

# Vivian Dien

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## EDUCATION

### **Massachusetts Institute of Technology (MIT)**

**Cambridge, MA**

*Candidate for B.S. in Materials Science & Engineering w/ minors in Energy Studies & Applied International Studies* June 2013

- Cumulative GPA of 4.6/5.0
- Relevant Coursework: Structure, Thermodynamics & Mechanical Behavior of Materials; Organic & Biomaterials Chemistry; Polymer Engineering; Energy Economics & Policy; Energy Markets & Decisions; Materials Processing Lab
- D-Lab: Energy – project-based class including 1 week trip to rural Nicaragua to work with an NGO; assessed relevant low cost energy solutions, taught agri-waste charcoal making process, assessed solar panel manufacturing and usage

### **Green Valley High School (GVHS)**

**Henderson, NV**

- International Baccalaureate Diploma; Valedictorian in class of 598 students; Weighted GPA of 4.8/4.0 June 2009

## WORK EXPERIENCE

### **Singapore Univ. of Technology & Design (SUTD)**

**Singapore, Singapore**

*Undergraduate researcher (UROP)*

*June – August 2012*

- Conducted experimental research on the use of magnetized tea waste to remove heavy metals from wastewater

### **Transsolar Climate Engineering**

**New York, NY**

*Intern*

*January 2011*

- Technical consulting firm for energy efficiency and environmental quality in buildings
- Created separate tools for evaluating economic life-cycles of projects and the heat transferability of glazing units
- Synthesized data from U.S. EIA to initiate energy benchmarking and set feasible energy targets for a commercial client

### **Centro de Investigaciones, Energéticas, Medioambientales, y Tecnológica (CIEMAT)**

**Madrid, Spain**

*Intern*

*June – August 2011*

- Explored the use of spectrophotometry to characterize series resistance of solar cells; adapted electroluminescence imaging apparatus into photoluminescence imaging to evaluate differences in characterization

### **Belcher Lab - Bio-molecular Materials Group, MIT**

**Cambridge, MA**

*Undergraduate researcher (UROP)*

*Feb. – May 2010*

- Performed purification of viral DNA and analyzed DNA sequences for Carbon Sequestration Research

## LEADERSHIP EXPERIENCE

### **MIT-SUTD 5<sup>th</sup> Row Leadership Programme, Mentor**

*June – August 2012*

- Served as a mentor for pioneer freshmen class of Singapore Univ. of Technology & Design; helped students actualize extra-curricular activities and school organizations

### **MIT Society of Women Engineers, Media & Marketing Chair**

*Dec. 2009 – present*

- National mentorship & networking organization; create & design publicity posters, videos, and apparel

### **MIT Women's Volleyball Club, Home Tournament Director**

*Sept. 2009 – present*

- Organize biannual tournaments in liaison with Yankee League & New England Region Volleyball Association; organize Co-ed tournament for MIT community; handle heavy logistics and large sums of money

### **Kappa Alpha Theta Sorority, Zeta Mu Chapter, Chief Education Officer, Nominating Committee,**

*Sept. 2009 – present*

*References Chairman, Executive Recruitment Board, Membership Development Committee*

- Member of Executive Board; oversee Education committee, new member education program, and chapter scholarship; slated new officers; obtained references and information for recruitment of new members; helped oversee chapter development and served as a resource while maintaining confidentiality

### **GVHS Gator Green, Vice President**

*Sept. 2008 – May 2009*

- Recycling and Environmental Club; helped maintain newly founded school wide recycling program

## ACTIVITIES & AWARDS

### **MIT International Science & Technology Initiatives (MISTI), Ambassador, fellowship recipient**

*May 2011 – present*

### **MIT Asian American Association, Board member**

*May 2011 – May 2012*

### **Materials Science Laboratory "Best Poster – Instructors' Choice"**

*Nov. 2010*

## SKILLS & INTERESTS

- Laboratory: Atomic Absorption Spectroscopy, Uniaxial Compression Testing, X-Ray Diffraction, Vibrating Sample Magnetometer, Spectrophotometry, QIAGEN DNA Purification, basic wet lab & machining skills
- Computer: Python; Mathematica; VBA for Excel; Photoshop; Microsoft Office
- Languages: Spanish (advanced), Mandarin Chinese (intermediate), Cantonese (conversational)
- Special interest in sustainability; renewable energy; literature; foreign languages; international development