

PRESS RELEASE

PRESS RELEASE

Saarbrücken, September 22, 2014

|| Page 1 | 1

67P, Rosetta mission and Fraunhofer IZFP

For over 10 years it has been on the road: the Rosetta spacecraft – one of the most fascinating and most demanding enterprises of the European space travel. After the launch on March 2, 2004, the space probe set out its journey to the comet 67P / Churyumov-Gerasimenko. En route, it performed several complex maneuvers, called "gravity assist" (three times using the Earth and one time using Mars as accelerators), which gave it the necessary "momentum" for the long journey to the outer regions of the solar system.

*Source: DLR*

Being an exponent of the Saarland R&D community, the *Fraunhofer Institute for Nondestructive Testing IZFP* is part of this important and eventful project. One of the tasks of the landing module Philae is the examination of the elastic and plastic properties of the comet ground. The required transducers have been developed by the Fraunhofer IZFP specifically for CASSE (Comet Acoustic Surface Sounding Experiment). CASSE is one of two instruments used for the measurement of elastic and/or plastic properties of cometary matter, whose knowledge allows conclusions on the composition and strength of the ground. The extensive knowledge and experience of the Institute in nondestructive materials characterization by ultrasound were incorporated into the test system which was specially adapted for the comet landing.

The four-year investment of Fraunhofer IZFP on this project led to a close collaboration with colleagues from the other participating European teams. For this purpose the participating German institutes were financially supported by the Federal Ministry of Economic Affairs and Energy (BMWi).

With the landing of Philae on 67P the project will soon hit its peak while the evaluation of the information obtained will be a scientific long-term project.

Rosetta is an ESA mission with contributions of the ESA members and the NASA. The Rosetta landing module Philae was subscribed by a consortium under the leadership of DLR, MPS, CNES und ASI.

PR Officer / Editorial Notes:

Dipl.-Übers. Sabine Poitevin-Burbes | Fraunhofer-Institut für Zerstörungsfreie Prüfverfahren IZFP | Phone +49 681 9302-3869 | Campus E3.1 | 66123 Saarbrücken, Germany | www.izfp.fraunhofer.de | sabine.poitevin-burbes@izfp.fraunhofer.de

For further information:

Rudolf Licht | Fraunhofer-Institut für Zerstörungsfreie Prüfverfahren IZFP | Phone +49 681 9302-3964 | Campus E3.1 | 66123 Saarbrücken, Germany | www.izfp.fraunhofer.de | rudolf.licht@izfp.fraunhofer.de