



ΑΡΙΣΤΟΤΕΛΕΙΟ
ΠΑΝΕΠΙΣΤΗΜΙΟ
ΘΕΣΣΑΛΟΝΙΚΗΣ

ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑ ΦΥΣΙΚΗΣ

Τετάρτη 11 Οκτωβρίου 2017

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Αίθουσα Α₃₁

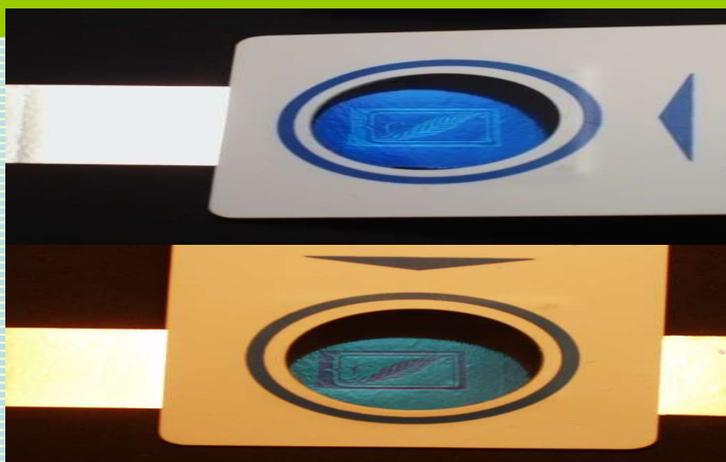
Κύκλος σεμιναρίων



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Polarization optics of polymers:
description and applications

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Linear polarized light irradiating on polymer films can cause the effect of optical anisotropy as in the bulk of the material (birefringence) and on its surface (providing material's aligning property). The main mechanisms of optical anisotropy formation upon polarized light impact in polymers and several specific applications are discussed. Some general information on polarized light is given and Jones approach of its description is presented. The mechanisms of formation of photoinduced birefringence depending on photochemical transformations in different polymers are considered. The principle of polarization phase recording is demonstrated. The basic procedures of fabrication of liquid crystal (LC) aligning polymer layers are presented and their applications in LC-display technologies are shown, the 3-dimensional type of LC displays is given the most attention.

Το προφίλ του ομιλητή



Ph.D. in Optics, 2009 (thesis's topic: "Induced birefringence under photoreduction of aromatic carbonyl compounds in polymeric layers")

- Associate professor of General Physics Department, since 2011 (course taught: "Optics, Atomic and Nuclear Physics")

- Senior researcher of Laboratory of Photopolymers, since 2010 (scientific field: optics of photosensitive polymeric materials: development of optical technologies and devices based on them)