SMFL Users News Letter Number 131016 V4.1http://people.rit.edu/lffeee/newslettersDr. Lynn Fuller, Microelectronic Engineering, Rochester Institute of Technology

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This News Letter is intended to provide information of interest to MicroE faculty and other users of the SMFL. It is a report on equipment and processes used in the SMFL with emphasis on changes, problems, and details that may not be generally available to users. I distribute this to the MicroE faculty and others. If you feel that this News Letter has some information that might be useful to your graduate students please forward it to them. Past newsletters are posted on Dr. Fuller's webpage.

STS Deep Trench Etch: The installation of Deep Trench RIE tool is in progress.



ASML Stepper: A new laser for stage position measurement has been installed. The stage position has been calibrated. The wafer handling robot was not working so overlay calibration could not be completed by ASML. John Nash did get the robot working but the wafer position on the stage was slightly different than the previous position. Stephanie Bolster's contacts as ASML provided phone assistance to her so that she could do the calibration of the wafer starting position on the stage. The result was successful overlay. The tool has been working great recently.

One change of importance is that the tool vacuum is now interlocked with the card swipe system, so that when the tool is not swiped in the vacuum is turned off. This gives an error message that can be cleared by swiping into the tool and from the main menu selecting FULL SHUT DOWN, followed by FULL START UP. It takes about 30 seconds for the shut down and a few minutes for the start up but avoids errors.



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SSI Track: The photoresist pump has been installed in the SSI track and has been interfaced with the track software. Recipes using the pump to dispense need to turn on the pump for 4.5 seconds. Your recipe should look like this for the coat module. The 1 turns on the pump, the 4.5 is the dispense time.

SET VALUE TOLERANCE BAKE TIME DISPENSE	140.0 5 60.0	OVEN2 OV 90.0 .0 5 0 60.0 .0 .0 .0	EN3 OVEN O O O O	00011
STEP 1 SPEED 0 TOLER. 25 ACCEL. 16 OUTPUT 1 TIME 4	5 VERT:29 99 SP:.0 0	DY:.0 0 0	EP : . 0 0	RA :8
STEP 2 SPEED 20 TOLER. 25	MODE:0 900 5 VERT:2. 5000 SP:.0 0	.0 .(0:spin 1:ag 0 DY:.0 0 0 .0 .0	it 2:pos) EP:.0 R 0_	.0 3 4 5 6 E 7 C 8 P 9 P .0