

The American Institute of Chemists, Inc.

7315 Wisconsin Avenue, Washington, D. C. 20014/301-652-2447

May 17, 1976

Dr. H. Tracy Hall, FAIC 1711 N. Lambert Lane Provo, Utah 84601

Dear Dr. Hall:

We have not yet received a reply to our letter of April 20, 1976, requesting a 500-word draft of the current status of the innovative research for which you received the Chemical Pioneer Award.

If you have not yet mailed the above information we hope the enclosed copy of Dr. Battista's write-up will aid you in preparation and are extending the deadline a few days longer so that we may have full participation in the Profiles of AIC Chemical Pioneers to be printed in a special Bicentennial Issue (July 1976) of The Chemist.

Cordially,

Paul Pierpoint Executive Director

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April 20, 1976

Dr. H. Tracy Hall, FAIC 1711 N. Lambert Lane Provo, Utah 84601

Dear Dr. Hall:

A special Bicentennial Issue — the July 1976 issue — of <u>The Chemist</u> has been authorized. This issue will carry Profiles of cooperating living AIC Chemical Pioneers.

We are soliciting your urgent cooperation to provide us with a 500-word draft of the current status of the innovative research for which you were awarded your Chemical Pioneer Award.

We plan to edit your draft, and wish to pinpoint especially the present-day benefits to society of your contributions: (a) humanitarian, (b) commercial success-pounds of product sold, number of jobs provided, etc., (c) contribution to national security, (d) specific benefits to the environment, or the good life of humanity, and (e) the future potentials of your contributions.

It is important that we receive your draft of this contribution no later than May 20, 1976 if it is to be included in this Bicentennial Issue of The Chemist. We also will require a reasonably current glossy photograph of you to accompany the presentation as soon as possible.

Our plan is to solicit financial support from industry and other sources to help the AIC distribute this Bicentennial Issue of The Chemist to high school libraries and high school science teachers. We believe the profession of chemistry will be enhanced by this issue, but more importantly, we believe that many high school science students who read this issue about the contributions of our Chemical Pioneers may be inspired to undertake the study of chemistry as a career.

We know we can count on your wholehearted support to help make the July 1976 Bicentennial Issue of The Chemist a worthy tribute to chemists and the profession of chemistry at large.

Appreciatively,

Paul Pierpoint Executive Director

PROFILE COPY FOR THE JULY 1976 ISSUE OF THE CHEMISTS

Chemical Pioneer: 0. A. Battista

Received Award: May 1969 while an employee of

FMC Corporation at Princeton, New Jersey

<u>Citation:</u> For pioneering research in the colloidal

chemistry of High Polymers

Commercial plants to manufacture the first microcrystal polymer product he invented - microcrystalline cellulose - now are realities in the United States, Japan, and Northern Ireland.

Patented microcrystalline celluloses are used in numerous foods, (low-calorie foods, salad dressings, etc.), pharmaceuticals (tabletting), and industrial products (paints, catalysts) with well over 100,000,000 pounds sold to date.

The second microcrystal polymer product to achieve commercial stature is Avitene Hemostat. The New Drug Application for this product has recently been approved by the FDA for marketing in the United States. As a safe and outstandingly effective anti-bleeding agent, it proffers to be of great humanitarian value as a new major adjunct for surgery. It is a natural form of collagen which is especially effective in stopping bleeding in internal organs and it is completely

assimilated by the body in a matter of a few weeks.

Other members of the microcrystal polymer family that have been researched and are awaiting future development are derived from amyloses, chrysotiles, polyamides, polyesters, polypropylenes, wool, and silk.

Following 32 years in industry as a research scientist (62 U.S. Patents, over 450 foreign patents, 35 scientific publications), Dr. Battista retired in 1974 as Vice President, Science and Technology, Avicon, Inc., to become a consultant and to enter academe. He is Director of the first center of its kind recently formed to pursue research and teaching in the field he has pioneered; Center for Microcrystal Polymer Science at the University of Texas at Arlington.

In addition, he serves as Chairman and President, Research Services Corporation (Consultants to Research Management), is President-Elect of the American Institute of Chemists, has authored 17 books, and is Founder and Editor of KNOWLEDGE Magazine.

Paul Pierpoint: Hope the following will be ok. H Iracy Hall 23 may 1976

PROFILE COPY FOR THE JULY 1916 ISSUE OF THE CHEMIST Chemical Pioneer: H. Tracy Hall, Distinguished Professor Brigham Young University Received Award: May 1970

Citation: For pioneering research in the field of high pressure at high temperature and the synthesis of diamond

The first laboratory synthesis of diamond from graphite by H. Tracy Hall some twenty years ago quickly led to the commercial production 66 diamond grit. His invention of the first machines capable of simultaneously generating high pressures and temperatures sufficient for the task coupled with "diamonds made by man" stimulated world-wide research that has vastly improved diamond materials available to industry.

Domestic production of diamond grit now stands at about 25 millin carats per year with foreign production probably somewhat less. The total dollar value 66 this diamond is about \$75 million. The manufacture of the product employs only about 1000 people worldwide but many, many more are employed between the production of the raw diamond material, its fabrication into products such as diamond grinding wheels and its sale to the end user. Also, many services and products are used by the manufacturer. The United states does not have any diamond mines and in the past has depended on other countries for its needs. The commercial production of synthetic diamond grit has relieved the U.S. of a former strategic disadvantage. However, for dhamond grit sizes above 25 mesh and for drilling stones, the U.S. still depends on foreign supply. But research will soon change that. Sintered diamond powder and recrystallized diamond powder available in large shapes for cutting tools, wire drawing dies, etc. are new developments in which Dr. Hall has also pioneered. At least two companies are currently marketing these new products and they are proving to be superior in many ways to the natural diamond formerly used.

Continued innovation in the types of diamond produced by man is a certainty and a necessity. Known reserves of natural industrial diamond will not be able to supply the anticipated demands of the year 2000.