



OSU Nanotech West Cleanroom Facility

Staff Responsibilities List

Revised 12 March 2008

RJD

Togging Room

Tool or capability	Tool Entity	Opspec(s)	Primary Contact	Secondary Contact	Notes
Cleanroom orientation and safety tour	None	Opspec in development	Steffen	Carlin	Required with TOG01 for user access to cleanroom; covers safety exits and basic usage of facility
Togging room	TOG01	Opspec in development	Grimm	Steffen	Covers togging procedure

Bay 1

Tool or capability	Tool Entity	Opspec(s)	Primary Contact	Secondary Contact	Notes
Bay 1 overall responsibility	BAY01	none	Bross		
Vistec EBPG-5000 electron beam pattern generator	EBL01	Opspecs in development	Bross	Davis	Staff and specially trained users only
Vistec optical alignment microscope	INS05	Opspec in development	Bross	Davis	Optical aligner for e-beam tool; staff and specially trained users only
Zeiss Ultra 55 Plus field-emission scanning electron microscope	SEM02	future	Bross	TBD	Future capability (estimated June 2008)
MTS Systems chemical hood	HOD07	Opspec in development	Steffen	Grimm	Pirhana / BOE / KOH
ReynoldsTech chemical solvent hood	HOD10	Opspec in development	Steffen	Bross	This hood intended primarily for solvents; contact staff member in charge for uses other than standard solvents
Olympus BX51TRF optical microscope	INS04	INS04	Bross	Davis	BF, DF, pol, DIC. The listed opspec is for regular illumination use only. Users needing the fluorescence unit must be trained on FLR01 listed below.
Olympus fluorescence attachment for INS04	FLR01	FLR01	Bross	Davis	Users must be trained on INS04 basic operations before training on FLR01
Laurell WS-400A-6NPP spin coater	COT02	Opspec in development	Grimm	Bross	
Versatile Technologies spin rinse dryer	SRD01	SRD00	Steffen	Grimm	Users can self-certify on this and other SRDs in cleanroom; shared procedure with SRD02, SRD03

Bay 2

Tool or capability	Tool Entity	Opspec(s)	Primary Contact	Secondary Contact	Notes
Bay 2 overall responsibility	BAY02	none	Ditmer		
Electronic Vision (EV) Group model 620 contact aligner	ALN01	ALN01	Ditmer	Carlin	Does not have more advanced capabilities of ALN02 below
Electronic Vision (EV) Group model 620 contact aligner	ALN02	ALN02	Ditmer	Carlin	100mm, 125mm, and 175mm mask chucks available (both ALN01 and ALN02)
Fisher Isotemp hotplate	HTP01	Opspec in development	Davis	Bross	Shared opspec with HTP02 below
Fisher Isotemp hotplate	HTP02	Opspec in development	Davis	Bross	Shared opspec with HTP01 above
Cost Effective Equipment model 100CB spin coat/bake	COT03	Opspec in development	Ditmer	Bross	
Electronic Vision (EV) Group model 520 wafer bonder	BND01	Opspec in development	Ditmer	Grimm	Tooling available for small parts through 100mm (4") wafers; wafer bonding and micro- and nanoembossing
MTS Systems photo developer hood	HOD08	Opspec in development	Steffen	Grimm	
Blue M convection process oven with 550 controller	OVN01	OVN00	Ditmer	Bross	Shared procedure with OVN02
Blue M convection process oven with 550 controller	OVN02	OVN00	Ditmer	Bross	Shared procedure with OVN01
Yield Enhancement Systems YES-3 vacuum bake / vacuum prime oven	OVN03	OVN03	Ditmer	Carlin	HDMS prime oven
Versatile Technologies spin rinse dryer	SRD02	SRD00	Steffen	Grimm	Shared procedure: users can self-certify; see listing for SRD01

Bay 3

Tool or capability	Tool Entity	Opspec(s)	Primary Contact	Secondary Contact	Notes
Bay 3 overall responsibility	BAY03	none	Steffen		
Atomic layer deposition tool	ALD01	Opspec in development	TBD	TBD	Future capability (est. June 2008)
Denton model DV-502A e-gun thermal evaporator	EVP01	EVP01 Draft opsec in circulation	Grimm	Ditmer	Variety of pure metals and SiO ₂ available
Technics Micro-RIE 800-II reactive ion etcher	ETC01	ETC01	Grimm	Ditmer	Oxygen, CF ₄ , CHF ₃ , and Ar available
Lam Autoetch 490 plasma etcher	ETC02	Opspec in development	Grimm	Ditmer	Runs chlorine chemistries; opspec shared with ETC03
Lam Autoetch 590 plasma etcher	ETC03	Opspec in development	Grimm	Ditmer	Runs fluorine chemistries; opspec shared with ETC02
MTS Systems wet chemical hood (HOD09	Opspec in development	Steffen	Ditmer	HF / BOE
Semitool Hydro3 ozonated spray acid tool	SAT01	SAT01	Steffen	Grimm	
Versatile Technologies spin-rinse dryer	SRD03	SRD00	Steffen	Grimm	Opspec shared with SRD01, SRD02
CVD Equipment LP-CVD polysilicon deposition tube furnace	FRN01	Staff operation only	Steffen	Pussadee	Undoped polysilicon; note that furnace tubes -01, -02, -03, and -04 share same physical stack and controllers
CVD Equipment LP-CVD silicon nitride deposition tube furnace	FRN02	Staff operation only	Steffen	Pussadee	Stoichiometric and low-stress nitride recipes available
CVD Equipment diffusion / annealing tube furnace	FRN03	Staff operation only	Steffen	Pussadee	Solid source boron diffusion process tube
CVD Equipment dry/wet oxidation tube furnace	FRN04	Staff operation only	Steffen	Pussadee	Silicon oxidation tube

Bay 4

Tool or capability	Tool Entity	Opspec(s)	Primary Contact	Secondary Contact	Notes
Bay 4 overall responsibility	BAY04	none	Grimm		
Nu-Aire model NU-425-400 biological safety cabinet	BSC05	BSC00	Steffen	Grimm	Shared opspec with other BSC's in laboratory
Gaertner L116S single-wavelength ellipsometer	ELP01	ELP01	Carlin	Steffen	HeNe 633nm tool
Leitz Ergolux AMC optical microscope	INS01	INS01	Carlin	Bross	BF/DF with Javelin camera and image capture system
Nanometrix Nanospec model 3000PHX optical thin film measurement tool	NMX01	NMX01	Carlin	Davis	400-800nm wavelength range
Karl Suss PM 5 electrical probe station	PRB01	PRB01	Carlin	Davis	Variety of low-frequency test capabilities available including NI GPIB computer control
Sloan Dektak3 surface profilometer	PRF01	PRF01	Grimm	Steffen	
A.G. Associates 210 rapid thermal annealing furnace	RTA01	Opspec in development	Carlin	Steffen	In installation 3/31/08