

Marcus S. Ward

- Objective:** Obtain a degree of Doctor of Philosophy in Materials Science with an emphasis in nano-structured Titania.
- Dissertation Title:**
- Education:**
- | | | |
|--|---|--------------------|
| 2004 – Present | University of California, Santa Barbara | Santa Barbara, CA. |
| Doctor of Philosophy in Materials - expected June 2008 | | |
| <ul style="list-style-type: none">• Emphasis in Electronic Materials• Advisor: Dr. Noel MacDonald• GPA = | | |
| 2000 – 2004 | Linfield College | McMinnville, OR. |
| Bachelor of Science in Applied Physics - May 2004 | | |
| Bachelor of Science in Mathematics - May 2004 | | |
| <ul style="list-style-type: none">• GPA = 3.722 | | |
- Work Experience:**
- | | | |
|---|---|--------------------|
| August 2004 – Present | University of California, Santa Barbara | Santa Barbara, CA. |
| Graduate Research Assistant | | |
| <ul style="list-style-type: none">• Novel research on Titanium MEMS, Dye Sensitized Solar Cell research using unique Titania growth, and applications using nano-structured Titania.• Knowledge and operation of device processing techniques and analytical analysis tools. | | |
| January 2002 – July 2004 | Applied Physics Technology, Inc. | McMinnville, OR. |
| Research and Development Assistant | | |
| <ul style="list-style-type: none">• Research on field emission, particularly concerning transition metal carbide materials.• Research on the deposition of microcrystalline and amorphous Silicon for thin film applications.• Data Analysis: including reports, graphs, theory, and modeling.• Development and setup of new data collection systems for various testing.• Knowledge and operation of UHV systems, custom deposition systems (PE-CVD & PVD), JEOL JSM-6400 SEM, PHI 590 Scanning Auger Microprobe, Autopurge and mass flow controller gas injection systems, RGA ion gun, PC-driven spectrophotometer, crystal thickness monitors, and machine shop tools and micro shop tools.• Rebuilt an Alcatel two-stage rotary-vein Mechanical Pump.• Created tools and developed methods for setup and testing of contract R & D projects. | | |
| November 2001 – December 2001 | Linfield Research Institute | McMinnville, OR. |
| Research Assistant | | |
| <ul style="list-style-type: none">• Performed research on the field emissions properties of materials.• Used the micro shop and machine shop to develop testing materials.• Used and maintained UHV chambers to test materials. | | |
| August 2000 – May 2004 | Linfield Campus Employment | McMinnville, OR. |
| Health, Human Performance, and Athletics Department Student Employee | | |
| <ul style="list-style-type: none">• Managed the Athletic Field House; including supervision and maintenance.• Recycling Monitor for the Health, Human Performance, and Athletic building. | | |
| Summer 2000 and Summer 2001 | Barker Surveying, Co. | Salem, OR. |
| Chain Man | | |
| <ul style="list-style-type: none">• Worked in two and three man crews on jobs throughout the state of Oregon. | | |

Phone: (503) 910-3628
Email: ward@engineering.ucsb.edu, m_s_ward@hotmail.com

340 Rutherford St. #42
Goleta, CA. 93117

- Flood certification, Topography, Construction staking

Honors and Awards:

- Alpha Lambda Delta National Academic Honor Society Member, Fall 2000 – 2004
- Sigma Pi Sigma National Physics Honor Society Member, Spring 2002 – 2004
- 2004 Linfield College Outstanding Senior Physics Student Award
- 2003 Academic All-District (8) Award, Academic All-American Nominee
- Four-time Linfield football varsity letter winner from 2000 through 2003. Northwest Conference Honorable Mention in 2001, 2nd Team in 2002, 1st Team in 2003. Northwest Conference Champions in 2000, 2001, 2002, and 2003. NCAA Division III playoffs in 2000, 2002, and 2003.
- Awarded a Linfield Trustee Four-Year Scholarship, Fall 2000 – Present.

References:

Available upon request

Publications: