

CONTENTS

C21/86	Thermoplastic composites in woven fabric form	1
C34/86	The preparation of ultra high modulus polyethylene composites	7
C31/86	Bismaleimide resins —the properties of compimide BMI-resins	13
C37/865	Tensile and fatigue behaviour of alumina reinforced aluminium alloys at ambient and elevated temperatures	19
C30/86	Buckling of perforated composite plates — an approximate solution	29
C23/86	Stochastic finite element analysis of uncertain in-ply stresses in fibre reinforced plastic laminated plate	35
C17/86	Designing with short fibre reinforced thermoplastics	39
C24/86	Reliability assessment of damage tolerance of unidirectional fibre reinforced composites based on failure process simulation	47
C25/86	The role of diffusion in the micromechanisms of stress corrosion cracking of E-glass/polyester composites	55
C38/86	The effect of environment on the stress corrosion of single E-glass filaments and the nucleation of damage in glass fibre reinforced plastics	63
C15/86	Postbuckling behaviour of cylindrically curved composite plates with clamped edges, subject to uniaxial and shear loading with geometric structures	69
C36/86	The characterization of carbon fibre/epoxy pultruded profiles with methods based on TMA and DSC	75
C40/86	Compact disc fracture mechanics testing of injection moulded short fibre reinforced thermoplastics	83
C39/86	Computer modeling of hybrid reinforced thermoset	89
C19/86	Thick section fibre reinforced thermoplastics injection moulding	95
C32/86	Behaviour of long fibre reinforced polypropylene and Nylon 66 in injection moulding	99
C22/86	Section pultrusions of continuous fibre reinforced thermoplastics	105
C26/86	Flexible manufacturing of composite aerospace structures	113
C29/86	Computerized numerical control filament winding for complex shapes	117
C27/86	Mechanized manufacture of composite main rotor blade spars	125
C41/86	Large scale manufacture of three-dimensional woven preforms	133
C16/86	The novel use of composite in engineering applications	141
C42/86	Airworthiness of composite structure —some experiences from civil certification	147
C33/86	AV-8B/GR Mk 5 airframe composite applications	153
C28/86	Fatigue growth of transverse ply cracks in (0/90 ₂) _s glass fibre reinforced plastic and (0/90 ₃) _s carbon fibre reinforced plastic laminates	173
C35/86	The prediction of the energy absorption of composite structure materials	179
C20/86	Hovercraft skirt design and manufacture	187

C18/86	Prospects for new materials development using biotechnology	195
C43//86	The development of balance tubes for Dowty Rotol composite bladed propellers	199
C44/86	Expanding core moulding of composite components	203
C45/86	Fatigue and damage in fibre reinforced nylon	211
C46/86	Future use of advanced composites in bridge construction engineering	217
C47/86	Tensile behaviour of unidirectional glass/carbon hybrid laminates	225
C50/86	The durability of adhesive bonds	231
C48/86	Low cost carbon fibre for high performance applications	235
C49/86	Transport applications for fibre reinforced Composite	245
C51/86	Development of a effective composite automotive exterior body panel	257