## **Expertise & Experience**

Sorică Elena, 33 years old, Metrology Engineer (Metrology in Electrical Engineering)

Position within the project: Researcher

**Current position held**: Scientific Researcher gr. III (CS III), Testing Department - DI, INMA, No. 6 Ion Ionescu de la Brad Blvd., sector 1, Bucharest, Romania, 013813

**Professional experience in the field of the project:** over 9 years of experience in scientific research activities in the field of technologies and equipment for agriculture and food industry, materialized in: 1 homologated product, 2 homologated services, 5 methodologies, technological studies realized in collaboration with the members of the working team, Experimental reports for various technical equipment etc. As project responsible (19 papers) or collaborator (26 papers), i have performed performance tests / safety / conformity assessment for various equipments, within various contracts with third parties. Also, the scientific activity resulted in the elaboration, as first author or collaborator, of over 45 articles published in national / international journals.

## List of the most important achievements in the field of the project:

**1. Sorică E.**, David L., Vlăduț V., Sorică C., Grigore I., Rotaru A., Zaica A. - *Kinetostatic analysis of separator within Miscanthus rhizome harvesting machine* - 45<sup>th</sup> International Symposium "ACTUAL TASKS ON AGRICULTURAL ENGINEERING", Opatija 2017, Croația, ISSN 1848-4425, page 249-257.

**2.** Sorică E., Vlăduț I., Sorica C., Matache M., Grigore I - *Experimental researches regarding the energetic indexes of technical equipment for miscanthus rhizomes harvesting*, TRACTORS AND POWER MACHINES, UDK 631.372, ISSN 0354-9496, December 2016, Novi Sad - Serbia, vol. 21, no. 1, page 48-57;

**3.** Sorică E., Pirnă I., Sorică C., David L. - *Kinematic analysis of the driving mechanism of eccentric separator wich are a component part of harvesting machinery for miscanthus rhizomes*, INMATEH II 2014, Vol. 43, page 73 – 80, Bucharest, e-ISSN 2068-2239, p-ISSN 2068-4215, <u>http://www.inma.ro/inmateh</u>;

## List of research grants or testing technical services, as colaborator:

**1.** Postharvesting technology for horticultural products intended for fresh consumption, using ozone in aqueous solution, NUCLEU Programe 2016, activity responsible;

**2.** Innovative technology for conditioning the horticultural products intended for fresh consumption, NUCLEU Programe, 2014, member of the research team;

**3.** Researches on the mechanization and automation of the processes of manufacturing the pellets and agripellets, NUCLEU Programe, 2013, member of the research team;

**4.** In-situ vibroacoustic diagnosis applicable to industrial machinery and equipment to build a predictive maintenance service, PNCDI 2 Programe, 2007, member of the research team;

**5.** Complex friction materials based on iron and/or copper for the braking systems of machinery and equipment designed for agriculture, made through integrated technologies, CEEX 2006 (M I) Programe, 2007, member of the research team;