



HOW TO SET KÖHLER ILLUMINATION



1. Switch the microscope on.

2. Switch on the light source.

3. Check the shutters

Is there a Shutter?

Yes

No

Open it fully

4. Check the Beam path

Beam Path free of filters
or
additional components?

Yes

No

Remove Fluorescence filters
Neutral density filters
or DIC components

5. Check the condenser

Condenser fixed
and roughly centered?

Yes

No

Use Centering screws of the
condenser mechanics, turn them
Until condenser is roughly centered
(without looking through the eye pieces)

6. Select an "empty" position
In the condenser.
(labeled as BF- Bright field or
HF- Hell Feld)

FIG. 1

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7. Put the condenser top lens in position.
(only for upright systems)

8. Secure your sample on the stage.

9. Choose low magnification objective - preferably 10X



10. Check the Field diaphragm (FD)

FIG. 1

Is the FD open?

Yes

No

Open it fully

11. Check the condenser diaphragm. (CD)

FIG. 1

Is the CD open?

Yes

No

Open it fully

12. Bring the condenser close to sample.

13. Adjust light intensity to comfortable working levels.

14. Focus your sample

Do you have problems focusing the sample?

Yes

No

Check focusing procedure guide

15. Fully close FD

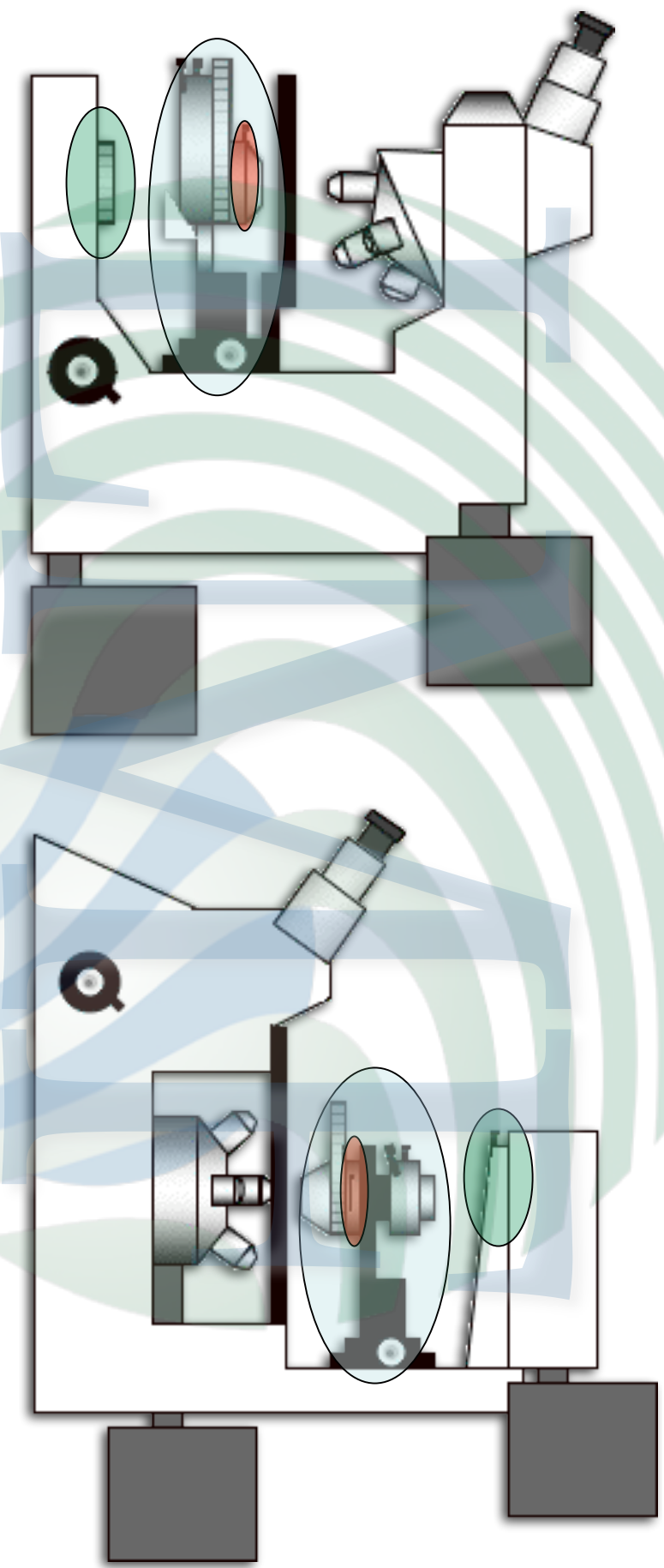
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FIGURE.1

UPRIGHT MICROSCOPE

INVERTED MICROSCOPE



○ Condenser

● Field Diaphragm. (FD)

● Condenser Diaphragm. (CD)



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16. Check the FD

FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

Is the image of the edges of the FD sharp?

Yes

No

Adjust the height of the condenser using the condenser focus knob

Is the image of the edges (polygon) of the FD in the center of the field?

Yes

No

Looking through the eye pieces, turn the Centering screws of the condenser mechanics. until image of FD (polygon) is centered

Open the FD until it's image is at the edge of the field of view

Re-center the FD.
For fine re-centering of FD, all edges of The polygon must touch the borders of the field of view

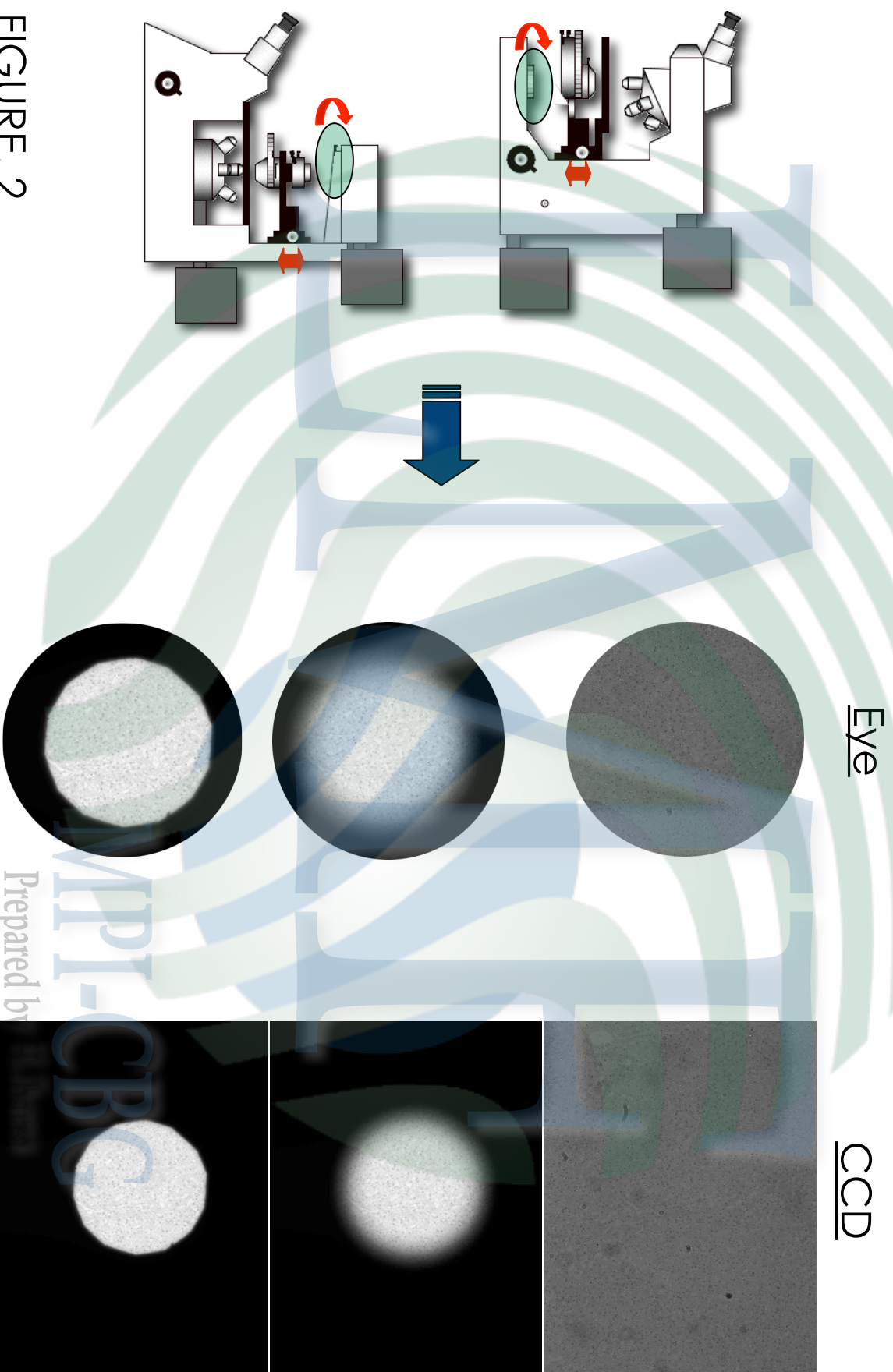
Open the FD until it's image is just out of the field of view. (Eyepiece or CCD chip)

17. Check the CD

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FIGURE. 2



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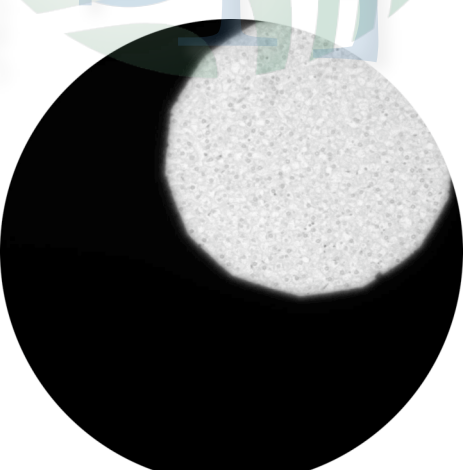
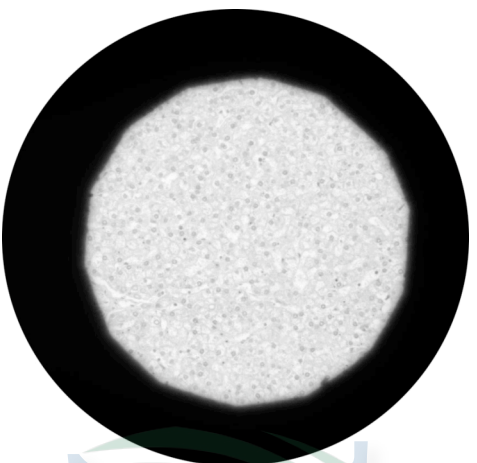
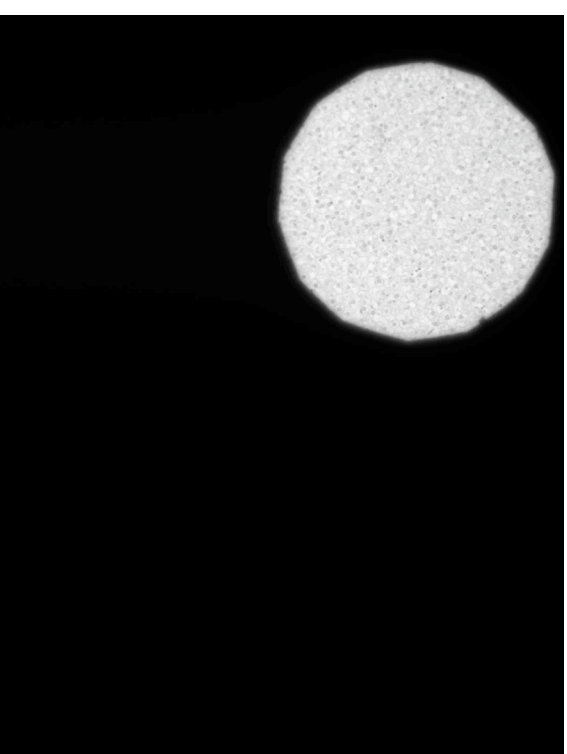
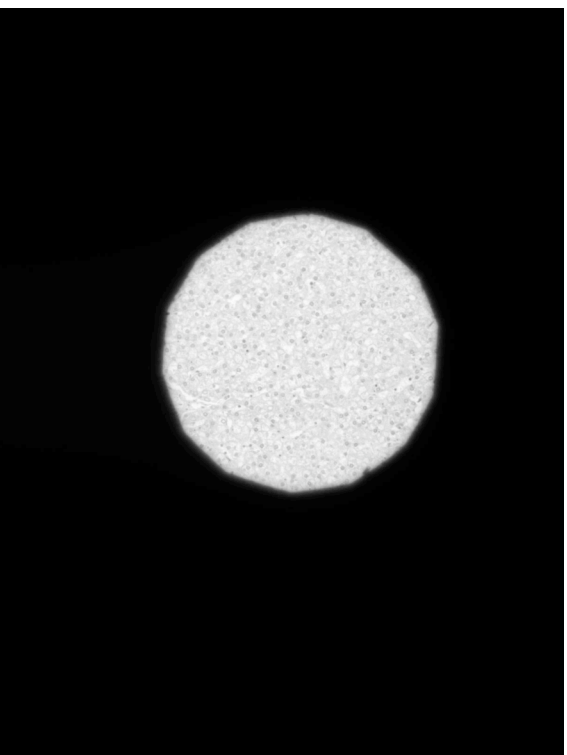


FIGURE. 3

PI-CBG

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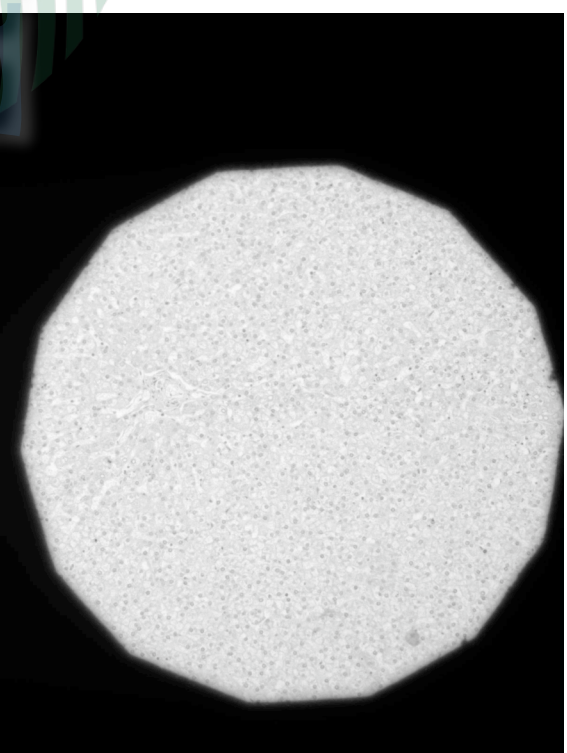
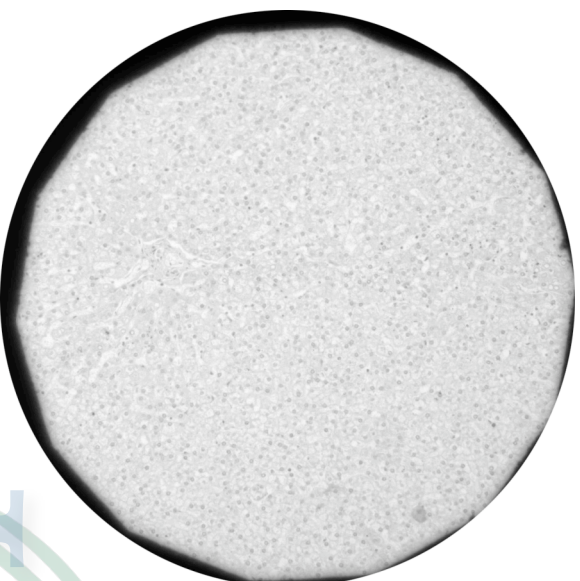


FIGURE. 4

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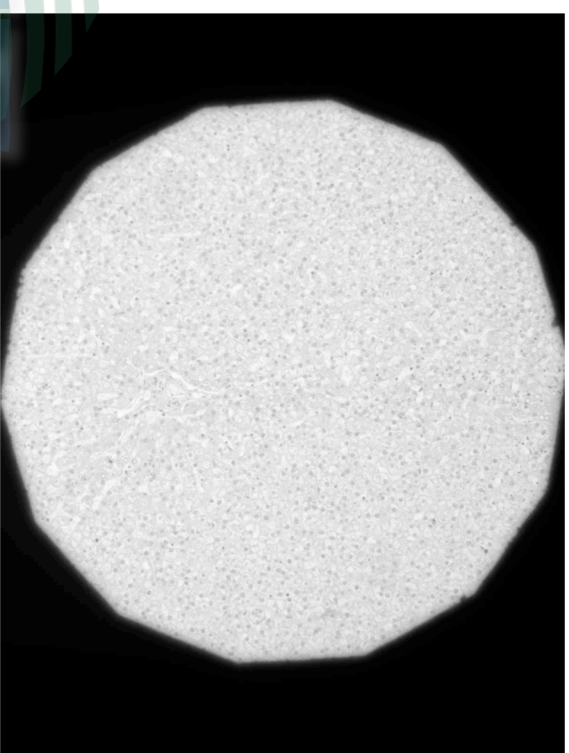


FIGURE. 5

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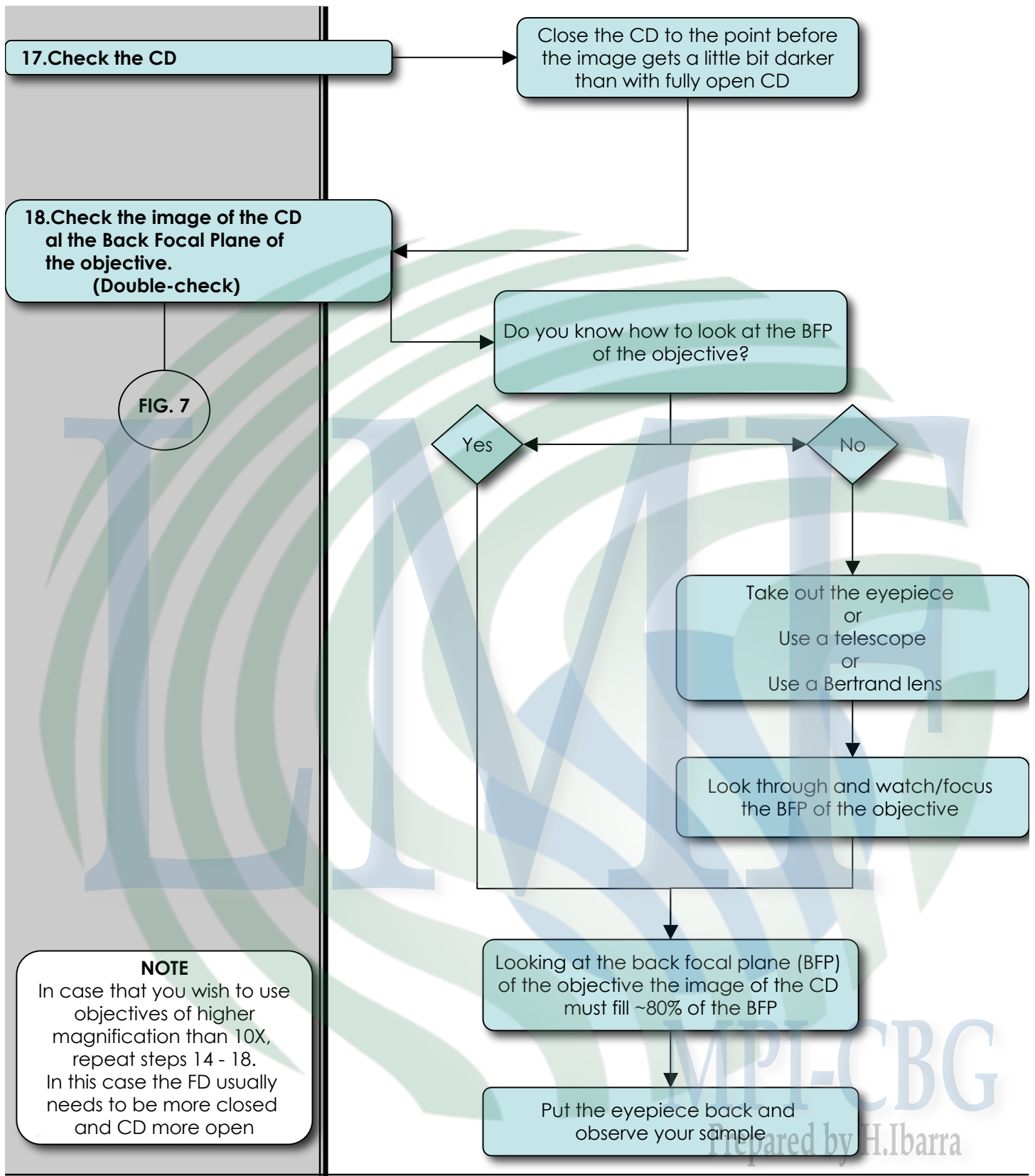


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FIGURE. 6

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YOU'VE JUST SET KÖHLER ILLUMINATION
HAPPY IMAGING





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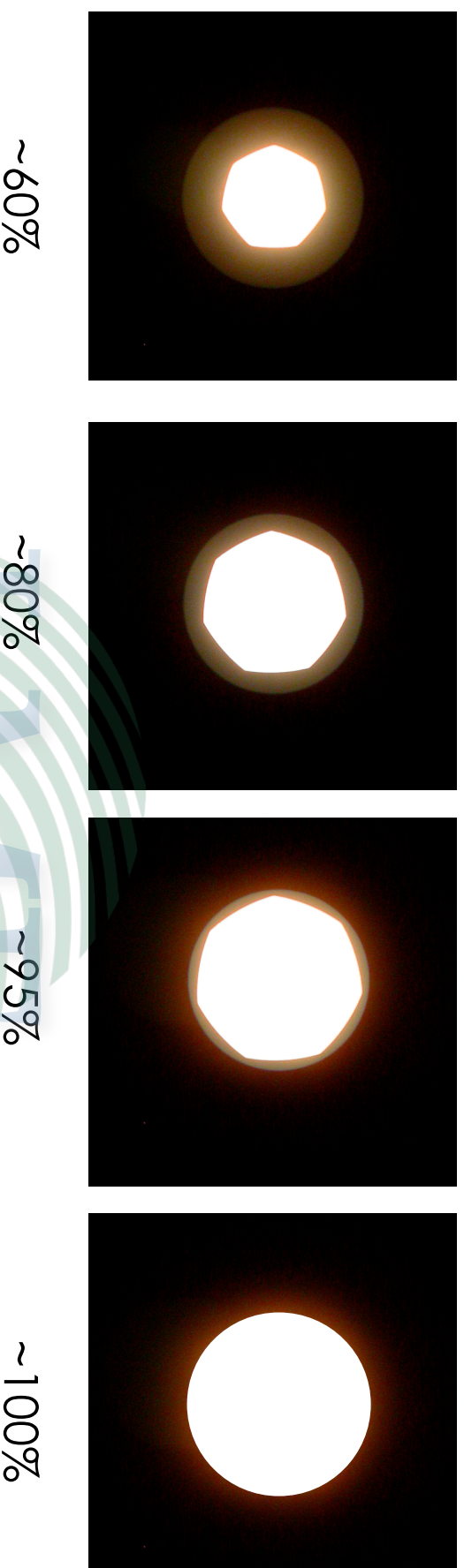


FIGURE. 7

MPI-CBG
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