GLOBAL ONLINE AUCTION

STARTING: August 13, 7:00 am ENDING: August 14, 10:00 pm PDT



A Bulk and Piecemeal Global Online Auction: Complete Facility Closure by Order of Nanosolar, Inc.

Featuring World Class Assets For The Solar, Semiconductor, Automotive, Biopharmaceutical, and Machine Tool Industries.

Complete Facility Closure by Order of:

Nanosolar, Inc.

AUCTION DATES:

Starting: August 13, 2013 - 7:00 am PDT **Ending:** August 14, 2013 - 10:00 am PDT

AUCTION & PREVIEW LOCATIONS:

5521 Hellyer Ave, San Jose, CA 95138

PUBLIC INSPECTION:

Two Day Preview: August 12th and 13th 9:00 am - 4:00 pm Local Time or by appointment.



AUCTIONEER'S NOTE:

HGP is pleased to be selected to conduct this Bulk and Piecemeal Global Online Auction for Nanosolar, Inc.

This Global Online Auction features World Class Assets For The Solar, Semi-conductor, Automotive, Biopharmaceutical, and Machine Tool Industries.

Please view our website at **www.hgpauction.com** for the bidding instructions and the full terms of the sale. Thank you for your interest, and we look forward to providing you quality equipment sales and World Class Service.

ADDITIONAL INFORMATION:

For more information including a photo gallery, equipment list, terms and conditions of sale and more, please visit **www.hgpauction.com**.

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www.hgpauction.com

FEATURED SOLAR EQUIPMENT

CONQUIP CIG COATER COMPLETE CIG COATER (2008)



SPUTTERING SYSTEMS

Anelva (Canon) SL3201Complete TiN/Mo #2 roll to roll sputtering system (mfg 7/2011), Inline system consisting of ConQuip winders w/ web steering
 Semicore SC943 Horizontal Inline Batch Sputtering System with Heat Cure Process, SRS RGA 100 Residual Gas Analyzer, Control Cabinet Contains Beckhoff 15" Flat Screen Monitor, (2) AE Pinnacle Plus Pulsed-DC Power Supplies, AE Dressler Cesar RF Power Generator, CyberPower 1500AVR

CHEMICAL DEPOSITION SYSTEM

2 – CdS roll to roll Electroless Chemical Deposition system (mfg 9/2011), consisting of: 27" - 32" rolls, with unwind and rewind stations, web steering rollers, 17 chamber upper process w/ Allen-Bradley and Mitsubishi controls, Zurich color imagery thickness measurement metrology system

COATERS

- 1- CIG coater (2008), roll to roll system to include ConQuip winders w/ web steering, additional interleaf winding and takeup station
- 1 Kurdex K1 TCO #1 roll to roll coater consisting of 13 chambers, w/ ConQuip unwind and rewind stations w/ web steering rollers, (13) Osaka Vacuum TG1100FBWD compound molecular pumps w/ Osaka Vac TC1103 controllers, (6) Sterling M50-6-4-2 and (1) SMCW-3.5 PCW system



INFRATEC PV-LIT LOT: PV-LIT LOCK-IN THERMOGRAPHY SYSTEM (MFG 2010)



SEMICORE SC943 HORIZONTAL INLINE SPUTTERING SYSTEM



SEMICORE SC943 HORIZONTAL INLINE SPUTTERING SYSTEM

1 – Davis TCE roll to roll coater line including 2 slot dies, Megtec 2 zone floating dryer, temp range 300°C - 500°C, vacuum clearance system w/ automatic backing 1 – Northfield Automation 5554 Complete Manufacturing Adhesive Coater and Production Laminator line 1 – Primary-Insulation/TCE Pilot Coating & Lamination Line (Roll Feed/Material Wrap Through; Currently Configured For 7"W Web). [(Footprint 23'Lx5'W) (Stations:TCE Coating; 5-Zone Oven; Venturi Supply; Lamination) (Components Included: AccuWeb Micro1000 Web Guide System; ChemInstruments Hot Roll Laminator; Qty-2 Dell T3400 Computers; Qty-3 17" Monitors)



CHA INDUSTRIES CHA 600 THERMAL EVAPORATOR SYSTEM

STRAND ANNEALERS

- 1 Complete Ebner Horizontal Strand Annealer (2011), Controlled Atmosphere Annealer, 600°C, roll to roll system, web speed 15m/ min, includes hydrogen recycling system
- 2 Ebner Horizontal Strand Selenium Condensation RTP (2011), Contolled Atmosphere Furnaces, roll to roll system, web speed 15m/ min. Consisting of: (2) stand alone evap systems and (4) condensers, selenium process chambers, electric heated process tunnel, inline photoluminescence metrology and More

HORIZONTAL STRAND RTP LINE

2 — Ebner BVHe 86/3/2350 Al-Se-Fv Complete Ebner Horizontal Strand Selenium Condensation RTP (2011), Controlled Atmosphere Furnaces, roll to roll system, web speed 15m/ min. Consisting of: (2) stand alone evap systems and (4) condensers, selenium process chambers, electric heated process tunnel, inline photoluminescence metrology, gas spectrometer, EMG unwind and rewind stations w/ web steering, Kelva and SDI SSA 3/2 web cleaners, Siemens PLC's, PDU panels



NORTHFIELD AUTOMATION 5554 COMPLETE MANUFACTURING ADHESIVE COATER AND PRODUCTION LAMINATOR LINE

FEATURED SOLAR EQUIPMENT

THERMOGRAPHY SYSTEM

1- Infratec PV-LIT Lot: PV-LIT lock-in thermography system (mfg 2010). Lock-in IR tool measures the image by IR w/ LED (Red). Includes infrared thermographic camera ImageIR PC based remote control and (2) Genesys TDK-Lambda programmable power supplies

SOLAR TEST, AND BINNING MODULE

Lot – Feintool Automation TSP Lot: Solar Simulator, Test, and Binning Module. Inline system consisting of (2) Trumpf TruMark 7000 ablation (Yag) laser systems, 2 power supplies, Riedel WKS 018.02.KE-S cooling system (mfg 2007), 8" Newport solar simulator w/ (3) Keithley 2440C Source meters, and 1 non functional laser head

SOLAR SIMULATORS

2 Lots – Newport 93194A-1000 Lot: Solar Simulator, 1000W system, (mfg 2009) includes (2) Keithley 2440 5A Sourcemeters

SOLAR SOAK SYSTEM

1 – Hydrofarm Solar Soak system w/ RD Luminaire series light fixtures

DAVIS - STANDARD COMPLETE ROLL TO ROLL LAMINATE BAKE CONVERTING DRYER







ANELVA (CANON) C-3910 COMPLETE TIN/MO #1 ROLL TO ROLL PVD COATING SYSTEM

INSPECTION _____

 $1-{\rm Davis}$ - Standard Black Clawson Converting Machinery roll to roll inspection station to include unwind and rewind stations, 68'' rollers, Stapla Ultrasonics seam welder, ISRA vision inspection system, ultrasonic controller, SDI contact web cleaner, ultrasonic seam welder, and PDU panels

PILOT COATING LINE

1 — Primary-Insulation/TCE Pilot Coating & Lamination Line (Roll Feed/Material Wrap Through; Currently Configured For 7"W Web). [(Footprint 23'Lx5'W) (Stations:TCE Coating; 5-Zone Oven; Venturi Supply; Lamination) (Components Included: AccuWeb Micro1000 Web Guide System; ChemInstruments Hot Roll Laminator; Qty-2 Dell T3400 Computers; Qty-3 17" Monitors)

CURING

1 – Northfield Automation Rotary Printer w/ UV Curing. SPUV tool (mfg 1/2010) roll to roll system to include Northfield Automation unwind and rewind stations w/ web steering, active alignment, Fusion generator and more



PRIMARY-INSULATION/TCE PILOT COATING & LAMINATION LINE



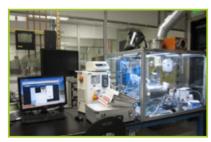
FEATURED SOLAR EQUIPMENT



NORTHFIELD AUTOMATION SYSTEMS BL-04197 ROLL2ROLL, ROTARY SCREEN/ UV CURE PRINT LINE-SYSTEM



OGINO SEIKI NS-600/SUPERCUTTER AUTOMATIC ROLL-FEED CUTTING MACHINE



NETZSH MINICER BALL MILLING STATION

R2R CONDUCTIVE PRINTING SINGULATION LINE

2 – NewLong/Northfield Automation/ ASI Complete CPS (Conductive Printing Singulation) Line. Roll to roll Line 3 (CPS 1) print and cure line to include: Northfield unwind and rewind stations w/ web handling vision system, (2) NewLong Seimitsu Kogyo Co. LZ-1031 & LZ-1032 auto screen printers 24" x 26" (mfg 4/2011), includes: embedded optics alignment system, active X-Y-angle print screen table, automatic ink dispense system and screen cleaning feature, and buffer/ accumulator modules for each screen printer and more

PRINT STATIONS

- 2 Preco MTS-3028 Dual-Squeegee Screen Printer s/n-WSP-1013. For Size Screens 46"x42"x1.5"
 1 Roll-Feed, Screen Print Station. For Film Width 9"; Twin Squeegee; Overall Workstation Dim 7'Lx2'W. With Dymax 400-Watt-EC Light Curing System; Dell Pentium-D Computer And 17" Monitor
 1 Screen Print Station. For Screen Size 19"x16.5"x1"; Twin Squeegee; Overall Workstation Dim 7'Lx2'W. With SuperLogics Computer And 20" Monitor
- 2 VIA Fill & Grid Print Station. For Screen Size 19"x16.5"x1"; Twin Squeegee; Overall Workstation Dim 5'Lx2'W. With SuperLogics Computer And 20" Monitor



 $\textit{DAVIS} - \textit{STANDARD} \ \textit{COMPLETE} \ \textit{ROLL} \ \textit{TO} \ \textit{ROLL} \ \textit{LAMINATE} \ \textit{BAKE} \ \textit{CONVERTING} \ \textit{DRYER} \ (\textit{MFG} \ 2011)$



ANELVA (CANON) SL3201 COMPLETE TIN/MO #2 ROLL TO ROLL SPUTTERING SYSTEM (MFG 7/2011)

RAPID THERMAL PROCESSOR

2 – Rapid Thermal Processor, RTP "A" and "B" (Se Process; Roll2Roll; 8"-MetalWeb; Enclosed System Footprint 23'Lx12'W) -- Incomplete System. [Includes Components: Roll Unwind Station; Roll TakeUp Station; AccuWeb Micro1000 Web Guide System; AMI Oxygen Analyzer; SuperLogics IntelCoreDuo Computer System With (2) 20" Monitors

CUTTING MACHINE

1 – Ogino Seiki NS-600/SuperCutter Automatic Roll-Feed Cutting Machine s/n-9A04 (Configured With Blade For 9" Cut). With SuperLogics IntelCoreDuo Computer And20" Monitor

UVO CLEANER

1 - Jetlight 144AX UV Ozone Cleaner

Assorted Lab Freezers from Revco, Kalvinator, SO-LO Environmental, and Others



AEROFLEX IFR 3416 SIGNAL GENERATOR

FEATURED SOLAR EQUIPMENT

SAND MILLS

3 – Netzsch LMZ-4 4L Sand Mill, Type 965-04, 20HP, 460/24FLA/3, s/n 2403332, with Zirconium Agitator and Shell Option, W.Z. Machinery HC-05PWC1 Chiller, Stainless Steel Mixer Tank and Watson Marlow Peristaltic Pump

1 – Netzsch Labstar O.6L Sand Mill, Type 996-03, 4HP, 460/6FLA/3, s/n 2400774, with Zirconium Agitator and Shell Option, Kinetix RC152ZLAM Chiller, and Master Flex Peristaltic Pump, BDC 2002 Mixer

Assorted Test Equipment Including Spectrometers, Power Supplies, Multimeters, and More from: Agilent, Xantrex, Keithley, Horiba, and Others



CHEMINSTRUMENTS CUSTOM HOT ROLL LAMINATOR LINE



BENICK MACHINE WORKS 325 ARROW SLITTER ROLL TO ROLL

LASER WELDER STATION

1 – Unitek Miyachi LW50 Laser Welding Station. Unitek Miyachi Laser Welder: CatNo.LW50A-1E, Model#8-806-01-01, S/N-06050006, Year-2006

LASER MARKER

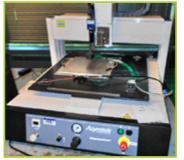
1 – Keyence YVO4 3 Axis Laser Marker with Super Logic & Dell Control Computer & Enclosure, Light and Table

VOC MAPPER STATION

1 – VOC Mapper Station. With Thorlabs OSL1 Fiber Illuminator; Stanford Instruments SR540 Chopper Controller; National Instruments NU-USB-6221 Multifunction I/O; Stanford Research SR830 DSP LockIn Amplifier; SuperLogics IntelCore2Duo Computer; 17" Monitor

RF GLOW DISCHARGE-OES

1 – Horiba Jobin Yvon GD Profiler 2 RF Glow Discharge Optical Emissions Spectrometer (RF GD-OES), s/n OROV/T1468C, with Lab Craft CF2050 s/n AB25010649, Tower Computer and Flat Screen Monitor



ASYMTEK DISPENSEMATE/D-585 ADHESIVES DISPENSER



PRECO MTS-3028 DUAL-SQUEEGEE SCREEN PRINTER

ARROW DUPLEX SLITTER

1 – Benick Machine Works 325 Arrow Slitter roll to roll,1 meter wide duplex slitter, to include (7) Tidland Class 3 rotary shear knives, and (2) Montalvo System 3000 upper and lower controllers

PUNCH PRESSES

1 – Complete roll to roll hydraulic punch press line, 120 ton (mfg 9/2010), w/ active X-Y-Z punch alignment control, punch inspection vision system and controlled lubricant dispenser
 1 – MWT Punch Press, 100 ton, 18" x 26" platen. Includes Northfield Automation 5543 unwind and rewind stations, deburr station, and SDI 34" MKWCS 3/2 web cleaner

LAMINATORS

- **2** Northfield Automation 5555 MWT Production Laminator. Roll to roll Lamination, 34" rollers, Line 2B vertical laminator to include Northfield unwind and rewind stations with precision alignment system, web steering, flying punch operation w/ Keyence vision system, dual unwind material shafts, inline slitter and edge trimmer station w/ Mac particle collector & chapping filter
- 1 Meier ICOLAM 18/11 Vacuum Laminator w/ SE-504 controller. Mfg. 2007



REM MFG. 3250.69F ROLL TO ROLL SLITTER/TRIM MACHINE (2009)

FEATURED SEMICONDUCTOR EQUIPMENT

MICROSCOPES

1 – Hitachi SU-1500 Scanning Electron Microscope (Compact SEM) VP Mode Standard, SE 3.0 nm Resolution at 30 kV, BSE 4.0 nm (6 Pa) Accommodates Samples up to 152 mm (diameter) and 60 mm (height), with Agilent DC Power Supply,, (2) Varian Vacuum Pumps, Tower Computer, 19" Flat Screen Monitor, Computer Table
 1 – Olympus Lext OLS 3100 Confocal Laser Scanning Microscope, with the following Objectives: Mplan Apo 408 100x, Mplan Apo 50x, MplanFLN 20x, MplanFLN 10x, MplanFLN 5x, Olympus U-DICR prism, U-AN360-3 Rotatable Analyzer Slider and more
 1 – Sonix Fusion Scanning Acoustic Microscope includes Sonix dual prober/ receiver

X-RAY IMAGING MACHINE

1 - Viscom (Vision Technology) X8011 Xray Imaging machine, XRI 3 kva, mfg 2007

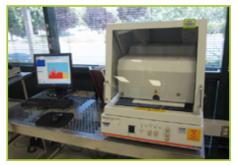
X-RAY DIFFRACTIOMETER

1 – Rigaku Ultima III X-Ray Diffractiometer, Various Sample Mounting Methods, including a High-Temperature Sample-Holder, Capable of a Variety of Data-Collection Modes, with Haskris RW 100 Water-chiller-recirculator-208V

X-RAY FLUORESCENCE MEASURING

1 – Fischer XDV-T7-SD Fischerscope HOV-SD, X-Ray Fluorescence Measuring Instrument For Coating Thickness And Materials Analysis





FISCHER XDAL X-RAY SPECTROMETER



KEYENCE MD-V9900 SERIES 3 AXIS YVO4 LASER MARKER



HITACHI SU-1500 SCANNING ELECTRON MICROSCOPE



VEECO WYKO NT3300 PROFILER SYSTEM



HITACHI S-4700 TYPE II COLD FIELD EMISSION SCANNING ELECTRON MICROSCOPE

POLISHER

1 – Buehler Ecomet Variable Speed Grinder / Polisher, 100-115volts, 155amps, 1 phase, 50/60hz

1 – Jeol SM-09010 Cross Section Polisher for Sample Preparation with Vacuum Pump

PROBE STATION

 $1-\,$ 4-Point probe Test Station/Fixture. With National Instruments NI-USB-6289 Multifunction I/O

ETCHING STATION

1 – Etching Station with CGI Motion Motor, Thermo Hotplate/Stirrer and TDI 48316C Enclosure

SCRUBBER FOR RTP

1 – Maelstrom M120R Compact Wet scrubber System (Serviced RTP/Se Systems)

CONTACT ANGLE MEASUREMENT

 $1-\,$ Future Digital Scientific Contact Angle /Colloid Chemistry/Interfacial/Rheology with ORC15EC Camera





DESPATCH PSC3-38S-1E ROLL-IN/BAKE OVEN



SLOAN/VEECO DEKTAK IIA PROFILOMETER



INTERNATIONAL INC., TCA181-7-72E36 BELT FURNACE

FURNACES

- 1 Annealing furnace, Controlled Atmosphere Annealing w/ hydrogen, roll to roll, 26 zones, nitrogen purge. Includes ConQuip web handling unwind/ rewind and web steering, ISRA surface vision camera system, Kelva web cleaner, Accuweb 1000 controllers and more
- **2** Custom Hydrogen Anneal Furnace, Used at 500c, radiative heating elements, quartz working tube, 3" Sample Size, Oxygen and Moister Sensors
- 1 RTP furnace, roll to roll furnace, 29 zone, 90°C 490°C temp range, nitrogen purge. Includes Kelva K-30 web cleaner, ISRA camera system, and ConQuip web handling unwind/rewind system w/ web steering rollers, Accuweb 1000 controllers, and 30" cross web CIGS thickness and bandgap tester, 3 evap sources for selenium and sulphur, 4 condensers for selenium and sulphur. Loaded w/ H2Se sensors and atmosphere analyzers
- 1 Barnstead/Thermolyne FD1540M Compact Benchtop Muffle Furnace, 1200°C max temp
- 2 Custom Selenium RTP (Rapid Thermal Processing) Furnace, Used at 500c, radiative heating elements, quartz working tube, 3" Sample Size, Oxygen Sensor
- 1 International Inc., TCA181-7-72E36 Belt Furnace, 208volts, 47amps, 1.5kva, 3 phase, 5060hz, Year 1997



CASCADE TEKTFO-10 FORCED AIR LAB OVEN



BARNSTEAD/THERMOLYNE FD1540M COMPACT BENCHTOP MUFFLE FURNAC



CUSTOM SELENIUM RTP (RAPID THERMAL PROCESSING) FURNACE

OVENS

- 1 Associated Environmental Systems SD-302 Oven, 120volts, 60hz, 26amps, 100-70'psig
- 1 Cascade Tek TFO-10 Forced Air Lab Oven. Capacity. 10.4 cu ft (294.5 cubic litres), Temperature Range, Ambient +15°C to 260°C
- 1 Despatch LND Series Oven
- 1 Precision/Thermo 29 Vacuum Oven
- **2** Wisconsin Oven Corp SDB-888-12E/EP Roll-In/Bake Oven, Max Op Temp 1250°F; Footprint Approx 9'Lx6'W x15'H (HighPoint Of Raise Door Frame Assembly); With Operators PC Computer Cabinet Station

ENVIRONMENTAL CHAMBERS

- 3 Tenney/LR Environmental T-20RC Temperature/Humidity Chamber
- 1 Thermotron/LR Environmental SM-16C Temperature/Humidity Chamber

Assorted Lab Freezers from Revco, Kalvinator, SO-LO Environmental, and Others



CARBOLITE INERT GAS OVEN



THERMOTRON SE-2000-6-6 ENVIRONMENTAL TEST CHAMBER/OVEN

FEATURED SEMICONDUCTOR EQUIPMENT



Q-LAB Q-FOG/CCT-1100 CYCLIC CORROSION TESTER



Q-LAB Q-SUN XE-3-H XENON ARC CHAMBER



Q-LAB QUV/SPRAY ACCELERATED WEATHERING TESTER

BALL MILL STATION

1 – Netzsh Minicer Ball Milling Station, Max 400ML, with Reservoir System. Organic Solvent comparable, (1) Cole Palmer Masterflex L/S Pump model 77301-22, (1) CASRANO BDC202 Mixer, 3' x 41" x 30" H Enclosure, YTZ media 1.0 mm, 0.5 mm, 0.3 mm, 0.2 mm, User Manuals

TEST STATIONS

1 -Electroluminescence Test Station. [Xenics Xeva-1202 Near Infrared Camera; (Qty-4)
 ThorLabs M405L1/ Detector & Driver Sets; Agilent E3633A Power Supply; Agilent 53642A
 Power Supply; Keithley 2000 Multimeter; Dell Intel-Core2 Computer With 17" Monitor
 1 - External Quantum Efficiency Tool/Station. [Stanford Research SR830 DSP Lock-In
 Amplifier; Stanford Research SR570 Low Noise Current PreAmplifier; Stanford Research SR-40 Chopper; SuperLogics SL-2U-CL Computer Operating BWtek #3.26-43 Array Spectrometer
 Data Acquisition Software And NI Labview-8.5 Software; Granite Table 4'Lx3;W

2 – Forward Bias Test Cabinet. [(Power Supplies: Xantrex XDC-20-300 Digital DC Power Supply; Ametek Sorensen XFR-100-12 DC Power Supply) (Computer: Dell PowerEdge-750 Server Computer And LG 19" Monitor) (Cabinet: 4'Lx3'Deepx7'H; With Qty-2 Connector Units)

1 – PV Cell Test Station. [SuperLogics Intel Core Duo/HD-Video Computer; 19" Monitor; Qty-2 Allied #Guppy Cameras; National Instruments USB-6009 Multifunction I/O; Rhino PSM-24 Power Supply Module; Test Fixture

1 – Feintool Automation TSP Lot: Solar Simulator, Test, and Binning Module. Inline system consisting of (2) Trumpf TruMark 7000 ablation (Yag) laser systems, 2 power supplies, Riedel WKS 018.02.KE-S cooling system (mfg 2007)

1 – HRSPV Test Station. [With: SuperLogics IntelCore2Duo Computer ; 19" Monitor; Agilent E3612A DC Power Supply ; HRSPV Test Fixture]

1 – Newport 93194H-1000 Solar Simulator Test Station s/n-133. [With: Newport 68945 Digital Exposure Control; Linkham THMS600/TMS94/LNP1492 Stage System; Dell Xeon Computer And 20" Monitor; Keithley 7002 Switch System; Keithley 6487 Picoammeter/Voltage Source; TE-Technology CP-200TT Test Table With TC-48-20 Thermoelectric Temperature Controller; National Instruments NI9211 Thermocouple I/O; TPI 605 Digital Vacuum Gauge; Test Fixture].



RIGAKU ULTIMA III X-RAY DIFFRACTIOMETER



VISCOM (VISION TECHNOLOGY) X8011 XRAY IMAGING MACHINE



MEIER ICOLAM 18/11 VACUUM LAMINATOR W/ SE-504 CONTROLLER. MFG. 2007

WET PROCESS BENCH

5 – MicroTech Systems Dual-Drum Chemical Distribution Cabinet Year-7/2010

PROFILER SYSTEM

 $1-\,$ Veeco WYKO NT3300 Profiler System, Capable of handling up to $8''\!/200mm$ wafers, Non contact sub-micron Optical Profiler for 3D Surface Metrology, 8'' Auto XY with 0.5 uM encoder / Auto TT.

SPECTRAL PL MAPPER

1 – PI Reader, High Resolution Photoluminescence Mapper, Resolution 50 um, 632 nm Laser Diode with Spectrometer Detector, Controls, Computer, Flat Screen Monitor

MIXING STATION

Lot – Nano Wire Synthesis Ink Mixing Station

Assorted Lab Freezers from Revco, Kalvinator, SO-LO Environmental, and Others



SONIX FUSION SCANNING ACOUSTIC



EXTERNAL QUANTUM EFFICIENCY TOOL/ STATION

FEATURED BIOPHARMACEUTICAL EQUIPMENT

HORIBA JOBIN YVON/HJY LABRAM-HR800 RAMAN SPECTROMETER SYSTEM

DIFFERENTIAL SCANNING CALORIMETER

1 – TA Instruments DSC Q20 Differential Scanning Calorimeter Temp Range AMB TO 725°C

THERMOMECHANICAL ANALYZER

1 – TA Instruments Q400 Thermomechanical Analyzer with Mass Flow Control, Temperature Range is -150 to 1000 °C

SPECTROPHOTOMETERS

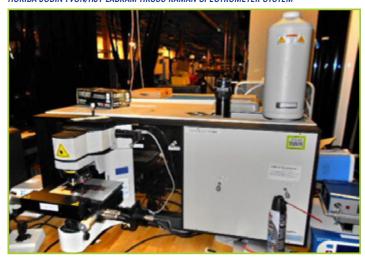
- 1 Horiba Jobin Yvon/HJY LabRam-HR800 Raman Spectrometer System
- 1 Jasco V-570 UV/Vis and NIR Measurement, Wavelength: 190-2500 NM Bandwidth selectable: 0.1-40 NM Stray light: less than 0.03%(0.5% at 1690 nm)
- 1 Perkin Elmer Analyst 200 Atomic Absorption Spectrometer

UV MEASUREMENT

1 - Thermo Oriel Xeon Arc Lamp with 68945 Digital Exposure Control, Temperature Control Stage, 69920 Power Supply, eMachines Tower Computer and Dell 17" Flat Screen Monitor

PL READER

1 – PI Reader, High Resolution Photoluminescence Mapper, Resolution 50 um, 632 nm Laser Diode with Photo Diode Detector, Controls, Computer, Flat Screen Monitor and Granite Fixed Table 10' x 4', 10" Thick with Casters





HORIBA JOBIN YVON GD PROFILER 2 RF GLOW DISCHARGE OPTICAL EMISSIONS SPECTROMETER



BECKMAN COULTER ALLEGRA X-22 BENCHTOP CENTRIFUGE PERKIN ELMER SPECTRUM 100 FT-IR SPECTROMETER

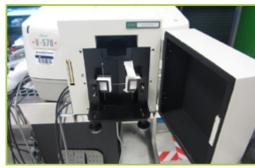




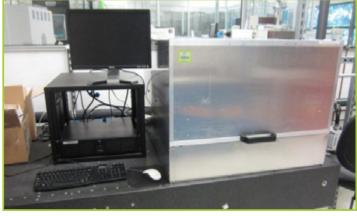
Q-LAB Q-SUN/XE-1-B XENON TEST CHAMBER



PERKIN ELMER ANALYST 200 ATOMIC SPECTROMETER



JASCO V-570 UV/VIS AND NIR MEASUREMENT



PL READER, HIGH RESOLUTION PHOTOLUMINESCENCE MAPPER

Assorted Sized Liquid, Corrosive, and Fire Cabinets from: Eagle, Justrite, and Others

OXYGEN ANALYZERS

- 1 Delta F DF-150E Oxygen Analyzer, With / Probes
- 1 Illinois Instruments ZR800 Process Oxygen Analyzer

GAS LEAK DETECTORS

- 1 ATi Analytic Technologies Porta-Sens-II/C16 Gas Leak Detector
- 1 RKI Instruments Eagle Gas Portable Monitor
- 1 Sensalert Sensalarm Universal Gas Monitor

CENTRIFUGAL MILL

1 - Retsch ZM200 Ultra Centrifugal Mill, Year 1996, 120volts, 60hz

DIFFERENTIAL SCANNING CALORIMETER

1 - TA Instruments DSC Q20 Differential Scanning Calorimeter

FEATURED MACHINE TOOLS



BRIDGEPORT 12/BR 233317 MILL



BRIDGEPORT 1815 S SERIES II SPECIAL MILL



POWERMATIC 2000 TABLE SAW



PEXTO 137-L FOOT OPERATED SHEAR





OKUMA L S INDUSTRIAL LATHE

SAWS

- 1 Dayton 10 F 7 x 121 Horizontal Band Saw, 1 HP Motor, 1725rpms, 115-230volts, Year 2007
- 1 Dewalt D28715 Chop Saw
- 1 Doall V-36-3 Industrial Band Saw, s/n 37-53187, 220volts, 3 phase, 60hz, Band Weight: 166 / File Length 162, Motor RVS-71, Vertical Transmission RVS-57, Air Pump 220
- 1 Powermatic 2000 Table Saw, 4'7" Bed, Stock # 1791997, With / Accu-Fence Guard

Assorted Tool Boxes and Work Benches

- 1 Delta Drill Press on Pedestal
- 1 Preco 2418-L-20 Metalworking 20-Ton Press

- 1 Bridgeport 12/BR 233317 Mill, With / XY KA Counter Readout, & KURT Mill Vise, With / Parts Tool Cabinet & Contents
- 1 Bridgeport 1815 S Series II Special Mill, With / XY KA Counter Readout, & Sokki # DE002 XY Counter Readout, GS Mill Vise, With / Parts Tool Cabinet & Contents
- Lot (2) Assorted GS Milling Vises

SHEARS

- 1 Enco 130-6510 Shear for Mild Steel,28" Cut
- 1 Pexto 137-L Foot Operated Shear, 3'1"Brake

- 1 Monarch EE 10x20 Industrial Lathe, Type Tool Room, 12 1/2" Swing, s/n 45840, Year 1962, Drill Bit Cabinet, With Assorted Drill Bits
- 1 Okuma L S Industrial Lathe, 4'2" center, 24" swing, s/n 431-13713, With /True Table, Drill Bit Cabinet, With Assorted Drill Bits



Assorted Machine Tools Including Cranes, Milling Machines, Drill Presses, CNC Turning Centers, Hand Tools and More From: Bridgeport, Dewalt, Pexto, Delta, Dayton,

Doall, Powermatic, Okuma, Monarch, and Others.



KENDAL OVER HEAD CRANE & KONERANES



DOALL V-36-3 INDUSTRIAL BAND SAW

FACILITY SUPPORT EQUIPMENT





Assorted Hand Trucks, Hydraulic Lift Carts, Pallet Jacks, Lift Trucks, and Forklifts from: Vermette, Presto, Interthor, Big Joe, U-Line, Dandy Southworth, Toyota, Komatsu, and Others.



OLYMPUS BX60F5 MICROSCOPE WITH (2) WH10X/22 EYEPIECES



SKY JACK SJII 3219 MAN LIFT



TEST EQUITY 1020C TEMPERATURE CHAMBER





VESTIL MANUFACTURING 2000LBS CAP. A-FRAME FOR HOIST

AMERICAN LIFT T362238 8'X 4' HYDRAULIC LIFT TABLE



KOMATSU FB30SH-6 5350LBS CAPACITY ELECTRIC FORK LIFT CROWN ELECTRONIC LIFT UNIT TRUCK



PRESTO M866-2000 480LBS CAPACITY HYDRAULIC LIFT TRUCK



ALUM-A-LIFT 250LBS CAPACITY ALUMINUM LIFT TRUCK



THERMOTRON S-1.2C **ENVIRONMENTAL TEST CHAMBER**



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Starting: August 14, 2013 - 9:00 am PDT Ending: August 15, 2013 - 10:00 am PDT Solar Sector Sale Hosted by Solaria, SunPrint, SunPower, and Other Leading Solar Companies. Sale Including Surplus Assets To Ongoing Operations. Richmond. CA - USA

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