

# **Advice & Counsel**

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# Industry Stalwarts: Floyd F. Oplinger and Clarence H. Sample

#### Dear Readers,

2009 marks the 100th anniversary of AESF Foundation [formerly American Electroplaters & Surface Finishers Society (AESF) and previous to that American Electroplaters Society (AES) and previous to that the National Electroplaters Society (NES)].

In making a historical journey through the history of this magnificent organization, I have come across articles providing a rare glimpse into the backgrounds of some of the individuals in our industry that had a major impact on how things were done or why. I am making an attempt at covering some of these individuals in the next few articles, using text previously printed in past issues of Plating or Plating & Surface Finishing magazine. Readers are urged to submit names and information for inclusion in future articles. These individuals are covered in no particular intended order. In some cases, I am assuming, based on apparent age that the individuals are longer with us. Forgive me and let me know if you are still out there.

I continue this series with:

Floyd F. Oplinger



In the 1950s, Mr. Oplinger was Manager of Electroplating Service and Development in the du Pont Company's Electrochemicals Department.

Mr. Oplinger was born in Danielsville, Pa. in 1898. He attended Albright College, in Myerstown, Pa. for two years, and was graduated from Franklin and Marshall College, in Lancaster, Pa. in 1919 with a Bachelor of Science degree in Chemistry. Three years later, he received a Master of Science degree in Chemistry from the University of Rochester.

Prior to his association with du Pont, Mr. Oplinger was a chemistry instructor at the University of Rochester and the University of Maine, and spent several years with the National Aniline and Chemical Company at Buffalo, N.Y. as well as with the North East Electric Company, in Rochester, N.Y.

In 1927, Mr. Oplinger went to work for the Roessler & Hasslacher Chemical Company as a chemist. Three years later, du Pont acquired Roessler & Hasslacher, and the following year, Mr. Oplinger was transferred to the New York Office as a service representative on sodium and cyanide products.

After 1933, Mr. Oplinger held a variety of positions in the fields of metal treatment and electroplating, in both the Niagara Falls and Wilmington, Delaware du Pont plants. In December, 1945, he was appointed Manager of Electroplating Service and Development.

Mr. Oplinger contributed to the plating industry a distinguished list of inventions and developments for which he has been granted a number of patents and which have been described in publications. His first major contribution (with C.J. Wernlund) was in the field of tin plating from stannate baths in which he developed the first really successful commercial process, still in use today. Later he did much ground-breaking research in the reflowing of tin, now so important in the manufacture of electrolytic tin plate.

In the field of cyanide zinc plating he

found the fundamental conditions under which bright plate could be obtained and discovered the nitric acid and the acidified hydrogen peroxide bright dips, also used on cadmium plate. Mr. Oplinger perfected high-speed copper and brass (including white brass) plating and was recognized for his work on barrel zinc plating and plating of zinc base alloy die castings.

A member of the Electrochemical Society and the American Electroplaters' Society, Mr. Oplinger was a popular speaker at technical meetings, renowned, not only for his many valuable contributions but also for his ready wit and forthrightness. He was a member of the Phi Sigma Kappa social fraternity.

Mr. Oplinger was married to the former Mary C. Attridge of Rochester, N.Y. and they raised three sons and two daughters.

Clarence H. Sample



Mr. Sample was born on September 21, 1906 in Spencer, Idaho, a village consisting of a "headquarters" building of a livestock company and a few frame houses. In his childhood, Mr. Sample caught trout from the little creek alongside the village and "commuted" via buckboard (a light, fourwheeled wagon without body or springs but with long elastic boards supported at the ends directly by the axles).

While still a youngster, Sample moved

with his parents to a farm in the Boise Valley. There he attended a typical tworoom country school until he went to Meridian High School. After graduation, in 1925, he worked his way through the University of Idaho in Moscow. During this period he spent two strenuous but enjoyable summers as a "smoke chaser" with the U.S. Forest Service in a remote section of the Clearwater National Forest on the Idaho-Montana border.

After he had received his B.S.Ch.E. degree in 1930, Mr. Sample joined the Technical Staff of Bell Telephone Laboratories, Inc., in New York City, where he was engaged in research and development work on corrosion and metallic finishes until 1945. While at Bell Laboratories in 1938, Mr. Sample earned an M.A. degree in Physical Chemistry, through part-time and evening work at Columbia University. In 1946 he joined the Electroplating Section of The International Nickel Company, in New York City.

Mr. Sample was particularly concerned with the development of reliable test methods in the field of electrocoatings, and was therefore active in the work of the American Society for Testing Materials, especially in its Committees A-5 and B-3 on corrosion of iron and steel and of nonferrous metals, respectively, and B-8 on Electrodeposited Metallic Coatings.

Mr. Sample served as ASTM secretary 1943-1947 and from 1947-1950 its Chairman. Mr. Sample earned much of the credit for the growth of the latter committee's activities and influence. He was also a member of the Advisory Committee on Corrosion and the Administrative Committee on Papers and Publication of the ASTM.

In the American Electroplaters' Society, Mr. Sample was the ASTM Liaison to the AES Research Committee. He served as a member of AES Project Committee No. 9 on "Physical Properties of Electrodeposited Metals," and as Chairman of AES Project Committee No. 13 on "Correlation of the Weathering Behavior of Electrodeposited Coatings with Their Permeability to Gases."

In 1949, he was the Chairman of the AES Paper Awards Committee. In the same year he received the Society's Award of Merit in recognition of his services. Mr. Sample held membership in a number of other societies, among them National Association of Corrosion Engineers, American Society for Metals, The Electrochemical Society and American Chemical Society. He was a popular lecturer and writer on corrosion and specification subjects.

More next month. P&SF

# The 2010 **Bright Design Challenge is GEARING UP!**



For more information contact Cheryl Clark at cclark@nasf.org.

NASF is pleased to continue its relationship with the College for Creative Studies in Detroit to bring you the 2010 Bright Design Challenge. The "Challenge" will soon begin and we need your support. The future of surface finishing depends on the innovative ideas of our vouth and it's the responsibility of those currently serving this industry to foster and nourish these ideas.

The 2010 Bright Design Challenge will focus on utilizing bright finishes and chromium on a performance motorcycle

- the details are still being worked out
- but you can be sure this will be an exciting challenge!

This event was created to help promote electroplated bright and alternative finishes in various industries and to educate future designers on the processes responsible for creating the look, feel and performance of these finishes.

# To view the 2009 Challenge entires, click here.

Please take a moment to review the photos as well!

To support this import industry event, we are offering several sponsorship opportunities.



A Bright Idea

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