

# Polarized Light Microscopy

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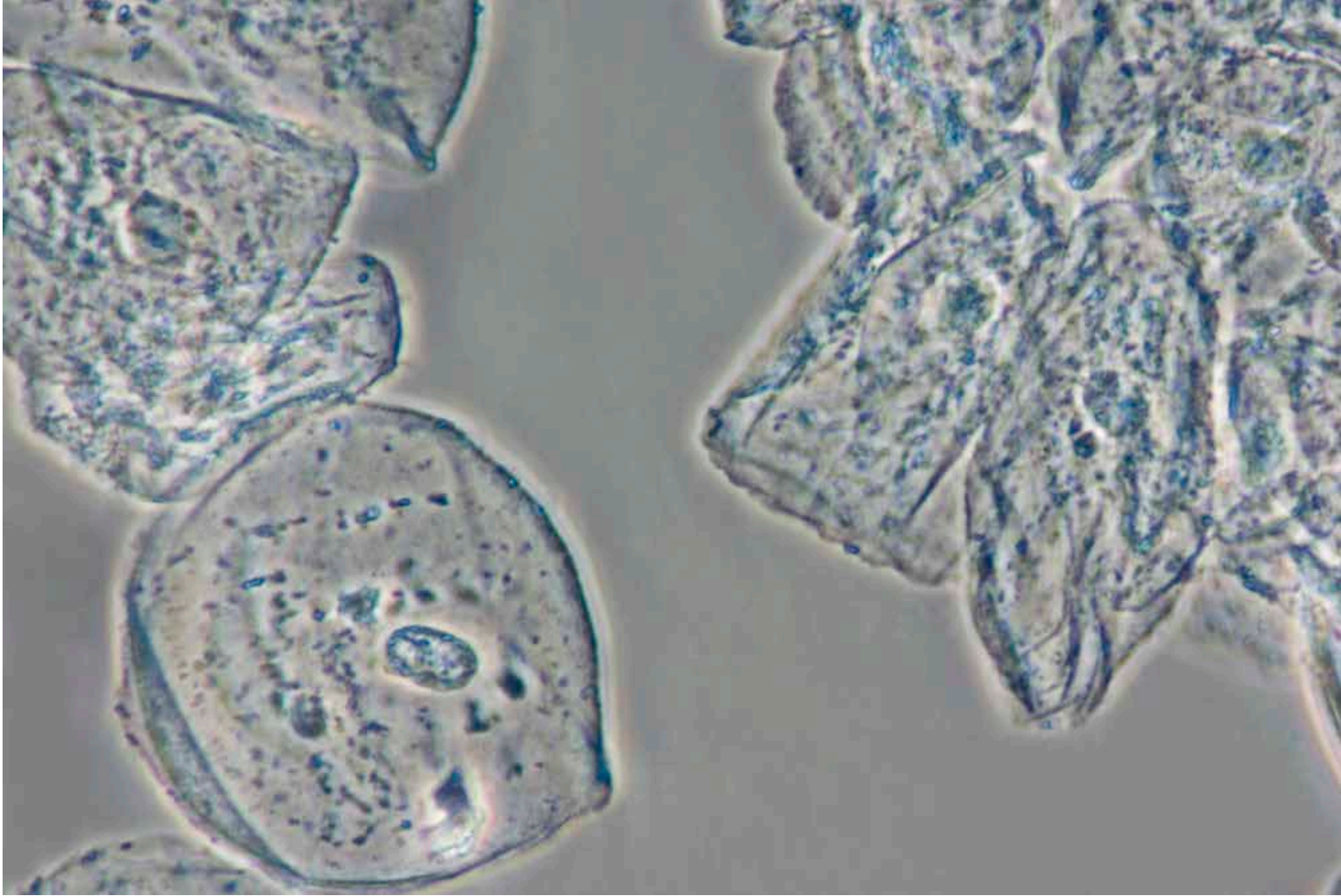
# Planning

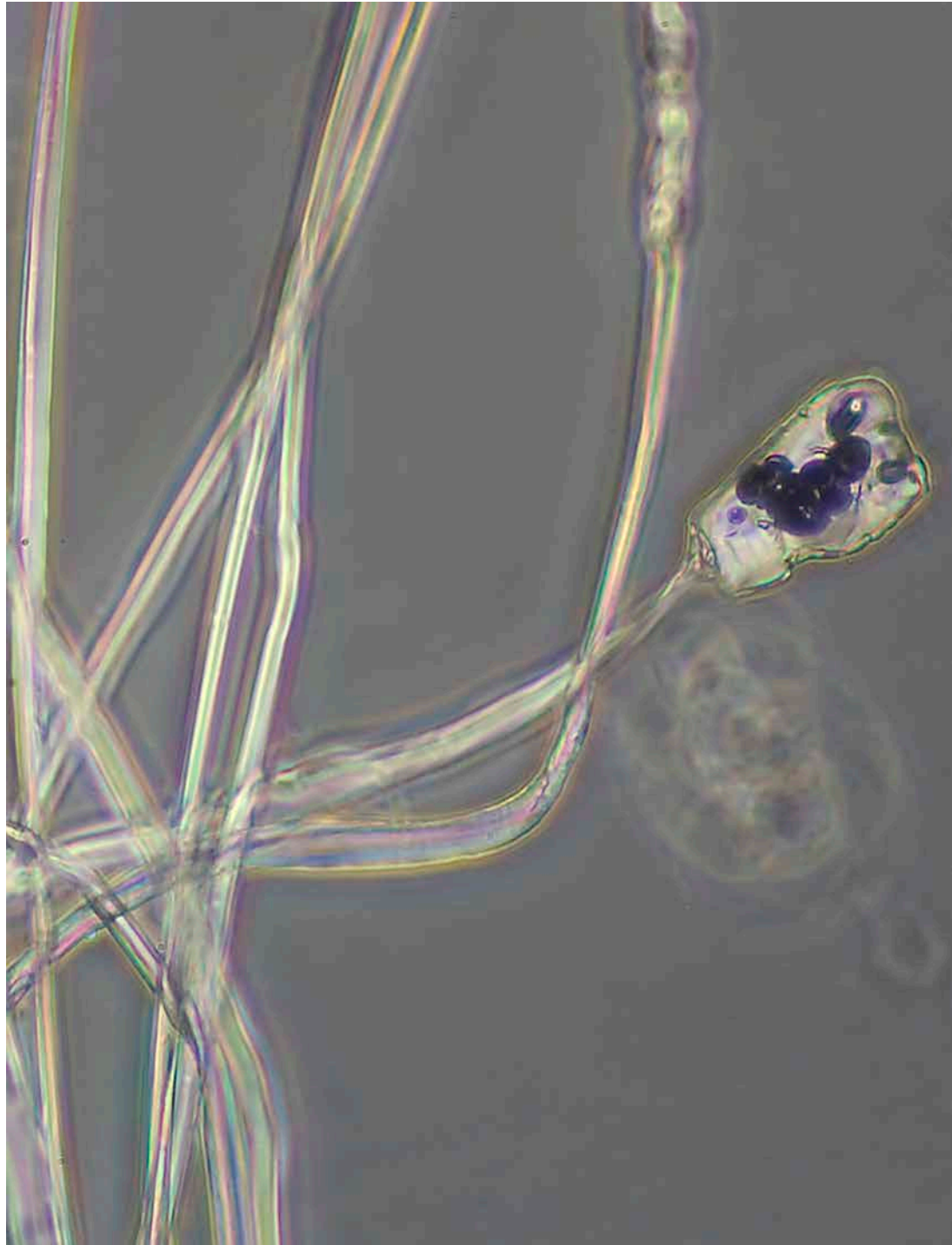
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- Assn Four – Widefield High Resolution Assn.
- Special Techniques Assn.
- Final project
- Blog – one post
- Final Exam

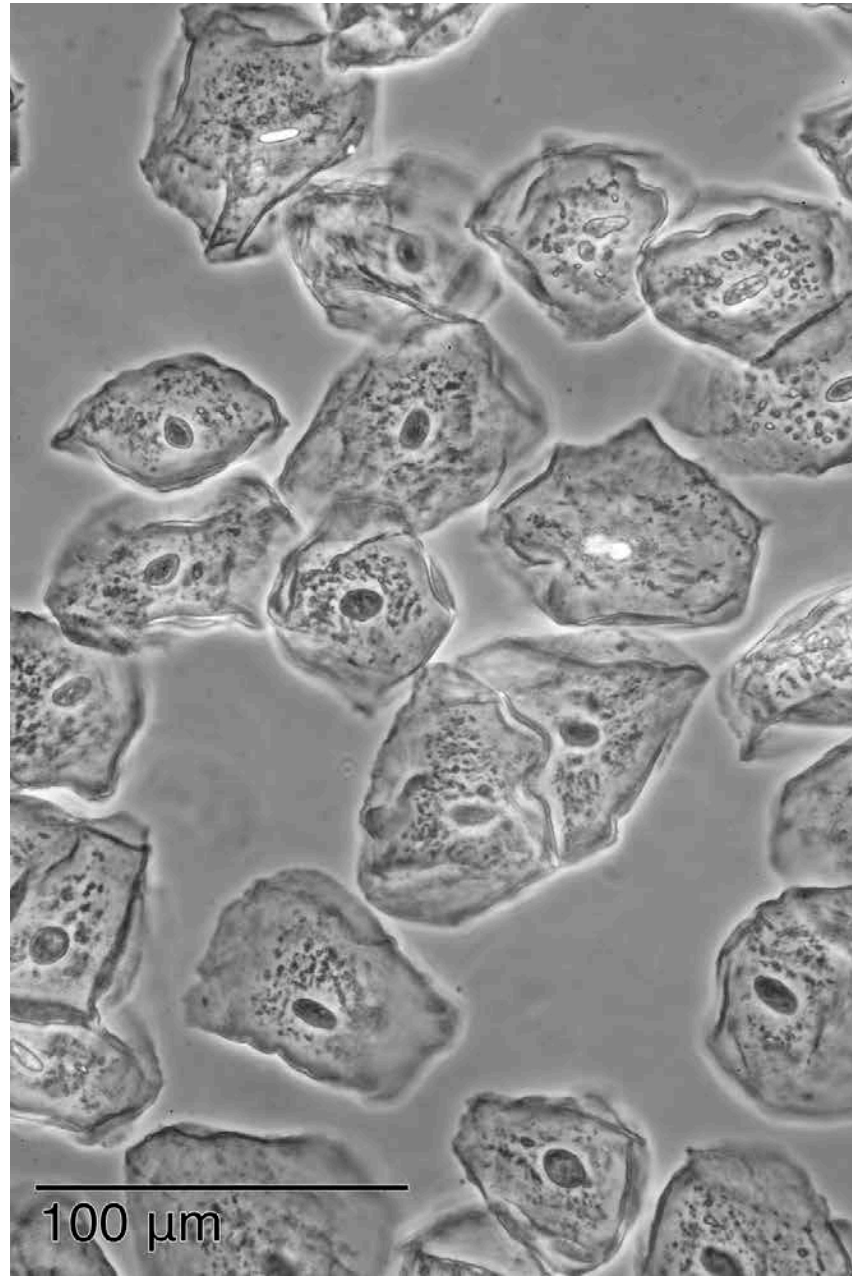
# Phase images

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<http://www.microscopyu.com/articles/polarized/polarizedintro.html>

# Isotropic

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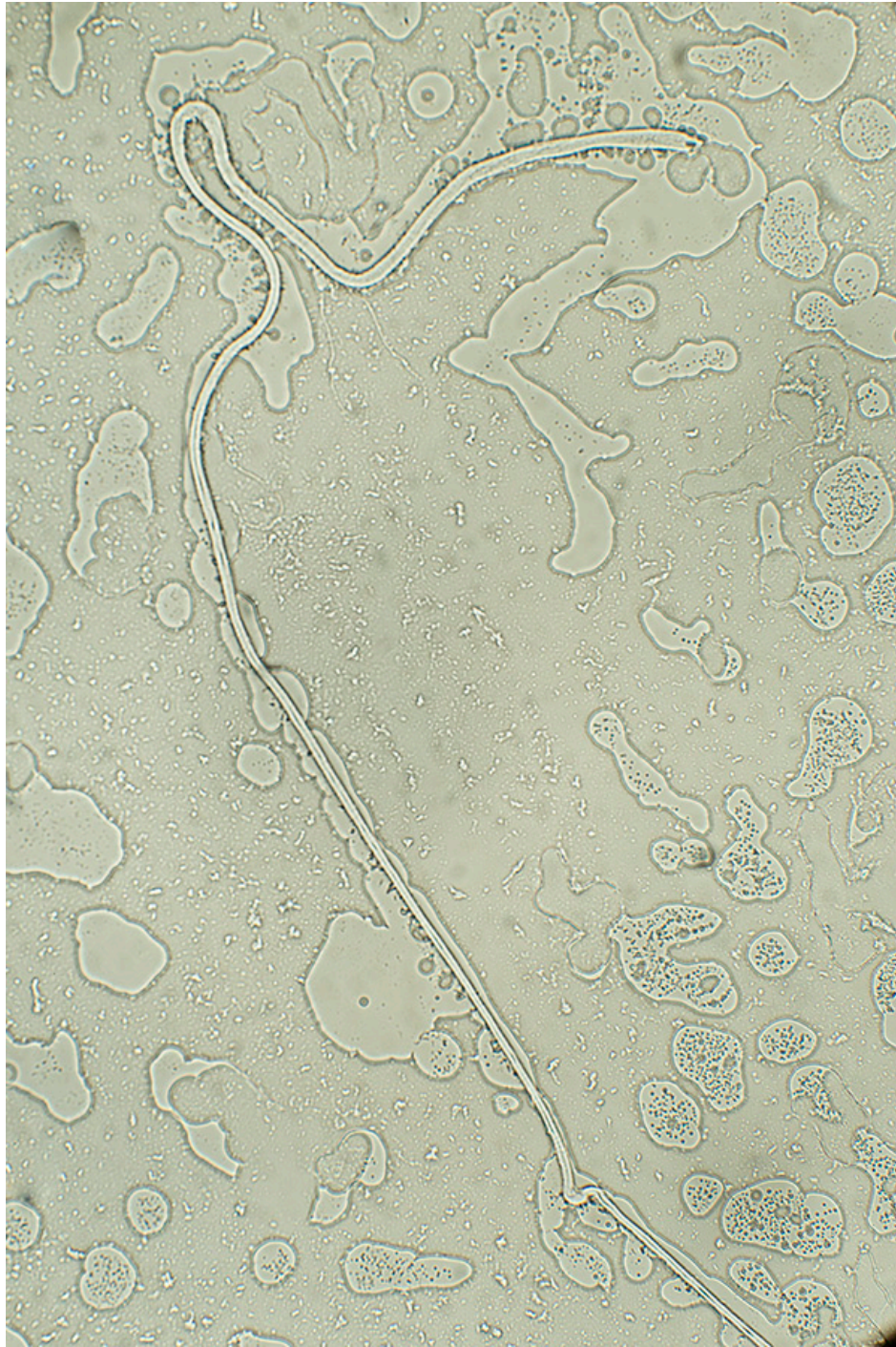
materials containing - one refractive index

<http://www.olympusmicro.com/primer/lightandcolor/birefringence.html>

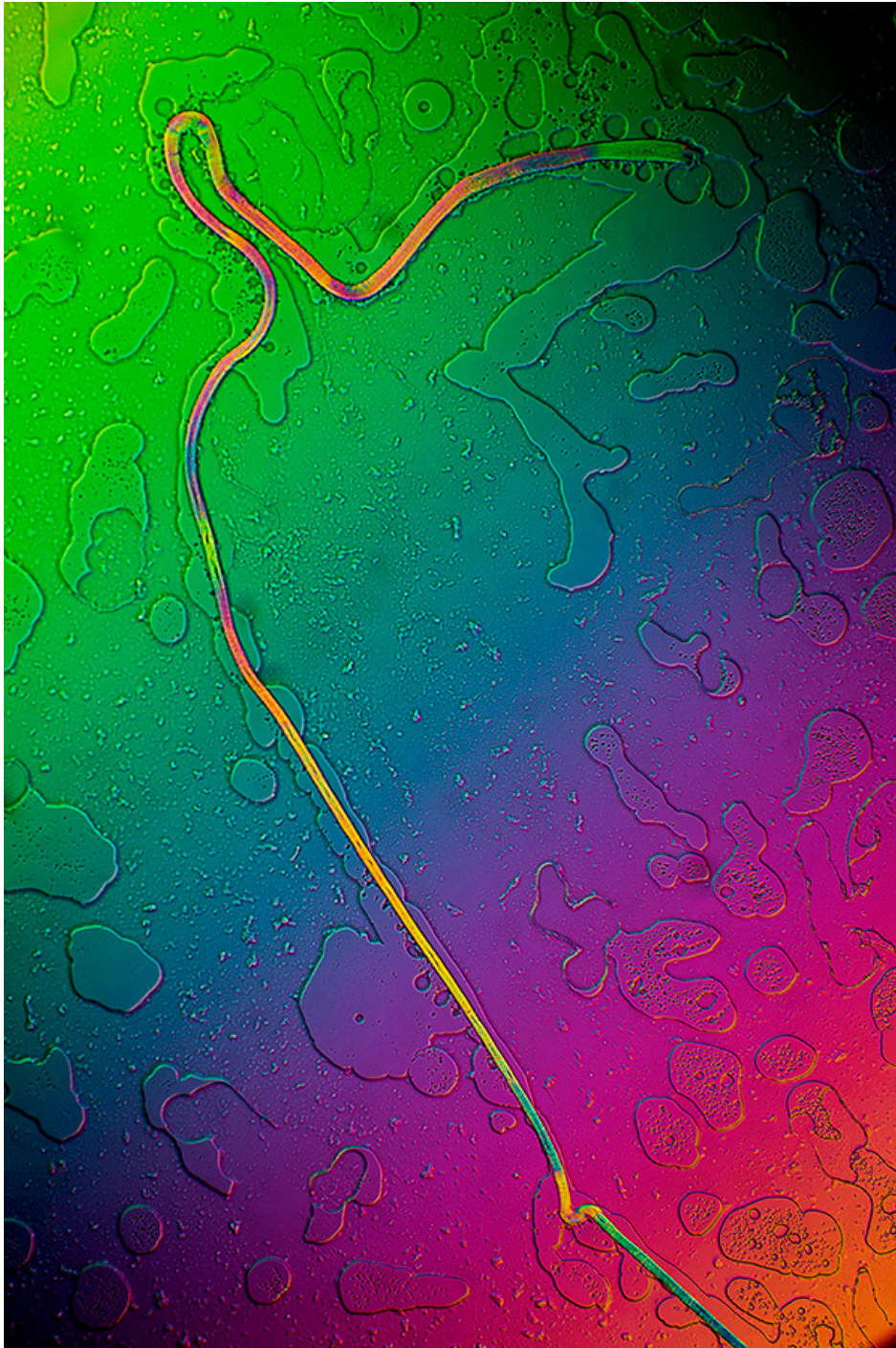
# Material Behaviors

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- Birefringent materials
  - Exhibit birefringence
- Multiple refractive indices – anisotropic
  - Single refractive index - isotropic







# Anisotropic Compounds

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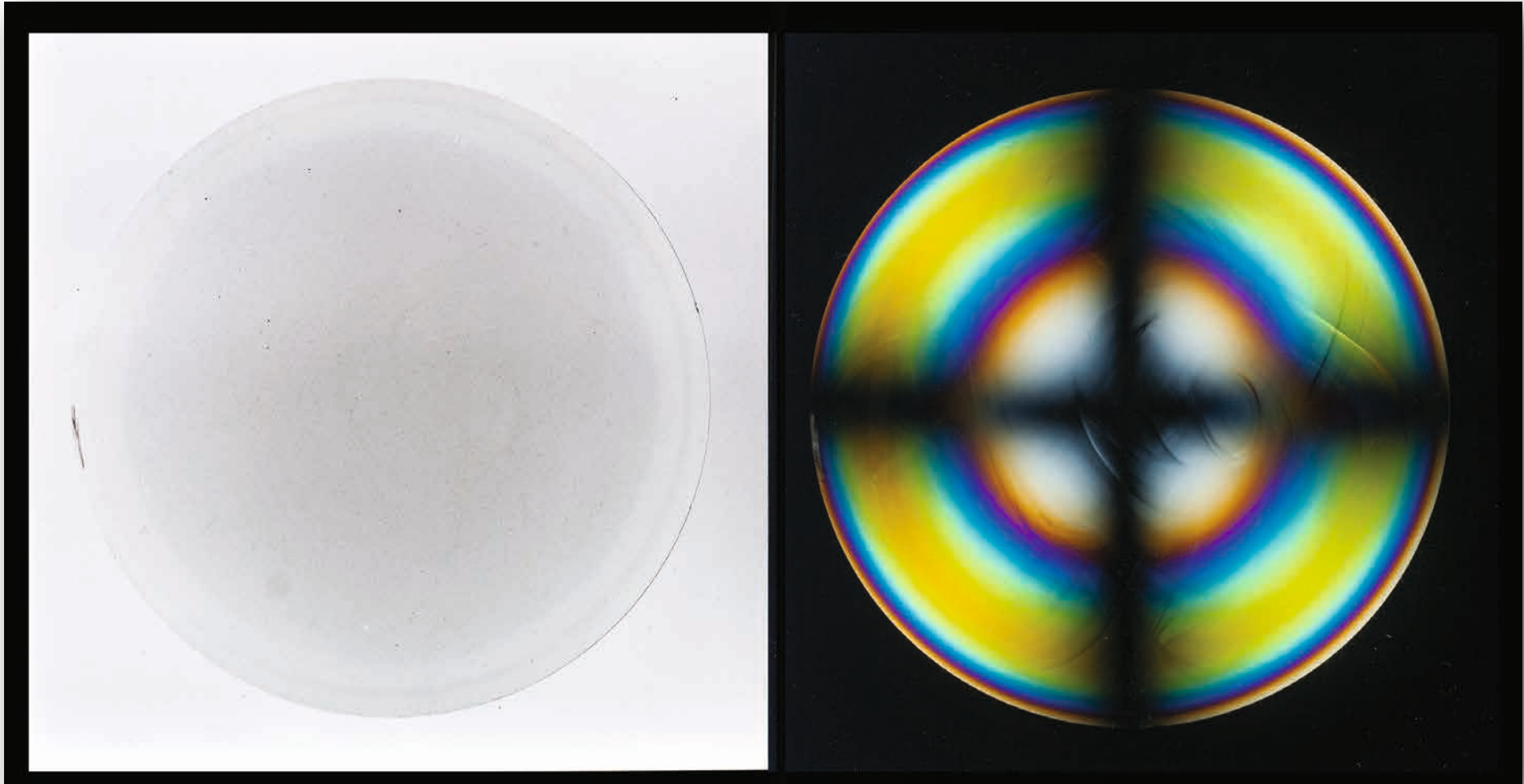
- Multiple refractive indices
  - Birefringent compounds
- Reveals birefringence in a material

# Stress free objectives

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POL





# Circular stage

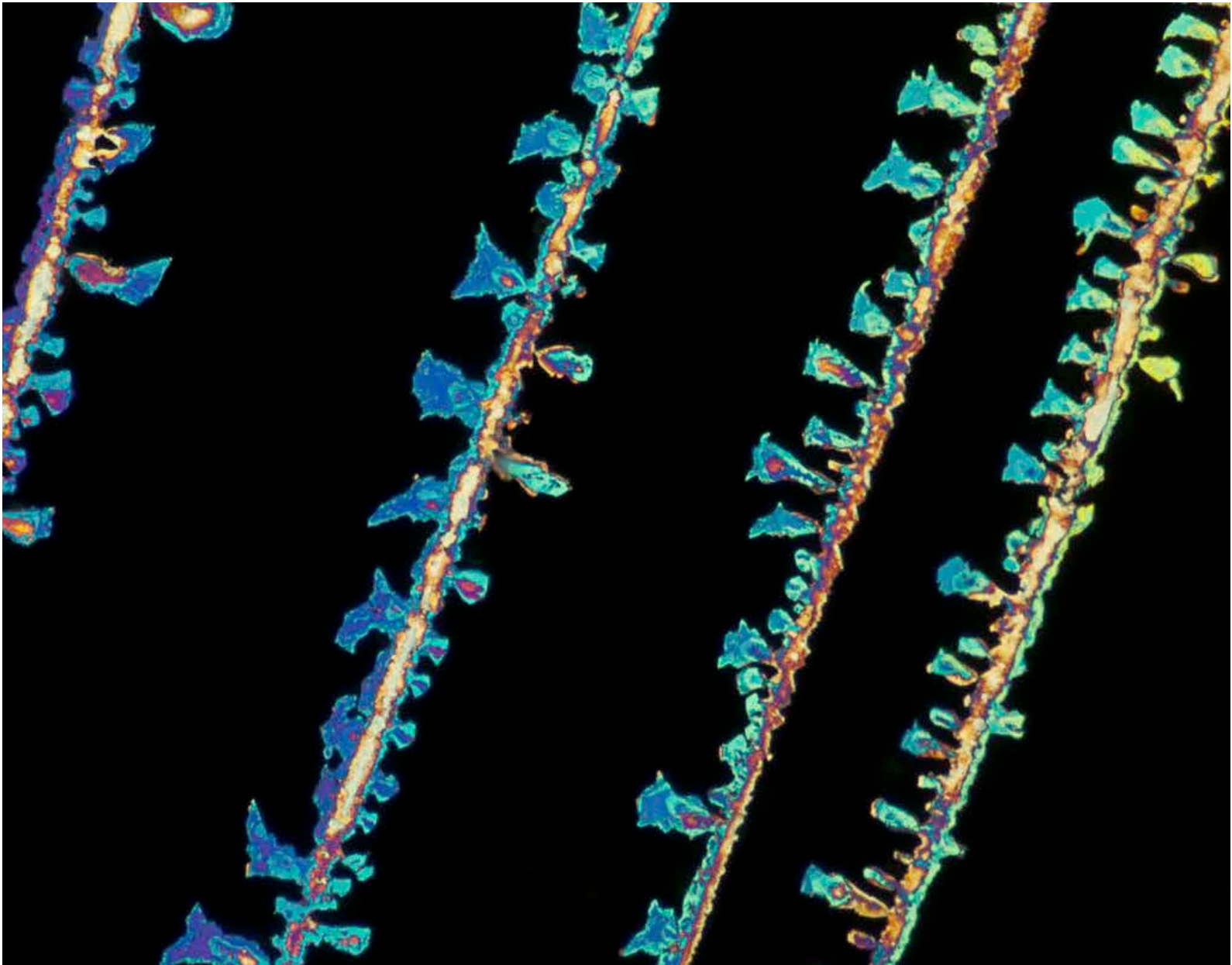
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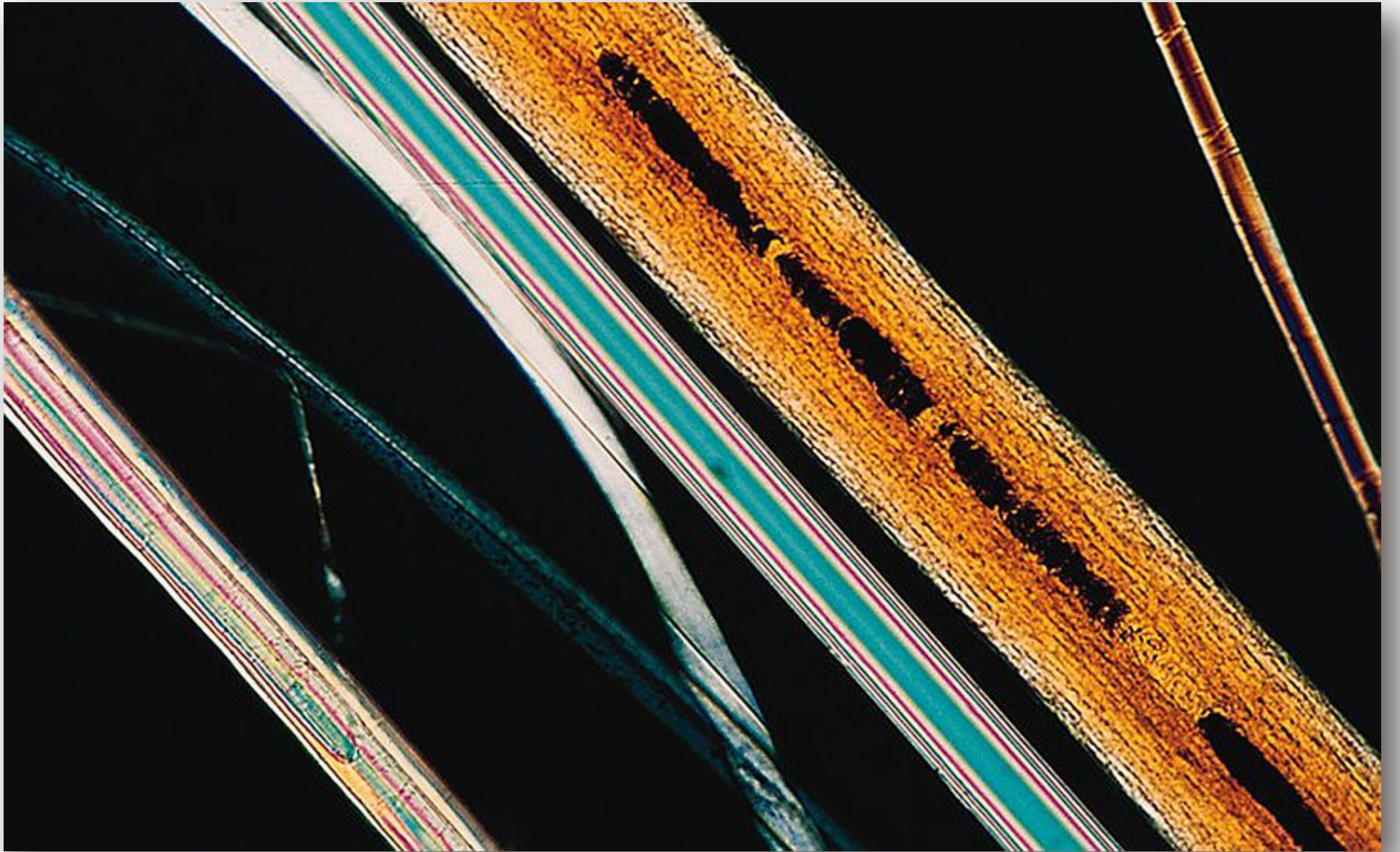
Kohler

Polarizer

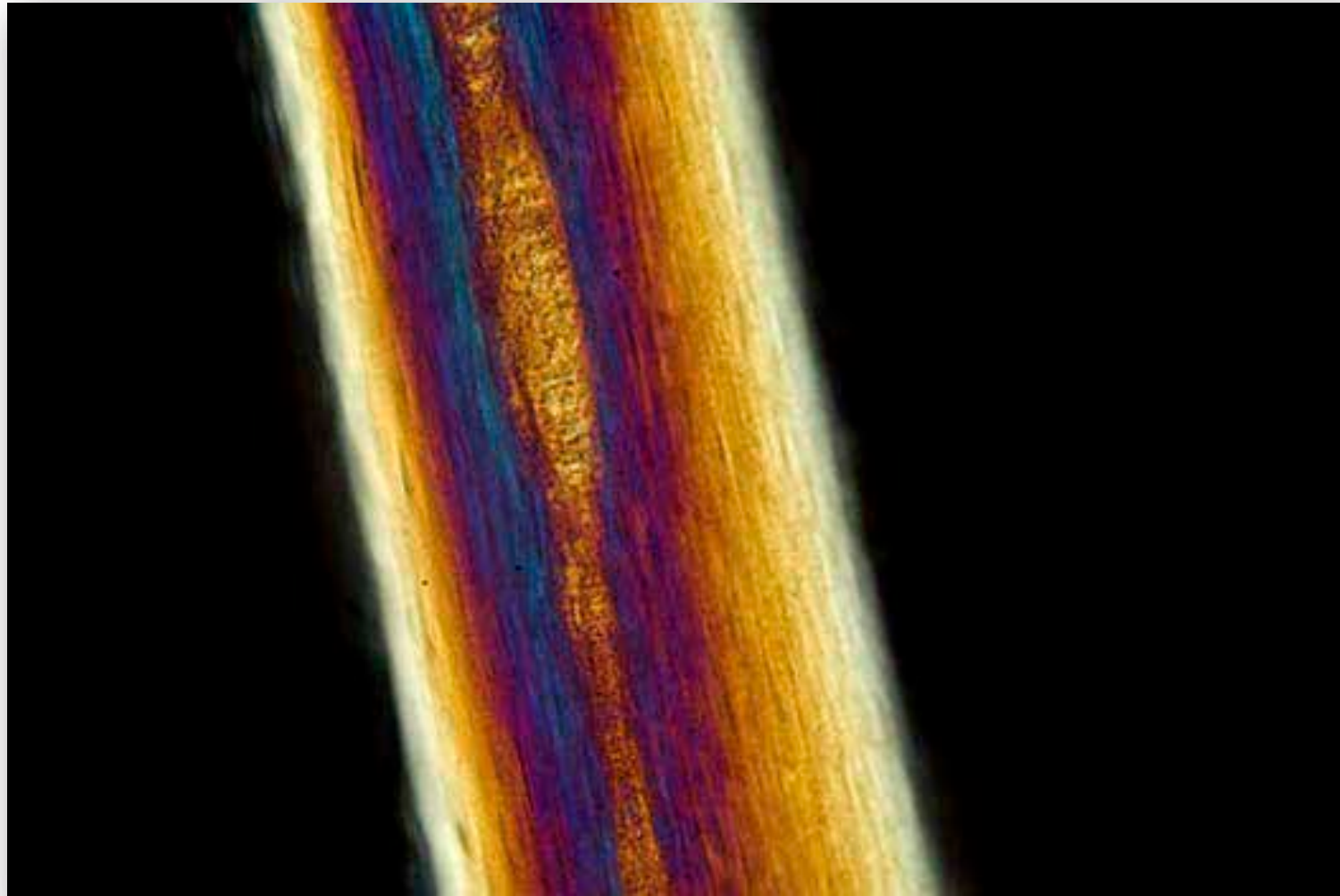
Analyzer

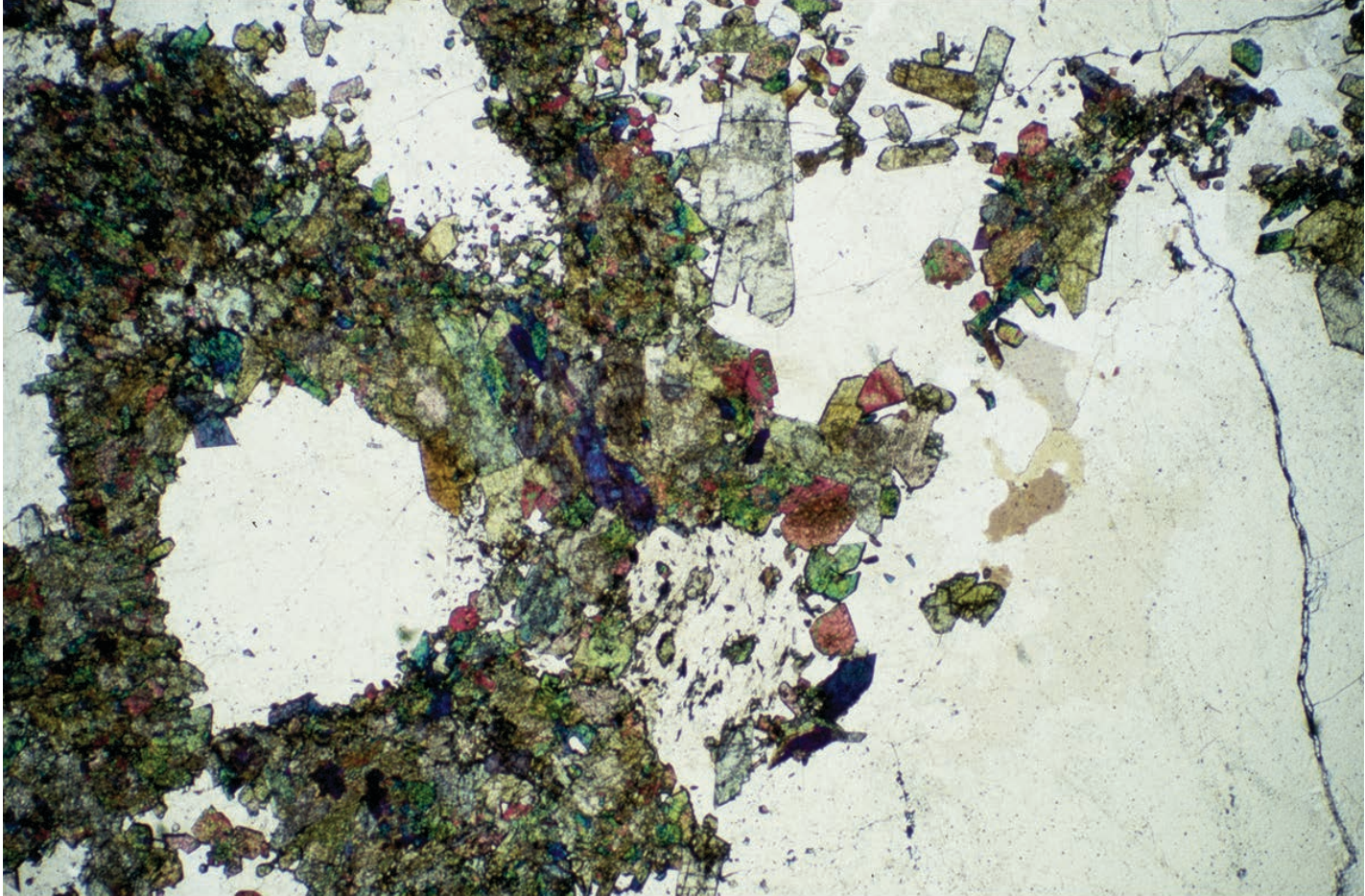
Angle of extinction

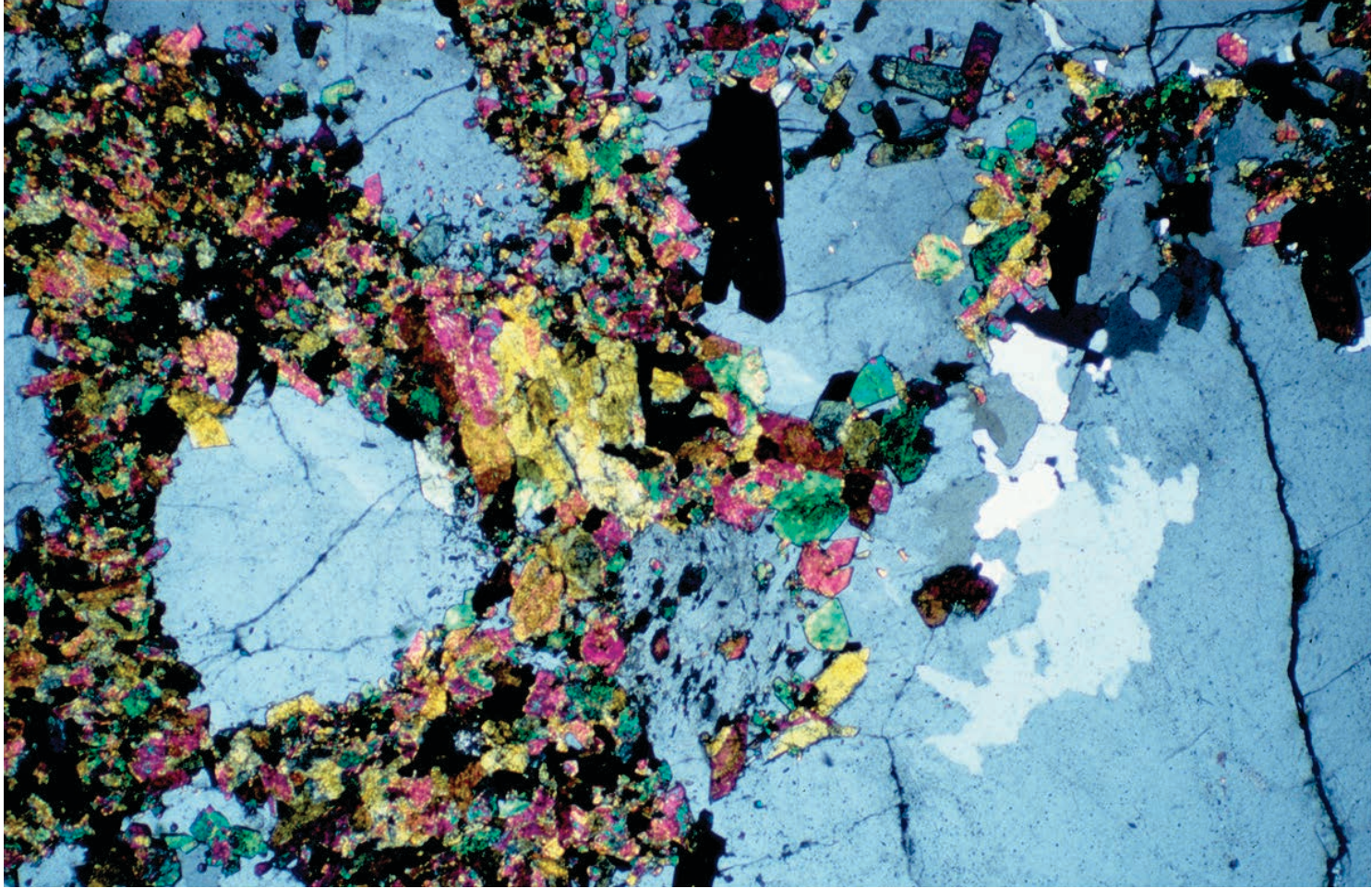




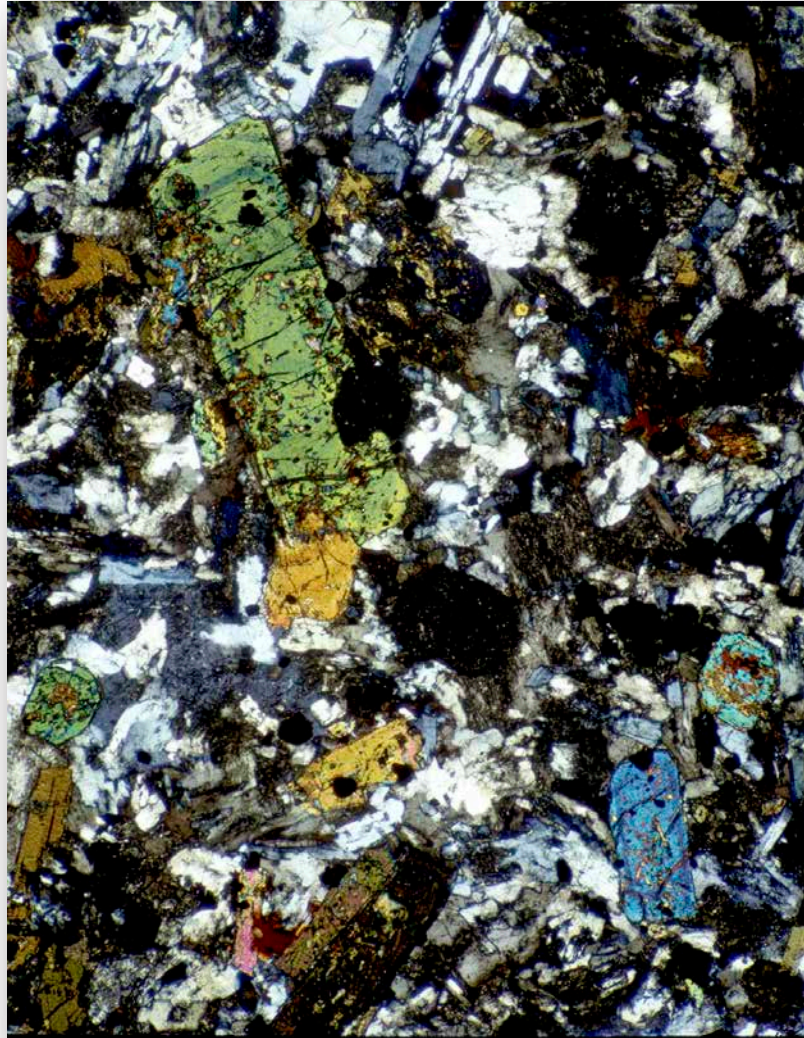






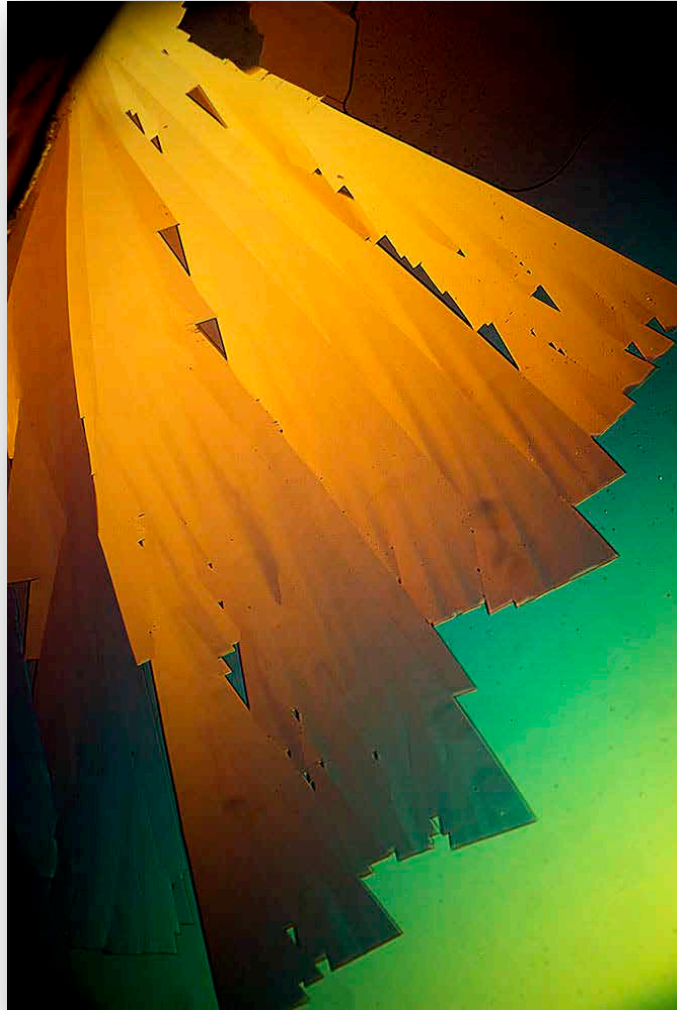






North American Minerals  
Alkalic syenite

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Merck® Foradil  
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