

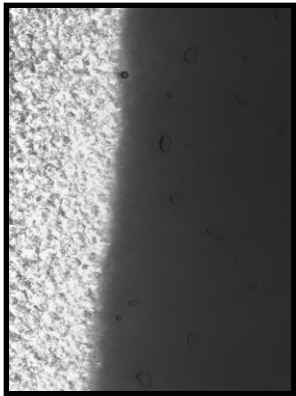
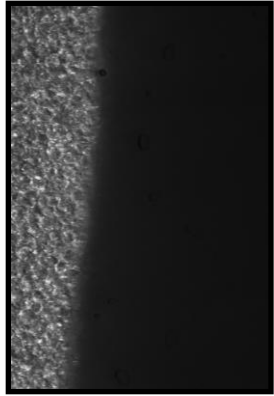
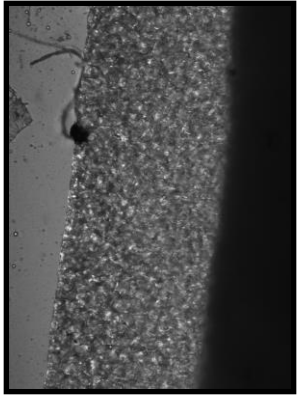
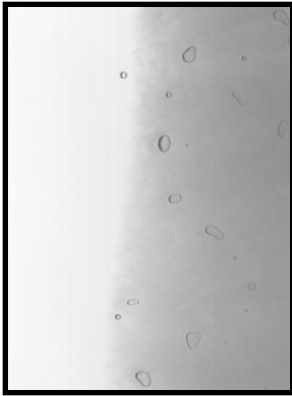
**METCOMP
Filling
and
Breadboard
Tests**

Cartridge Filling Procedure

	+	-	comments
temperature field		an insufficient temperature at the root of the front clamp	bad luck
filling time	quick		additionally isolation
syringe	it works		vapor, if syringe is removed from the reservoir
cartridge		bubbles	at the straws
observation area	no bubbles		

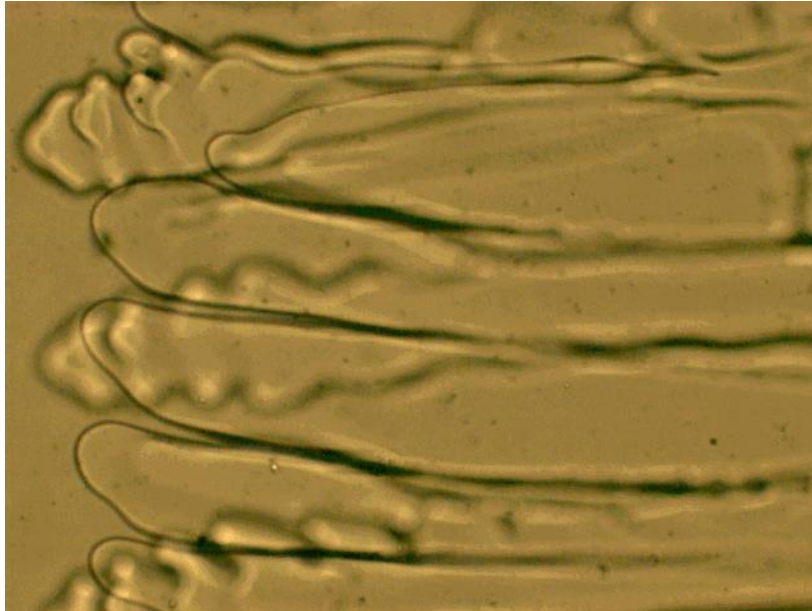
Conclusion: Acceptable, under the assumption of a homogeneous temperature field.

Different Optical Solutions by Lambda X

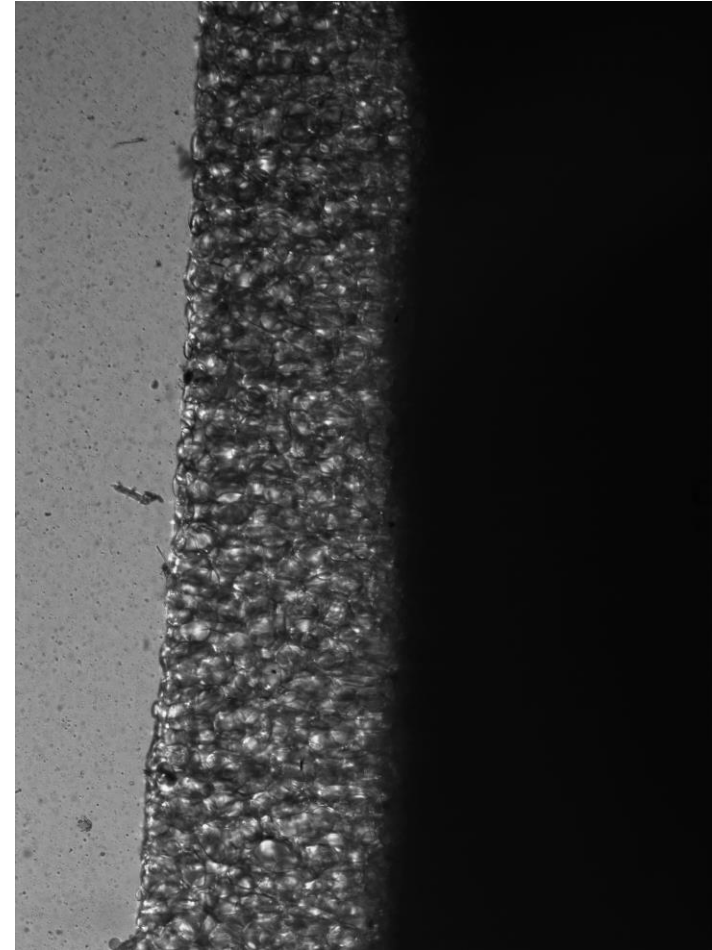
			
dark field blue	50000 int time dark field blue	30000 int time dark field + bright field blue	saturated dark field blue
acceptable	o.k.	o.k.	not acceptable

Breadboard Test Result for $V = 0.128 \mu\text{m/s}$

MUL



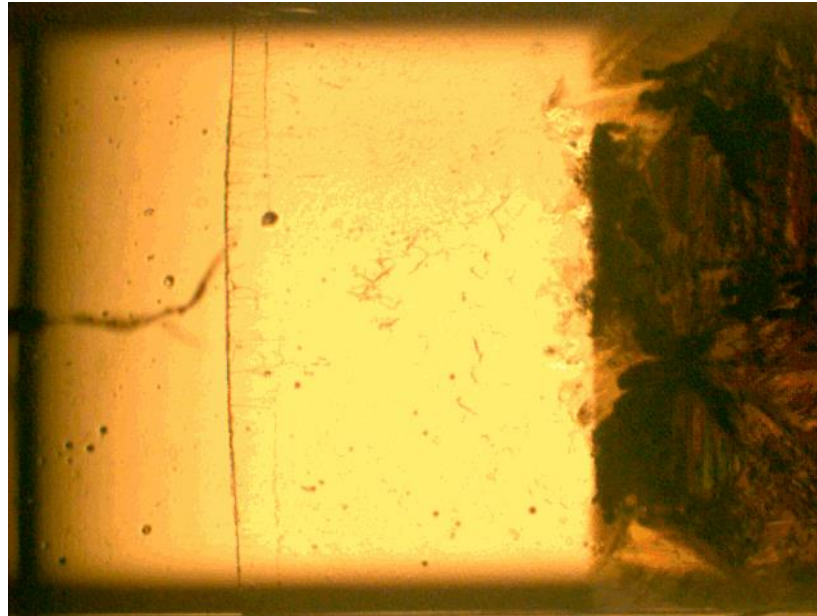
BB test



Conclusion: optical solution acceptable,
temperature gradient to
steep.

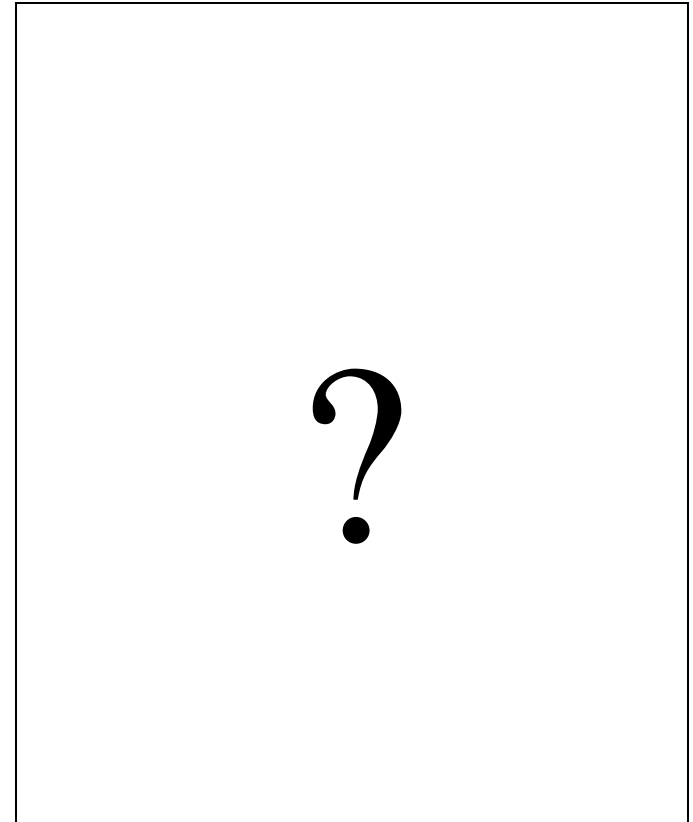
Breadboard Test Result for $V = 0.9 \mu\text{m/s}$

MUL



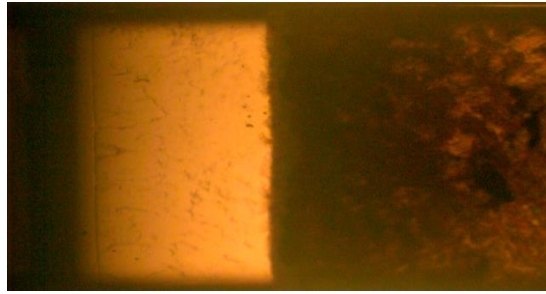
Conclusion: still open.

BB test



Comparing of the Optical Solutions of MUL and Lambda X

1.5 mm

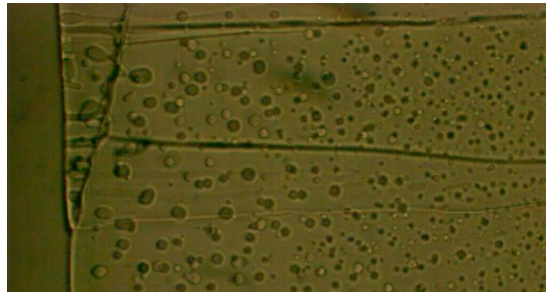


MUL overview

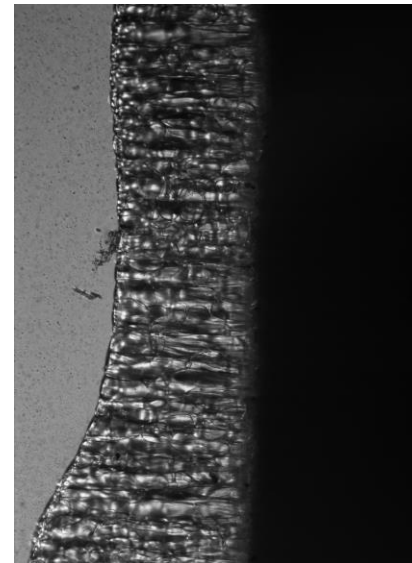


MUL bands (19 μm – 80 μm)

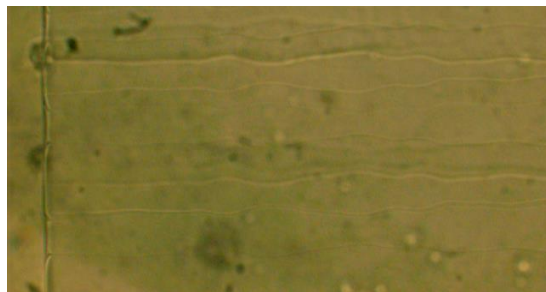
300 μm



MUL second phase



BB test



MUL coupled growth

MUL: 1/2", 648 (H) x 484 (V) pixel @ 60 Hz

Conclusions

		results	remarks
procedures	filling	o.k.	improve the isolation
	breadboard	o.k.	temperature gradient to steep
parameters	$V = 0.128 \mu\text{m/s}$	o.k.	temperature gradient to steep
	$V = 0.89 \mu\text{m/s}$		still open
satisfaction		80% + 20% -	temperature gradient
planned objectives			variation of the G/V ratio
open issues		FoV	both corners are necessary
		G_T	solid/liquid interface to close to the hot zone of the furnace

Thank you for listening



TRIS under Moving Conditions

