

## James Pawley: Scholar, Teacher, Inventor

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James Pawley impacted the lives of so many scientists it's hard to know where to start. I suspect everyone knows about his confocal books. These were classics and mandatory class texts for my students as well I am sure many others. What is remarkable is how many scientists interacted in some way with Jim. My goal is to just focus on the person himself as Jim was a vibrant human being with strong opinions. It was almost pointless to try to argue against Jim and the odd occasion I tried, I soon realized I was outmatched.

The first time I sent students to his courses at the University of British Columbia which was held each June, I realized just how much impact he had on each and every student. Both students I sent to the course back in the late 1990s were a bit surprised when I told them the course was 2 weeks. But the impact it had was lifelong. Jim's courses were not just lectures -they were socially inspired discourses on every aspect of imaging that you can imagine and then some. I bet even in 1998 he was strong on global warming.

I was fortunate to teach at the university where his daughter Alice is also a professor. Every year Jim and Christine would visit town and Jim and I would spend an afternoon talking about science, and every chance Jim got, he would talk about climate change and the evil political events he found distasteful.

One year, Jim was in town I asked him to give one of the lectures in my class. It was an imaging class designed to bring graduate students up to scratch on the principles of imaging and image processing, so it covered just about everything, but in limited depth. Despite this admonition, Jim turned up with a pin drive and plugged it in to my computer...and proceeded to give a highly detailed talk with 165 slides in the 50-minute lecture...Of course I had to stop him eventually otherwise the students would be late to their next class. I still have those 165 slides on my computer and I have used several of them in my regular classes. Jim never did quite understand the command of the clock, but it did not worry him, or I suspect many others!

Jim Pawley moved freely across the spectrum of imaging modalities. He was one of the few folks I know that was as comfortable on an EM, a brightfield microscopy, a fluorescence microscope or a confocal. His 70 page treatise on high resolution topographic and density contrast imaging in 1992 was an exhaustively detailed article, typical of his attention to the smallest detail when it came to academic issues. He wrote a book on "*Biological Low Voltage Scanning Electron Microscopy*" many years later.

Of course, everyone knows about his *Handbook of Biological Confocal Microscopy*. The first edition in 1990 was about 220 pages. The second edition in 1995, was 630 pages, and the 3<sup>rd</sup> Edition in 2006 was a mammoth 930 pages. This edition with over 120 authors was an incredible document, managed amazingly by Jim as the only editor! Exactly how he managed to keep this all organized is one of life's little mysteries, but the result is a wonderful testament of the nature of James Pawley. Once when Jim was visiting, I asked him to autograph my copy of the second edition – and he wrote "*James Pawley – who is glad to be here!*" Those of us who have perhaps only a bird's eye view of the world of microscopy from our narrow vantage points, are glad that Jim was here too.

Jim was a fierce advocate for social and political change when it came to the issue of global warming. The last time I spoke with him, just a month or so before he died, Jim said to me "*I have decided that global*

*warming is such an important issue I am prepared to get arrested fighting for this cause*". To Jim Pawley, it was more than a cause – it was life. I think it's really a cause that Jim felt was something everyone should pay attention to. The last statement on the last slide on the talk he gave my students said:

*"Last word: Pay attention to global warming. It will shape your life"*