



# Sloan Career Cornerstone Center

## Profiles of Materials Science and Engineering Professionals



**Carlos Barefield**

**Process Manufacturing Engineer  
Hyundai Electronics  
Max Media Division  
Milpitas, CA**

### Education:

1992 - BS Industrial Technology, Ball State University

1996 - MS Engineering Specialization Materials, California Polytechnic San Luis Obispo

### Job Description:

Process Manufacturing Engineer, involved in Production.

### Advice to Students:

"Never give up when things get tough."

### Video Transcript:

"I worked in tribology, which is the study of friction and wear. Because you have a metal substrate with a metal head and if you have two metal objects moving against each other, you can get a lot of friction. And so it was very important to have a smooth surface and also enough lubricant without too much lubricant on the hard disc for your hard drive to operate. My job is really important because it's at the back end and a lot of money's been put into the disk before it gets to my area. And if my job isn't done correctly, then when the disk goes into the drive, the drive will crash."

### Interview:

#### - Typical Day

7:00 AM - Leave for work at 7:25 AM.

8:00 AM - Morning meeting and check messages.

9:00 AM - Inspect my area in production.

10:00 AM - Talk to operators and check control charts.

11:00 AM - same as above

12:00 PM - Lunch.

2:00 PM - Desk work.

3:00 PM - Desk work.

4:00 PM - Desk work.

5:00 PM - Return to production area for final check.

6:30 PM - Leave work to go home.

### "Profiles of Materials Science and Engineering Professionals"

Prepared as part of the Sloan Career Cornerstone Center ([www.careercornerstone.org](http://www.careercornerstone.org))

Source: "Careers In Materials Science and Engineering" © The Minerals, Metals & Materials Society

### **- Career Experience**

5/97-Present: Hyundai Electronics Max Media Division

11/95-5/97: Seagate Technology, Process Engineer

6/95-9/95: Thomas West Inc., Technical Sales

### **- Internships & Coops**

6/94-9/94: Lab technician, Argonne National laboratory

### **- Best Preparation**

Learning to solve certain problems through group brainstorming, and learning how to write proper technical reports.

### **- Getting First Job**

Through networking with other Materials Engineer graduates from Cal Poly.

### **- Advice**

Never give up when things get tough.

### **- Memberships**

The Minerals, Metals & Materials Society