

The Nano Coast™

Exploiting the Ultra-Small on California's Central Coast

A study conducted for the
UCSB College of Engineering

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Outline

- **Background**
 - Hubs – Region – UCSB
- **Nano Cases**
 - Established – Up-and-Coming – Long-Range
- **Challenges and Opportunities**
 - IP – Biz Ed – Incubation – Conference – Fund

Techno-Industry Hubs

Finance	1790s	Wall Street
Steel	1870s	Pittsburgh
Automobiles	1903	Detroit
Consumer elect.	1954	Tokyo
Semicond., IT	1955	Silicon Valley
Nanotech	20??	TBD

Nanotech Hub

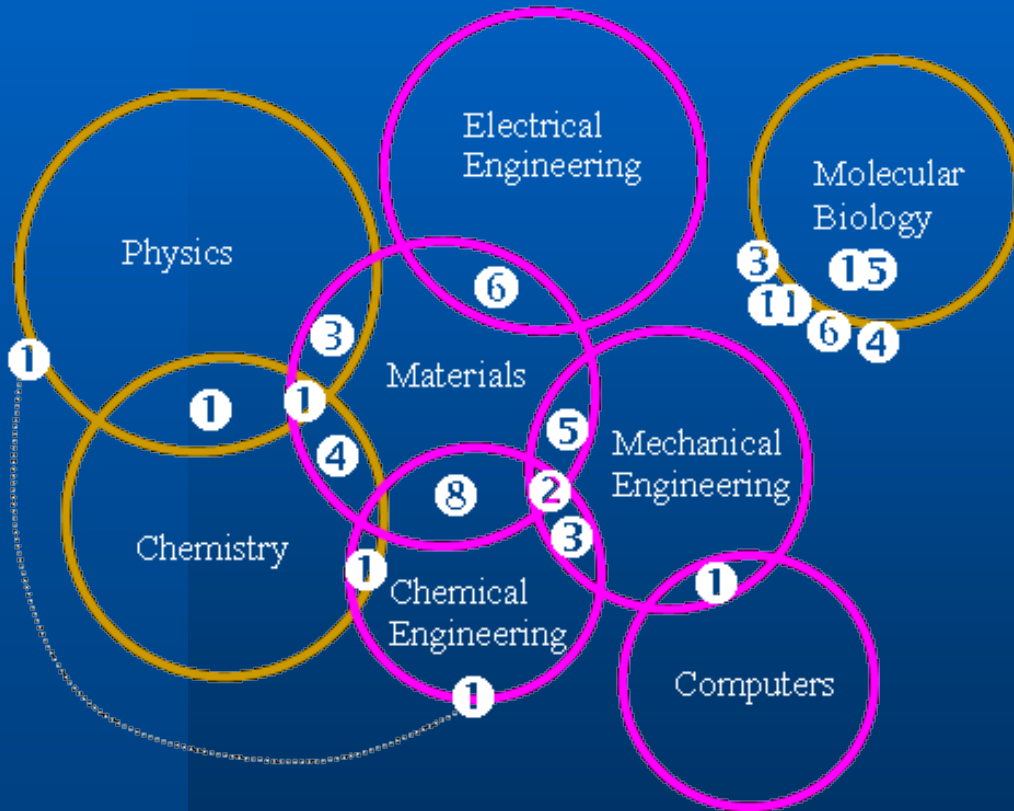
1. Silicon Valley
2. Boston
3. Beijing, China
4. Southern California
5. Albany

Preliminary ranking supplied
courtesy of NanoXchange.com

The Nano Coast



UCSB



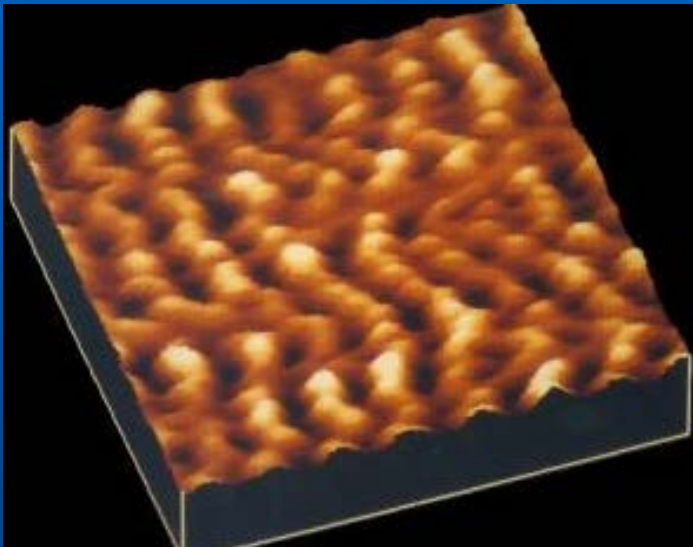
- MRL
- BMSE
- CNSI

Some UCSB Spin-Offs

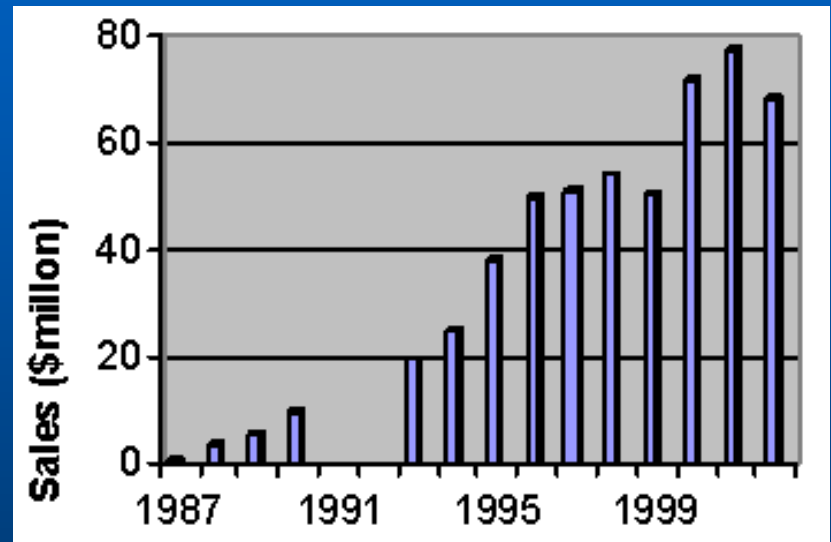
Digital Instruments (Veeco)	\$ 219 M
Nitres (Cree)	210
Uniax (Dupont)	30

Case Examples

Case: Established Success

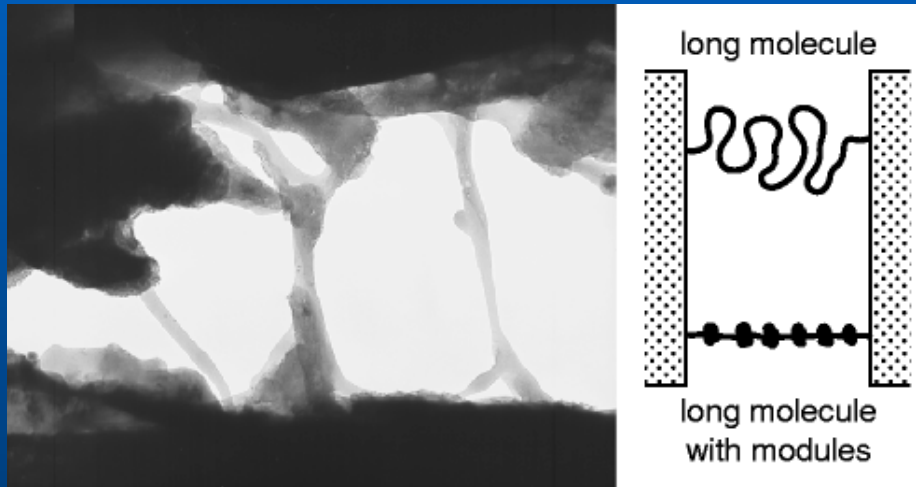


Probe Microscopes



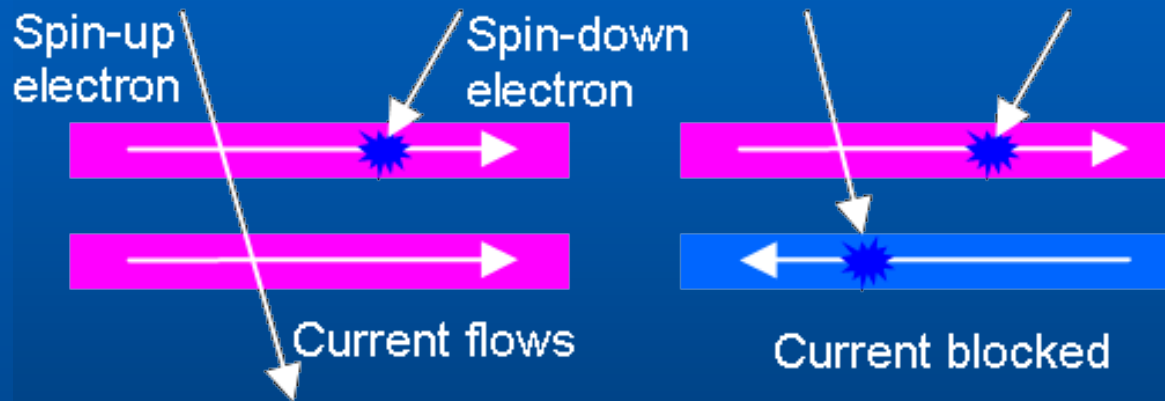
Digital Instruments

Case: Up and Coming



Biomimetics – SBA Materials

Case: Long Range



Spintronics

Cases: More Projects

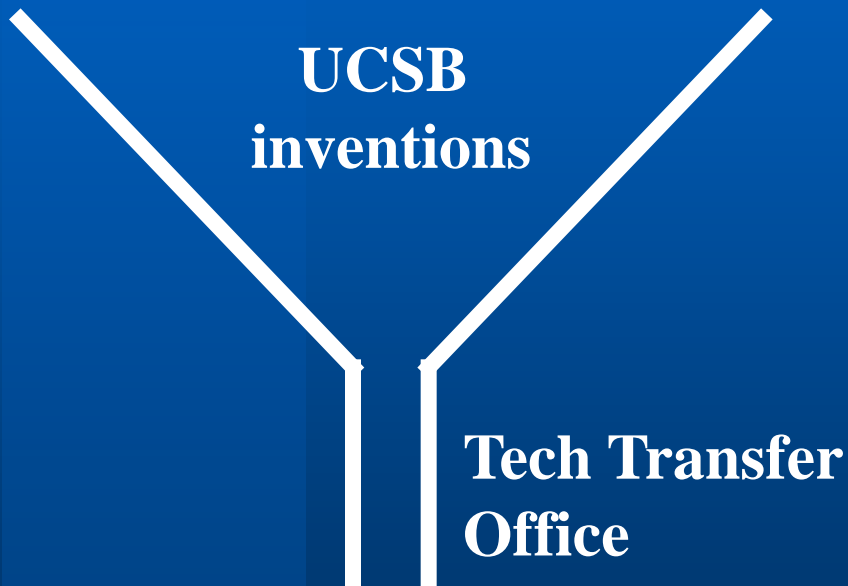
- Optoelectronics
- Conductive Plastics
- Quantum Dots
- Peptide Adhesives
- Vesosomes
- Auralization
- Many more

Cases: 2nd-Order Spin-Offs

- NanoDevices
- Asylum Research

Challenges and Opportunities

Challenge: IP Management



Portfolio: 290

New (2001): 81

On-campus staff: 1

Challenge: Biz Ed



- **CEEM**
- **Students, Faculty, Entrepreneurs**
- **Masters Program**
- **MBA ?**

Challenge: Incubation



- Access to capital
- Management
- Service providers
- Pooled equipment and administrative
- Education

Opportunity: Conference

- **Combined tech and biz (3+3=5)**
- **Including trade show**
- **Global coverage**
- **Global draw**

Opportunity: Fund

- Nanotechnology focus
- Close ties to CNSI, Caltech
- Incubator?
- \$50 – 100M
- 3 – 7 year exits

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For copy of report:

www.Ennex.com/project/NanoCoast