



The public tours the international US Department of Energy Solar Decathlon, featuring energy-efficient, solar-powered houses built by 20 university teams from North America and Europe, on the National Mall in Washington, D.C., Tuesday, Oct. 13, 2009.

By Gary White
Director of SPS and Sigma Pi Sigma

“I wanted a softer degree so I changed from engineering to engineering physics.”

Preet Anand, a senior at Santa Clara University, said this to me earlier this fall, and I did a double-take. Preet was one of the communications leaders for Team California at the Solar Decathlon, held this fall on the Mall between the Washington Monument and the Capitol Building. The Solar Decathlon is quite a spectacle—20 teams bring their best solar energy house (entire houses!) to the nation’s capital to compete in ten separate events, from market viability (which was won by University of Louisiana at Lafayette) to architecture (California won this) to Net Metering (Germany won this category, and overall, by feeding substantially more power to the grid than it used despite several rainy days). Each competing team making it through the application process receives \$100,000 to start their house. Most of them raise and spend that much again, and more, to design, build, and transport to DC a house that has creature comforts, yet nets zero



Photo by Tracy Seiwach

Engineering physics students Allison Kopf and Preet Anand talk in front of Team California’s houses.

energy use. Thousands of people toured the houses (including the SPS staff—what a great field trip!) to learn more about new developments in green technology and soak in the student excitement. The US Department of Energy manages the contest, a solar-powered-house of a public relations event if ever there was one. Read much more about it at <http://www.solardecathlon.org/>.

Anyway, as I said, I did a double-take when Preet suggested that engineering physics was “softer” than engineering—I don’t often hear that physics is softer than other majors. Yes, he was taking E&M from Griffiths like many physics students—he didn’t mean it was an easier degree program. He meant that engineering physics

gave him more flexibility in his overall career plans; he could appreciate the big picture better (in projects like the solar house, for example) and wasn’t constrained to one area of expertise as he felt like he would have been had he remained in engineering. Interesting... not sure I fully understood, but I was beginning to see things more from his perspective.

Allison Kopf, also a senior engineering physics student at Santa Clara, is the project manager for the team, and one of the lead spokespersons. She also changed from engineering to engineering physics, citing, as did Preet, some contagiously enthusiastic professors in the physics department as part of the reason for the change. “Some might think it’s ironic that the physics students in the group are leading the public communication and project management efforts, but you do what needs to be done.” I asked her whether she used any of her physics background in the project. “I did some preliminary work on the photovoltaics over a year ago, but none of what I did ended up in the final version.” She did indicate that her broad physics knowledge of the various systems helped her in her role as a lead communicator. Again, this was



Team California celebrates after taking third place overall in the U.S. Department of Energy Solar Decathlon competition on the National Mall in Washington, D.C., Friday, Oct. 16, 2009.

not the answer I expected, exactly, but informative.

Preet also mentioned that he liked physics because it teaches you how to attack problems, even big problems. He wants to continue doing “green-tech” work after he graduates—certainly there are big problems, and solutions needed there. Allison wants to move

into the science policy domain—that’s exciting! I am thoroughly encouraged about the future of physics and society after meeting Allison and Preet.

The California Team finished third overall, and they won the Communications event. After watching these physicists in action, it’s no wonder they did well. I came to appreciate better the reasons why students opt for engineering physics as a discipline.

Letters to the Editor

Dear Editor:

Thank you for the elegant stories of “A Survey of Big Bang Cosmology” and “The History of Cosmology as I Have Lived Through It,” the latter by Victor S. Alpher, Ralph Alpher’s son.

I am aware that Rosalind Franklin had her data stolen and given to Crick and Watson, and thus she was denied recognition of her crucial part in the unraveling of the structure of DNA, which would have warranted a Nobel Prize had she lived. I also know that Lise Meitner was cheated out of a Nobel Prize for her recognition of nuclear fission. It is gratifying to me

that *Radiations* has substantiated the work of Ralph Alpher and his colleagues with regard to their fundamental original work on the Big Bang Theory of the Universe, work which had been ignored until recent times, and which was certainly of Nobel quality.

Enclosed is a donation in recognition of the outstanding work with respect to the publication of *Radiations*. It is one of my favorite physics publications.

Sincerely,
Ronald A. Brown
Emeritus Professor of Physics
Oswego, NY

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