

## Amy Phillips, MS, 1985



### **What influenced your decision to attend graduate school at OSC?**

My interest in Optical Sciences was sparked after working for an IR astronomer using a Fourier Transform Infrared Spectrometer to study the atmospheres of planets and planetary nebulae. As a Lab Tech working at the Lunar and Planetary Lab, I had been taking classes as an unclassified grad student —physics courses and independent study from Angus Macleod. Through him, I learned about the work in coating technology for solar energy generation being conducted by Dr. Bernhard Seraphin. I was admitted as an official grad student in 1982 working for Dr. Seraphin, but switched to Remote Sensing under Dr. Phil Slater.

### **What do you wish you would have known your first day of graduate school? Was there anything you wish you had done to prepare more for graduate school?**

I had intended to study on my own, as was emphasized in my undergraduate years. I didn't realize that studying in groups was actually encouraged in graduate school. In hindsight, I see the benefit of having other people's perspectives on the material we were learning.

### **Which classes did you find most enjoyable? Which ones did you find most difficult?**

That's a tough question, as I truly enjoyed almost all of the classes I took at OSC. But the ones that really stood out for me were Dr. Jack Gaskill's Intro to Fourier Optics and Dr. Rick Shoemaker's Quantum Optics class. They were also the most difficult ones, which might be why they were enjoyable. Both courses were very demanding and forced the students to develop good study habits.

### **Was there an individual (professor, advisor, staff, friend, family member) who played a particularly important role in your education?**

Phil Slater ended up being my advisor, and I really admired his approach with students. He set a great example of always learning, even from his own students when we would ask intriguing questions or offer improbable solutions. We had great adventures out at White Sands Missile Range and at the Maricopa Farms, calibrating the multi-spectral cameras for the Landsat Thematic Mappers (see Stuart Biggar for current status of that and related work).

### **What was your research while attending OSC?**

I started out working in Dr. Seraphin's CVD coating lab under the tutelage of Dr. Ursula Gibson, who had just arrived at OSC and was taking over Dr. Seraphin's labs while he was on a one-year sabbatical. That was most fortuitous, as she became a great friend.

But my chemistry skills were insufficient for the CVD work, so I switched to Remote Sensing under Dr. Slater. My research was to increase the accuracy of our techniques for calibrating the multi-spectral scanners for the Landsat Thematic Mappers.

### **What was the cost of rent in Tucson while you were in school?**

Rent was not too bad. I paid \$90/month for a tiny efficiency on Mountain Avenue, just south of Lee Street (the complex is still there) as an undergraduate. Over the year in graduate school, I worked my way up to a tiny house on Blackridge, just east of Mountain, and paid about \$150/month.

### **If you owned a car during graduate school, what year and model was it?**

1972 Chevrolet Nova, 4-door with a 307 V8 engine.

### **What was your favorite restaurant/student hangout near campus?**

Blue Willow was my favorite restaurant. For hanging out, it was Gentle Ben's on Friday afternoons.

### **What did you do for fun during your time in graduate school?**

Hiking and camping in the various mountain ranges around Tucson.

**What was most memorable about your commencement ceremony?**

I graduated out-of-cycle, so was not able to attend the commencement ceremony.

**At the time of your graduation, what were the most sought-after jobs/most popular industries/most popular companies?**

Lockheed Martin was hiring, as was Bell Labs. The Industrial Affiliates were a big source of employment. But, a lot of students had entrepreneurial interests, and either started their own companies or started working for other OSC startups.

**What was your first job after graduation?**

At first, I worked on a contracting basis for Russell Chipman, who was a fellow grad student at the time and also had a company called Optical Tactics. I also did contract work for Dr. Slater's group, acting as a field manager for the trips to White Sands and the Maricopa Farms. But within a year, I took a job as an Optical Engineer at a startup company in Colorado called Optotech. They were making optical disk drives, and I was working on designs for the optical heads.

**What was the most significant world event during your time in graduate school. How were you affected by this event?**

Truthfully, I don't remember much because I had my head down working on my studies, and didn't watch much TV or read the news. But of what I do remember, the most significant for me was the establishment of Martin Luther King Jr. Day as a federal holiday. I grew up in a highly integrated society, and it felt good that the U. S. as a whole was honoring Dr. King.

**Was there a campus or community event in Tucson that was especially important to you?**

Well, the most important event to me was getting married to Ed Beshore in 1983. If you define the community in relatively small terms, it might qualify as a community event. We were the first couple married in what was then the Flandrau Planetarium, and several of my OSC colleagues were there.

The major event for Tucson, also in 1983, was the catastrophic flooding of the Rillito River. The flood happened before the banks of the river were reinforced, so the flood did not so much inundate neighborhoods with water, as it eroded the banks. Several houses, and even a law firm office, dropped into the river and were demolished when they hit the bridges. Almost all of the approaches to the Rillito River bridges were washed away, even though the center portions were still standing. The bridge at Dodge Blvd was the only one that survived intact in that part of town.

**What advice would you give to this year's graduating class?**

Study hard, but take time to enjoy Tucson's natural environment. Make friends and keep them. And, remember that your professors and advisors are among the best in the world—not just intellectually, but also as human beings. They will help you to do your best if you let them.