

A Balanced Life

Ask CPID's Don

Titterington about himself and he'll probably tell you he's a devoted family man, occasional outdoorsman and musician, and an organic chemist who never took physics in high school and wasn't even in a chemistry class until his senior year. He'll also tell you that life offers so many opportunities that work should be challenging and satisfying but not all-consuming.

What's interesting about Don, however, is that despite his humble and balanced approach to life, in his 17 years at Tektronix he has become a top inventor and engineer, has earned the company's highest technical honor — the Howard Vollum Award — and recently was named a Tek Fellow.

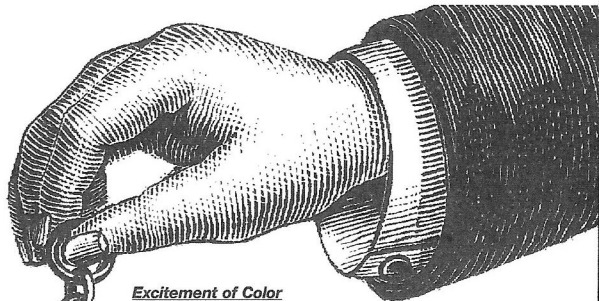
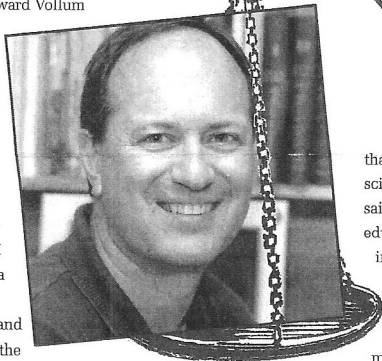
Chemistry A Good Fit

Unlike many with technical careers, Don did not focus on science and technology early in life.

"I wasn't very interested as a child, although I did like math," he said in a recent interview. "I was more interested in music, and in high school, because of the way the elective system worked, I took primarily music classes until my chemistry class my senior year. It was that class that got me interested in the science of chemistry and helped me realize that chemistry fits in with the way I think.

"Organic chemistry is a very conceptual science. It's not mathematically based. Although I like math, I don't use it in my day to day work like many engineers at Tektronix," Don continued. "But I learned that organic chemistry was a good fit for my native abilities and I decided after high school to head in that direction."

**As a New Tek Fellow,
Don Titterington Encourages
Brilliance and Hard Work —
And Personal Priorities**



Excitement of Color

After receiving his Ph.D. in

organic chemistry from Oregon State University, Don — a Pacific Northwest native — joined Tektronix as a process engineer in 1980, realizing his dream to remain in the region.

"I came to Tektronix thinking I might get to work on liquid crystal technology, but in 1981 I joined Tek Labs and started working on ink-jet technology," he recalled. "I still remember vividly seeing the very first prototype of our water-based ink-jet technology — what was to become the 4692 — which consisted of a drum spinning very fast, and then you'd see this weird-looking band of color appear, and when it stopped there was an image.

"I was fascinated by that and excited that I had a chance to learn some things that were very personally interesting to me, such as color science, and also polymer chemistry and physics," Don said. "The company was very supportive in continuing my education in those areas so I could continue to work with ink and media, which I've done ever since."

Numerous Patents

In 1984, Don took a position in CPID as engineering manager for media, and in 1987 he began working with Tek Labs on phase-change printing technology. Although he worked on transparencies for a time, his primary focus has continued to be with ink.

In 1991, Don began serious work on the offset transfer technology that became the Phaser 340 printer, serving as the project leader for the product's ink. He began working on future generations of phase-change ink technology last year.

In addition to his recognition as a Tek Fellow, and the Vollum Award he shared in 1995 with his friend and mentor, Wayne Yeager,

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patents. He has also produced numerous technical papers and presentations.

Enhancing Technology

In addition to his love for ink-jet technology, Don is a strong proponent of statistical design of experiments and structured problem-solving. As opposed to the traditional "hit and miss" form of experimentation, structured problem solving involves utilizing a statistically-based approach.

"By using statistics in experiments, we obtain a more accurate view of the entire process," he said, "as opposed to looking at things one at a time and risking that the conclusions are not valid. This approach is especially important in our work with ink-jet technology where you can't physically see many of the things that cause problems."

As for his future work at Tektronix, Don says: "I've had the opportunity to see a new technology grow and become viable in the marketplace. We didn't conceive the idea for the phase-change ink-jet, but we're the ones who made it work and turned it into a very profitable technology for Tektronix.

"The challenge now is to further enhance the technology so we will continue to compete with the laser printer market in the future. We have a long way to go to

CPID principle scientist, Don is co-inventor of 15 current and 10 pending

make this technology viable for the long term. That's what I plan to be working on for the next few years. We want to ensure that we aren't just generating a good technology, but a good technology that continues to be commercially viable," Don said.

Avoiding Burnout

But Don stops short of saying he's a workaholic when it comes to his passion for the technology.

"At times I have worked a lot of hours," he says. "But I have other priorities, too, including a wife, three kids and several outside interests. I have at times told the younger folks at Tektronix that we're here for the long term and they can work 12 hours a day, six days a week if they want, but I don't believe that's the most effective way to achieve a successful career over time.

"We should always be prepared to sprint and work extremely hard during short periods of time, and to be self-motivated to do whatever is necessary to get the project done," he added. "But we must also remember that we just can't operate in overdrive all the time. Speaking personally, the quality of my work suffers when I am burned out"

Don practices what he preaches. When he can't be found immersed in his work at CPID, you'll probably find him relaxing by enjoying a day of fishing or archery, coaching a game for one of his children, or participating in church or community music events — a truly balanced approach to life for a remarkable CPID scientist.

— Rick Moss

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