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**Title:** Advances in low flammability non-halogenated polymers.

**Abstract:**

This presentation will describe the preparation of non-halogenated polymers, including polyesters, epoxies, and polyurethanes, from monomers that are designed to predominately char upon thermal decomposition rather than produce flammable gas. Non-halogenated monomers are designed and polymerized, primarily using the deoxybenzoin and bisphenol triazole frameworks. Pyrolysis combustion flow calorimetry (PCFC) enables characterization of the heat release properties of these new materials on a small scale, thus allowing an early evaluation of the compounds to provide rationale for choosing particular polymers for further development. Multifunctional deoxybenzoin are now under investigation to extend the concepts developed so far in new directions.