OPENING ADDRESS 31ST CONFERENCE 1978

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Our agricultural chemicals world is slowly but surely unravelling at the seams. But perhaps I shouldn't be so angry and frustrated about it. After all, we are just a tiny portion of the world of chemistry created by mankind and an even smaller portion of the world of chemistry fashioned by nature. Does it really matter if we go down the drain?

You and I know it does matter. World food needs are going to triple in the next 25 years and meeting these needs will require the extensive use of agricultural chemicals. Will these chemicals continue to be available? I wish I could be sure.

Ten thousand years ago life was short, nasty and brutish. As one of nature's creations, we got equal treatment with all the rest and spent our limited existence in a continuing bitter struggle for enough food and shelter to survive.

Afflictions of one sort or another came early, caused enormous suffering and were seldom curable. We were, with a vengeance, an integral part of that so-called balance of nature.

Fortunately, by chance or divine intervention, we acquired the ability to accumulate and preserve knowledge for future generations. Even more important, we converted this knowledge into useful technology that ensured for many of us longer, healthier, more comfortable and enriched lives. We became relatively free from the clutches of the natural world and we feel sorry for the hundreds of millions of people who still have not achieved this kind of liberation.

Thus it is strange that powerful elements in our modern industrial societies seek not just to control the growth of technology, particularly chemical technology, but to abolish it.

There is a senseless yearning to reincorporate with nature. It is an odd malady that doesn't afflict the people of developing countries who are striving desperately to escape the balance of nature and gain control of their destiny. Unlike some of us they recognise clearly that the growth of technology is the underlying base for health, for wealth, and for all improvement in the human condition.

What is surprising is how suddenly the malady developed. In 1910 our life expectancy was about 47 years. To-day it's about 72 years. The growth of technology was the essential ingredient that gave us that remarkable improvement and chemical technology was one of the star contributors.

Can we have forgotten as soon? Don't we believe anymore in that marvellous slogan "better living through chemistry"?

The trouble is the public is being led to believe that all man-made chemicals are hazardous and that naturally occurring chemicals are not when, in fact, no chemical is hazardous if properly managed.

The public is being deceived when it is told that chemicals in nature are any less toxic or potentially less hazardous than man-made chemicals.

The dioxin contaminant in 2,4,5-T and other compounds has been branded as a chemical of incredibly high toxicity, and indeed it is. After all, it is a thousand times more toxic than our most toxic pesticide. But

did you know that the botulism toxins than can be formed in improperly canned foods are at least 50,000 times more toxic than our most toxic pesticide?

We ingest about 40 mg of pesticides each year, an amount about equivalent to the tip of a lead pencil. If we drink coffee, we ingest about 40,000 to 400,000 mg of caffeine each, depending on whether we drink one or ten cups a day. Caffeine is not innocuous. It takes a dose of about 10-20 grams to kill you, which is the amount in about 100-200 cups of coffee. Also,, it is mutagenic, teratogenic and carcinogenic, just like a host of other toxic natural products that we consume in greater quantities than pesticides everyday.

Are you a smoker? The average smoker inhales about 1 mg of nicotine and 10 mg of tar into his lungs everytime he smokes a cigarette. That adds up to about 40-160 gm of tar each year, depending on whether you smoke half a pack or two packs a day.

Nicotine has an acute oral toxicity to rats of about 50mg/kg, more toxic than most pesticides. It only takes a dose of about 2½ to 5 grams to kill you. Which is the amount in the smoke from 125-250 packs of an average cigarette. Tar contains potent carcinogenic compounds. Heavy smokers of an average cigarette inhale about a third of a pound into their lungs each year.

The problem is that neither the news media nor our public agencies are accurately informing the public on the distinction between toxicity and hazard and the relationship of toxicant concentration to expression of toxicity.

The voices of chaos are a mixed bag and much too noisy. Who are these people? What are they like? Well, there are the fearful, the ignorant, and the superstitious who see demons in the form of pesticides around every corner; the anti-technologist who promotes the fear of pesticides to hasten their demise; the scientist who promotes the fear of pesticides in hopes of gaining funds for support of his research; the fear of pesticides for political gain and power.

The voice of chaos is having an impact. A number of major pesticides have been banned or withdrawn from the marketplace. An initial working list of 45 pesticides that may be considered too dangerous for use are scheduled for rebuttable presumption hearings - in short, guilty until proven innocent.

It is not my intention to paint a picture so bleak that you get discouraged and give up. I would rather have you fighting mad. We, in the pesticide industry, have an enormously important job to do and that is to control pests, improve health, and increase food and fibre production.

A lot of misguided, cynical and self-serving people are getting in our way. Everyone of you needs to make sure that your pesticide house is in order by any reasonable standards. And you need to keep raising your voice until it is clearly heard in the press, on television, in the courts, by our public agencies and most of all by the long-suffering public.

Finally, it has not been "fun" talking to you but I most sincerely believe that what I have had to say IF listened to, may well allow a lot of people round the world to continue to have fun in the future, rather than starve in a NATURAL world without pesticides but with plenty of pests.