



May 10-12, 2017 NARIC Food Science Research Institute Budapest, Hungary

## Session 1

Tips: The schedule for each presentation is for reference only. In case of missing your presentation, we strongly suggest that you attend the whole session.

Afternoon, May 10, 2017 (Wednesday)

Time: 14:00~15:30

Venue: NAIK ÉKI meeting room

Session 1: 6 presentations- Topic: "Food Science and Management"

Session Chair: Prof. Raquel de Pinho Ferreira Guiné

**S2001 Presentation 1 (14:00~14:15)** 

Gluten-free bread: a case study

Paula M. R. Correia, Mariana F. Fonseca, Luís M. Batista, Raquel P. F. Guiné

CI&DETS/ESAV, Polytechnic Institute of Viseu/Department of Food Industry, Viseu, Portugal

Abstract—Physicochemical and sensorial characteristics of a possible commercial gluten-free bread (GFB) made with a new gluten-free flour were studied, as compared to a regular wheat bread, which was also analysed as Control sample. Results show that GFB presented high values of moisture and water activity, 36.56% and 0.96. This bread presented high density (0.38 g/ cm3) comparing to regular bread (0.25 g/ cm3), being these results reinforced by image analysis of alveoli. GFB was whiter, with less color intensity, meaning that a\* and b\* color parameters were lower than control, which was confirmed by sensorial evaluation results. GFB was soft and easily chewable (75.0 N and 70.0 N, respectively for hardness and chewiness), which, once again, was corroborated by the sensorial results. The overall assessment done by the consumer panellist to GFB was 4.1 (on a scale from 1 to 10), while the control bread presented 5.5. It could be concluded that the new flour formulation is suitable for GFB production, with characteristics comparable with the regular bread.