AIME Honorary Membership Speech, May 4th, 2010.

Mr. Sadler, Mr. Ashburn and the Board of Directors of the AIME and the AIST, ladies and gentlemen: I feel so privileged that the AIST nominated me to receive the AIME Honorary Membership award. It is like a dream come true.

Now I would like to tell you with one of my stories my secret on what makes a good scientist.

Sixty years ago when I was a young engineer, still wet behind the ears, I witnessed at a steel plant a ladle full of molten steel being repeatedly plunged with an ingot. I was told that this procedure was to homogenize the steel as to temperature and composition. I thought it was cumbersome, crude and time consuming and that a better method ought to be developed.

Months went by. Then one night while soaking in the bathtub, lo and behold, I released a flatus more commonly known as a fart. I saw the bubbles of gas rising through the water. Eureka- I got it!

Could argon gas be introduced through the bottom of a refractory lined ladle to homogenize the molten steel? Then the hard work started. I needed a porous plug to test my theory. Refractory companies told me that they do not produce porous refractory plugs. They make solid, dense bricks to increase its service life. Who was this fool who wanted a porous plug- not only pores but connecting pores no less from top to bottom in his plug? They then would show me the door.

Finally a Canadian Government ceramic laboratory came to my rescue and at last after much experimentation and many trials I got my porous plug. The rest is history—We have Ladle Metallurgy—— and it all started with a soak in the bathtub.

With the advent of computers and computer simulation, metallurgical research has left me, a computer illiterate, far behind. However an idea, observation, an enquiring mind, hard work and determination is still a major requirement for innovation.

Thank you for the great honor you have bestowed upon me.

Ron, my apologies for taking more than the one minute which you have allotted me. I do hope that the following honorees will help maintain your tight timetable by keeping to the rules. Thank you.