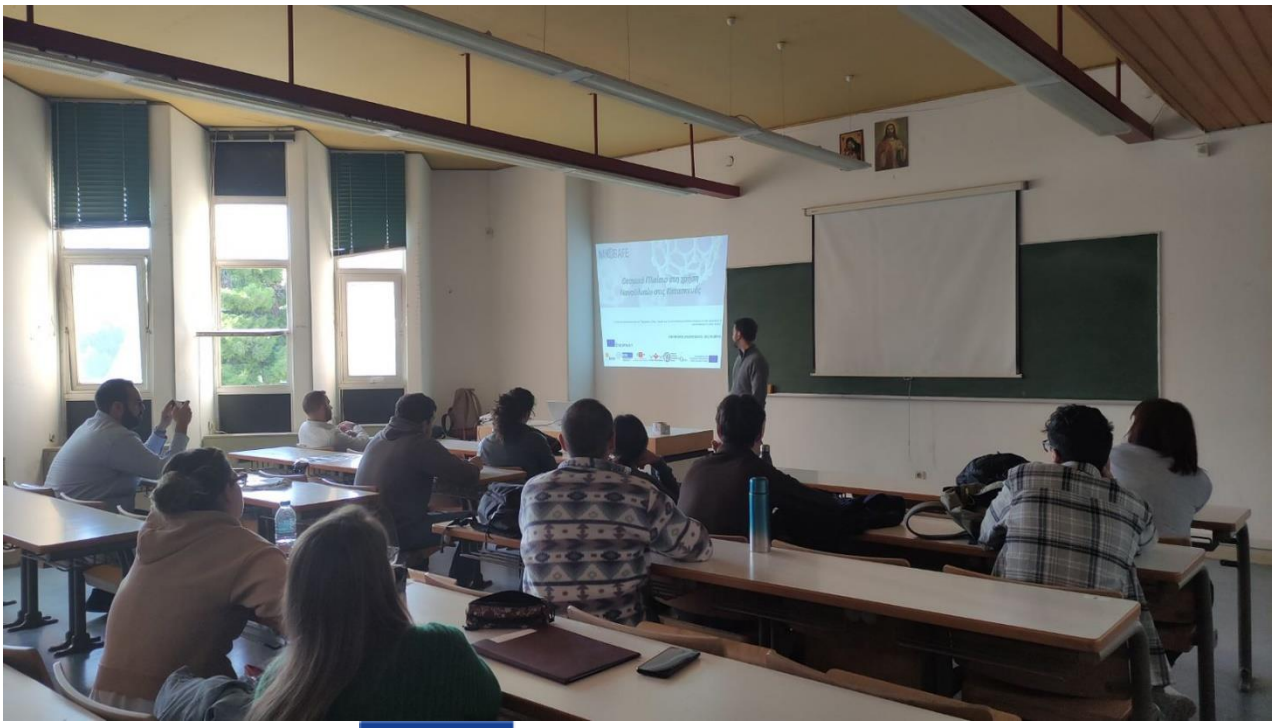
INTELLECTUAL OUTPUT 1

TASK O1-A5 TECHNICAL CONCLUSIONS OF FIRST INTERNATIONAL SEMINAR IN ATHENS (GREECE)



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CONTENT

Introduction

The “Risks, health and environmental prevention measures in safe production and use of nanomaterials in the stone sector” event was organized within the NanoSafe project, namely the First Seminar in Athens (Greece), a task assumed by the deliverable identified as O1/A5 "*Technical conclusions of First International Seminar in Athens (Greece)*".

This task is included in Intellectual Output 1 "*Guideline of risks, health and environmental prevention measures in safe production and use of nanomaterials in Stone Sector*" of the NanoSafe project.

This First International Seminar held in Athens (Greece) hosted by NTUA, focused on the use of nanomaterials in stone products and was attended by students of all grades (pre- and postgraduate), as well as freelancers, employed and interested in the evolutions on stone industry. At this multiplier event, all the results produced at this stage of the project were disseminated.

The different risks and prevention measures for the use of nanomaterials were analysed and the strengths and weaknesses of each of them have discussed as well as their adaptation to the current needs of the stone sector and whether they respect EU environmental policy. The short discussion that followed helped the audience further understand the importance of regulations and safety measures in the usage of nanomaterials.

This technical report compiles the main conclusions with the aim of implementing corresponding improvements in the project results.

Agenda

October, 31th

15.00 – 15.20	Short presentation of the project NanoSafe (NTUA T. Katsavrias)
15.20 – 15.40	Presentation of project objectives and results (NTUA T. Katsavrias)
15.40 – 16.00	The use of nanoproducts in construction and stone sector – Risks and safety (NTUA T. Katsavrias)
16.00 – 16.20	Regulation and legislation for nanoproducts in Greece and the E.U. (DELTA G. Zaverdinos)
16.20 – 17.00	Discussion
17.00	Closure of the Seminar.

The international Seminar was held at NTUA. It was organized by Mr. Thanos Katsavrias, Researcher at the Rnano-Lab of the National Technical University of Athens, with the help and close cooperation of Giorgos Zaverdinos from DELTA-MPIS.

The National Technical University (NTUA) is the largest technological institute in Greece, with more than 10,000 students of all levels in the 9 schools of the University. Rnano-Lab has been dealing with nanomaterials and nanoproducts for years, from their production to their evaluation. Safety in their production and use is of the utmost importance, and this is a subject which the laboratory has dealt with extensively.

With the long-term presence of NTUA in education, the attendees of the seminar learned about the importance of safety and the prevention of all necessary measures in the use of nanomaterials and nanoproducts.

The seminar presented the results of the NanoSafe project, the online platform created (OER), the VR environment created by CTM, as well as of course the risks and safety rules, the rules and legislation for the correct use of the above materials.

Photos and material from the seminar were presented on the social media of Rnano-Lab and DELTA.

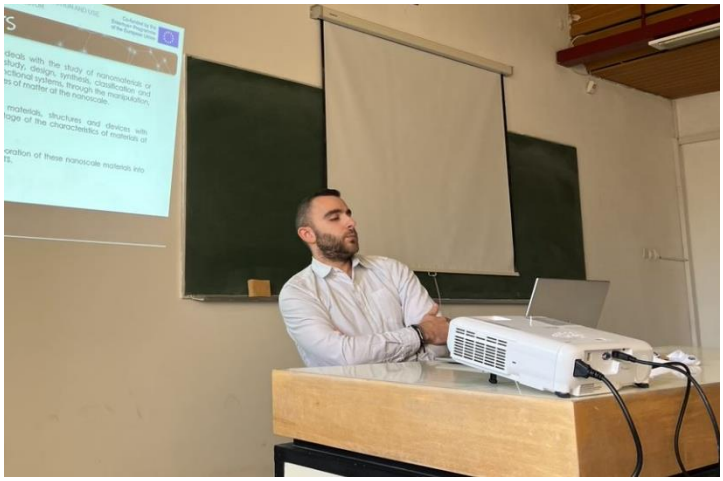
1. Short presentation of the project NanoSafe [NTUA]

Among the core functions of the Rnano-Lab is the training of future scientists and workers in the field of nanomaterials. Therefore, within the framework of the NanoSafe project, the basic principles of the correct use of nanomaterials and nanoproducts in the stone industry, all the necessary preventive measures for the health of workers and the preservation of the environment were presented. NanoSafe has created a virtual reality tool that can be used by universities, professionals in the nanomaterials and stone industries, and others.

Mr. Thanos Katsavrias briefly presented the NanoSafe project and underlined the importance of the project's outcomes and the need for digitization and utilization of electronic media by teachers, students and employees.

2. Presentation of project objectives and results [NTUA]

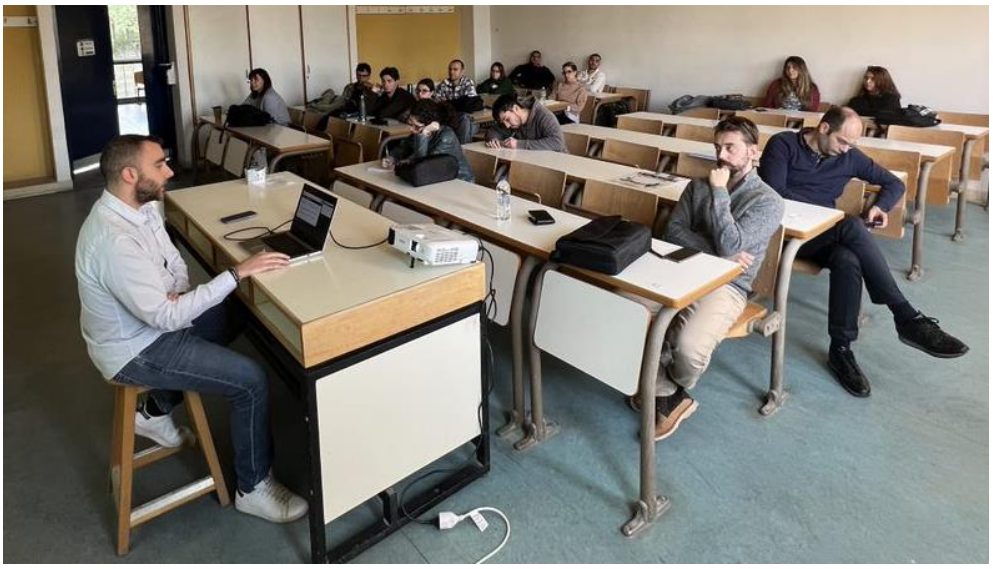
Mr. Thanos Katsavrias presented the work done during the project, emphasizing the educational purposes of the project. He briefly explained that, for now, there is limited information on the potential risks of these materials, both to health and to the environment. For this reason, it is important, as a result of the project, that rules for the correct use of materials and protection of workers and the environment arise.



3. The use of nanoproducts in construction and stone sector – Risks and safety [NTUA]

At this point, Mr. Thanos Katsavrias proceeded with the presentation on the risks and safety in the use of nano products in the construction and stone sectors.

He presented all the possible combinations of nanomaterials that we face in the aforementioned industries, the risk that the producer and the user may face, as well as of course the positive criteria that lead to its use. This is the driving force in dealing with these materials, which is no other than increasing the properties of an existing material.



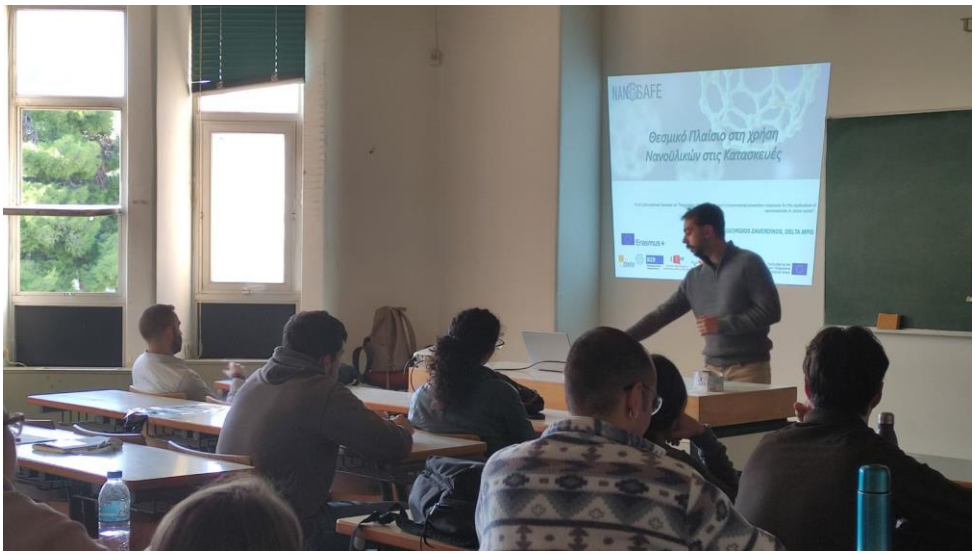
The properties that these materials can give to a structure (a wall or a road construction for example) are very important. Thus, we should create all those necessary conditions to be able to use them safely, both for the environment, for the worker, and also for the end user.

Also, the importance of the correct use of both individual and collective safety measures was emphasized, with the necessary equipment having to be available to all workers at all times, while at the same time environmental preventive measures (such as filters and ventilation) should always be considered.

Finally, the VR tool created by CTM was presented, with all the scenarios it concerns.

4. Regulation and legislation for nanoproducts in Greece and the E.U. [DELTA-MPIS]

Mr. Giorgos Zaverdinos took then the floor, proceeding with his own presentation regarding the regulations and legislation regarding nanomaterials and their use, within Greece and the European Union.



It is important to note that the institutional framework has not yet completely incorporated the use of such materials, with the result that workers are not fully protected from the effects of nanomaterials on their bodies. An important role in the absence of regulation has played, the absence of broad data on the use of the specific materials, without which the establishment of specific regulations and broader legislation cannot proceed.

At the same time, the importance of ensuring the correct rules for the use of materials by employers was emphasized. It is important, beyond the individual responsibility of every professional active in the field of nanomaterials, that employers observe all those necessary measures, which make the work safe, both for the workers and for the environment and also for the end user of the materials.

5. Discussion

Part of the discussion was the usability of the VR tool created by CTM. It is an online tool that immediately gains the attention of the young audience and can be a starting point to create many such training tools.

An important part is the absence of a regulatory framework for the use of nanomaterials, something that the national and European authorities should take care of.

Finally, the scientific community should proceed with the faster evaluation of the effects of the use of nanomaterials on the environment and health.

Number of attendees

The seminar was attended by 22 people. 5 of them were freelancers, with the remaining 17 being students from various universities in the country (3 of them NTUA students). 12 women and 10 men attended the seminar. The list of participants is attached in “ANNEX I. Attendance list” for privacy reasons.