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Handbook on Coal, Coke, Cotton, Lignin, Hemicellulose, Wood, Wood-Polymer Composites, Lignocellulosic-Plastic Composites from Recycled Materials, Wood Fiber, Rosin and Rosin Derivatives

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About the Book

Handbook on Coal, Coke, Cotton, Lignin, Hemicellulose, Wood, Wood-Polymer Composites, Lignocellulosic-Plastic Composites from Recycled Materials, Wood Fiber, Rosin and Rosin Derivatives
(Also Known as Handbook on Coal, Lignin, Wood and Rosin Processing)

Coal is the product of plants, mainly trees that died tens or hundreds of millions of years ago. Coal is a fossil fuel and is the altered remains of prehistoric vegetation that originally accumulated in swamps and peat bogs. The energy we get from coal today comes from the energy that plants absorbed from the sun millions of years ago. Coal is used primarily as an energy source, either for heat or electricity. It was once heavily used to heat homes and power locomotives and factories. Bituminous coal is also used to produce coke for making steel and other industrial process heating. Lignin is a constituent of the cell walls of almost all dry land plant cell walls. It is the second most abundant natural polymer in the world, surpassed only by cellulose. Lignin is found in all vascular plants, mostly between the cells, but also within the cells, and in the cell walls.

Wood is an aggregate of cells essentially cellulose in composition, which are cemented together by a substance called lignin. The cells are made of three substances called cellulose (about 50 percent), lignin (which makes up a fifth to a quarter of hardwoods but a quarter to a third of softwoods), and hemicellulose. Rosin refers to an extraction process that utilizes a combination of heat and pressure to nearly instantaneously squeeze resinous sap from your initial starting material

In India's energy sector, coal accounts for the majority of primary commercial energy supply. With the economy poised to grow at the rate of 8-10% per annum, energy requirements will also rise at a reasonable level. The Indian coal industry aspires to reach the 1.5 billion tonne (BT) mark by FY 2020. In fore-coming years, the industry will naturally need to focus on building on the success, and be on track for reaching the FY 2020 goal. One of the primary goals of the Government of India is to ensure that it is able to meet the country's power generation needs. Another aim is to lower the country's reliance on coal imports by boosting the coal production quickly.

The Major contents of the book are Coal, Analysis of Coal and Coke, Cotton, Lignin and Hemicelluloses,

Degradation of Wood, CCA-Treated Wood, Wood-Polymer Composites, Lignocellulosic-Plastic Composites from Recycled Materials, Chemical Modification of Wood Fiber, Delignification of Wood with Pernitric Acid, Rosin and Rosin Derivatives, Polymerizable Half Esters of Rosin and Photographs of Plant & Machinery with Supplier's Contact Details.

It will be a standard reference book for professionals, entrepreneurs, those studying and researching in this important area and others interested in the field of these industries.

Contents

Chapter 1

Coal

Ethylene

Fischer –Tropsch Synthesis for Olefins

Direct Conversion of Synthesis Gas to Ethylene

Ethanol from Synthesis Gas

Olefins from Methanol

Methanol Homologation

Methanol to Acetic Acid

Ethylene Glycol

Acetic Anhydride

Vinyl Acetate

Other Chemicals

Coal Pyrolysis Processes

Acetylene

Production of Chemicals by
Coal Liquefaction Processes

Conclusion

Chapter 2

Analysis of Coal and Coke

Methods of Analysis

Sampling

Determination of Constitution and Physical Properties

Functional Group Analysis

Spectroscopy

Determination of Optical Constants

Electron Microscopy

Density

X-Ray Diffraction

Specification Tests

Proximate Analysis

Ultimate Analysis

Calorific Value

Fusibility of Coal Ash

Behaviour on Healing

Equilibrium Moisture of Coal at 96-97%

Relative Humidity and 39oC

Determination of Harcbgrobve Grindability

Index of Coal

Special Constituents

Coal Classification

Chapter 3

Cotton

Methods of Analysis

Modified Cottons

Finishing Agents

Separation and Identification

Spectroscopic Methods

Inorganic Constituents

Chemical Methods

Spectroscopic Methods

Chapter 4

Lignin and Hemicellulose

Hemicellulose

Assay systems

Classification

Thermophilic Hemicellulases

Alkaline active xylanases

ß - Xylosidase

Mannanases and galactanses

Accessory enzymes for Hemicellulose utilization

Lignin

Lignin-degrading enzymes

Lignin degradation in whole cell cultures

Degradation by cell-free enzyme systems

Role of glycosides in Lignin degradation

Lignin-carbohydrate complexes

Fractionation of Lignin and Carbohydrate in wood

Isolation of LCCs

Chemical characteristics of LC bonds

Ferulic and p-coimaric ester side chains

Frequency and stability of LC bonds

Residual lignin in kraft pulp

Biodegradation of LCCs

Residual LC structures after exhaustiveenzymatic digestion

Solubitization of LCC by microbial activity

Enzymatic treatments of pulps

Conclusion

Chapter 5

Degradation of Wood

Introduction

Gross Chemical Composition

Distribution of Wall Components

Component Chemistries

Microstructure and Porosity

Degradation of whole wood

Biodegradation of Lignin

Biodegradation of Cellulose

Biodegradation of Hemicellulose

Applications

Conclusion

Chapter 6

Cca-Treated Wood

Introduction

Materials and methods

Results and Discussion

Conclusion

Chapter 7

Wood-Polymer Composites

Introduction

Materials and Methods

Monomers

Wood specimens

Treatment of specimens with monomers

Volumetric swelling and moisture content

Result

Swelling of wood soaked in monomers

Polymer loading

Volumetric swelling of WPC specimens

Moisture content of WPC specimens

Conclusions

Chapter 8

Lignocellulosic-Plastic Composites from Recycled
Materials

Municipal Solid Waste as a Source of Lignocellulosic Fibre and Plastics

Thermoformable composites as Outlets for Waste Paper, Wood and Plastics

Recent Research on Wood Fiber-Thermoplastic Composites

Research and Development Needs

Concluding Remarks

Chapter 9

Chemical Modification of Wood Fiber

Introduction

Experimental Procedure

Esterification Procedure

Analyses of Esterification Products

Board Formation

Board Testing

Moisture sorption

Rate and extent of swelling

Results and Discussion

Esterification of Wood Fiber

Moisture Sorption of Esterified Fiberboards

Rate and Extent of Swelling of Fiberboards in Liquid Water

Plasticization of Esterified Fibers

Conclusions

Chapter 10

Delignification of Wood with Pernitric Acid

Generation of pernitric acid

Decomposition of pernitric acid

Delignification of aspen wood

Conclusions

Experimental

Chapter 11

Rosin and Rosin Derivatives

Composition

Reaction and derivatives

Isomerization

Maleation

Oxidation

Photosensitized oxidation

Hydrogenation

Hydrogenless Hydrogenation

Polymers of vinylesters of hydrogenated rosin

Prehydrogenation

Hydrocracking of Rosin

Dehydrogenation

Polymerisation

Analysis

Compatibility

Solubility

Instrumental analysis

Gas chromatography analysis

Infrared Spectroscope

Nuclear magnetic resonance

Ultraviolet spectroscopy

X-Ray Analysis

Mass Spectroscopy

Phenolic modification

Salt formation

With metals

With unsaturated cyclic and acyclic hydrocarbons

Example-2

Rosin-isoprene condensate (Example-3)

Rosin-isobutene condensate (Example-4)

Example –5

Rosin-styrene condensalt (Example-6)

Rosin-cyclopentadiene condensate (Example-7)

Rosin-coumarone-indene condensate (Example-8)

Rosin-divynylbenzene condensate (Example-9)

Example-10

Esterification

With Glycerol

With pentaerythritol and other polyhydric alcohols

With monoydric alcohols

Hydrogenolysis

Polyesterification

Copolyesters

Ammonolysis

Preparations

Dehydroabietylamine acetate

Dehydroabietylamine

Typical Uses

Asphalt additives

Chemical Intermediates

Corrosion Inhibitors

Flotation Reagents

Preservatives

Resolving agent

Chemical and physical properties of
Amine D acetate

Stability to heat and storage

Stability to heat and storage

Surface Activity

Chemical Reactivity

Chemical and Physical Properties of

Amine D acetate

Solubility

Note

Stability to Heat and Storage

Stability to Air and Sunlight

Surface Activity

Styrenation

Decarbxylation

Hydroxymethylation and hydroxylation

Methods of preparations

Nitrogenous intermediates

Methyl levopimarate (i)

Methyl neoabietate (ii)

Methyl photolevopimarate (iii)

Reaction of SSI with Methyl levomarate (i)

Reaction of Chlorosulphonyl isocyanate with methyl neoabietate (ii)

Reaction of Chlorosulphonyl isocyanate with methyl photolevopimarate (iii)

Fumaroniprile Adduct of levopimaric acid

Tetracyanoethylene Adduct of levopimaric acid

Acrylonitrile adducts of levopimaric acid

Polyoxyalkylation

Chapter 12

The Polymerizable Half Esters of Rosin

Expermental

Preparation and properties of monomers

Maleic rosin esters with reactive groups

Polymerization & Copolymerization

Aqueous Polymerization

Suspension Polymerization

Secondary reactions and graft copolymers

Reaction Involving Crosslinking

Applications

Coatings

Inks

Textiles

Conclusions

Chapter 13

Photographs of Plant & Machinery with Supplier's

Contact Details

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