



NTSE - Nano Technology Science Education

Project No: 511787-LLP-1-2010-1-TR-KA3-KA3MP



**NTSE VIDEO CONFERENCE PROGRAMME on LIGHT EMITTING DIODES (LED)
EXPERIMENT**

Dec the 12th, 2011

TR - BG Videoconference (Sample Video Conference)

TR students&teachers

(Çekirge Doga Anatolian High School, Bursa, Turkey)

BG students&teachers

(John Atanasov Electronic High School, Bulgaria)

Lesson Title: "LEDs"

14.50 Establishing the connection. Testing of system

15.00 Introduction of students and teachers

15.15 Implementation of sample lesson "LEDs" (İdil Akçay-TR)

15.45 Activity on LED strips (Çekirge Doğa Anatolian High School)

15.55 Questions and answers (TR-BG)

16.05 Activity with a PC Microscope with LEDs (BG)

16:20 End of session



**NTSE VIDEO CONFERENCE PROGRAMME on NANOCRYSTAL FABRICATION
EXPERIMENT**

May the 14th, 2012
TR - BG Videoconference

TR students&teachers
(Acarkent Doga Anatolian High School, İstanbul, Turkey)
BG students&teachers
(John Atanasov Electronics High School, Bulgaria)

Lesson Title: “Nanocrystal Fabrication”

14:50: Establishing the connection. Testing of system
15.00 : Introduction of the Nano Crystal fabrication (Idil Akçay - Doga Schools)
15:30: Tooth pick activity (Acarkent Doga Highschool & John Atanasov Electronic High School
15.45: Discussions. Section for questions and answers (TR & BG)
15.55: Evaluation of the activity
16.00: Student presentation (BG)
16:30: Ending of the Session

NTSE VIDEO CONFERENCE PROGRAMME on LOTUS EFFECT

May the 14th, 2013
TR - IT Videoconference

TR students&teachers
(Acarkent Doga Primary School, İstanbul, Turkey)
IT students&teachers
(Scuola Primaria San Tarcisio di Ercolano (NA), Italy)

Lesson Title: “Lotus Effect”

14.50 Establishing the connection. Testing of system
15.00 Introduction of the students and teachers
15.10 Implementation of Lotus Effect 3 experiments(Ercan Tatlı, Doğa Schools)
15:40 Question and answers (TR-IT)
15.50 End of session



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**NTSE VIDEO CONFERENCE PROGRAMME on UNDERSTANDING NANOSCALE
EXPERIMENT**

June, 2013

TR – BG Videoconference

TR students&teachers

(Çekirge Doğa Anatolian High School, Bursa Turkey)

BG students&teachers

(John Atanasov Electronics High School, Bulgaria)

Lesson Title: “Understanding Nanoscale”

14.50 Establishing the connection. Testing of system

15.00 Introduction of the students and teachers

15.10 Implementation of Understanding Nanoscale Experiment (İdil Akçay, Doğa Schools)

15:40 Question and answers (TR-BG)

15.50 End of session

**NTSE VIDEO CONFERENCE PROGRAMME on NANOTECHNOLOGY and
UNDERSTANDING NANOSCALE EXPERIMENT**

June, 2013

TR – IT Videoconference

TR students&teachers

(Çekirge Doğa Anatolian High School, Bursa Turkey)

IT students&teachers

(Liceo Scientifico Statale “Arturo Labriola” of Napoli-IT)

Lesson Title: “Understanding Nanoscale”

14.50 Establishing the connection. Testing of system

15.00 Introduction of the students and teachers

15.10 Introduction of Nanotechnology and Understanding Nanoscale Experiment (İdil Akçay, Doğa Schools)

15:25 Question and answers (TR-IT)

16.00 End of session



NTSE VIDEO CONFERENCE PROGRAMME on IS THERE ANY LOTUS EFFECT AROUND US?

December the 6th, 2013

RO - IT Videoconference

2 Videoconference Sessions starting at 11 C.E.T.

RO Primary School Teacher: Ștefan Georgiana

(Școala "Ioan Alexandru Brătescu Voinești" Târgoviște, Romania)

IT School Teacher: Francesca Borrelli

(Scuola Primaria Paritaria San Tarcisio, Italy)

RO young students' level: 3rd form - 9/10 years old

IT young students' level: 5th form - 10/11 years old

Lesson Title: Is there any Lotus effect around us?

Session I

10.50 Establishing the connection. Testing of system

11.00 Starting of the activity (RO). Presenting the Lotus flower by the Romanian teacher

11.04 Observing at optical microscopes the Lotus leave structure by young students

11.10 Explanations and discussions. Section for questions and answers (RO & IT)

11.15 Explaining the particular phenomena of floating of a needle on the surface of water.
Experimenting

11.23 Discussions. Section for questions and answers (RO & IT)

11.28 Watching the *Lotus Effect* videoclip (from the NTSE Virtual Lab)

11.34 Experimenting the Lotus Effect using Lotus leaves, water and oil

11.44 Discussions. Section for questions and answers (RO & IT)

11.50 Ending of the Session I

Break

Session II

12.00 Establishing the connection. Starting of the activity (IT). Presenting the content of the activity by the Italian teacher

12.05 Watching the *Hydrophobic Paper* videoclip (from the NTSE Virtual Lab)

12.10 Experimenting with water colors, color pencils, paper, baking paper, special prepared paper with "nano-spray"

12.20 Discussions. Section for questions and answers (IT & RO)

12.26 Evaluation of the whole activity (in IT and RO).

12.36 Conclusions related to the activity (IT & RO)

12.45 Ending of the Session II



NTSE VIDEO CONFERENCE PROGRAMME on THE WORLD ON NANOMATERIALS

December the 16th, 2013

TR - RO Videoconference

Videoconference Session starting at 3 p.m. C.E.T.

TR Contact Point: İdil Akçay

(Doga Schools, Turkey)

RO Contact Point: Mihai Bîzoi

(Universitatea Valahia din Târgoviște, Romania)

Level of participants: University students (Master students / Prospective teachers)

Activity Title: The World of Nanomaterials

14.50 Establishing the connection. Testing of system

15.00 Introduction in the World of Nanomaterials (Andrei Chilian - Universitatea Valahia din Târgoviște)

15.15 Allotropes of Carbon - Carbon Nanotubes. Watching the *Carbon Nanotubes* videoclip (from the NTSE Virtual Lab) (İdil Akçay - Doga Schools)

15.30 Allotropes of Carbon - Fullerenes (Andrei Chilian - Universitatea Valahia din Târgoviște)

15.45 Discussions. Section for questions and answers (TR & RO)

15.55 Evaluation of the activity

16.00 Ending of the Session

NTSE VIDEO CONFERENCE PROGRAMME on NANOCOMPOSITES

December the 13th, 2013

BG - GR Videoconference

Videoconference Session starting at 4 p.m. E.E.T.

TR Contact Point: Eleni Papananou

(FORTH, GREECE)

BG Contact Point: Irina Kostadinova and Alexander Angelov

(2nd English Language School, Sofia and CCTA)

Level of participants: 12th grade students and Ph.D student (as scientist)

Activity Title: Nanocomposites and nano-materials application on practice

16:00 – 16:15 Start and introduction

16:15-17:00 Q&A session

17:00 – 17:15 conclusion in the classroom

17:15 – end of session

Full protocol and recording of the meeting is available in the podcasting room.



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**NTSE VIDEO CONFERENCE PROGRAMME on NANO MATERIALS &
CARBON NANO TUBES**

December the 16th, 2013

**TR - RO Videoconference
Videoconference Session starting at 3 p.m. C.E.T.**

TR Contact Point: İdil Akçay
(Doga Schools, Turkey)

RO Contact Point: Mihai Bîzoi
(Universitatea Valahia din Târgoviște, Romania)

**Level of participants: University students (Master students / Prospective
teachers)**

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15.30 Allotropes of Carbon - Fullerenes (Andrei Chilian - Universitatea Valahia din Târgoviște)

15.45 Discussions. Section for questions and answers (TR & RO)

15.55 Evaluation of the activity

16.00 End of Session