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A Mythical History of the Scanning Probe Microscope - How it Could Have Been

VIRGIL ELINGS, co-founder and past president, Digital Instruments

The path from the ground breaking Topografiner by Young et. al. in 1972 to the current Atomic Force Microscopes was tortuous, to say the least. Now as an entrepreneur, they say that you should study the problem, work out a plan, and then execute the plan. Since this rarely works for me in real life, let's follow the mythical history of Phil the physics student whose simple approach to scanning probe microscopes during his summer job may explain life better than real life did. Comparisons between Phil's experience and real life will be made along the way to show how random real life was compared to Phil's straightforward approach. We will follow Phil as he goes from the Scanning Touching Microscope (STM) to the All Fancy Microscope (AFM) and ends up with a current scanning probe microscope. The "lesson" in this story is that when you are doing something new, you learn so much while you are doing it that what you thought at the beginning (the plan) is rarely the best way to go. It is more important, I believe, for entrepreneurs to explore possibilities and keep their eyes open along the way rather than pretend the path they are on is the right one. Phil is mythical because he always knew where he was headed and it was always the right direction. So how does Phil's story end? I'm working on it and will tell you at the March Meeting.