APPLICATION OF SOLAR DRYING TECHNOLOGIES FOR BIOLOGICAL PRODUCTS CONSERVATION

Istvan Farkas

Szent István University, Department of Physics and Process Control, 1 Páter K. u., H-2103 Gödöllő, Hungary,
e-mail: Farkas.Istvan@gek.szie.hu, Phone: +3628522055

Abstract

The drying of biological materials plays an important role in influencing energy savings, quality of end-products and also environmental issues. Several new approaches in application of solar dryers and a great number of biological materials have been developed. In the paper the background of solar drying, current solar drying arrangements, and some of the recently focused biological products such as grain, fruit, vegetable etc. are selected and discussed. Additionally an integrated energy/technology approach in the sense of utilizing the solar energy is introduced. It is implies to include a sophisticated solution for process control, as well.

Key words: energy savings, environmental issues, fruit, grain, integrated systems

Received: May, 2011; Revised final: August, 2011; Accepted: August, 2011