X-RAY SCIENCE DIVISION

400/1-CR-A Facility Hazard Analysis

The purpose of this form is to serve as a summary of facility characteristics, recognized hazards, implemented hazard controls, pertinent sources of information, and incident reporting contacts.

Scope of work conducted in this facility: Thin-film coating; Substrate cleaning

Hazardous materials/equipment associated with this facility:

2 sputter deposition systems	Motor control systems	2 manual hydraulic hoists
RF sputter power supplies	2 ultrasonic cleaners	HEPA vacuum
75W xenon light source	Cryogenic pumps	Organic solvents
Visible light ellipsometer	Compressed air	Compressed Inert gases
Microscopes	Various flammable aerosols	Hot plate heater
Liquid nitrogen dewar	Stylus profiler	

Hazards associated with this facility:

RF fields	Electrical hazards	Chemical exposure
Noise exposure	Occasional heavy lifting	Pressurized gases

Hazard controls implemented within this facility:

Engineered Controls	**Procedural Controls**	**PPE**
GFCI outlets	None specified	Chemical-resistant gloves
Chemical fume hood		Safety Glasses
Interlocked sputter deposition system		Safety shoes
		Ear plugs

Relevant ESH manual chapters that may be associated with this facility:

1) Ch. 4.1 - Hazard Communication
2) Ch. 4.3 - Laboratory and Chemical Safety
3) Ch. 6.1 – Radiofrequency and Microwave Radiation
4) Ch. 7.12 – Safe Use of Tools
5) Ch. 10.14 – Use and In-Place Testing of HEPA Filters
6) Ch. 13.2 – Compressed Gas Cylinders

Pertinent safety training courses that may be associated with this facility:

1) ESH 115: Laboratory Hazard Communication Training
2) ESH 119: Pressure Safety Orientation
3) ESH 574: Chemical Waste Generator

Note: This is not intended to be an all-inclusive list of training that is required to work within this facility. The authoritative record of required training is depicted by the individual's JHQ.

Incident reporting contacts: ******Dial 911 in an emergency******

Lab Safety Captain:	Chian Liu	2-9985
Group Leader:	Lahsen Assoufid	2-2774
ES&H Coordinator:	Paul Rossi	2-4192

Facility hazard analysis completed by: _____ _____

Lab Safety Captain or designee — Date

Reviewed and approved by:

_____ _____

ES&H Coordinator — Date

_____ _____

Line Management — Date

This hazard analysis must be reviewed and updated whenever conditions change. Once approved, this hazard analysis must then be posted in a conspicuous space within the facility.