

# Recycling

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## Co-pyrolysis of lignite and pistachiou seed in a well-swept fixed bed reactor

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Co-pyrolysis of waste tire and pistachiou seed under nitrogen gas was performed in a well-swept fixed bed reactor. The effect of blending ratio and heating rate of waste tire and biomass on product distribution of pyrolysis process investigated under pyrolysis temperatures of 500°C. In the range of the experimental conditions investigated the yield of the product is proportional to the percentage of biomass and waste tire in the mixture. On the other hand, considerable synergetic effects were observed during the co-pyrolysis in a well swept fixed bed reactor leading to increase in oil yield. Maximum pyrolysis oil yield was obtained with 10wt% of waste tire mixed with pistachiou seed, as compared to the expected ones, calculated as the sum of oil fractions produced by pyrolysis of each separated component. These findings can potentially help to understand and predict the behavior of waste tire/biomass blends in practical liquefaction systems.

### Biography

O Onay has studied some part of her PhD at the University of Strathclyde, Department of Pure and Applied Chemistry and completed her PhD at Anadolu University, Department of Chemical Engineering in 2001. She has published more than 25 papers in reputed journals and has presented more than 40 papers in the conferences all over the world.

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