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	New Paradigm: Aromatics from Furans -- 7 Chemical and Biological Degradation -- 8 General Conclusions -- Index -- EULA.
Sommario/riassunto	"Furfural (F) industrial production, from pentose-rich oat hulls, begun in 1922 at the Quaker Oats cereal mill in Iowa, and soon after its first resins for molding and abrasive tools were on the market in the US. That was followed by furfuryl alcohol (FA) industrial production by the same company in 1934, through an efficient F reduction process, and its resins for the foundry business in 1958 became commercially available. In both instances, these materials were crosslinked polymers with useful thermal and mechanical properties, but little was known about their mechanisms of formation and ultimate structures. It is most likely that the resinification of both these furans was a frequent unwanted event when handling them from their earlier synthetic operations and isolation, given their sensitivity to accidental polymerization, particularly in acidic media. It is moreover particularly relevant to note that since the inception of a series of thermoplastic (cellulose esters) and thermoset (linoleum and vulcanized natural rubber) materials from renewable resources during the second half of the XIX century, these furan resins were the first novel materials being produced from renewable resources in the XX century"--