## Hydrocolloids from grape pomaces

Alexandros Pavlou<sup>1</sup>, Christos Ritzoulis<sup>2</sup>, Andreas Filotheou<sup>2</sup>, and Costas Panayiotou<sup>1</sup>

- 1. Department of Chemical Engineering, Aristotle University of Thessaloniki
  - 2. Department of Food Technology, ATEI Thessaloniki

## **Abstract**

Hydrocolloids were extracted from finely crashed and freeze-dried winery wastes, using temperature-controlled aqueous solutions in different buffers. Various techniques were used in order to characterize the extracts, including size exclusion chromatography (SEC); Fourierinfra-red (FTIR) spectroscopy; and transform zeta measurements. An evaluation of the emulsification and emulsion stabilization capacity of the extracts has taken place at basic and acidic environment using light scattering. Large and stable over time droplets were observed (tens of microns). Further studies were made on the sera of the emulsions as to obtain information for the components of the extracts, adsorbed at the oil-water interface. The results suggest that winery waste extracts could have a potential use as emulsifiers in the food industry.