

Lignin & Lignans Advances in Chemistry

Table of Contents

Overview; **D. Dimmel**

Determining Lignin Structure by Chemical Degradations; **C. Lapierre**

Electronic Spectroscopy of Lignins; **J. A. Schmidt**

Vibrational Spectroscopy; **U. P. Agarwal and R. H. Atalla**

NMR of Lignins; **J. Ralph and L. L. Landucci**

Heteronuclear NMR Spectroscopy of Lignins; **D. S. Argyropoulos**

Functional Groups and Bonding Patterns in Lignin (Including the Lignin-Carbohydrate Complexes); **G. Brunow and K. Lundquist**

Thermal Properties of Isolated and **in situ** Lignin; **H. Hatakeyama and T. Hatakeyama**

Reactivity of Lignin-Correlation with Molecular Orbital Calculations; **T. Elder and R. C. Fort, Jr.** Chemistry of Alkaline Pulp; **D. Dimmel and G. Gellerstedt**

Chemistry of Pulp Bleaching; **G. Gellerstedt**

The Chemistry of Lignin-Retaining Bleaching: Oxidative Bleaching Agents; **G. Leary and J. A. Schmidt** The Chemistry of Lignin-Retaining Bleaching: Reductive Bleaching Agents; **S. Robert**

Lignin Biodegradation; **K-E. L. Eriksson**

Biopulping and Biobleaching; **I. D. Reid, R. Bourbonnais, and M. G. Paice**

The Photochemistry of Lignin; **C. Heitner**

Pharmacological Properties of Lignans; **T. Deyama and S. Nishibe**