



National Institute of Telecommunications

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**International Visegrad Fund
Kralovskie udolie 8
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ICTON 2013

Dear Sir/Madam,

This is to confirm Mr. Denys Natarov, the beneficiary of the V4EaP Scholarship No. 51201091 is successfully pursuing his research plan at the National Institute of Telecommunications.

In particular, I am pleased to confirm that:

1. A substantial technical progress has been achieved till now. This is reported in detail in a joint technical paper entitled 'Periodicity Assisted Scattering and Absorption of Light by Finite Layered Gratings of Silver Nanowires' by Denys M. Natarov, Marian Marciniak, Ronan Sauleau and Alexander I. Nosich, accepted for the IEEE XXXIII International Scientific Conference ELECTRONICS AND NANOTECHNOLOGY ELNANO-2013, Kyiv, Ukraine, April 16-19, 2013.
2. In the paper mentioned above, two types of resonances: plasmon and grating-type and computed the components of the extinction cross-section and near-field patterns of such layered gratings have been investigated. The results of accurate calculations with a convergent numerical algorithm of the scattering and absorption characteristics for the 2 and 3-layer periodically structured ensembles of sparsely placed silver nanowires have been presented. An valuable observation is an occurrence of a minimum on the TSCS spectral dependence due to the G-resonance, if the wavelengths of the broader P-resonance and the sharper G-resonance coincide.
3. A proper acknowledgement for International Visegrad Fund support has been included in the above paper.
4. The project is being continued with accordance to the approved workplan.
5. The planned month of completion of the project – June 2013

Sincerely yours,

Prof. Marian Marciniak, Chairman

COST Action MP0702 Towards Functional Sub-Wavelength Photonic Structures
(2008-2012)

<http://cost-mp0702.nit.eu/cost-mp0702>

ICTON Organising Committee Chairman

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7 March 2013