Project title :

BIOANALYTICAL SYSTEM SYSTEM FOR PESTICIDES DETECTION IN COMPLEX
FOOD MATRIX

Acronym : SCREENFOOD

Thematic areas : Agriculture, food safety and security

Contracting Authority : CNMP

Coordinator :
UNIVERSITY OF BUCHAREST
Project Director : profesor dr. Camelia BALA

Parteners :
1. UNIVERSITY OIL AND GAS PLOIESTI
2. POLITEHNICAL UNIVERSITY OF BUCHAREST

Abstract :

The interdisciplinary project SCREENFOOD aims to develop bioanalytical systems for
detection of pesticide residues in complex food matrices, by combining the expertise of
partners in the development and application of techniques of analytical chemistry, analytical
biochemistry, biosensors, synthesis and characterization of carbon nanotubes, electronics and
technology achievement sensors. Checking pesticide residues in foods, especially those
intended for infants, represents a major burden for public health insurance. Common methods
for detection of pesticides in food, gas chromatography and / or high performance liquid
chromatography is laborious, requiring more time for an analysis, high purity solvents,
specialized personnel and equipment with high cost and price analysis does not allow in the
field. Bioanalytical systems proposed in the project integrates elements of recognition
enzymatic, amperometric sensors obtained by screen printing, easily manipulated
accomplished with new material - carbon nanotubes, which will allow rapid detection of
pesticide residues in food directly from the sample.

Project duration :	36 months
Start date :	18/09/2007
End date :	18/09/2010