



**NSF ADVANCED STUDY INSTITUTE:
USING NANOTECHNOLOGY FOR FABRICATING NEW
BIOMATERIALS AND NEXT-GENERATION ELECTRODES**

NSF Grant #1762602, PI: K.E. Aifantis (UoF)

PROGRAM

Wednesday, July 12, 2023

Arrival of International Participants

Thursday, July 13, 2023

- 12 pm: Welcome at the AUTH Laboratory of Engineering Mechanics (ETEM)
Introduction to the Scientific Instruments to be used at the NSF ASI
- 1 pm: Lunch break
- 3 pm: Introductory battery Experiments

Friday, July 14, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 11 am: Lecture by ETEM Director, Assoc. Prof. A. Konstantinidis : *Nanoindentation*
- 1 pm: Lunch break
- 3 pm: Battery Experiments

Saturday, July 15, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments.
- 11 am: *Short Presentations by US participants*
- 1 pm: Lunch break
- 3 pm: Battery Experiments

Sunday, July 16, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 12 pm: Battery Experiments

Monday, July 17, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments.
- 11 am: Lecture by Prof. P. Zanis : *Linking global warming levels with climate change and its impacts in the Mediterranean region*
- 12 pm: Lecture by Emer. Prof. E.C. Aifantis: *Application of Gradient Theory on Biomaterials and Next-generation Electrodes Applications*
- 1 pm: Lunch break
- 3 pm: Battery Experiments

Lectures will take place at the D6 Lecture Room of the Civil Engineering Department of AUTH
Experiments will take place at the Laboratory of Engineering Mechanics of AUTH



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PROGRAM

Tuesday, July 18, 2023

Cultural experience of the Ancient and Byzantine Greece

Wednesday, July 19, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 11 am: Lecture by Assoc. Prof. K.E. Aifantis : *Li-ion Batteries*
- 1 pm: Lunch break
- 3 pm: Battery experiments.

Thursday, July 20, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 11 pm: Lectures by Prof. A. Chattopadhyay: *Stochastic Diffusion – AI in Covid outbreak*
- 1 pm: Lunch break
- 3 pm: Battery experiments.

Friday, July 21, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 11 am: Lecture by Assoc. Prof. A. Konstantinidis: *Micropillar Compresioni*
- 1 pm: Lunch break
- 3 pm: Battery experiments.

Saturday, July 22, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 11 am: Lecture by Dr. E. Harea: *Indentation size effect of LiF single crystals*
- 1 pm: Lunch break
- 3 pm: Battery experiments.

Sunday, July 23, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 12 pm: Battery experiments

Monday, July 24, 2023

- 10 am: Nanoindentation / Confocal Microscopy / Sputter Coating / Microtensile Experiments
- 12 pm: Farewell by Emer. Prof. E.C. Aifantis

Lectures will take place at the D6 Lecture Room of the Civil Engineering Department of AUTH
Experiments will take place at the Laboratory of Engineering Mechanics of AUTH