

FRAUNHOFER INSTITUTE FOR ELECTRON BEAM AND PLASMA TECHNOLOGY FEP

## PRESS RELEASE

# Fraunhofer FEP receives prize for the most innovative product

As part of the international vacuum trade fair "VacuumTechExpo", which took place in Moscow between the 16<sup>th</sup> and 18<sup>th</sup> of April 2013, the Fraunhofer FEP was awarded the prize for the most innovative product to be presented at the trade fair. The product for which the prize was received, the Double Ring Magnetron DRM 400, is used for the precise vacuum coating of surfaces.

At the industrial exhibition "VacuumTechExpo" which took place between the 16<sup>th</sup> and 18<sup>th</sup> of April 2013, the scientists of the Fraunhofer Institute for Electron Beam and Plasma Technology FEP based in Dresden presented their precision technologies and processes for the high-rate coating of especially challenging thin films. The jury of the Russian fair organization MVK and the Russian Vacuum Society was particularly impressed by a special component for the vacuum precision coating, the Double Ring Magnetron DRM 400.

The DRM 400 is a coating source for the refinement of surfaces used in applications which require very precisely deposited layers. Optical layers used in laser applications and spectacle lenses for example need to be applied with extreme accuracy, as a deviation of mere nanometers in the layer thickness can lead to the product being rejected. The Double Ring Magnetron DRM 400 makes the deposition of such precise layers on substrates of up to 200 mm in diameter possible. The sputter process which is used allows purely metal layers, compound layers, gradient layers or complex multilayer systems to be applied economically. Fraunhofer FEP has not only many years of process know-how, but also the corresponding technological equipment at its disposal. Electric, optical, acoustic or magnetic active layers can as a result also be precisely and homogenously deposited on a pilot scale.

In addition to the interest generated by the DRM 400, German vacuum technologies for optics, sensors and electronics also proved popular with Russian visitors to the trade fair. On the 16<sup>th</sup> of April 2013, Fraunhofer FEP organized the "Technology Day" with the title "Functional Coating for Optics, Sensors and Electronics" during which small and medium sized German companies presented their very latest developments and

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products emerging from the German vacuum technologies sector. The technologies in particular captured the attention and interest of Russian representatives from the optics, battery technologies and film-coating sectors, and future cooperations could be initiated.

You can find the programme for the German "Technology Day" at the "VacuumTechExpo" at: *www.fep.fraunhofer.de/en/events/events\_review\_2013/vacuumtechexpo.html* 

You can find more detailed information about the Precision Coating Technologies from Fraunhofer FEP at: *www.fep.fraunhofer.de/en/Geschaeftsfelder/Praezisionsbeschichtung.html* 



The prize awarded to Fraunhofer FEP for the Double Ring Magnetron DRM 400 as the most innovative product at the "VacuumTechExpo"

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