

## EPI-POLARIZATION PART 2:

### MACRO OBSERVATIONS, DIY EPI-POLARISCOPE WITH A TV SCREEN

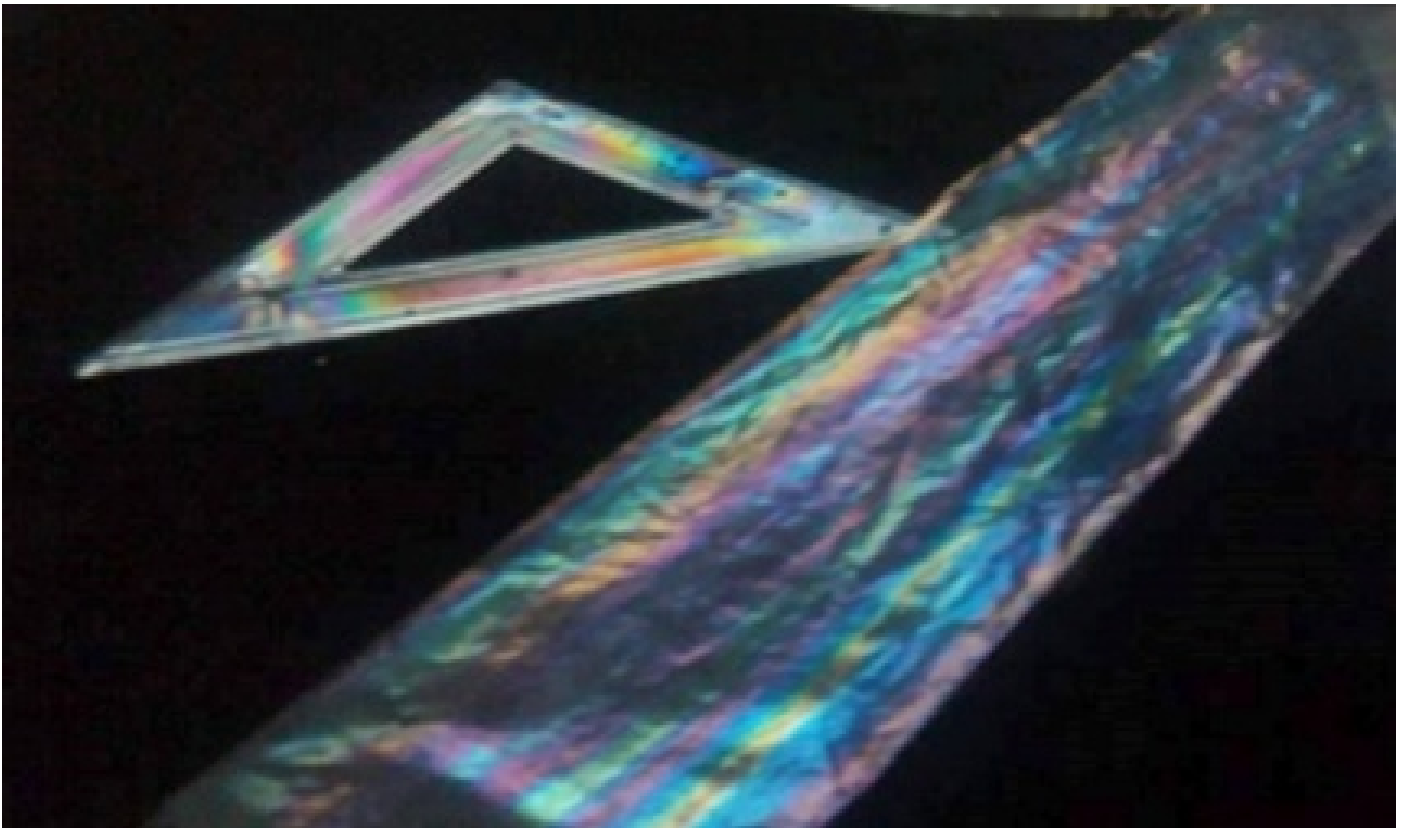
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#### INTRODUCTION:

Last month I presented an [article](#) showing how to do epi-polarization using a TV screen (that as it was stated, is a source of polarized light) and a dark surface which in my case was made of black foam.

Once the TV is on and showing a white screen, a piece of birefringent material is placed on the foam and then observed and photographed obliquely so that the colors showing birefringence appear.



As I emphasized in the conclusion to the previous article, that apart from showing the beauty of this easy to do experiment, the other purpose was to prepare the way to describe the application of this to microscopy that I have partially tried with good results.

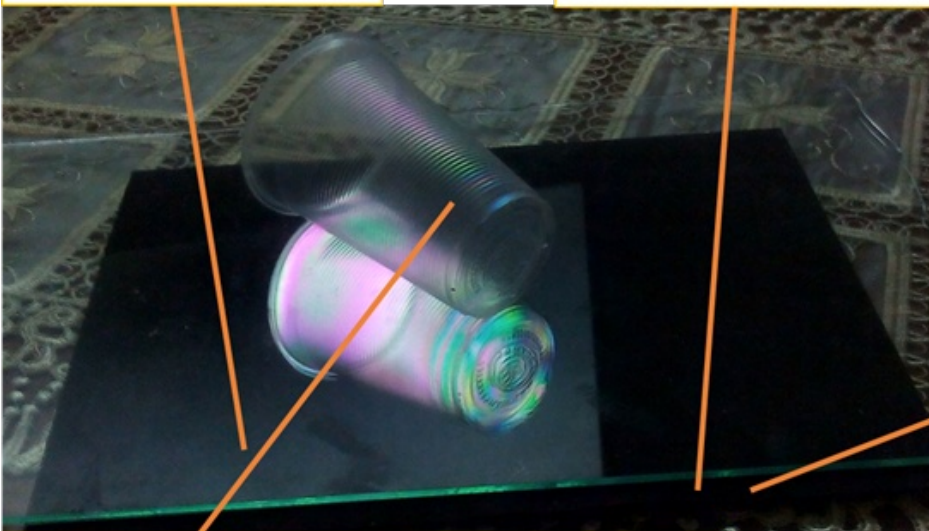
Today I have another experiment also with the TV screen and black foam but now with a piece of glass to reflect the TV screen onto it, see below.

DEVELOPMENT:

The TV screen reflection

The piece of glass on the black surface

The black foam surface



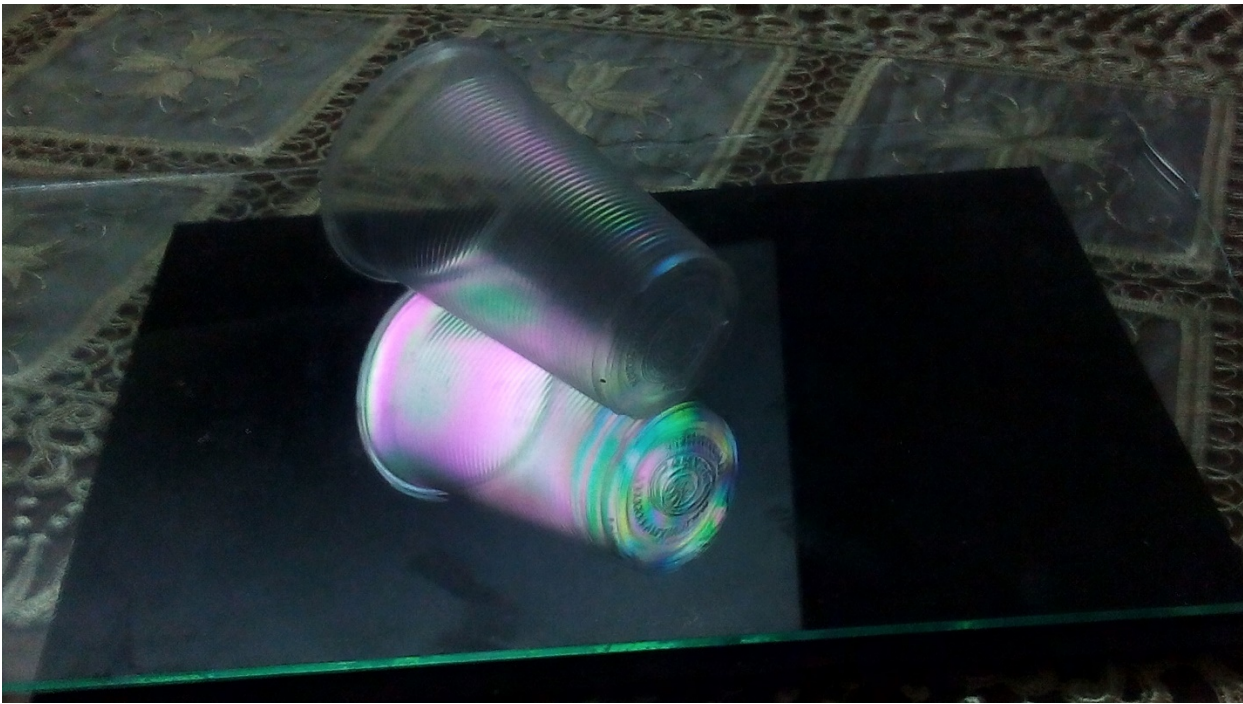
The birefringent material can be placed on the surface or held with the hand above, so it may be reflected exactly on the tv screen image, as shown.

As shown, it is possible to see the birefringence of the object in the reflection on the surface made by the TV screen, the glass, and the black foam, it is a must to place correctly the reflection of the screen in order to see the effect.

RESULTS:



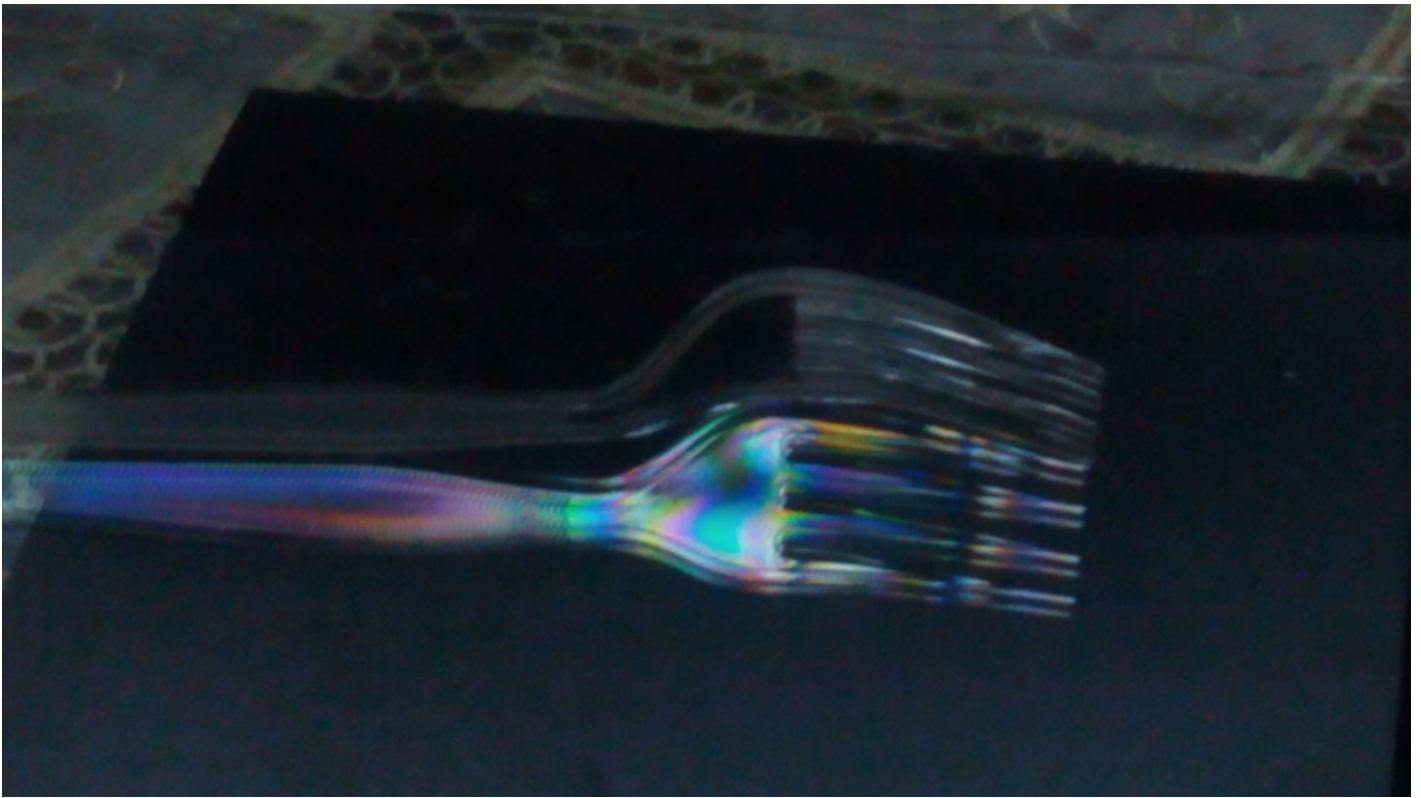
A piece of a syringe package



A disposable container



A plastic non-disposable food container



A disposable transparent plastic fork



A disposable transparent plastic spoon

#### CONCLUSION:

To appreciate the beauty of birefringence, it is not limited to transmitted professional polariscopes neither to the need for two polarizing filters to produce it, since as discussed above it is possible to achieve it in the living room or wherever a TV screen might be.

I invite the reader to try it.

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(Above in anti-spam format. Copy string to email software, remove spaces and manually insert the capitalised characters.)

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