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Subject: Minutes of Telecon (fwd)

Minutes of the Core Optics Telecon, Thursday, July 12, 2001

Caltech: Jordan Camp, Dennis Coyne, GariLynn Billingsley, Ren-Yuan Zhu

MIT: Gregg Harry, Norna Robertson, Dave Ottoway

Stanford: Shiela Rowan, Roger Route, Marty Fejer

Glasgow: Jim Hough

Jordan reporting on Crystal systems.

Crystal Systems has received the new annealing oven, they are working on it's commissioning.

Ren-Yuan Zhu reporting on his and Jordan's trip to Shanghai Institute of Optics and fine Mechanics (SIOM)

Background: SIOM has grown 36 samples over 3 years, three of which were delivered to LIGO. These were C-axis samples that showed promising absorption. These are grown by the Thermal Gradient Technique (TGT)

We are now in a second phase with SIOM. They have just entered into a joint venture with a Hong Kong company. Because of this they now have 10 ovens in a new, modern facility, these currently grow 3" sapphire.

They now have the oven which was funded by LIGO, they need to locate the space for this oven. They will soon try for 32 cm diameter pieces. They have currently agreed to deliver small samples of sapphire by the end of July for absorption measurement. They will also deliver 11cm dia 8 cm thick M-axis sapphire.

SIOM has proposed the use of YAG for LIGO, which they also grow(doped) by TGT and Czochralski method. They will grow 1cm cube YAG samples for testing. These should be available by September.

GariLynn reporting on Spot polishing

Goodrich has the removal rate data for m-axis sapphire and can now proceed with the estimate for spot polishing the large piece. They expect to have the estimate to us in a couple of weeks. The CSIRO change order is in place for spot polishing, we are now waiting on delivery of sapphire from CSI.

Roger reporting on Absorption

There have been no new measurements, Alex is still reconfiguring the setup. The new post doc is getting some hands-on time with Alex, so momentum is picking up. Jordan mentions that it would be good to have the measurement capability at Caltech.

Nothing new with the Hydrogen annealing oven, Roger is waiting for absorption measurements on his last batch.

Q-test substrates

Mindrum expects delivery sometime this week, they are currently a month behind. They are having trouble getting figure and microroughness to come in at the same time, and they have broken some pieces. We have put a duplicate order in with Wave Precision (GO), who has a 12 week turnaround now.

Jordan, Roger and Shiela plan to meet with Gary DeBell of MLD on Monday the 23 of July to discuss the next coating phase.

Jim Hough asked about the status of getting some SV glass for q-testing. Jordan reports that Helena has been working on it and that we have some ordered.