

THIRTEENTH FOOD
COLLOIDS 2010
On the Road... From
Interfaces to Consumers

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Organized by the University of Granada
Granada 2010



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Thirteenth Food Colloids 2010

On the Road ... From Interfaces to Consumers



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Welcome to the Food Colloids 2010

This is the thirteenth in the series of biennial European conferences dedicated to the area of food colloids.

This conference will be hosted by the Bicolloids and Fluid Physics Group of the University of Granada, and co-organized by the University of Granada.

Food Colloids is a multidisciplinary topic that brings together scientists from many different areas. The aim of the conference is to present the state of the art on a number of fast evolving questions and to promote discussions and interactions between researchers involved in different fields of food colloids. This series aims to emphasise the importance of approaching the subject from different perspectives; from the fundamental physical-chemistry to the nutritional and consumer aspect of the food product.

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P-094

Viscous Flow Behavior of Solutions of Gum Extracted from Wild Sage Seeds*S.M.A. Razavi¹, L.A. Quinchia^{2*}, and C. Gallegos²*¹ *Department of Food Science and Technology, Ferdowsi University of Mashhad, PO Box 91775-1163, Mashhad, Iran*² *Department of Chemical Engineering, University of Huelva, 21071 Huelva (Spain)*
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Sage seed (*Salvia macrosiphon*) has reasonable amounts of gum with interesting functional properties which is comparable with some commercial food hydrocolloids such as xanthan. Steady shear flow \square nalyzer \square of sage seed gum (SSG) solutions was investigated in the concentration range of 0.5-2% (w/w) and temperatures of 10-50°C. Different time-independent rheological models were used to characterize the viscous \square nalyzer \square of SSG solutions, in a shear rate range comprised between 0.01-300 s⁻¹. The effect of concentration on apparent viscosity was studied using three non-linear models. Temperature dependency of apparent viscosity was also evaluated using an Arrhenius model. The most interesting phenomenon was the higher zero-shear viscosity and shear-thinning characteristics of SSG solutions than some commercial gums such as xanthan, locust bean gum and guar gum in the same conditions, which are important attributes for use in sauces, salad dressings and some other food formulations.