Bruce Brinson, Ph.D.

On teamwork: “Problems are rarely solved by individuals working alone. There are almost always two or more people involved.”

—Dr. Bruce Brinson, June 9, 2009

Dr. Bruce Brinson describes his life as “a random walk.” At first, photonics was not a driving passion. “I didn't have visions of Star Wars,” he recalls. “I was looking for schools.” A coworker at his auto repair shop told him about a man in Germany who worked with lasers and had been educated in Waco, Texas, at Texas State Technical College (TSTC). “I looked into it,” he says, “and talked to John Simcik (a former TSTC faculty member) who is a motivating guy, to say the least. I drove over to Waco, talked to John and some other people in the department, and moved into the dormitory that day.”

Upon completion of his associate degree, Bruce was hired by the Department of Electrical and Computer Engineering at Rice University in Houston, Texas. “I was working with lasers and electronics,” he says. “I saw systems that people like Jerry Reay (a former TSTC faculty member) said we would learn about but were ‘never going to see in the real world.’ Well, I saw them and I built them.”

After a year of settling in at Rice, Bruce hoped to finish an optical engineering degree at the University of Houston at Clear Lake. But soon afterward, the program was dropped. “I kind of let that go,” he recalls, “but then while at Rice, I said to myself, ‘You know, I can take classes at Rice for free. It could take ten years to get a degree out of this, but what the heck?’” With the help of Regents College in Albany, New York, Bruce assembled a bachelor’s degree from credits earned at both TSTC and Rice.

Research on Bucky balls, nanotubes, and other carbon nanostructures that Bruce started in his bachelor’s degree program began to fuel a desire for a master’s. “I could take this and run with it,” he thought. But no Rice employee had ever been allowed to earn a Rice degree while working for the university. Bruce planned to resign his position and enroll as a graduate student at Rice. He explained his plan to Professor Naomi Halas, for whom he would be working. As far as Professor Halas was concerned, Bruce’s plan was a “no brainer,” so she “rocked the foundation” at Rice and Bruce was accepted without
having to resign. Doctoral work seemed to naturally follow Bruce’s master’s degree. “All in all, the pieces were in place,” he says. “I was simply blessed.”

Bruce was blessed by circumstance, but he was also blessed by a tenacious patience that slowly but surely sought out the means to further his education. Plenty of encouragement came from mentors and friends as well. Concerns about the cost of tuition were eased by words of wisdom from Dr. Dial Martin, a retired faculty member of Texas A&M University. He said to Bruce, “If you really want to go back to school and you find a way to get in, you’ll find a way to stay.” He was right.

Decisive, curious, and enthusiastic about his interests, Bruce is willing to try many things, including dancing. With practice, he has become one of the top amateur country and western dancers in the Houston area. The first time Bruce tried it, he was hooked. “I didn’t know it for a while,” he says, “but I danced and danced, and when you practice, you excel.” That philosophy has served Bruce well in many parts of his life. Now TSTC can count among its alumni one of today’s most promising researchers and developers of new photonics and nano technologies.

**Dr. Bruce Brinson of Pasadena, Texas, recently received his Ph.D. in photonics and nano engineering from Rice University in Houston, Texas. He also holds a master’s degree in photonics and nano engineering from Rice, a bachelor’s degree in optical technology from Regents College in Albany, New York, and an associate in applied science degree in laser electro-optics technology from Texas State Technical College.**