforced polypropylene composites, *Composites: Part A*, **40**(2009)442-448
- [107] D.P.N. Vlasveld, J. Groenewold, H.E.N. Bersee & S.J. Picken, Moisture absorption in polyamide-6 silicate nanocomposites and its influence on the mechanical properties, *Polymer*, **46**(2005)12567–12576
- [108] Ferrigno, Principles of filler selection and use. In handbook of fillers for Plastics, H. Katz and J. Milewski, ed.: Van Nostrand Reinhold Co. New York, 1985, pp 8-61
- [109] Kristiina Oksman & Craig Clemons, Mechanical properties polypropylene-wood and morphology of impact modified flour composites, *Journal of Applied Polymer Science*, **67**(1998)1503-1513
- [110] Abdulkadir Gullu, Ahmet Ozdemir & Emin Ozdemir, Experimental investigation of the effect of glass fibres on the mechanical properties of polypropylene and polyamide 6 plastics, *Materials & Design*, **27**(2006)316-323
- [111] Bankim Ch. Ray, Loading Rate Effects on Mechanical Properties of Polymer Composites at Ultra-low Temperatures, *Journal of Applied Polymer Science*, **100**(2005)2289-2292

- [112] S. Jana and W.H. Zhong, Effect of hygrothermal conditions and UV radiation on UHMWPE fibres/ nanofibre epoxy composites, *Journal of Composites Materials*, **41**(2007)2897-2914
- [113] Thomason, J.L., Structure-property relationships in glass-reinforced polyamide, Part 3: Effects of hydrolysis ageing on the dimensional stability and performance of short glass-fibre-reinforced polyamide 66, *Polymer Composites*, **28**(2007)344-354
- [114] A. Stamboulis, C.A. Baillie & T. Peijs, Effects of environmental conditions on mechanical and physical properties of flax fibres, *Composites Part A*, **32**(2001)1105-1115
- [115] B. Alcock, N.O. Cabrera, N. M. Barkoula, C.T. Reynolds, L.E. Govaert & T. Peijs, The effect of temperature and strain rate on the mechanical properties of highly oriented polypropylene tapes and all-polypropylene composites, *Composites Science and Technology*, **67**(2007)2061–2070
- [116] R.O. Ochola, K. Marcus, G.N. Nurick, & T. Franz, Mechanical behaviour of glass and carbon fibre reinforced composites at varying strain rates, *Composite Structures*, **63**(2004)455–467
- [117] Gui-Fang Shan, Wei Yang, Ming-Bo Yang, Bang-Hu Xie, Jian-Min Feng & Qiang Fu, Effect of temperature and strain rate on the tensile deformation of polyamide 6, *Polymer*, **48**(2007)2958-2968
- [118] J. Fitoussi, F. Meraghni, Z. Jendi, G. Hug, & Baptise, Experimental methodology of high strain-rates tensile behaviour analysis of polymer matrix composites, *Composites Science & Technology*, **65**(2005)2174-2188

- [119] Shahrudin Abdullah, Mohd Faridz Mod Yunoh, Hazlinda Kamarudin, & Azman Jalar, Role of strain rate on the micromechanical characterization properties of 4N gold micro wire: micro tensile and nano indentation, *European Journal of Scientific Research*, **28**(2009)33-43
- [120] Ulrich Hansen, Peter Zioupos, Rebecca Simpson & David Hynd, The effect of strain rate on the mechanical properties of human cortical bone, *Journal of Biomechanical Engineering*, **130**(2008)1-8
- [121] R.S. Yamakawa C.A. Razzino , C.A. Correa , & E. Hage Jr., Influence of notching and moulding conditions on determination of EWF parameters in polyamide 6, *Polymer Testing*, **23**(2004)195–202
- [122] J.F. Mano, & J.C. Viana, Effects of the strain rate and temperature in stress–strain tests: study of the glass transition of a polyamide-6, *Polymer Testing*, **20**(2001)937–943
- [123] Shin-Pon Ju, Wen-Jay Lee, Jenn-Sen Lin, & Ming-Liang Liao, Strain rate effect on tensile behaviour of the helical multi-shell gold nanowires, *Materials Chemistry and Physics*, **100**(2006)48–53
- [124] Chia-Chang Wu, Shing-Hoa Wang, Chih-Yuan Chen, Jer-Ren Yang, Po-Kay Chiuc and Jason Fang, Inverse effect of strain rate on mechanical behaviour and phase transformation of superaustenitic stainless steel, *Scripta Materialia*, **56**(2007)717–720
- [125] Ikuo Shohji , Tomohiro Yoshida , Takehiko Takahashi & Susumu Hioki, Tensile properties of Sn–Ag based lead-free solders and strain rate sensitivity, *Materials Science and Engineering A*, **366**(2004)50–55
- [126] Mark R. Daymond, Christian Lund, Mark A.M. Bourke, and David C. Dunand, Elastic Phase-Strain Distribution in a Particulate-Reinforced Metal-Matrix

Composite Deforming by Slip or Creep, *Metallurgical & Materials Transactions A*, **30A**(1998)1999–2989

- [127] H. Ku, Y. M. Cheng, C. Snook & D. Baddeley, Drop Weight Impact Test Fracture of Vinyl Ester Composites: Micrographs of Pilot Study, *Journal of Composite Materials*, **39**(2005)1607-1620
- [128] A. K. M. Masud, A. K. M. Kais Bin Zaman & Abdullah-Al-Khaled, Effects of Environment on Fracture Toughness of Glass Fibre/Polyester Composite, *Journal of Mechanical Engineering*, **38**(2007)38-44
- [129] V.N. Gaitonde, S.R. Karnik, Francisco Mata & J.Paulo Davim, Taguchi Approach for Achieving Better Machinability in Unreinforced and Reinforced Polyamides, *Journal of Reinforced Plastics & Composites*, **27**(2008)909-924
- [130] D. C. Leach and D. R. Moore, Toughness of Aromatic Polymer Composites Reinforced with Carbon Fibres, *Composites Science and Technology*, **23**(1985)131-161
- [131] P.W. Bland & J.P Dear, Observation on the impact behaviour of carbon fibre reinforced polymers for the qualitative validation of models, *Composites: Part A*, **32**(2001)1217-1227
- [132] N.H. Tai, C.C.M. Ma, J.M. Lin & G.Y. Wu, Effects of thickness on the fatigue-behaviour of quasi-isotropic carbon/epoxy composites before and after low energy impacts, *Composites Science and Technology*, **59**(1999)1753-1762
- [133] Naven V. Padaki, R. Alagirusamy & B. L. Deupura, Low velocity impact behaviour of textile reinforced composites, *Indian Journal of Fibre & Textile Research*, **33**(2008)189-202

- [134] G. Caprino & V. Lopresto, On the penetration energy for fibre-reinforced plastics under low-velocity impact conditions, *Composites Science and Technology*, **61**(2001)65-73
- [135] Asad A. Khalid, The effect of testing temperature and volume fraction on impact energy of composites, *Materials and Design*, **27**(2006)499–506
- [136] Amin Salehi-Khojin, Reza Bashirzadeh, Mohammad Mahinfalah & Reza Nakhaei-Jazar, The role of temperature on impact properties of Kevlar/fibre glass composite laminates, *Composites: Part B*, **37**(2006)593-602
- [137] J.M. Crosby & T.R. Drye, Fracture Studies of Discontinuous Fibre Reinforced Thermoplastic Composites. Proceedings of the American Society for Composites. Technical conference; Oct 7-9, 1986 Marriott Hotel Dayton, Ohio. Technomic Publishing Company, Pennsylvania; 245-263
- [138] M.G. Bader & R.M. Ellis, The effect of notches and specimen geometry on the pendulum impact strength of uni-axial CFRP Composites, *Composites*, **6**(1974)253-258
- [139] D. Liu, B.B. Raju, & X. Dang, Impact perforation resistance of laminated and assembled composite plates, *International Journal of Impact Engineering*, **8**(2000)733-748
- [140] Yoshinobu Nakamura, Miho Yamaguchi, Masayoshi Okubo and Tsunetaka Matsumoto, Effect of particle size on the fracture toughness of epoxy resin filled with spherical silica, *Polymer*, **33**(1992)3415-3426
- [141] David Roylance, Introduction to Fracture Mechanics, NBS Special Publication 647-1, Washington, 1983

- [142] P. S. Razi and A. Raman, Studies on Impact Fracture Properties of Wood-Polymer Composites, *Journal of Composite Materials*, **34**(2000)980-997
- [143] H.N. Dhakal, Z.Y. Zhang, M.O.W. Richardson, & O.A.Z. Errajhi, The low velocity impact response of non-woven hemp fibre reinforced unsaturated polyester composites, *Composite Structures*, **81**(2006)559-567
- [144] Levent Onal and Sabit Adanur, Effect of Stacking Sequence on the Mechanical Properties of Glass–Carbon Hybrid Composites before and after Impact, *Journal of Industrial Textiles*, **31**(2002)255-271
- [145] K. Kageyama and I. Kimpara, Delamination failures in polymer composites, *Materials Science and Engineering*, **A143**(1991)167-174
- [146] A. Vlot, Impact Loading on Fibre Metal Laminates, *International Journal of Impact Engineering*, **18**(1996)291- 307
- [147] H. Ku, Y. M. Cheng, C. Snook & D. Baddeley, Drop Weight Impact Test Fracture of Vinyl Ester Composites: Micrographs of Pilot Study, *Journal of Composite Materials*, **39**(2005)1607-1620
- [148] Nikhil Gupta, Balraj Singh Brar & Eyassu Woldesenbet, Effect of filler addition on the compressive and impact properties of glass fibre reinforced epoxy, *Bulletin Material Science*, **24**(2001)219–223
- [149] Shiqiang Deng, Meng Hou & Lin Ye, Temperature-dependent elastic moduli of epoxies measured by DMA and their correlations to mechanical testing data, *Polymer Testing*, **26**(2007)803–813

- [150] Thomas S. Gates, Xiaofeng Su, Frank Abdi, Gregory Odegard & Helen Herring, Facesheet Delamination of Composite Sandwich Materials at Cryogenic Temperatures, *Composites Science and Technology*, **66**(2006)2423-2435
- [151] Donald George Fesko, PhD thesis, Time-Temperature Superposition for Block Copolymers, California Institute of Technology, 1971
- [152] A. K. Shrivastava & Md. Nazir Hussain, Effect of Low Temperature on Mechanical Properties of Bidirectional Glass Fibre Composites, *Journal of Composite Materials*, **42**(2008)2407-2432
- [153] K. Friedrich & J. Karger-Kocsis. Fractography and Failure Mechanisms of Unfilled & Short Fibre Reinforced Semi-crystalline Thermoplastic. Fractography and Failure Mechanisms of Polymers & Composites. Editor Anne C. Roulin-Moloney. Elsevier Science Publishers Ltd., England 1989
- [154] B. Mouhmid, A. Imad, N. Benseddiq, S. Benmedakhene & A. Maazouz, A study of the mechanical behaviour of a glass fibre reinforced 6,6: Experimental investigation, *Polymer Testing*, **25**(2006)544-552
- [155] Joao Carlos Miguez Suarez , Fernanda M.B. Coutinho & Thas H. Sydenstricker, SEM studies of tensile fracture surfaces of polypropylene sawdust composites, *Polymer Testing*, **22**(2003)819–824
- [156] J.L. Thomason, The influence of fibre length, diameter and concentration on the impact performance of long glass-fibre reinforced polyamide 6,6, *Composites: Part A*, **40**(2009)114-124

- [157] J.J. Horst & J.L., Spoomaker, Fatigue fracture mechanisms and fractography of short-glass fibre-reinforced polyamide 6, *Journal of Materials Science*, **32**(1997)3641-3651
- [158] S. Vaynman, M.E. Fine, S. Leeb and H.D. Espinosa, Effect of strain rate and temperature on mechanical properties and fracture mode of high strength precipitation hardened ferritic steels, *Scripta Materialia*, **55**(2006)351–354
- [159] J.A.P. Cunha, M. L. Costa and M.C. Rezende, Study of the hygrothermal effects on the compression strength of carbon tape/epoxy composites, *Latin American Journal of Solids and Structures*, **5**(2008)157-170