Without question we live in an era of revolutionary change. Knowledge of all kinds is accumulating rapidly, and additional scientific secrets are being unlocked every day. The principles underlying society’s relationships are being challenged and value systems continually questioned.

This is a time of great challenge to all parts of society. Scientists do much to just keep up with progress, much less contribute to it. Artists must describe this fluid world, how it looks, sounds, and tastes. Spiritual leaders grope for descriptions of what this changing life means.

And, what is the role of the engineer in the era of change? Simply stated, it is to continue to beneficially expand the material productivity of society. This presents a special challenge in a world that can be described as anything but stable. The challenge is to garner the rapidly expanding scientific knowledge and to apply it consistently with a clear vision of the world and within the systems of value to which one subscribes. Mastering technology is absolutely essential, but that alone is not enough. One must look for a vision and adhere to a system of life-governing principles as well.

It is not an easy task, as the prevailing visions and values preclude simple solutions to problems for which society demands solutions. Further, what is “prevailing” seems to change continually.

Society will look to those applying technology to participate in the process of building consensus concerning principles and priorities. Without such participation, public policy decisions will be reached without full understanding of all probable impacts. True cause and effect relationships will not be understood, and potentially damaging impacts not considered. The engineer, with mastery of technology and the discipline of rigorous analysis, should be a major contributor to public consensus building. It is a role that should be gladly
accepted. Without it the profession is diminished and society not well served.

I commend the challenge to any young person seeking a rewarding career. It won’t be dull; it won’t be easy, but it will be rewarding to both the engineer and society.