

## Synthesis of Self-UV-Protective Polyesters by the Reaction of Resorcinol with Iso/Terephthaloyl Chloride

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There has been a great interest towards the synthesis of weatherable polymers that provide enhanced UV-protection. The aim of this project is to synthesize polyester resins that are self-UV protecting. These polyesters are obtained by the reaction of resorcinol with various diacids. These polymers in principle should undergo Photo-Fries rearrangement that leads to the formation of hydroxy benzophenones derivatives which are known to be effective UV-absorbers. Various polyesters were synthesized by using resorcinol, terephthaloyl chloride and isophthaloyl chloride at different ratios.

### Biography:

Refia Tigrak is a master student in Chemistry department at Bogazici University, Turkey. In 2017, she received her bachelor's degree in Chemistry at Bogazici University. She has been worked on organic/drug synthesis and polymer synthesis, also their characterizations during her undergraduate researches. She is currently studied about polyester synthesis for powder coating applications by using the solution polymerization.