

POSTER PROGRAM

MONDAY 12 AUGUST

Poster title	Presenter name	Poster no
Additive manufacturing		
DEVELOPMENT OF COMPOUND MELT EXTRUDED NANOCOMPOSITE FDM FILAMENT BY CONTINUOUS SYRINGE PUMPING OF DISPERSED NANOFILLERS DURING EXTRUSION	Joshua Brooks	P001
OPTIMIZATION OF PROCESS PARAMETERS FOR FUSED FILAMENT FABRICATION USING TOOL PATH REVERSING	Vishal Hayagrivan	P002
FLEXURAL FATIGUE STRENGTH OF 3D-PRINTED CONTINUOUS CARBON FIBER REINFORCED THERMOPLASTIC LAMINATES	Morihumi Inaba	P003
3D PRINTING OF CONTINUOUS SIZED CARBON FIBER REINFORCED PA6 COMPOSITES	Tengfei Liu	P004
INTERLAYER BONDING BEHAVIORS OF 3D PRINTED CONTINUOUS CARBON FIBER REINFORCED PEEK COMPOSITES	Meng Luo	P005
DEVELOPMENT OF A TEST BENCH FOR FUSED FILAMENT FABRICATION	Alexander Matschinski	P006
IMPROVING THE STIFFNESS OF HIGH RESOLUTION DLP STEREO LITHOGRAPHIC MATERIAL	Chow-shing Shin	P007
EFFECT OF LASER RE-MELTING PROCESS ON THE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF ADDITIVELY MANUFACTURED METAL MATRIX COMPOSITES	Jianshen Wang	P008
INSTRUMENTED IMPACT BEHAVIOR OF PANELS PRODUCED BY ADDITIVE MANUFACTURING	Thomas Whitney	P009
Advanced manufacturing and automation		
EFFECTS OF CURE CYCLE PRESSURE PROFILE AND HEATING RATE ON PROPERTIES OF OUT-OF-AUTOCLAVE RAPIDLY CURED CARBON FIBRE COMPOSITES	Sima Kashi	P010
HIGLY AUTOMATED MANUFACTURING PROCESS OF LARGE AIRPLANE CFRP STRCTURES	Marcin Malecha	P011
CONTINUOUS TAPE LAYUP MOLDING BEHAVIOR OF CFRTP USING NEAR-INFRARED HEATING AND INDUCTION HEATING	Naoki Nakata	P012
IMPREGNATION PROCESS IN OPEN MOLDING METHOD USING MULTI-FILAMENT WINDING	Kazuma Otake	P013
Aerospace		
MODE I FRACTURE TOUGHNESS OF 3D COMPOSITES REINFORCED WITH METAL OR CARBON Z-BINDERS	Sadaf Abbasi	P014
WARPAGE BEHAVIOUR OF DISCONTINUOUS CF/PEEK THIN PLATES	Natassia Batista	P015
EXPERIMENTAL STUDY ON INTER-YARN FRICTION CHARACTERISTICS OF STF-KEVLAR FABRICS WITH DIFFERENT MASS CONCENTRATIONS	Wei Chen	P016
CF/MODIFIED-PEEK COMPOSITES FOR AIRCRAFT	Takahiro Hayashi	P017
EFFECTS OF PROCESS CONDITIONS ON AEROSPACE GRADE EPOXY/CARBON FIBRE COMPOSITE PROPERTIES	Matt Jennings	P018
OBTENTION OF A CARBON-CARBON COMPOSITE MATERIAL FOR ITS USE IN EXPANDING NOZZLES FOR AEROSPACE VEHICLES	Liliana Maricarmen Lopez	P019
QUANTIFYING AND MINIMISING THE EFFECTS OF THE ROOT CONDITION OF DRUM DEPLOYED COMPOSITE TUBULAR BOOMS FOR SPACECRAFT	Jason Shore	P020
MINIMIZATION OF THE OUT-OF-PLANE THERMAL DEFORMATION OF CFRP REFLECTORS BY STACKING SEQUENCE OPTIMIZATION	Shun Tanaka	P021
VIBRATION FREQUENCY DESIGN AND STUDY OF COMPOSITE FUSELAGE STRUCTURE	Kaijian Wang	P022
DESIGN AND ANALYSIS OF FILAMENT-WOUND COMPOSITE PRESSURE VESSELS BASED ON MESH WINDING THEORY	Hui Xu	P023
A COMPUTATIONALLY EFFICIENT APPROACH FOR ANALYSING THE ONSET OF FAILURE IN AEROSPACE COMPOSITE STRUCTURES	Shibo Yan	P024
Automated fibre placement		
SCALED BOUNDARY FINITE ELEMENT BASED METHOD FOR CRACK INITIATION AND PROPAGATION IN FIBER REINFORCED COMPOSITE STRUCTURES.	Nikhil Garg	P025
INTRA-LAMINAR AND INTER-LAMINAR PROGRESSIVE FAILURE ANALYSIS OF AFP COMPOSITE ON A TOW LEVEL	Xie Li	P026
PERFORMANCE MONITOR AND PREDICTION OF A BIAXIALLY LOADED THIN COMPOSITE TUBE	Md Shamsuddoha	P027
TOOLPATH STRATEGY & GENERATION FOR ROBOTIC FIBRE PLACEMENT ON CURVED SURFACES	Nahaad Vaheed	P028
SIMULATION AND TEST VERIFICATION OF PREPREG PEEL FOR PLACEMENT PROCESS	Xianzhao Xia	P029
Automotive		
SIMULATION AND EXPERIMENTS FOR MECHANICAL PROPERTIES DOMINATING THE PRESS MOLDING USING CFRTP PREFORMS	Yuji Abo	P030
CHARACTERIZATION OF UNDAMAGED AND DAMAGED CARBON FIBER COMPOSITES IN ELECTROMAGNETIC FIELDS FOR INDUCTIVE CHARGING OF ELECTRIC VEHICLES	Tobias Mayr	P031
DEVELOPMENT OF BENDING PROCESS FOR THERMOPLASTIC COMPOSITE PIPE DURING PULTRUSION MOLDING PROCESS	Asami Nakai	P032
PRESS AND INJECTION HYBRID MOLDING OF GF/PP HAT-SHAPED MEMBER AND EVALUATION OF ITS BENDING PROPERTY	Kazuto Tanaka	P033
DESIGN AND ANALYSIS OF COMPOSITE CARBON FIBER REINFORCED ANTI-COLLISION BEAM BASED ON ANSYS ACP	Chuanxiang Zheng	P034
Bio-composites		
FACTORIAL STUDY OF MATERIAL AND PROCESS PARAMETERS ON FIRE AND MECHANICAL PROPERTIES OF WOOL AND WHEAT GLUTEN COMPOSITES	Nam Kyeun Kim	P035
BAMBOO BASED BIO-COMPOSITES UNDER DAMAGED AND UNDAMAGED FRACTURE	Wen Liu	P036
ADVANCED QUALIFICATION OF COMBOO - A BAMBOO BASED CORE MATERIAL	Andreas Loth	P037
CHARACTERIZATION AND THERMAL EFFECT ON MECHANICAL PROPERTIES OF BIOMATERIAL-REINFORCED-POLYPROPYLENE	Anh Dung Ngo	P038
MULTILEVEL RESISTIVE SWITCHING IN NANO SILVER INCORPORATED CHITOSAN THIN FILMS	Sreedevi Vallabhapurapu	P039
Bio-inspired composites		
DESIGN AND CONSTRUCTION OF BIO-INSPIRED SMART MATERIALS WITH REVERSIBLE ADHESION	Ying Chu	P040
PREPARATION AND ELECTRICAL CHARACTERIZATIONS OF MAN-MADE NACRE-LIKE COMPOSITES	Yingbang Yao	P041
BONE TISSUE SCAFFOLD BASED ON SHAPE MEMORY POLYMER	Wei Zhao	P042
Biomedical		
DIC ANALYSIS OF SHRINKAGE BEHAVIORS OF DENTAL COMPOSITES DURING DENTAL RESTORATION	Nak-sam Choi	P043
IN VITRO STUDY OF A NOVEL BIOFUNCTIONALIZATION FOR 3D PDMS SCAFFOLD VIA SURFACE MODIFICATION	Baek Ji Hun	P044
CARBON DOT/POLYPYRROLE NANOPARTICLE COMPLEXES AS MULTIFUNCTIONAL THERANOSTIC AGENTS	Tae Eun Kim	P045
CARBON QUANTUM DOTS USING POLYPHENOL COMPOUNDS:SKIN ANTI-AGING	SeokWon Park	P046
Ceramic matrix composites		
OXIDATION AND INDENTATION RESISTANCE OF CARBON-CARBON COMPOSITE BY SILICON CARBIDE COATING	Kee Sung Lee	P047
HIGH-TEMPERATURE THERMAL AND MECHANICAL PROPERTIES OF AEROGEL/FIBROUS ZIRCONIA CERAMIC COMPOSITES	Jingjing Sun	P048
SIC/SIC COMPOSITES FABRICATED BY ELECTROPHORETIC DEPOSITION COMBINED WITH POLYMER INFILTRATION AND PYROLYSIS PROCESS	Honglei Wang	P049

POSTER PROGRAM

MONDAY 12 AUGUST

Poster title	Presenter name	Poster no
BEHAVIOR OF GFRP BARS SUBJECTED TO DYNAMIC LOADING	Farid Abed	P050
RESIDUAL BEARING CAPACITY OF RC MEMBER AFTER EXPOSURE TO HIGH TEMPERATURE	Lili Bai	P051
IMPROVEMENT OF PENETRATION RESISTANCE OF AMINE CURED EPOXY RESIN FOR CONCRETE LINING BY ION EXCHANGE ZEOLITE UNDER SULFURIC ACID	Tetsuya Sakai	P052
Composite Materials: Route to Impact		
UNDERSTANDING RESIDUAL STRESS IN RAPIDLY CURED CARBON FIBRE REINFORCED COMPOSITE	Saman Ghadi	P053
EVALUATION OF THERMOELECTRIC PROPERTIES OF GRAPHENE-ENABLED REINFORCED POLYMER COMPOSITES: A PROFICIENT MOVE TOWARDS ADVANCED STRUCTURAL APPLICATIONS	Azadeh Mirabedini	P054
A STUDY ON HEAT TRANSFER EFFECT OF HEAT SINK FOR DIFFERENT COMPOSITE MATERIALS	Meehye Oh	P055
Composites structures		
THERMO-MECHANICAL BEHAVIOUR OF MICROWAVE-CURED CARBON NANOTUBES-BASED POLYMER COMPOSITES	Gaurav Arora	P056
STIFFENED COMPOSITE PARTS BY RESIN INFUSION PROCESS FOR AIRCRAFT APPLICATION	Oyoung Choi	P057
TTT CURE DIAGRAM FOR AN AMBIENT TEMPERATURE CURING EPOXY-AMINE THERMOSET	Wannakuwattewaduge Minolie Shanelle Fernando	P058
DETERMINATION OF MODE II INTERLAMINAR FRACTURE TOUGHNESS ENHANCEMENT OF UNIDIRECTIONAL CARBON FIBER-REINFORCED MATRIX COMPOSITES WITH GRAPHENE AND MULTI-WALLED CARBON NANOTUBES	Nongyue Gao	P059
A TRISTABLE CROSS-SHAPED UNSYMMETRIC FIBER-REINFORCED CROSS-PLY LAMINATES: EXPERIMENTAL AND SIMULATION METHODS	Yang Li	P060
THE ENERGY-ABSORBING CHARACTERISTICS OF COMPOSITE TUBE-REINFORCED ALUMINUM FOAMS UNDER COMPRESSION	Zheng Liu	P061
A NUMERICAL MODEL FOR COUPLING HYGRO-MECHANICAL PHENOMENA IN COMPOSITE MATERIALS	Mamadou Abdoul MBACKE	P062
STUDY ON THE PROPERTY OF LIGHTWEIGHT BUILDING STRUCTURE	Comfort Mensah	P063
NONLINEAR FINITE ELEMENT ANALYSIS OF COMPOSITE BOLTED LAP-JOINTS : EXPERIMENTAL VS . NUMERICAL TESTS	Benoit Montagne	P064
EXPERIMENTAL VALIDATION OF A COMPOSITE BEAM SUB-STRUCTURAL TEST SPECIMEN	Alex Quinlan	P065
NOVEL FILLER MATERIALS FOR SKIN-STIFFENER STRUCTURES	Zsombor Sápi	P066
MICRO-MECHANICAL FAILURE ANALYSIS OF A UNI-DIRECTIONAL COMPOSITE PLY - COHESIVE ELEMENTS & A DUCTILE FRACTURE APPROACH	Akash Sharma	P067
EFFECT OF LAYING METHOD ON MECHANICAL PROPERTIES OF CONTINUOUS GLASS FIBER REINFORCED POLYPROPYLENE SANDWICH PANELS	Yiliang Sun	P068
KINKING MECHANICS IN COMPOSITES UNDER COMBINED LOADING	Sachin Vankar	P069
EFFECT OF INTERFACE LAYER AND DISLOCATION ON TANDEM HONEYCOMB MECHANICAL PROPERTY	Hangjian Weng	P070
INVESTIGATION INTO 3D PRINTING OF CFRP USING COVERING COMPOSITE YARN	Takato Yoshizawa	P071
QUASI STATIC COMPRESSIVE RESPONSE OF CFRP HONEYCOMB CORE WITH FOAM FILLERS	Hao Zhou	P072
Computational and finite element methods		
POTENTIAL APPLICATION OF WIRE WOVEN MESH AS PACKING TOWER BED LIMITER-COMPUTATIONAL APPROACH	Vahid Ebrahiminejad	P073
FINITE ELEMENT ANALYSIS AND EXPERIMENTAL TESTING OF NON-CRIMP FABRIC COMPACT TENSION SPECIMENS - INFLUENCE OF COHESIVE PROPERTIES.	Dimitris Gouskos	P074
MICROMECHANICS MODELING OF TENSILE/SHEAR BEHAVIOR AND CRACK DENSITY OF COMPOSITE MATERIALS	Daichi Haruyama	P075
APPLICATION OF A VARIABLE-KINEMATICS CONTINUUM SHELL ELEMENT TO THE ADAPTIVE NONLINEAR ANALYSIS OF COMPLEX SHELL STRUCTURES	Aewis K.W. Hii	P076
MECHANICAL BEHAVIOR OF TEXTILE COMPOSITES USING A TWO-STEP HOMOGENIZATION TECHNIQUE	Chaeyoung Hong	P077
BUCKLING ANALYSIS OF MULTILAYERED BEAMS WITH SOFT AND RIGID INTERFACES	An Le	P078
CARBON FIBRE PROSTHETIC FOOT: DESIGN AND MANUFACTURING PROCESS	Chao Liu	P079
MATERIAL DESIGN SIMULATION FOR FIBER REINFORCED CEMENT-BASED COMPOSITES USING MESO-SCALE ANALYSIS	Hiroki Ogura	P080
DYNAMIC STRESS-STRAIN RELATION OF ALUMINUM POWDERS USING MULTI-PARTICLE FINITE ELEMENT METHOD	Kefeng Peng	P081
DESIGN OF 70MPa COMPOSITE HYDROGEN STORAGE VESSEL	Cheng Shuo	P082
TOWARDS UNDERSTANDING AND MODELING IRREVERSIBLE BEHAVIOR OF WOVEN FABRICS UNDER LOADING-UNLOADING BENDING REGIMES	Reza Sourki	P083
SIZE-EFFECT DETERMINATION OF THE MODE I INTRALAMINAR FRACTURE TOUGHNESS USING COMPUTATIONAL MICROMECHANICS	Luis Varandas	P084
A MICROMECHANICAL MODEL IN CYCLIC PLASTICITY FOR FIBER REINFORCED WAVY COMPOSITES	Danhui Yang	P085

POSTER PROGRAM

TUESDAY 13 AUGUST

Poster title	Presenter name	Poster no
Composite Materials: Route to Impact		
AN INTRODUCTION TO SYNTACTIC FOAMS - THREE DIMENSIONAL COMPOSITE NETWORKS	Jim Kingston	P001
Composites structures		
THE INFLUENCE OF PET CRYSTALLINITY IN CARBON FIBER REINFORCED PET COMPOSITE AT VARIOUS TEMPERATURE	Hui Jin Um	P002
STUDY ON TRUSS TYPE SEGMENTAL COMPOSITE STRUCTURE FOR TEMPORARY RESCUE BRIDGE	Fang-Yao Yeh	P003
Computational and finite element methods		
NUMERICAL MODELING FOR MECHANICAL PROPERTIES OF NAMD(TM) CFRP	Satoshi Tomita	P004
Damage tolerance		
MULTI-MODE VIBRATION DETECTION FOR DELAMINATION OF CARBON FIBRE COMPOSITE PLATE	Jie Pu	P005
COMPARATIVE STUDY ON THE DAMAGE TOLERANCE OF THERMOSET AND THERMOPLASTIC GLASS FIBER-REINFORCED COMPOSITES	Florian Schimmer	P006
INFLUENCE OF DENT DEFECTS ON THE COMPRESSIVE STRENGTH OF COMPOSITE LAMINATES	Yuequan Wang	P007
Defence		
EXPERIMENTAL STUDY ON ANTI-PENETRATION PERFORMANCE OF SANDWICH TARGET MADE OF THIN STEEL PLATES AND WOOD AGAINST 7.62MM BULLET	Liling He	P008
COMPUTATIONAL MULTISCALE MODELLING OF CERAMIC MATERIALS FOR DEFENCE NEEDS	Meredith Mahoney	P009
THE DEFORMATION AND FAILURE RESPONSE OF ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE COMPOSITE TO LOCALIZED BLAST LOADING	Long Nguyen	P010
ANALYTICAL AND EXPERIMENTAL STUDY ON HIGH-TEMPERATURE HIGH-VELOCITY IMPACT LIMIT FOR C/C COMPOSITE	Fan Yang	P011
Design and manufacture for multifunctionality		
ELECTRONIC CIRCUITS EMBEDDED INTO COMPOSITE AEROSPACE MATERIALS	Greg Beziuk	P012
MECHANICAL PROPERTY OF A CORE-FILLED CUBIC MODEL CREATED BY 3D PRINTING TECHNIQUE	Jeongho Choi	P013
SUPERHYDROPHOBIC COATINGS FOR ENHANCED FIBRE COMPOSITE MATERIALS	Puneet Garg	P014
DESIGN OF FIBER PREFORMS FOR WORLD'S LARGEST FIBERGLASS COMPANY	Peng Li	P015
Durability, creep and aggressive environment		
FUEL EFFECT ON THE TENSILE STRENGTH EVOLUTION OF CARBON FIBERS UNDER DIRECT FLAME ATTACK	Pablo Chávez Gómez	P016
STATISTICAL LIFE PREDICTION OF UNIDIRECTIONAL CF/PP TAPE UNDER CREEP TENSION LOAD	Takeharu Isaki	P017
AN ATOMISTIC STUDY OF CREEP DEFORMATION IN FIBER/MATRIX INTERFACE	Jinqiao Jiang	P018
COMBUSTION OF CARBON FIBER REINFORCED PLASTICS	OKOSHI MASAYUKI	P019
AN EXTENDED THICKNESS-DEPENDENT MOISTURE ABSORPTION MODEL FOR UNIDIRECTIONAL CARBON/EPOXY COMPOSITES	King Jye Wong	P020
Dynamic properties & fracture		
EFFECT OF TEMPERATURE ON THE DYNAMIC DEFORMATION BEHAVIORS OF THE TUNGSTEN FIBER REINFORCED BULK METALLIC GLASS COMPOSITE	Junhong Chen	P021
RATE DEPENDENT TENSILE RESPONSE OF A PLAIN WEAVE TEXTILE COMPOSITE	Taeseong Choi	P022
EFFECT OF INTERMEDIATE STRAIN RATES ON SHEAR PLUGGING STRENGTH OF COMPOSITES	Santanu Choudhury	P023
NATURAL FREQUENCY OF BI-STABLE COMPOSITE PLATES IN THERMAL ENVIRONMENTS	Ming Li	P024
MODE II INTERLAMINAR FRACTURE BEHAVIOR OF ZANCHOR REINFORCED COMPOSITE LAMINATES UNDER LOW-VELOCITY IMPACT LOADING	Wataru SUGIMOTO	P025
NUMERICAL SIMULATION OF HAIL IMPACT CHARACTERISTICS OF GLASS FIBER LAMINATES	Xiaojun Yan	P026
IMPROVING THE DYNAMIC MATERIAL CHARACTERISATION OF CARBON/EPOXY COMPOSITES AT INTERMEDIATE STRAIN RATES	Sanghyun Yoo	P027
RESEARCH ON THE DYNAMIC TENSILE OF GFRP LAMINATES BASED ON PERIDYNAMICS	Jian Yu	P028
Energy harvesting and storage		
BI-STABLE PIEZOELECTRIC COMPOSITE LAMINATE FOR ENERGY HARVESTING	Fuhong Dai	P029
CARBON FIBERS MODIFIED WITH METAL ORGANIC FRAMEWORK NANOSHEETS: POTENTIAL USE AS ELECTRODE FOR STRUCTURAL BATTERIES	Yu Fu	P030
MULTIFUNCTIONAL COMPOSITES FOR ENERGY HARVESTING	Xiaoyu Guan	P031
ORGANIC FRAMEWORK DERIVED ULTRA-THIN COBALT IRON SULFIDE NANOSHEET ARRAYS FOR HIGH-PERFORMANCE SUPERCAPACITORS	Jae Won Lee	P032
THE EFFECT OF VIBRATION ON MECHANICAL, AND ELECTRICAL PROPERTIES OF MAGNESIUM SILICIDE BASED THERMOELECTRIC MODULES	Keisuke Nagayoshi	P033
DEVELOPMENT OF SIC NANO-PARTICLE/MG ₂ SI THERMOELECTRIC COMPOSITES	Junki Nakano	P034
A REVIEW OF MULTIFUNCTIONAL COMPOSITE STRUCTURES WITH EMBEDDED LITHIUM-ION BATTERIES	Korant Pattachakun	P035
VIBRATIONAL ENERGY HARVESTING OF MULTIFUNCTIONAL COMPOSITE BLADE FOR OFFSHORE WIND TURBINE	Tao Wen	P036
SULFIDE COMPOSITE WITH A LARGE SPECIFIC SURFACE AREA FOR HIGH-PERFORMANCE ALL-SOLID-STATE PSEUDOCAPACITORS	Sailong Xu	P037
DESIGN AND PRODUCTION OF FILAMENT WOUND SLEEVES FOR HIGH SPEED FLYWHEEL ROTORS	Lei Zu	P038
Fatigue		
SHORT-TIME APPROACH FOR FATIGUE LIFE ESTIMATION OF MULTIFUNCTIONAL COMPOSITES	Sebastian Backe	P039
A CREEP MODEL FOR THE FATIGUE BEHAVIOR OF HYBRID BI-STABLE LAMINATE	Yanqi Li	P040
FATIGUE LIFE ANALYSIS FOR WIND TURBINE GEAR SHAFT WITH OXIDE INCLUSION	Ran Liu	P041
INVESTIGATION ON HOMOTHETIC FAILURE ENVELOPES IN THE LAYER-BASED FATIGUE ANALYSIS OF CFRP	Marc Möller	P042
CRUCIFORM SPECIMEN DESIGNS FOR PLANAR BIAxIAL FATIGUE TESTING IN COMPOSITES	Aakash Muncy	P043
CONTROLLED STRAIN RESONANCE FREQUENCY FATIGUE TEST BENCH FOR CFRP	Eduard Relea	P044
ENHANCED FATIGUE PROPERTIES OF GRAPHENE OXIDE/CARBON BLACK/NATURE RUBBER COMPOSITES	Shipeng Wen	P045
Fibers		
TRANSVERSE YOUNG'S MODULUS MEASUREMENT OF CARBON FIBRE BY ATOMIC FORCE MICROSCOPE AND NANOINDENTATION	Shanghong Duan	P046
A STUDY OF GF/PA6 FIBER REINFORCED COMPOSITES MATERIALS USING PULTRUSION AND DIRECT EXTRUSION METHOD	HyunSeok Jung	P047
LOW-COST, HIGH STRENGTH POLYACRYLONITRILE PRECURSOR FIBRE	Huma Khan	P048
SPECIMEN PREPARATION FOR TRANSVERSE MODULUS MEASUREMENT OF CARBON FIBRES USING FOCUSED ION BEAM	Fang Liu	P049
MANUFACTURE OF THE PLLA/BATIO ₃ FIBER FOR FIBROUS PIEZOELECTRIC SENSORS	Hyun Ju Oh	P050

POSTER PROGRAM

TUESDAY 13 AUGUST

Poster title	Presenter name	Poster no
FACTORS GOVERNING THE TENSILE STRENGTH OF BASALT FIBRE	Dan Xing	P051
PROPERTIES AND STRUCTURAL PERFORMANCE OF KD-II SIC FIBER WITH DIFFERENT TEMPERATURE IN AIR AND ARGON ATMOSPHERE	Chenxi Yang	P052
OIL-WATER SEPARATION USING JANUS MEMBRANES	Avinash Baji	P053
Fracture and damage		
A PRELIMINARY ASSESSMENT OF A NEW XFEM FRAMEWORK FOR PREDICTING COMPLEX FRACTURE	Keith Ballard	P054
COMPARATIVE DAMAGE ANALYSIS OF VARIOUS OPEN CROSS-SECTION GLARE COMPOSITE COLUMNS	Dominik Banat	P055
EFFECT OF PLY THICKNESS AND TEMPERATURE ON TRANSVERSE CRACKING PROCESS IN COMPOSITE LAMINATES	Tanguy Briand	P056
SIZE EFFECT AND INTRALAMINAR FRACTURE TOUGHNESS OF FIBRE REINFORCED COMPOSITES	Giuseppe Catalanotti	P057
EFFECT OF CARBON NANOTUBE CONTENTS ON FRACTURE PROPERTIES OF THERMALLY DEGRADED NANOCOMPOSITE FILMS VIA THE ESSENTIAL WORK OF FRACTURE TEST	Min-Seok Choi	P058
FRACTURE MECHANISM AND STRENGTH PREDICTION OF IN-SITU TIB2/AL COMPOSITE	Min'ge Duan	P059
DIC DEFORMATION MEASUREMENT IN CRACKED CFRP CROSS-PLY LAMINATES	M.j. Mohammad Fikry	P060
FRACTURE CHARACTERISTICS OF PARTICULATE REINFORCED COMPOSITES USING DIGITAL IMAGE CORRELATION	Sangdeok Kim	P061
DAMAGE PROGRESSION OF NOTCHED AND UNNOTCHED COMPOSITE LAMINATES UNDER PICTURE-FRAME SHEAR LOADING	Daniel Rapping	P062
DUCTILE-BRITTLE FRACTURE SIMULATION OF IN-SITU TIB2/AL COMPOSITE	Ma Yifan	P063
DEVELOPMENT OF PROGRESSIVE FAILURE ANALYSIS METHOD FOR COMPOSITE LAMINATES CONTAINING OPENINGS WITH DIGITAL IMAGE CORRELATION	Donghyun Yoon	P064
EVOLUTION OF FRACTURE PARAMETERS OF A CRACK IN A MICROPOLAR ELASTIC SOLID	Hongjun Yu	P065
INTERLAMINAR PROPERTIES OF CONTINUOUS FIBER REINFORCED THERMOPLASTIC COMPOSITES WITH DIFFERENT RESIN FRACTION	Tao Zhang	P066
MICRO-CRACK STUDY OF MULTICRYSTALLINE SILICON SOLAR PANEL BASED ON IN-SITU EXPERIMENT	Yangbo Zhang	P067
Green & natural fibre composites		
ELABORATION AND MECHANICAL CHARACTERISTICS OF FLAX-PCL COMPOSITES AND SANDWICHES	Laurent Bizet	P068
NATURAL FIBRE BASED HYBRID POLYPROPYLENE COMPOSITES: AN INSIGHT INTO THERMAL PROPERTIES	Rupam Gogoi	P069
THE EFFECT OF CORE-SHELL NANOPARTICLES ON STRENGTHENING AND TOUGHENING OF POLYLACTIDE AND JUTE FIBER REINFORCED POLYLACTIDE COMPOSITE	Hailing He	P070
THERMAL AND MECHANICAL BEHAVIOUR OF FLAX YARNS MODIFIED WITH GRAPHENE OXIDE	Farzin Javanshour	P071
WASTE-DERIVED NANOCELLULOSE-CHITIN HYBRID MATERIALS WITH TUNABLE PHYSICAL PROPERTIES	Sabu John	P072
THE FABRICATION OF POLYLACTIC ACID (PLA) / CELLULOSE NANOFIBER (CNF) NANOCOMPOSITES WITH PLASTICIZER AS DISPERSING AGENT	Bich Nam Jung	P073
GREEN AND NATURAL FIBRE PANEL COMPOSITES FROM BAMBOO-A MATERIAL OF THE FUTURE	Uday Nagammanavar	P074
EVALUATION OF TENSILE PROPERTIES AND WATER ABSORPTION OF ABACA FIBER THERMOPLASTIC COMPOSITE RELATIVE TO FIBER LENGTH, TYPE OF MATRIX AND ADDITIVES	Marissa Paglicawan	P075
ONE-STEP EXTRACTION OF CELLULOSE NANOCRYSTALS ONLY USING HIGH-PRESSURE HOMOGENIZER	Nae-man Park	P076
RESEARCH ON COMBUSTION BEHAVIOR OF HYBRID COMPOSITE BY FIRE DYNAMICS SIMULATOR	Yoon Hee Park	P077
TUBE MADE FROM POLYLACTIC ACID YARN AND SILK YARN BY FILAMENT WINDING TECHNIQUE	Natee Srisawat	P078
Hybrid composites		
ON THE COMPRESSION RESPONSE OF HYBRID 3D ORTHOGONAL WOVEN COMPOSITES	Sohail Ahmed	P079
INVESTIGATION OF LOW-VELOCITY IMPACT AND CAI BEHAVIOR OF HYBRID SANDWICH COMPOSITES	Alex Osei Bonsu	P080
ROBUST AND CONDUCTIVE HYDROGEL BASED ON CARBON NANOTUBE/ARAMID NANOFIBER FOR STRUCTURAL ENERGY STORAGE	Wenxin Cao	P081
EFFECT OF FIBER DISTRIBUTION ON COMBINED COMPRESSION-TORSIONAL RESPONSE OF HYBRID COMPOSITES	Sneha Bhushan Cheryala	P082
INVESTIGATION OF DAMAGE ACCUMULATION IN GLASS/CARBON FIBER HYBRID COMPOSITES THROUGH ACOUSTIC EMISSION METHOD	Isa Emami Tabrizi	P083
PROPERTIES AND FAILURE PREDICTION OF INTERPLY HYBRID COMPOSITES OF GLASS AND SELFREINFORCED POLYPROPYLENE	Farzaneh Hassani	P084
IMPACT OF CELLULOSE FILAMENTS ON INTERLAMINAR PROPERTIES, FLAMMABILITY AND THERMAL DEGRADATION BEHAVIOUR OF POLYMER MATRIX COMPOSITES	Félix Lessard	P085
HYBRID NANOCOMPOSITE OF ZIF-67 AND COBALT-NICKEL LAYERED DOUBLE HYDROXIDE AS ELECTROCATALYST FOR HIGHLY EFFICIENT OXYGEN EVOLUTION REACTION	Feng Li	P086
GAMMA-RAY SHIELDING PROPERTY OF TUNGSTEN/BASALT FIBER REINFORCED EPOXY MATRIX COMPOSITES FABRICATED BY TWO TUNGSTEN HYBRID WAYS	Ran Li	P087
EFFECT OF ARAMID FIBER CLOTH ON CARBON/ARAMID FIBER REINFORCED THERMOPLASTICS	Hisaki Matsuda	P088
HOW THE SPRAYING OF GRAPHENE NANOPATELETS CHANGES MECHANICAL PROPERTIES OF CARBON FIBRE REINFORCED POLYMER?	Marzena Pawlik	P089
CFRP-STEEL HYBRIDS WITH IMPROVED AGEING RESISTANCE THROUGH ZINC OXIDE NANORODS - INVESTIGATION OF BASIC MECHANISMS	Jan Striewe	P090
HYRID MULTIFUNCTIONAL POLYMER NANOCOMPOSITES USING GRAPHENE-MOF.	Vishnu Unnikrishnan	P091
TEMPERATURE SENSOR BASED ON PHASE TRANSITION FOR ALARM SYSTEM	Yuyan Yu	P092
Interdisciplinary Forum on Multifunctional Composites for Sensing, Actuation, Computation and Structural Power		
ELECTROMECHANICAL RESPONSE OF MULTIFUNCTIONAL PIEZOELECTRIC COMPOSITES	Krishna Challagulla	P093
COMPRESSION PROPERTIES OF MULTIFUNCTIONAL CFRP LAMINATES WITH EMBEDDED LITHIUM-ION POLYMER BATTERIES	Pooneh H.M Attar	P094
MULTIFUNCTIONAL STRUCTURAL ENERGY STORAGE COMPOSITES	Feng Huang	P095
PREPARATION OF THE PVDF/PAR COMPOSITE MATERIALS BY HIGH SHEAR RATE PROCESSING	Seung Goo Lee	P096
PROGRESS IN STRUCTURAL TAILORED POLYMER INSERTS; TRENDS AND STRATEGIES TOWARDS FUNCTIONAL POLYMERIC INTER-PLY REINFORCEMENTS	Sithila Theminimulla	P097
Hybrid composites		
BASALT FIBER REINFORCED HYBRID EPOXY COMPOSITES	Ramdayal Yadav	P098
CARBON FIBRE FROM VICTORIAN LIGNITE	Ramdayal Yadav	P099

POSTER PROGRAM

WEDNESDAY 14 AUGUST

Poster title	Presenter name	Poster no
Computational and finite element methods		
A SEMI-ANALYTICAL FINITE ELEMENT METHOD FOR THE ANALYSIS OF FUNCTIONALLY GRADED CIRCULAR PLATES	Chih-Ping Wu	P001
Interfaces and interphases		
CHARACTERISATION OF BOND STRENGTH IN OVERMOULDED HIGH-PERFORMANCE THERMOPLASTIC COMPOSITES	Robert Gaitzsch	P002
THERMORHEOLOGICAL CHARACTERIZATION OF INTERFACIAL BONDING ENHANCEMENT OF BASALT FIBER REINFORCED EPOXY COMPOSITES	Doojin Lee	P003
TUNABLE MICROWAVE DIELECTRIC RESPONSE IN CARBON NANOCOMPOSITES VIA VERTICAL INTERPHASE	Faxiang Qin	P004
MODIFICATION OF CARBON FIBRE SURFACES BY SUFEX CLICK CHEMISTRY	James Randall	P005
DIRECTIONAL LAMINATES USING CARBON NANOTUBE INTERFACES	Lulu Shen	P006
TAILORING INTERFACIAL INTERACTIONS IN FIBER REINFORCED POLYMERIC COMPOSITES BY THE ELECTROSPRAY DEPOSITION OF WATERBORNE CARBON NANOTUBES	Murat Tansan	P007
INVESTIGATING WATER AGEING EFFECTS ON THE INTERFACIAL INTEGRITY OF CARBON FIBRE POLYMER COMPOSITES	Filip Vuković	P008
MUSSEL INSPIRED SURFACE MODIFICATION AND FUNCTIONALIZATION METHOD WITH HIGHLY EFFICIENT AND ENVIRONMENTAL FRIENDLY	Wencai Wang	P009
GRAFTING CARBON NANOTUBES ON CARBON FIBER SURFACE AND ENHANCING THE INTERFACIAL PROPERTIES OF COMPOSITES	Shu Xiong	P010
MOLECULAR SIMULATIONS OF INTERPHASE FORMATION PROCESS OF CARBON FIBER REINFORCED POLYMER COMPOSITES	Yingdan Zhu	P011
Joints		
INVESTIGATION OF GEOMETRICAL AND COMPOSITE MATERIAL PARAMETERS FOR TENSION-ABSORBING BOLTED JOINTS	Jazib Hassan	P012
AUXILIARY JOINING ELEMENT WITH INTEGRATED PIN STRUCTURES FOR MECHANICAL JOINING OF FIBER-REINFORCED PLASTIC/METAL COMBINATIONS	Per Heyser	P013
MECHANICAL ANALYSIS FOR WELDING TECHNOLOGY OF THERMOSET FRP	Masato Honma	P014
A STUDY ON THE FATIGUE CHARACTERISTICS OF SINGLE LAP JOINT BETWEEN CARBON FIBER REINFORCED PLASTIC/CARBON STEEL	Byunghyun Kang	P015
TENSILE PROPERTIES OF STITCHED 3D-WOVEN-COMPOSITES/TITANIUM SINGLE-LAP JOINT	Yi-rong Lu	P016
AXIAL TENSILE ADHESIVELY BONDED PERFORMANCE OF CFRP WOUND COMPOSITE TUBES UNDER ROOM-TEMPERATURE AND LOW-TEMPERATURE CIRCULATION	Haibo Luo	P017
EVALUATION METHOD OF JOINING STRENGTH OF CFRTP MANUFACTURED BY HYBRID INJECTION MOLDING PROCESS	Fumiya Matsumoto	P018
NUMERICAL MODELING OF ADHESIVELY BONDED CFRP JOINTS CONSIDERING NON-LINEAR DEFORMATION OF ADHESIVE LAYERS	Shunta Mimura	P019
THE EFFECTS OF ENVIRONMENTAL CONDITIONS ON THE STRENGTH OF DOUBLE LAP JOINTS	Aakash Paul	P020
A STUDY ON THE CHANGE OF ADHESIVE SHEAR STRENGTH OF CARBON STEEL/CARBON FIBER REINFORCED PLASTIC COMPOSITE BY SURFACE TREATMENT OF CARBON STEEL	Seung Hak Song	P021
DAMAGE IN HYBRID JOINTED GLARE STRUCTURES UNDER THE QUASI-STATIC	Peifei Xu	P022
MECHANICAL PROPERTIES OF CFRP SINGLE LAP ADHESIVE JOINT	Kotono Yanagisawa	P023
SILICA DEPOSITION TREATMENT FOR IMPROVING ADHESION PROPERTIES OF ADHESIVE BONDING OR COATING OF AIRCRAFTS	Tetsuo Yasuoka	P024
Liquid composites moulding		
A TWO PHASES COUPLING FREE AND POROUS FLOW METHOD AT MULTI-SCALES OF LCM PROCESS	Arthur Cantarel	P025
NUMERICAL SIMULATION OF RESIN FLOW THROUGH 3D FIBROUS REINFORCEMENT AT MULTISCALE	Chaozhong Chen	P026
PERMEABILITY EVALUATION IN VACUUM-ASSISTED RESIN TRANSFER MOLDING OF CARBON FIBER REINFORCED PLASTICS	Fumiya Isono	P027
LINKAGE ANALYSIS OF PERMEABILITY AND MECHANICAL EXPERIMENTS FOR CFRP	Seonghun Kwak	P028
EFFECT OF WETTABILITY ON IMPREGNATION PROCESS OF VISCOUS FLUID TO WOVEN FIBER BUNDLES	Atsuki Mizuno	P029
A PARAMETRIC FLOW VISUALISATION STUDY OF THE WET COMPRESSION MOULDING PROCESS	Balaji Muthuvel	P030
EFFECT OF FLAME RETARDANT FILTRATION ON THE FIRE PERFORMANCE OF CARBON FIBRE REINFORCED EPOXY COMPOSITES MADE BY RESIN TRANSFER MOULDING	Ákos Pomázi	P031
EVALUATION OF MECHANICAL PROPERTIES FOR CFRTP USING IN SITU-POLYMERIZING THERMOPLASTIC URETHANE RESIN	Tsuyoshi Sugita	P032
Machining of composites		
EPI-FLUORESCENT MICROSCOPY OF EDGE TRIMMED CARBON FIBRE REINFORCED POLYMER: AN ALTERNATIVE TO CT-SCANNING	Sam Ashworth	P033
STUDY ON THE PROCESS AND PROPERTIES OF CARBON NANOTUBE FILM CURING CARBON FIBER COMPOSITES	Zhiwei Liu	P034
MACHINED SURFACE TOPOGRAPHY ANALYSIS IN ULTRASONIC VIBRATION ASSISTED END GRINDING OF SICP/AL COMPOSITES	Wei Zheng	P035
Meta-composite		
INDENTATION RESPONSE OF TOPOLOGICAL LATTICE	Xiao-fei Guo	P036
Metal matrix composites		
THE MAGNETIC AND ELECTROMAGNETIC PROPERTIES OF FECONISIXAL0.4 HIGH ENTROPY ALLOY POWDERS	Yuping Duan	P037
ENHANCING THE MECHANICAL PROPERTIES OF TIB2 REINFORCED MAGNESIUM COMPOSITES USING STIR CASTING METHOD	Anbuezhhiyan Gnanasambandam	P038
OPTIMIZING THE MICROSTRUCTURE AND MECHANICAL BEHAVIORS OF IN-SITU TIC- γ /NI COMPOSITES BY SUBSEQUENT THERMAL TREATMENT	Wenqiang Hu	P039
WEAR AND MECHANICAL CHARACTERISTICS OF AL-SI/TIB2 COMPOSITES	Jimmy Karloopia	P040
EFFECT OF TA ADDITION ON MICROSTRUCTURES AND ROOM TEMPERATURE FRACTURE TOUGHNESS OF THE NB-16SI-20TI-5AL ULTRAHIGH TEMPERATURE ALLOY	Wenyuan Long	P041
SIMULATION OF THERMAL CONDUCTIVITY FOR TITANIUM BORIDE PARTICLE DISPERSED ALUMINUM COMPOSITES	Gen Sasaki	P042
EVALUATION OF INTERFACIAL THERMAL RESISTANCE OF AL-ALN PARTICLE DISPERSED COMPOSITES BY USING IMAGE-BASED CALCULATION	Kenjiro Sugio	P043
PREPARATION OF SICNP AND IN-SITU MG2SI HYBRID PARTICULATES REINFORCED AL-CU MATRIX COMPOSITES	Shusen Wu	P044
A NOVEL W/TIN/TA COMPOUND SHAPED CHARGE LINER	ZiZhi Yan	P045
STRENGTHENING OF PURE AL MATRIX COMPOSITES BY IN-SITU SYNTHESIZED NANO AL-O NEEDLE PHASE	Xinxin Zhu	P046
Multiscale modelling		
FINITE STRAIN PARAMETRIC HFGMC PREDICTION OF THE MICROMECHANICAL BEHAVIOR OF COMPOSITE	Uri Breiman	P047
MULTISCALE FAILURE ANALYSIS OF 3D BRAIDED COMPOSITE STRUCTURE BY COUPLING FEM AND FFT METHOD	Guodong Fang	P048
DEVELOPMENT OF MULTISCALE DAMAGE PROPAGATION ANALYSIS METHOD FOR WOVEN LAMINATES USING A HOMOGENIZATION THEORY	Gai Kubo	P049
OVERALL ELASTOPLASTIC PROPERTY OF PARTICULATE COMPOSITE WITH STRAIN GRADIENT MATRIX	Hansong Ma	P050

POSTER PROGRAM

WEDNESDAY 14 AUGUST		
Poster title	Presenter name	Poster no
IDENTIFICATION OF THE QUASI-STATIC BEHAVIOR OF A WOVEN COMPOSITE SENSITIVE TO THE ENVIRONMENTAL CONDITIONS USING NUMERICAL HOMOGENIZATION	Patrick Rozycki	P051
ACCOUNTING FOR SHEARED TEXTILE COMPOSITE UNIT CELL PROPERTIES IN MACRO SCALE FE SIMULATIONS	Meng-yi Song	P052
ANALYSIS OF MICRO/MESO/MACRO TEMPERATURE-DEPENDENT ELASTOVISCOPLASTIC PROPERTIES OF WOVEN COMPOSITES	Junpei Tetsuka	P053
ON THE EXPERIMENTAL VALIDATION OF THE WAVE PROPAGATION MODELLING FOR TWO-DIMENSIONAL PERIODIC TEXTILE COMPOSITES	Victor Thierry	P054
MODELLING AN IMPROVED NOL RING TEST USING A REDUCED VOLUME METHOD FOR THE CHARACTERISATION OF COMPOSITE CYLINDERS	Martinus Putra Widjaja	P055
Nano-composites		
HIGH-EMISSION NANO-COMPOSITE FILM FOR EUV PELLICLE APPLICATIONS IN SEMICONDUCTOR FABRICATION PROCESS	Jinho Ahn	P056
EVALUATING THE MICRON LEVEL PHASE DISTRIBUTION IN COMPOSITE STRUCTURES AND ITS EFFECT ON MECHANICAL BEHAVIOR USING 2D MODULUS MAPPING	Ankita Bisht	P057
CONDUCTIVE NANOPARTICLE ENHANCEMENTS FOR STRUCTURAL DIELECTRIC CAPACITORS	KY Chan	P058
NANO-ENABLED MANUFACTURING OF AEROSPACE-GRADE THERMOPLASTIC COMPOSITES	Frederick Daso	P059
MULTIFUNCTIONAL COMPOSITES WITH MODIFIED CARBON FIBERS FOR LIGHTNING STRIKE PROTECTION	Anchalee Duongthipthewa	P060
PHOSPHATE FUNCTIONALIZED GRAPHENE OXIDE AS ADSORBENT FOR THE REMOVAL OF PB(II) FROM AQUEOUS SOLUTION	Daniel Gang	P061
LOW PERCOLATION THRESHOLD OF POLYPROPYLENE SPECIALLY DESIGNED GRAPHENE NANOCOMPOSITES	Karolina Gaska	P062
FABRICATION AND HYDROPHILIC CHARACTERIZATION OF NANOPARTICLES-FILLED POLYMER COMPOSITES	Yuki Hanzawa	P063
EFFECT OF CARBON NANOTUBES CONTENT ON THE FRACTURE BEHAVIOR OF PP/EPDM/MWCNT BLEND-NANOCOMPOSITES UNDER DYNAMIC AND QUASI-STATIC LOADING	Mehrdad Khodabandelou	P064
COBALT COPPER ALLOYS ENCAPSULATED BY MOS ₂ /N-DOPED GRAPHENE NANO-HETEROSTRUCTURES FOR ORR APPLICATION	Nam Hoon Kim	P065
COBALT PHOSPHIDES COATED COPPER OXIDE NANOROD ARRAYS FOR ENHANCED OVERALL WATER SPLITTING	Joong Hee Lee	P066
ELECTROMAGNETIC PROPERTIES OF KH560/RGO@FE ₃ O ₄ /TiO ₂ /PARAFFIN WAX COMPOSITE IN 0.5-18 GHz FREQUENCY	Yuxuan Li	P067
ANALYSES OF MECHANICAL REINFORCEMENT FOR CELLULOSE NANOFIBERS/CLAY NANOCOMPOSITES USING X-RAY DIFFRACTION	Shunichi Mori	P068
EFFECT OF GRAPHENE NANOPARTICLES AND THEIR FUNCTIONALISATION ON VITRIMER MATRIX	Quentin-Arthur Poutrel	P069
PREPARATION OF FLUOROALKYL END-CAPPED OLIGOMER/MAGNETITE NANOCOMPOSITES – APPLICATION TO WATER/OIL SEPARATION	Hideo Sawada	P070
USE OF RESOLE SEPIOLITE-PHOSPHATE NANOCOMPOSITE FOR BUILDING FACADES	Leila Soufeiani	P071
GRAPHENE OXIDE/POLYMER-BASED NANOCOMPOSITE HYDROGEL FOR BIOMEDICAL APPLICATIONS WITH ANTIMICROBIAL PROPERTY	Lee Won Chang	P072
NUMERICAL INVESTIGATION ON MECHANICAL PROPERTIES OF POLYMER COMPOSITES REINFORCED WITH MXENE NANOSHEETS	Daiva Zeleniakienė	P073
POLYIMIDE AEROGELS CROSS-LINKED WITH AMINATED AG NANOWIRES: MECHANICALLY STRONG AND TOUGH	Tianyi Zhang	P074
IMPROVING INTERLAMINAR SHEAR STRENGTH OF FIBER REINFORCED EPOXY COMPOSITES LAMINATES BY CARBON NANO-FILLERS	Helezi Zhou	P075
INTERFACIAL PROPERTIES OF MXENE/GRAPHENE/POLYMER MATRIX NANOCOMPOSITES	Kristina Žukienė	P076
Non-destructive evaluation		
THERMOELASTIC ASSESSMENT OF COMPOSITE DELAMINATION BUCKLING	Cedric Antolis	P077
AUTOMATED IMAGE ANALYSIS OF ULTRAFAST SYNCHROTRON CT SCANS TO EXPERIMENTALLY CHARACTERISE THE FIBRE BREAK DEVELOPMENT DURING IN-SITU TENSILE TESTS	Christian Breite	P078
SIMULTANEOUS MULTI-FREQUENCY DIELECTRIC ANALYSIS OF THE POLYMERIZATION PROCESS OF ANIONIC POLYAMIDE 6	Maximilian Eberhardt	P079
EARLY PREDICTION OF CRACK DEVELOPMENT USING DIGITAL IMAGE CORRELATION	David Jesson	P080
FABRICATION AND CHARACTERIZATION OF DISCONTINUITIES IN AIRCRAFT COMPOSITES AS REFERENCE FLAWS FOR GUIDED WAVE BASED ULTRASONIC TESTING	Michael Koerdt	P081
DAMAGE DETECTION IN HONEYCOMB SANDWICH PANELS BY ACTIVE THERMOGRAPHY	Sefa Kemal Mandal	P082
MEASUREMENT OF MOISTURE DIFFUSION COEFFICIENT OF WOOD USING TERAHERTZ WAVE	Gyung-hwan Oh	P083
INVESTIGATION OF DELAMINATED COMPOSITES BY DIC AND AE METHODS	Hliva Viktor	P084
COMPOSITE PROPERTY DETECTION USING "WEAK" FORMULATION BASED LOCAL SPECIFIC STIFFNESS IDENTIFICATION	Chao Zhang	P085
Polymer matrix materials		
EFFECT OF GRAPHENE AND MWCNTS AND ITS DOSAGE ON MODE I INTERLAMINAR FRACTURE TOUGHNESS OF CFRP	Shuanghui Cao	P086
TAILORED POLYMER NETWORKS BY SEQUENTIAL THIOL-ENE PHOTOPOLYMERIZATION	Sergio Cespedes	P087
STRUCTURAL COMPOSITE BATTERIES FOR AUTOMOTIVE APPLICATIONS	Jaehoon Choi	P088
PREPARATION AND CHARACTERIZATION OF MODIFIED POLYVINYL ALCOHOL/SODIUM ALGINATE HYDROGEL	Jianle Gong	P089
THE EFFECTS OF MOISTURE AND TEMPERATURE ON THE FLEXURAL PROPERTIES OF CARBON FIBER PAPER REINFORCED THERMOPLASTICS/POLYAMIDE 6	Xiangdong He	P090
PREPARATION AND CHARACTERIZATION OF POLY(1,4 BUTYLENE CARBONATE-CO-TEREPHTHALATE)/ORGANICALLY MODIFIED MGAL LAYERED DOUBLE HYDROXIDE NANOCOMPOSITES	Ming-Chen Hsu	P091
PREPARATION AND CHARACTERIZATION OF ALUMINUM OXIDE/ALUMINUM NITRIDE AS FILLER OF THERMALLY CONDUCTIVE MATERIALS	Gyungsoo Jeon	P092
THE INFLUENCE OF DIFFERENT POWDER IMPREGNATION PROCESSES ON THE PROPERTIES OF L-SHAPED WOVEN FABRIC REINFORCED PEEK COMPOSITES BY HOT STAMP FORMING	Hansong Liu	P093
EXPERIMENTAL EVALUATION ON FIBER ROTATION OF THERMOPLASTIC COMPOSITE LAMINATE UNDER TENSILE LOADING	Taoye Lu	P094
DEFORMATION MECHANISM INVESTIGATION FOR EPOXY BY IN-SITU MECH-ELECTRIC COUPLING MEASUREMENT	Yinggang Miao	P095
COMPARISON OF SHORT CARBON AND POLY(P-PHENYLENE-2,6-BENZOBISOXAZOLE) FIBERS ON THE PROPERTIES OF POLYESTER THERMOPLASTIC ELASTOMERS	Adam Pearson	P096
PREPARATION AND MECHANICAL PROPERTIES OF METAL FLAKE PARTICLES/RESIN COMPOSITE	Yutaro Sako	P097
LINEAR AND NONLINEAR ELASTIC PROPERTIES OF POLYSTYRENE-BASED NANOCOMPOSITES	Irina Semenova	P098
ELECTRICAL, THERMAL AND MECHANICAL PROPERTIES OF THERMOPLASTIC ELASTOMER COMPOSITES CONTAINING CARBON FILLERS	Rajesh Theravalappil	P099
PREPARATION AND CHARACTERIZATION OF ORGANICALLY MODIFIED LAYERED ZINC PHENYLPHOSPHONATE/POLY(1,4-BUTYLENE CARBONATE-CO-TEREPHTHALATE)S NANOCOMPOSITES	Li-ying Tseng	P100
HIGH TEMPERATURE COMPRESSION PROPERTIES OF CFF/PPS COMPOSITE LAMINATES FABRICATED BY FILM STACKING TECHNIQUE	Shixun Wang	P101
RESEARCH ON WAVES DEFECTS OF TAPE WINDING RESIN MATRIX COMPOSITES	Xiaojing Wang	P102
CHARACTERIZATION AND GAS SENSING PROPERTIES OF GRAPHENE NANORIBBONS/ INDIUM TRIOXIDE / POLYANILINE NANOCOMPOSITES	Ling-hui Xu	P103
PHTHALONITRILE MODIFIED MULTI-HYDROXYL PHENOLIC: SYNTHESIS, CURING AND PROPERTIES	Shuangshuang Xu	P104
MACROSCOPIC AND MICROSCOPIC PROPERTIES OF FABRIC RUBBER COMPOSITE	Xuefeng Yao	P105
PREPARATION AND CHARACTERIZATION OF HIGH STRENGTH AND HIGH OIL RESISTANT FLAME RETARDANT EVA COMPOSITES FOR CABLE	Yiyang Zhou	P106
Resin and Polymers		
NEW THERMOSET MATRIX BASED ON BISOXAZOLINES	Salumeh Issazadeh	P107

POSTER PROGRAM

THURSDAY 15 AUGUST

Poster title	Presenter name	Poster no
Computational and finite element methods		
APPLICATIONS OF THE MLS-RITZ METHOD TO THREE-DIMENSIONAL VIBRATIONS OF LOADED AND CRACKED FUNCTIONALLY GRADED MATERIAL PLATES	Chiung-Shiann Huang	P001
Process modelling		
1D SQUEEZE FLOW ANALYSIS OF CHOPPED LONG FIBER THERMOPLASTIC COMPOSITE	Waqas Ali	P002
MODELING STRATEGY OF IR LAMPS WITH INTEGRATED REFLECTOR USED IN THE MANUFACTURING PROCESS OF THERMOPLASTIC COMPOSITE TAPES	Olivier De Almeida	P003
MACHINE-DRIVEN EXPERIMENTATION FOR SOLVING CHALLENGING CONSOLIDATION PROBLEMS	Anatoly Koptelov	P004
MODELING THE TEMPERATURE GRADIENT EFFECT ON THE CURE-INDUCED DISTORTION OF CFRP L-SHAPED LAMINATES	Yujun Li	P005
A CHARACTERIZATION STUDY RELATING CROSS-SECTIONAL DISTRIBUTION OF FIBRE VOLUME FRACTION AND PERMEABILITY	Filip Salling Rasmussen	P006
NUMERICAL SIMULATION OF FLOW OF RUBBER COMPOUNDS IN PARTIALLY FILLED INTERNAL MIXER	Haibo Yang	P007
Recycling and sustainability		
INFLUENCE OF NOVEL TYPES OF OLEFIN-MALEIC-ANHYDRIDE COPOLYMER BASED ADDITIVES IN BLENDS OF PA AND RECYCLED PET	Bianka Nagy	P008
DEVELOPMENT OF HIGH PERFORMANCE ALIGNED DISCONTINUOUS FIBRE COMPOSITES: FIBRE SURFACE MODIFICATION	Thomas Pozegic	P009
UPCYCLING OF AEROSPACE CARBON SCRAP: IMPACT OF MATERIAL PROPERTIES	Sanjeev Rao	P010
NOVELTY IN RECYCLING OF WASTE ELASTOMERS IN HDPE/PP BLENDS BY EXPERIMENTAL COMPATIBILIZERS	Lilla Simon-Stöger	P011
Renewable Carbon		
BIOCHAR: A POTENTIAL COMPOSITE CONSTITUENT	Oisik Das	P012
MELT ELECTROSPINNING: AN ECO-FRIENDLY WAY OF NANOFIBER AND GRAPHITIZED FIBRE PREPARATIONS USING NANOCELLULOSE	Haoyi Li	P013
EFFECT OF CFRP ON VORTEX-INDUCED VIBRATION OF A BRIMMED-DIFFUSER SHROUD FOR A WIND TURBINE	Taeyoung Kim	P014
REAL-TIME SINGLE MOLECULAR STUDY OF A PRETREATED CELLULOSE HYDROLYSIS MODE AND INDIVIDUAL ENZYME MOVEMENT	Yanan Zhang	P015
Repair		
FAILURE AND RELIABILITY ANALYSIS OF IN-SERVICE REPAIRED COMPOSITES	Wei Feng	P016
NEW MATERIAL REMOVAL TOOLS AND PROCESSES TO SAFELY EXPEDITE MAINTENANCE ON COMPOSITE STRUCTURES	James Mazza	P017
BONDED COMPOSITE REPAIRS UNDER DRY/COLD AND HOT/WET ENVIRONMENTAL CONDITIONS	Florian Röper	P018
Resin and polymers		
THE PREPARATION, PROCESSING AND HEALING OF DIELS-ALDER EPOXIES AND THEIR FIBRE-REINFORCED POLYMER COMPOSITES	Callum Branfoot	P019
THE ONE-POT SYNTHESIS, CHARACTERIZATION AND POLYMERIZATION OF HYPERBRANCHED BENZOXAZINE RESINS DERIVED FROM A2 + B3 MONOMERS	Wanan Cai	P020
MELAMINE-MELTBLOWN NONWOVEN A HIGH-PERFORMANCE MATERIAL COMBINING FOR THE FIRST TIME THERMOSET MELAMINE WITH EXCELLENT THERMAL AND ACOUSTIC PROPERTIES	Simona Lavric	P022
ANTIPLASTICATION OF ARYL ETHER EPOXIES	Larry Reyes	P023
LIQUID PROCESSABLE, THERMALLY STABLE, HYDROPHOBIC PHENOLIC-TRIAZINE RESINS FOR ADVANCED COMPOSITE APPLICATIONS	Aristeidis Tsiamis	P024
POLYANILINE/PHENOL-DIVINYLBENZENE RESIN FOR CFRP COMPOSITE WITH ENHANCED ELECTRICAL AND MECHANICAL PROPERTIES	Yu Zhou	P025
Sandwich structures and materials		
FLEXURAL BEHAVIOUR OF FOAM CORED SANDWICH STRUCTURES WITH THROUGH-THICKNESS REINFORCEMENTS	Ghilane Bragagnolo	P026
STUDY OF THE ENERGY ABSORPTION CAPABILITY OF SANDWICH STRUCTURES WITH FOAM CORE AND CFRP FACE SHEETS	Ignacio Carranza Guisado	P027
LOW VELOCITY IMPACT RESPONSE OF CORRUGATED CORE SANDWICH PANELS - EFFECT OF IMPACTOR GEOMETRY	Jayantha Epaarachchi	P028
RESPONSE OF AS4/PEEK COMPOSITE LATTICE STRUCTURES UNDER THE COMPRESSION AND LOW VELOCITY IMPACT LOADING	Jiqiang Hu	P029
MODIFIED DCB TESTS FOR MEASURING MODE I FRACTURE TOUGHNESS AT THE INTERFACE OF SANDWICH STRUCTURES	Sooyoung Lee	P030
NONLINEAR LOW-VELOCITY IMPACT RESPONSE OF SANDWICH BEAMS WITH FUNCTIONALLY GRADED NEGATIVE POISSON'S RATIO HONEYCOMB CORE	Chong Li	P031
REPEATED IMPACT RESPONSES OF HONEYCOMB SANDWICH PANELS	Yinggang Li	P032
ADHESION OF DISSIMILAR POLYMER-METAL COMPOSITE MATERIAL BY MECHANICAL INTERLOCKING	Harrison Lin	P033
FRACTURE BEHAVIOR AND FACE SHEET BUCKLING ANALYSIS OF CFRP/HONEYCOMB SANDWICH PANELS SUBJECTED TO BENDING LOAD	Mae Oiwa	P034
DAMAGE PREDICTION IN QUASI-STATICALLY INDENTED SANDWICH COMPOSITE STRUCTURES USING A TWO-REGION PLATE MODEL	Abhendra Singh	P035
DESIGN EXPLORATION OF MULTI-LAYER SANDWICH STRUCTURES TO TRANSVERSE LOADING	Anbazhagan Subramani	P036
DECONSOLIDATION BEHAVIOR OF CARBON FIBER REINFORCED THERMOPLASTICS AS CORE IN SANDWICH STRUCTURE	Bing Xiao	P037
MECHANICAL PROPERTIES AND ENERGY ABSORPTION CAPABILITY OF HYBRID HONEYCOMB SUPERSTRUCTURE	Mengchuan Xu	P038
NUMERICAL SIMULATION OF IMPACT PERFORMANCE FOR PMI FOAM FILLED CORRUGATED BOARD SANDWICH STRUCTURE	Peiyan Yang	P039
THE ANALYTICAL AND NUMERICAL CHARACTERIZATION REGARDING INDENTATION OF COMPOSITE HONEYCOMB SANDWICH STRUCTURES	Xiaoyu Zhang	P040
MANUFACTURING AND COMPARISON OF SPRINGBACKED CARBON FIBER REINFORCED THERMOPLASTIC SANDWICH STRUCTURES	Yunqian Zhang	P041
Self-healing		
MICROCAPSULE-BASED SELF-HEALING PROTECTIVE COATING USING LINSEED OIL HEALING AGENT	Dong-min Kim	P042
EFFECT OF VASCULAR TUBES DESIGN ON MECHANICAL AND SELF-HEALING PROPERTIES OF CFRP COMPOSITES	Jungil Song	P043
SELF-HEALING PROPERTIES OF CARBON-BLACK IMPREGNATED THERMOPLASTIC POLYURETHANE PROCESSED VIA FUSED DEPOSITION MODELLING	Fareed Tamaddoni Jahromi	P044
Smart composite structures		
HARMONIC AND TRANSIENT DYNAMIC RESPONSE OF A SMART LAMINATED STEPPED COMPOSITE BEAM	Saeed Fazeli	P045
PREPARATION AND CHARACTERIZATION OF THE RADIATION CROSSLINKED SHAPE MEMORY EVA/HDPE	Wei Liang	P046
SYNTHESIS OF GRAPHENE QUANTUM DOTS FROM LOW COST MATERIALS AND FABRICATION OF NANOCOMPOSITES	Derya Ozyurt	P047
A MORPHING WINGTIP STRUCTURE	Jian Sun	P048
LASER INDUCED GRAPHENE PAPERS ENABLED FUNCTIONAL COMPOSITES FOR LIQUID MONITORING	Yanan Wang	P049
ANALYSIS OF INTERFACE STRENGTH AND FAILURE MODE OF INDENTED SMA WIRE COMPOSITES	Tongzhou Zhu	P050

POSTER PROGRAM

THURSDAY 15 AUGUST

Poster title	Presenter name	Poster no
Structural analysis and optimisation		
HYDROPHILIZATION OF PET USING DBD PLASMA	Musaddaq Azeem	P051
AN ASYMPTOTIC SOLUTION TO DENSITY DISTRIBUTION OF GRADED CELLULAR MATERIALS WITH A CONSTANT IMPACT LOAD	Baixue Chang	P052
VIRTUAL CALCULATION OF THE B-BASIS ALLOWABLES OF NOTCHED COMPOSITE LAMINATES	Carolina Furtado	P053
DESIGN OF SEMI-COMPLEX PARTS USING ANISOTROPIC CARBON FIBER CARD WEB REINFORCED THERMOPLASTICS	Yasuyuki Furuta	P054
REDESIGN AND OPTIMIZATION OF THERMAL PROTECTION SYSTEM FOR ATMOSPHERIC REENTRY	Guokai Han	P055
EXPERIMENTAL AND SIMULATION STUDY OF GFRP WITH LOCAL FIBRE DEFLECTION UNDER BEARING LOADS	Lars Thorsten Hefft	P056
OPTIMIZING DESIGN OF TRUSS STRUCTURES VIA AN AUGMENTED PARTICLE SWARM OPTIMIZATION ALGORITHM	Shih-Lin Hung	P057
DAMPING OPTIMIZATION OF LAMINATED PLATES BASED ON COMPLEX MODULUS APPROACH	Masaki Kameyama	P058
CLASSIFICATION AND PROPERTIES OF THREE-DIMENSIONAL TEXTILE PREFORMS	Zhenyu Ma	P059
LIGHTWEIGHT DESIGN OF COMPOSITE BODY FOR ELECTRIC MICROBUS	Pongpat Sirisobrana	P060
Structural health monitoring		
EXPERIMENTAL CHARACTERIZATION AND MODELLING OF MECHANICAL BEHAVIOR OF MICROCAPSULES IN COMPOSITES	Andrey Aniskevich	P061
DETECTION OF DAMAGES ON COMPOSITE PLATES DUE TO LOW VELOCITY IMPACT USING CARBON FIBERS	Salem Bashmal	P062
DAMAGE VISUAL INDICATION SYSTEM FOR POLYMER COMPOSITE STRUCTURES	Olga Bulderberga	P063
SMART MECHANOLUMINESCENT SHAPE MEMORY FILM FOR FLEXIBLE STRESS SENSING	Yang He	P064
DAMAGE DETECTION USING DIRECT-WRITE PIEZOELECTRIC TRANSDUCERS AND LAMB WAVES IN COMPOSITE MATERIALS	Marilyne Philibert	P065
INFLUENCE OF OPTICAL FIBER SENSOR PLACEMENT ON CFRP LAMINATES FOR PROCESS AND STRUCTURAL HEALTH MONITORING	Helena Rocha	P066
STRAIN SENSING OF EPOXY RESIN USING POROUS CARBON NANOTUBE/GRAPHENE COMPOSITE BUCKYPAPER	Guangming Yang	P067
Testing methods		
SINGLE FIBER PULL-OUT TEST FOR THE MATERIAL SELECTION OF A HYBRID RESIN COMPOSITE	Holger Buettmeyer	P068
RESIN TREATMENT FOR RELIABLE TRANSVERSE SHEAR STRENGTH ASSESSMENT IN AEROSPACE STRUCTURES	Tomas Chuaqui	P069
EFFECTS OF GEOMETRY AND STACKING SEQUENCE ON APPARENT POISSON'S RATIO OF QUASI-ISOTROPIC LAMINATE CFRPS UNDER THE COMPRESSION TESTS	Eiichi Hara	P070
AN INNOVATIVE CIRCULAR RING METHOD FOR MEASURING YOUNG'S MODULUS OF THIN FLEXIBLE MULTI-LAYERED MATERIALS (COMPRESSIVE METHOD)	Atsumi Ohtsuki	P071
CHARACTERIZATION AND STATISTICAL ANALYSIS OF SINGLE FIBER STRENGTH OF FIBERS AT VARIOUS PROCESSING STAGES	Ashok Rajpurohit	P072
A NOVEL TEST METHOD TO INDUCE BI-AXIAL STRESS STATES IN THIN PLY CARBON COMPOSITES UNDER COMBINED LONGITUDINAL COMPRESSION AND TRANSVERSE TENSION	Tamas Rev	P073
MECHANICAL CHARACTERIZATION OF HIGH PERFORMANCE THERMAL DECOUPLING UNITS IN BUILDING ENVELOPS	Florian Röper	P074
AXIAL COMPRESSION TESTING OF CARBON FIBERS	Shipeng Zhu	P075
Textile-based composites		
DEVELOPMENT OF A FAST DRAPING ALGORITHM USING MULTIFACTORIAL LOCAL SHEAR SIMULATIONS	Jacob Hoffer	P076
NUMERICAL STUDY ON MECHANICAL PROPERTIES INFLUENCING BALLISTIC IMPACT BEHAVIOR OF WOVEN FABRICS USING CONSTANT TOUGHNESS APPROACH	Sagar Ingle	P077
TENSILE PROPERTIES AND POISSON'S RATIO OF PET NEEDLE-PUNCHED NONWOVEN FABRIC PREPARED BY THERMOCOMPRESSION BONDING	Jae-chul Lee	P078
FATIGUE BEHAVIOR OF UN-NOTCHED AND NOTCHED 3D BRAIDED COMPOSITES	shuangqiang Liang	P079
IMPACT PROPERTIES OF HELICOIDAL STRUCTURE OF CARBON/EPOXY COMPOSITES	Mazhar Peerzada	P080
BUCKLING PROPERTY OF PLAIN WEAVE FABRIC COMPOSITE LAMINATE CONSIDERING INTRALAMINAR INHOMOGENEITY	Kazushi Sugiyama	P081
RECONSTRUCTION OF MESOSCALE TEXTILE COMPOSITES USING MICRO-CT IMAGE & COMPUTER VISION ALGORITHM	Congyuan Tao	P082
EFFECT OF TACKIFICATION ON IN-PLANE SHEAR BEHAVIOURS OF BIAXIAL WOVEN FABRICS IN BIAS EXTENSION TEST	Xiaoran Zhao	P083
Three-dimensional composites		
STUDY ON CFRP PI-BEAM PARAMETRIC AND STRENGTH ANALYSIS	Geon Tae Park	P084
THE OPTIMIZATION OF PROCESS PARAMETERS OF THREE-DIMENSIONAL NEEDED COMPOSITES BASED ON ANN AND GA	Yunchao Qi	P085
Tribology and wear		
WEAR PROPERTIES OF PAN- AND PITCH-BASED CARBON FIBER REINFORCED PLASTICS WITH SIC-NANOPARTICLES	Shigenori Inoue	P086
NON-ASBESTOS POLYBENZOXAZINE COMPOSITES: FRICTION AND MECHANICAL PROPERTY	Chanchira Jubsilp	P087
FATIGUE LIFE PREDICTION OF EPOXY COATING ON COMPOSITES SUBJECTED TO WATERDROP IMPACT	Ameya Kaore	P088
TRIBOLOGICAL CHARACTERISTICS OF MICROWAVE PROCESSED KENAF/HDPE COMPOSITES UNDER DRY SLIDING WEAR	Manoj Kumar Singh	P089
THE INFLUENCE OF FABRIC ON THE WEAR-RESISTING PROPERTY OF SELF-LUBRICATING COMPOSITES	Mingming Yu	P090
WATER VAPOR CORROSION BEHAVIOR AND FAILURE MECHANISM OF PLASMA SPRAYED MULLITE/LU ₂ SI ₂ O ₇ -LU ₂ SI ₂ O ₅ COATINGS	Xunxun Hu	P091
Bio-inspired composites		
FABRICATION OF BIOINSPIRED STRUCTURED ALUMINA COMPOSITES WITH ENHANCED FRACTURE TOUGHNESS	Jingyu Liu	P092