

# **Accelerated Solvent Extraction (ASE) of Phenolic Antioxidants from Pomegranate Wastes**

Emir Zafer Hoşgün, Berrin Bozan,

Anadolu University, Engineering and Architecture Faculty, Chemical Engineering  
Department, Eskisehir, Turkey; Tel. +90 222 3213350/6500, e-mail:  
bbozan@anadolu.edu.tr

Pomegranate (*Punica granatum* L.), which belongs to the Punicaceae family is an important tree of the tropical regions of the world. The pulp and bagasse as the main wastes of the extracted pomegranate juice can have potential source of phenolic antioxidants.

In this study, phenolic antioxidants were extracted by accelerated solvent extraction using ethanol:water mixtures at different temperatures and static extraction times and constant pressure (1500 psia). Efficiency of extraction was observed by measuring total phenolic content. Total phenolic content in the extracts was between 155.4 and 720.4 mg GAE/g extract, and increase with temperature and decreased with increased ethanol content in the extraction solvent. Static time did not effect on the total phenolic yields of pomegranate juice wastes.