

SUBJECT INDEX 2016

ANALYSIS, TESTING AND QUALITY CONTROL

Accelerated weathering.....	629
ATR, FTIR.....	71
Chromophores.....	659
Colorimetric spectroscopy.....	71
Composite materials characterization.....	423
Elasticity contributions.....	601
Fractal-like kinetic analysis.....	483
FTIR in non-destructive analysis.....	213
Kinetic modelling.....	269, 1085
Mechanical properties.....	723, 1069
Morphological properties.....	723
Multivariate analysis.....	301
Response surface methodology.....	803, 925, 1077
Rheological behaviour.....	455, 569
Swelling behaviour.....	463
UV-VIS Diffuse Reflectance Spectroscopy.....	659

BIOLOGY AND BIOCHEMISTRY

<i>Acetobacter xylinum</i>	997
Acnee.....	569
Antimicrobial activity.....	473, 689, 905
<i>Aspergillus nidulans</i> AKB-25.....	781
Bacteria.....	983
Bioprotection.....	77
Bioregulators.....	529, 967
Biotransformation.....	819
Cancer culture.....	49
Cell culture.....	897
Cell growth.....	997
Cellulolytic enzymes.....	385, 401, 781, 983
<i>Cordyceps</i> strains.....	257
Dermatocosmetics.....	569
Drug release.....	219, 569, 593, 609, 925
Enalapril maleate.....	593
Enzymatic hydrolysis.....	139, 177, 243, 391, 401, 405, 483, 781, 791, 803, 973
<i>Eryngium</i> species.....	473
Ethanol production.....	243, 401, 771, 791
Fermentation.....	771
5-Fluorouracil delivery.....	233
Fungal strains.....	811
Genetic manipulation (HCT and C3H down-regulation).....	649
<i>Glycine max</i> L.....	529
<i>Kluyveromyces lactis</i>	385
Laccase.....	391
<i>Lavandula angustifolia</i>	711
<i>Lentinula edodes</i>	771
<i>Loranthus tanakae</i>	819
<i>Melaleuca alternifolia</i>	711
Metabolic pathways.....	967

Metabolite production.....	997
Mucoadhesive buccal.....	593
Natural degradation.....	723
Neomycin.....	577
<i>Neosinocalamus affinis</i>	189
<i>Phoenix dactylifera</i> L.	1015
Plant development.....	967
<i>Rhodopseudomonas palustris</i>	819
<i>Ricinus communis</i>	443
Saccharification.....	177, 771
Shiitake mushroom.....	771
Solid-state fermentation.....	257, 439, 771
<i>Spathaspora passalidarum</i>	243
<i>Tabebuia</i> sp.	71
<i>Trametes versicolor</i>	1035
Wound dressings.....	915

CARBOHYDRATES

Chitosan.....	689, 873
Chitosan-starch crosslinked beads.....	873
Crosslinked polymeric network.....	233
Cyclodextrins in rotaxa-conjugated polymers.....	585
β -Cyclodextrin hydrogels.....	233
Epichlorohydrin-modified rice starch.....	329
Fermentable sugars.....	649, 791
Food application.....	1
Gellan.....	1
Pullulan film.....	593
Reducing sugars in ionic liquids.....	761
Sugars.....	127
Terephthaloylthiourea carboxymethyl chitosan.....	463
Xanthan-chitosan complex.....	577

CELLULOSE AND CELLULOSE DERIVATIVES

Acrylates and methylcellulose hydrogels.....	609
Bacterial.....	49, 219, 997
Cationization of alkalized.....	109
Cationization of native.....	109
Cellulose diacetate.....	455
Cellulose fibres.....	557, 863
Cellulose scaffold for 3D.....	49
Characterization of.....	1015
Chelating cellulose.....	147
Dissolution of.....	199
Enzymatic hydrolysis.....	127, 139, 177, 243, 391, 401, 405, 483, 781, 791, 803, 973
Extraction.....	1015
Flow of a derivative solution.....	601
Fluorescent derivative.....	57
Grafting copolymerization.....	65
Hydrophobic functionalization of.....	745
Hydrogels based on.....	545, 897, 915
Hydroxypropyl.....	569, 755
Microcrystalline cellulose.....	117, 937
Nanofibres.....	361, 377, 369
Nanocrystals.....	225, 937

Oxidized nano-bacterial.....	853
Pretreatments of.....	139
Porous structure.....	23
Pyridinium-based ionic liquids.....	199
Pyrolysis of.....	311
Silver deposition.....	905
TEMPO-mediated oxidation.....	905
Tissue engineering scaffolds.....	23
Transport properties.....	755
Viscose-barium titanate composites.....	621

CELLULOSE TEXTILES

CI reactive red 194 dye exhaustion.....	497
Cotton fabric.....	497
Cotton and viscose fabrics.....	711
Cotton fabric coating.....	879
Cotton fabric crosslinking.....	321
Dyeing parameters.....	169, 497
Fastness.....	163
Maleic anhydride and sodium hypophosphite in crosslinking.....	321
Mercerized enzyme scoured cotton.....	153
UV protection properties of.....	163
Wrinkle resistant finishing.....	889

CHEMICALS-RAW MATERIALS AND ADDITIVES

Alkyl ketene dimmer.....	369
Biofiller.....	429
Boehmite/organo-modified montmorillonite composites.....	879
Butanol production.....	405
Carbonaceous sorbent preparation.....	265
Carbon/nitrogen-ratio.....	997
Co(II)[H ₄]salen and [H ₂]salen complexes.....	1047
Dimethyloldihydroxyethyleneurea (DMDHEU).....	889
Hydrochloric acid.....	483
Ionic liquids.....	761
Methyl methacrylate.....	65
Montmorillonite.....	847
N,N-dimethylacetamide/lithium chloride.....	545
Polyethylene.....	117
Poly(3-hydroxybutyrate).....	429
Poly(lactic acid) composites.....	417, 629, 1077
Polyurethane foam production.....	941
Schiff base reaction.....	57
Sodium hydroxide.....	483
Soy protein adhesive.....	847
Thermoplastic polymer waste.....	637
Titanium dioxide.....	889

CHEMISTRY, PHYSICS AND MATHEMATICS

Atmospheric pressure plasma.....	745
Cold plasma treatment.....	711
⁶⁰ Co- γ irradiation.....	31, 973
Diffuse coplanar surface barrier discharge plasma.....	41
Electromagnetic shielding.....	621
Extrusion processing.....	455

Humidity.....	31
Kinetic analysis.....	339, 443, 483
Lyophilization.....	23
Macromechanical properties.....	423
MAPP.....	1069
Micromechanical parameters.....	423
Polypropylene/alfa fibre composites.....	1069
Soundproofing characteristics.....	411
Steam-exploded.....	391
Temperature.....	31, 1069
UV radiation.....	31

FIBRES

Alfa fibre treatment.....	1069
Bleached softwood fibres.....	417
Buriti fibre.....	15
Chemical composition.....	15
Depolymerisation of.....	557
Hemp fibres.....	31
Recycled.....	449, 1061
Silk fibroin.....	853
Softwood pulp fibres.....	1061
Structural characterization.....	15
Tensile properties.....	15
Virgin and virgin-recycled.....	301
Wheat straw pulp fibres.....	1061

FILMS, FOILS AND LAMINATES

Nano-bacterial cellulose/silk fibroin composite.....	853
Pullulan film.....	593

HEMICELLULOSES; HOLOCELLULOSE AND PECTIN

Detoxification of hydrolysate.....	265
Hot-water extraction.....	669
Pectin.....	473
Pentosan.....	669
Purification using ion exchange resins.....	669
Recover of.....	535
Separation of.....	247
Structure of.....	189

LIGNIN AND LIGNIN DERIVATIVES

Carbon source.....	811
Charcoal from.....	701
Composites based on.....	117
Condensation.....	213
Epoxidation.....	77
Molecular characteristic.....	355, 649
Lead(ii) removal.....	339
Lignin from vegetal wastes.....	967
Nitrobenzene oxidation.....	731
Non-wood lignin.....	731
Organic acids in precipitation.....	355
Oxypropylation.....	941
Precipitation.....	213, 355

Soda lignin.....	941
Sulphuric acid in isolation of.....	731
PAPER AND BOARD	
Carbonized microstructure of.....	101
Gypsum boards reinforced with polypropylene.....	411
Handsheets.....	1061
Hygienic tissue paper.....	301
Laser inkless eco-printing.....	101
Models for opacity.....	93
Paper conservation.....	689
Paper waste sludge.....	439
Waste office paper.....	243
PAPER AND BOARD MANUFACTURE	
Characterisation and evaluation.....	275
Drainage.....	377
Hardwood CMP paper.....	873
Packaging.....	449
Paper sheets.....	863
Retention.....	377
PAPER AND PAPER BOARD TREATMENT	
Fermentation.....	439
Pyrolysis.....	439
PULP	
Bamboo pulp.....	225
Bleaching and strength properties.....	837
Calcium hydroxide as alkali.....	1055
Characterisation and evaluation.....	275
Kraft pulps.....	837, 1055
Organosolv pulp.....	377
Pulp suspension pH.....	873
Pulp waste.....	803
Soap skimmings.....	247
Soda pulp.....	681
PULP MANUFACTURE	
Alkaline delignification.....	675
Chemi-mechanical pulp.....	285, 489
Dissolving pulp.....	535
Kraft pulping.....	87, 1025, 1035
Oxygen bleaching stage.....	1055
Pre-impregnation.....	675
Pulping temperature and alkalinity.....	1025
Sodium bisulfite pulping.....	293
Ultra-fine anthraquinone in.....	87
PULP TREATMENT	
Bleaching.....	285, 1047
ECF bleaching.....	1025
PULPWOOD AND OTHER FIBROUS MATERIALS	
Bamboo culms.....	189

Eucalyptus.....	1025
Miscanthus.....	401
<i>Leucaena leucocephala</i>	1005
<i>Pinus radiata</i>	535
Poplar.....	269, 1035
Rapeseed straw.....	489, 681, 973
Sorghum.....	401
Ugandan grasses.....	275

SPENT LIQUOR, BY-PRODUCTS AND POLLUTION CONTROL

WATER AND POWER

Black liquor.....	1005
Energy optimization.....	1005
Biodiesel.....	247
Biofuels.....	397
Dye sorption.....	1085
Energy industry waste.....	529
European biofuels landscape.....	507
Heavy metals adsorption.....	701
Oil absorbent aerogels.....	369
Olive mill wastewater.....	961
Lead(II) removal.....	339
Nanofiltration in.....	961
Selective separation of indium from zinc.....	147

WOOD

Aged wood.....	659
Alkaline hydrolysis.....	269
Beech wood.....	837
Chips from.....	637, 675
European beech.....	41
Exotic ipe wood.....	71
Extraction.....	429
Fractionation.....	429
Green composites based on.....	637
Hardwood.....	285
Hot water extraction.....	535
Hydrothermal treatment.....	521
Japanese white birch.....	265
Lignocellulosic materials.....	77, 177, 385, 405, 429, 507, 545, 761
Microwave-assisted acid hydrolysis.....	127, 761
<i>Pinus radiata</i>	535
Polysaccharide fractions.....	1005
Poplar.....	269, 847, 1035
Poplar plywood.....	847
Pre-extraction.....	837
<i>Prunus amygdalus</i>	863
Rubberwood particleboard.....	329
Spruce.....	293
<i>Tabebuia</i> sp.	71
<i>Tamarisk</i> sp.	863
Tropical woods.....	723
Ultraviolet light effect on.....	71
Wood fibre reinforced with polypropylene.....	411
Wet oxidation pretreated wood.....	803

Wood wettability.....	41
-----------------------	----

WOOD EXTRACTIVES AND SILVICHEMICALS

Essential oils.....	711
Heptaldehyde.....	443
Mangrove bark extract.....	163
Polyphenols.....	473, 961, 967
Undecylenic acid.....	443

WOOD WASTE, BARK AND AGRICULTURE RESIDUES

Acid pretreatments.....	397, 791
Alkaline pretreatments.....	397, 791
Apple seed powder.....	1085
<i>Astragalus</i> residues.....	257
Bioconversion of.....	257
Catalysts based on waste.....	831
Cassava leaves.....	1077
Corn fibre destarched.....	791
Corn stalk.....	377
Corn stover.....	311
Corn straw.....	669
Cocoa shell.....	311
Date palm seeds.....	1015
<i>Eucalyptus</i> sawdust.....	521
Forest biorefinery.....	521
Forestry waste.....	529
Leaf litter biomass.....	127
Olive stone filled with polypropylene.....	411
Oil palm frond pretreatments.....	951
Pearl millet stover.....	81
Pine sawdust.....	361
Rapeseed straw.....	489, 681, 973
Sorghum biomass.....	397
Sugar beet shreds.....	139
Sugarcane bagasse.....	483
Wheat straw.....	391