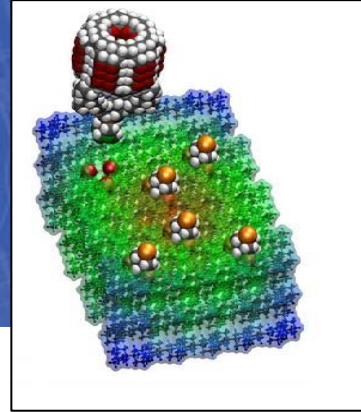


MICROELECTRONICS - LED & Optics

# Nanosys

## Lab Expansion & Upgrade



### OVERVIEW

Client retained IES to prepare permit packages for their Nano Materials lab expansion and upgrade of waste collection, new AWN treatment system and installation of new TGO Class I toxic gases. IES was also retained to perform microcontamination studies to determine causes and solutions for their cleanroom performance issues.

### PROJECT DETAILS

- Expand existing lab spaces to accommodate new process equipment and CVD tool
- Design new waste collection and AWN treatment system
- Design new dopant gas sources and distribution piping
- Design and assist with procurement of BOE, IPA and HF tools within existing cleanroom space
- Troubleshoot contamination issues affect yield and product performance and make corrective action recommendations

### IES SOLUTIONS

- Creative space utilization to facilitate new equipment installation within very limited lab space area
- Design and specification of HF lift stations and solvent recovery system with cost effective off-the-shelf solutions
- Worked with City to obtain permits for all phases of project
- Located sources of contamination and prepared corrective actions summary in a timely fashion enabling processes to reach milestones
- Identified deficiencies in cleanroom design and prepared design solutions for their mechanical contractor to implement resulting in better overall efficiency and lower cost of ownership

### LOCATION

Palo Alto, California

### PROJECT DURATION

Design & Permit: 6 months

Construction: 4 months

### PROJECT VALUATION

\$250,000 - \$500,000

### ABOUT IES

Integrated Engineering Services (IES) is an established firm providing innovative and cost-effective solutions to meet your complex engineering, design and operational needs.

**When experience, knowledge and innovation matter most.**

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