

Dr. Myron Harrison, former physician for IBM, articulated a profound insight in a recent article in Hazardous Materials Toxicology:

*“ Professionals associated with (semiconductor manufacturing) have invariably commented on the rapid pace of change in tools and materials and on the fact that adequate toxicological assessment of chemicals almost never proceeds their introduction into manufacturing settings. The pace of change is quickening under the pressure of severe economic competition. As recently as 3-4 years ago, a typical schedule of a new technology from research and development to pilot lines to full manufacturing was 6-8 years. Executives who manage micro-electronics businesses are now demanding the schedule be compressed into a 2-3 year time frame. Engineers are not evaluated nor rewarded on their ability to ... understand new or unusual health hazards. This task is the responsibility of health and safety professionals. Unfortunately, the opportunities for the professionals to be involved before these new processes arrive at the manufacturing floor are being diminished by the quickening pace of technologic change.... Any large semiconductor facility uses several thousand chemicals. An attempt to review the toxicology of all these materials is doomed to be superficial and of little value...”*