

SUBJECT INDEX 2014

ANALYSIS, TESTING AND QUALITY CONTROL

Acetone-insoluble substances	477
Biosorption parameters	735
Cationic surfactant adsorption	727
Chemical composition	105
Chemical oxygen demand index (COD)	661
Chromatography	61
¹³ CP/MAS NMR	643
Crystallinity	33
Electrical properties	189
Fiber size distributions	299
Filtration characteristics	299
FTIR	643
Kinetic	703
Klason method	53
Linear and nonlinear adsorption isotherms	717
Morphological properties	105
NIR spectroscopy	181
PY-GC/MS analysis	275
SEM	535,643
Surface charge measurements	535
Surface morphology	33
Stickies and ink particle size	285
Tracheid dimensions	445
Thermal properties	199
Thermal and catalytic degradation	665
WAXS	643

BIOLOGY AND BIOCHEMISTRY

Amylase production	521
Antibacterial	265, 325
Antioxidant	265
<i>Aspergillus flavus</i>	285
<i>Aspergillus niger</i>	285, 521, 529
Bioethanol	313
Biopolymer	515
Bile acids binding	11
Cellulase-poor crude xylanases	127
Cellulase production	285
Cellulolytic enzyme genes	529
<i>Coprinellus disseminatus</i>	127
Drug-delivery system	237
Drug loaded liposomes	485
Enzymatic saccharification	849
Fermentation	849
Fungal decay	97
Molecular encapsulation	753
Production and enzyme recovery	313
Solid-state fermentation	285
UV radiation and chemical mutagenesis	529
Xanthine derivatives	61

CARBOHYDRATES	
Cationic starch	375
β -cyclodextrin	1
Chitosan coatings	565
Chitosan in composites	325
Chitosan/poly(acrylic acid)	247
Chitosan/poly(vinyl alcohol) hydrogels	845
Chitosan and poly(vinyl amine)	495
Composite microspheres	495
Content quantification	661
Hydrolysis industry	613
Nanocomposites based on	515
Polycaprolactone/starch	515
Polysaccharides	661
Reducing sugar yield	89
Starch-based materials	425
CELLULOSE AND CELLULOSE DERIVATIVES	
Acetate	477
Acetic acid acetylation process	477
Atom transfer radical polymerization	209, 653
Carboxyl content	469
Cationization of	25
Cellulose-based cationic adsorbents	11
Cellulose-graft-poly(L-lactide)	237
Cellulose insulation	461
Cellulose/turmeric powder	321
Cotton yarn	189
Crosslinked cellulose spheres	455
Dissolution in ionic liquid	45
Ethylenediamine activation	19
Formic acid pretreatment	469
Grafting	209, 653
Grafting copolymerization	217
Hydrolytic hydrogenation	75
Oxidation and addition of silver ions	189
Novel materials based on	425
Periodate-oxidized cotton	25
Pre-swelling	45
Tempo-oxidized	469
Thermal decomposition	461
Thermo-responsive behaviour	225
Trimethylsilyl cellulose	19
CELLULOSE TEXTILES	
Antifungal cotton fabric	753
Loading and release of cationic dye	247
Natural dyes	385
Sonication and conventional dyeing	145
CHEMICALS-RAW MATERIALS AND ADDITIVES	
Ammonium persulfate	217
ASA	375
β -butyrolactone oligomerization	1
Carboxylic acids production	835

Choline chloride	25
2-Hydroxy ethyl methacrylate	137
Maleic anhydride	863
Methacrylic monomers	653
Methyl methacrylate	209, 217
Modified clay	515
N-cyclohexylacrylamide	209
Nickel salts	75
N,N-dimethylacetamide/lithium chloride	643
Peracetic acid and sodium perborate mixture	693
Polycarbonate	69
Polyethylene	565
Polyolefin composites	599
Terbinafine	753
Sodium organic salts recovery	825
Sugar alcohols	75

CHEMISTRY, PHYSICS AND MATHEMATICS

Analysis of a pilot plant	793
Axial dispersion model	717
Cubic Hermite collocation method	717
La-containing SBA-15 catalyst	275
Loading and release of cationic dye	247
Near-critical water	813
Polyelectrolyte multilayers	247

ECONOMICS, RESEARCH AND MISCELLANEOUS

Centrifugal roller mill	545
Material flow	793

FIBERS

Cotton	455
Cellulose fibers	819
Fastness properties	137
Electrospun nanofibers	401
Flax fibre	145
Grafted cotton fibers	137
Hemp (<i>Cannabis sativa L.</i>)	455
Kenaf bast fibers.....	33
Luffa cylindrical fiber	337
Narrow-leaved cattail fiber	375
Natural fiber.....	599
Pulp fibres	727
Rice straw fiber	199

FILMS, FOILS AND LAMINATES

Food-packaging materials	565
Green composite films	321
HDPE composites	337
LDPE/CS composite films	325
Poultry minced meat packaging materials	325

HEMICELLULOSES; HOLOCELLULOSE AND PECTIN

Carboxymethylated guar gum	503
Commercial and bacterial xylan	675

Isolation of	675
Poly(butyl methacrylate) grafted sodium salt	503
Carboxymethylated guar gum	503
Xylan	819

LIGNIN AND LIGNIN DERIVATIVES

Lignin as by-product	613
Characterization	255
Content in hardwood	53
Depolymerization	813
Isolation	255
Kraft lignin	813
Pyrolysis	69
Recovery technology	799
S/G ratio effect	365
Separation	805
Solution properties of some	855

PAPER AND BOARD

Hardwood kraft paper	375
Inkless eco-printing	577
Production	553
Packaging materials	585
Weight loss heat induced	577

PAPER AND BOARD MANUFACTURE

Sorted office paper	285
---------------------------	-----

PAPER AND PAPER BOARD TREATMENT

Agitated biomass suspensions	299
Brightness	559
Deinked pulp	559
Enzymatic desizing	521
Enzymatically hydrolyzed	299
Fiber size distributions	299
Filtration characteristics	299
Reductive bleaching	559
Stickies and ink particle size	285

PULP

Abaca soda pulp	693
Cationic surfactant adsorption	727
Chemical pulp	385
Chemimechanical pulp	119
Kraft pulp	181

PULP MANUFACTURE

Formic acid/acetic acid/water	111
Acetosolv process	787
Ammonia-sulfite-ethanol	345
Chemical-mechanical	703
Ethanol-soda pulping	355
Kraft pulping	365
Organosolv lignocellulose biorefinery	793
Production	553

Soda pulping	663, 675
Sulphur-free cooking	781
PULP TREATMENT	
Aspen BCTMP	535
Bleaching	703,713
Elemental chlorine free bleaching	119, 127, 365
Mechanical treatment	535
Soda-AQ pulp bleaching	127
TCF sequences	713
TCF single-stage bleaching	693
Supercritical CO ₂ extraction	535
PULPWOOD AND OTHER FIBROUS RAW MATERIALS	
Biorefinery for lignocellulosics	765
Canola plant	105
Cassava leaves	585
Narrow-leaved cattail fiber	375
<i>Eucalyptus camaldulensis</i>	713
Hemp (<i>Cannabis sativa</i> L.) stem	455
Kenaf bast fibers	33
Natural fibers	599
<i>Phoenix dactylifera</i>	255
Poplar	703
<i>Stipa tenacissima</i> L.	255
Sugarcane bagasse	355
Wheat straw	345, 355,787
SPENT LIQUOR, BY-PRODUCTS AND POLLUTION CONTROL	
Adsorbable organic halides	127
Basic blue 9 biosorption	735
Bleaching effluents	127
Black liquor	675, 805, 819
Cellulosic residue as carbon source	521
Chemical oxygen demand index (COD)	661
Foumanat tea waste	735
Membrane filtration permeates	805
Sodium organic salts recovery	825
Sorption capacity for Cu ²⁺	495
Ultrafiltration permeate reuse	553
Wet oxidized black liquor	825
WATER AND POWER	
Energetic viability	787
Fenton oxidation	745
Ultrasound irradiation.....	745
Lignin as fuel	613
Pulping and papermaking wastewater	745
WOOD	
Aspen	535
Beech wood (<i>Fagus orientalis</i>)	97
Chemical changes	79
Chemi-mechanical properties	97
Eucalyptus	365

Fir wood	79
Fish feed based on	843
Lignocellulose hydrolysis	89
Lignocellulose solubility	643
LignoFibre (LGF) process	765
Materials and fuels	773
Old buildings due to ageing	79
Physical properties	445, 863
Poplar	365, 703
Softwoods	445, 863
Supercritical carbon dioxide pretreatment	89
Tracheid dimensions	445
WOBAMA project	773

WOOD EXTRACTIVES AND SILVICHEMICALS

<i>Allium cepa</i> anthocyanin	145
Xanthine derivatives	61

WOOD WASTE, BARK AND AGRICULTURE RESIDUES

Acetylation modification	199
Agricultural wastes	111
Alkaline pretreatment	835
Corn straw	545
Corn cob	313
Douglas-fir	849
Fast pyrolysis	275
Flaxseed cake	265
Grape seeds/polyethylene	665
Mechanical pretreatment	545
Physicochemical and functional properties of	633
Pineapple (<i>Ananas comosus</i>)	633
Poplar wood sawdust	275
Rapeseed straw	663
Rice straw	199
Softwood	835
Sugarcane bagasse	35
Wheat straw	127