Mr. Jerome F. Smith

I am mainly concerned with Lead Industries Association's trade show exhibits, the use of lead in ceramics, and more recently, the use of lead in paints.

Since lead's use in ceramics is broken up into a number of categories, i.e., glass, porcelain enamels, glazes, solid state and other electronic applications, colors, etc., obtaining a fair market picture is difficult. However, one thing we can do is assess new developments as they affect lead in ceramics and paint.

In glass technology, for example, a couple of developments have come along to help lead. Devitrifying solder glasses using as much as 65% lead are common in television and electronics industries for bonding glass to glass, or metal. More extensive use of this, as well as high lead radiation shielding windows, can be expected. As industrial applications for radioactive isotopes increase, so will the need for these shielding windows.

Lead in porcelain enamels is confined almost entirely to aluminum these days. This market is gradually expanding, and at the same time the product is improving. Of significance is the fact that one company (said to produce 80-90% of the enamel frit sold) no longer offers leadless enamels for aluminum. Enamelers weren't using them anyway, but this makes the fact more obvious.

This is not the case, however, with porcelain enamels for steel. As I mentioned last year, we have no satisfactory low-temperature enamels for steel. One is desired by steel enamelers because of inherent cost saving features. And one could no doubt be developed. Given a 10 to 15% lead enamel for steel (a likely range), the potentially wide usage of such enamels could account for 8,000 to 10,000 tons of lead per year.

Another promising area in ceramics is ferromagnetics. Mr. Daiesian-ovics will later this morning, point out some ways in which the lead industry can help itself to a good share of this new market.

The fact is, solid state and other electronic markets for lead in ceramics have grown steadily in the last decade. This would include: thermoelectrics, ferroelectrics, ferromagnetics, and dielectrics.

One sour note I should mention is the advent of throw-away glass bottles with organic color labels. This is often in place of returnable bottles with lead-bearing glass color labels.

Overall, however, it would appear that lead consumption for ceramics will continue to experience moderate growth, and given a little time, some of the newer developments, especially electronic and electrical, could be major markets for lead.

Turning to paints, here too, we can offer some encouragement. New developments — both from the industry and from I.L.Z.R.O. — look good. This includes new pigments, new vehicles, and new uses for old pigments. For example, water thinnable ferrous primers (such as the one broken down into its parts at the back of the room) are being seriously considered by the automobile industry.

White corrosion-resistant lead pigmented primers are fighting less expensive coatings for a share of the highway guardrail market. And, of course, lead chromate paints are finding increased application because their yellow color states CAUTION, and because they are more visible; therefore, safer for motorists.

A considerable amount of time, energy and money goes each year into the preparation of our trade show exhibits and for manning the booths. Because of this we would like you to visit our exhibits whenever possible — and when it isn't possible, ask others in your organization to drop by. Often our members have helpful suggestions concerning our displays, and of course, we find it useful because it offers a chance for an exchange of ideas and information useful to both parties.

We are scheduled to exhibit at the following trade shows in 1964:

Construction Specifications Institute in Dallas, Texas	Booths #41 and #43 April 20 - 22, 1964
Design Engineering Show Chicago, Illinois	Booth #407 May 11 - 14, 1964
American Institute of Architects in Saint Louis, Mo.	Booths #1 and #2 June 14 - 18, 1964
Nat'l Plumbing-Heating-Cooling Exposition Minneapolis, Minn.	Booth #108 June 21 - 23, 1964