

## Keynote Title – “The Exciting World of Additive Manufacturing and the Steady March of Technology”

Abstract – A technology is called disruptive when it displaces established technology and turns an industry upside down. By this definition additive manufacturing (AM) is truly disruptive. In what seems like a few years AM has gone from invention to indispensable in a host of areas from human prosthesis to military equipment procurement. No doubt, AM is here to stay, but how many people realize that it is not really a new technology? AM was invented in the 1970s, and the first AM patents were granted in the '80s. But, just as it took time after the birth of personal computers before most homes had one, I believe we have not yet experienced how AM will revolutionize our world. Consider that the PC was so disruptive that we really don't think about what industries it displaced; we are too busy enjoying the totally new industries that it made possible including cellphones. So, an interesting question is not how AM will affect manufacturing, but how it will change our interactions with each other and our world? In this talk, I will focus on this question as we consider the exciting current state of AM. I will illuminate the history and paths that AM is forging. Of course no one can predict exactly how AM will change our future, but we can have a lot of fun trying.