

**NTSE - Nano Technology Science Education
Project No: 511787-LLP-1-2010-1-TR-KA3-KA3MP**

Welcome to the NTSE Newsletter, Issue 2, December 6th, 2013

You are reading the latest issue of the <http://www.ntse-nanotech.eu/newsletter>, presenting you the latest information and progresses about “NTSE-Nano Tech Science Education” Project.

NTSE Nanotech Science Education project is a KA3 Transversal Multilateral Project with a duration of three years (01/01/2011-31/12/2013). NTSE aspires to make science education more attractive and accessible through using ICT and nanotechnology. The project target groups are students from the general and vocational schools aged 13 to 18; teachers in science subject plus college & university students attending science education courses (prospective school teachers in sciences).



NTSE Poster Competition and Nano Science Camp

NTSE Poster Competition aimed at encouraging the students (aged 13-18) to produce projects with regard to Nanotechnology. The NTSE posters were designed about current applications in daily life and creative ideas/innovations for the future of nanotechnology in 300 words. The competition lasted between March-April 2013 and addressed 214 students between the age 13 to 18 with 115 posters from Bulgaria, Greece, Germany, Italy, Romania, Turkey. All posters were evaluated by a committee comprised of international group of scientists with expertise in nanotechnology. The Virtual Laboratory was the platform to release the result of the competition.

The science camp participants were selected from the winners of the poster competition. The Nano Camp was hosted in Varna, Bulgaria between 1-6 July, 2013. 25 teachers (experts) from partner countries (Bulgaria, Romania, Greece, Italy and Turkey) and 45 students attended to the camp. The students had both implementations/hands on activities and culture tours in Bulgaria. They also had sessions using the Virtual lab.



“INT-NTSE” Congress 15-16 NOVEMBER 2013

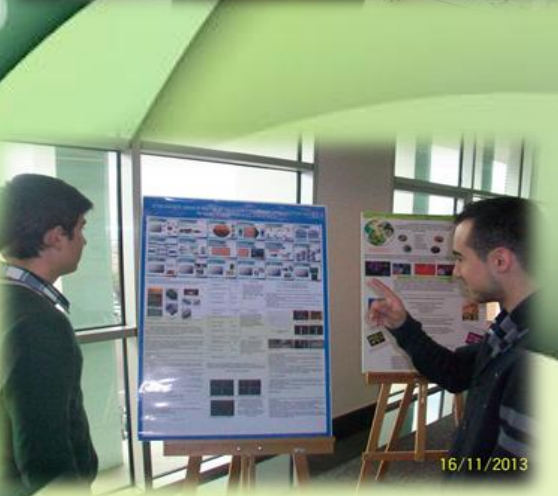
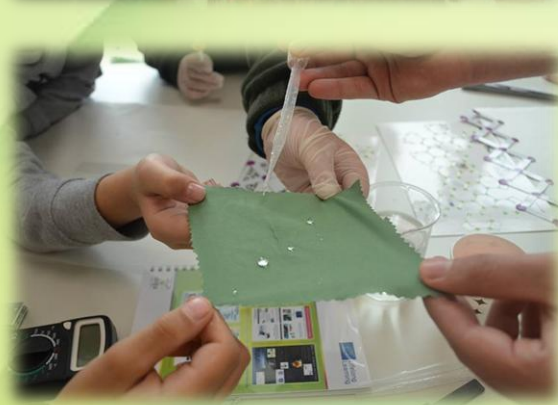
“International Nano Technology Science Education Congress: “INT-NTSE” Congress took place in Istanbul (TURKEY), Avclar Doğa School on 15-16 November 2013.

The aim of the congress was to promote the sharing of good practices and transnational cooperation in the field of the application of Nano Technology and ICT in Science Education learning and training. In two days, approximately 200 students and teachers participated in the congress.

On the first day of the congress, the project was presented and key note speakers gave speeches on nanoscience and nanotechnology. Assist. Prof. Sevil AKAYGÜN highlighted the importance of nanoscience literacy with her presentation titled “An attempt to improve Nano science literacy and awareness: A nano science workshop for students and teachers”. Other key note speaker, Dr. Ron BLONDER touched upon how to use nano science in education with her presentation “Zooming into Nano Education: Bringing the chemistry of tomorrow into high school chemistry lessons of today.” Additionally, NTSE Virtual Laboratory was introduced to participants by project partners Ilian UZUNOV and Kichka MINKOVA.

A presentation titled “Women in Natural Sciences” made by Associated Prof. Daniela Karashanova and a presentation titled “ICT in Classroom and Education” was made by Prof. Dr. Cengiz Hakan AYDIN on the second day of the congress.

The congress continued with workshops dedicated to different themes and topics in nanoscience. Number of case studies and research results were presented by the project implementer teachers and partners. <http://www.ntse-nanotech.eu/int-ntse-congress.asp>



UPCOMING EVENTS: Local workshop & webinar
 NTSE team will organize a local workshop & webinar to provide basic information on how to effectively use the virtual lab in the classroom for science and prospective science teachers. The Virtual Lab serve as a platform for science lessons, as a database of teaching materials and as a hub for science-learning-related graphic aids and recorded, illustrated experiments on Nano-Tech. The webinar aims to increase the number of teachers who benefits from the virtual lab.

The first session of the webinar will be on the 9th December, 2013. The project will be presented and the basic information about nano technology will be provided to participants.

The second session of the webinar will be held on the 16th December, 2013 and the topic of the webinar will be virtual laboratory, how it should be used and introduction to the Nano Kit. The webinar is organized in collaboration with European School Net. <http://www.ntse-nanotech.eu/webinar.asp>

The dissemination seminars were organized in each partner country to present the project outputs. During the seminars the 'Nano-Tech Annual' including facts, statistics and graphics about the project and 'Nano-Tech Guidelines' with the brief information on Virtual Lab will be distributed to participants.

Dissemination Seminar in Bulgaria on 5th December 2013 in Blagoevgrad in front of 36 science teachers, with the assistance of the Regional Education Inspectorate.

Dissemination Seminar in Greece: Dec. 4 ,2013 in Vamos, Crete.

Dissemination Seminars in Italy: Oct. 10, 11 12 in Naples, Oct. 19-21 in the ASTC Annual Conference 2013, Albuquerque, NM, USA

Nov. 27 in Pomigliano d'Arco (NA) at the ISIS Europa,

Dec. 4 in Pomigliano d'Arco (NA) at the ISIS Europa

Dissemination Seminar in Romania: Nov. 6/ Dec. 4, 2013, Targoviste and in Cluj Napoca on the Nov. 8, 2013.

Dissemination Seminar in Turkey: Dec. 13 2013, İstanbul.



Nano-Tech Science Education Webinars



NTSE KIT IN THE CLASSROOM!

Nanokit and the 9 experiments in the virtual lab will be in next years' science curriculum in Doğa Schools starting from lower elementary education level and expanding other levels gradually. In 2014-15 school years Nano kit & virtual lab will be used by 4000 students from lower secondary & 3700 students from upper secondary schools. NTSE Kit comprises nine experiments from the virtual laboratory, which serves for the hands-on activities on nanotechnology and science teaching.

<p>Doğa Schools, Turkey www.dogaschools.com</p> 	<p>Universitatea Valahia Din Targoviște(UVT), Romania www.valahia.ro</p> 	<p>Center for Creative Training (CCTA), Bulgaria www.cct.bg</p> 	<p>Sirma Media, Bulgaria www.sirmamedia.com</p> 	<p>Foundation for Research and Technology (FORTH), Greece www.forth.gr</p> 	<p>Fondazione Idis-Citta della Scienza, Italy www.cittadellascienza.it</p> 
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