

Mound Science and Energy Museum Association

presents

STABLE ISOTOPE ENRICHMENT at MOUND LABORATORY **Robert E. Ellefson, Ph.D.** **REVac Consulting**

September 25, 2019

7:00 pm

**at the Mound Cold War Discovery Center
1075 Mound Road, Miamisburg, OH**

In the mid-1950s Mound Laboratory received an assignment from the AEC to enrich gaseous stable isotopes to sell to industry and government laboratories. All of the noble gases were enriched at Mound to high isotopic levels as well as C-13, Oxygen-17 and 18 and sulfur isotopes. The enrichment methods were developed at Mound including gaseous thermal diffusion, liquid thermal diffusion and chemical exchange. These same researchers developed tritium enrichment columns used in the nuclear division at Mound. In the process of these developments, many papers were written on this unclassified scientific work that are still publicly available and used. Some of the former HH workers will be present and lend their expertise to the presentation; together we will answer questions.

Speaker's Biography

Dr. Ellefson holds B.S., M.S. and PhD degrees in Physics and was employed as a research staff member at Mound Laboratory from 1972 until he retired as a Science Fellow in 1994. Following his Mound Lab employment, he continued to design and build mass spectrometers at INFICON, Inc. in Syracuse, NY. Since 2005 he has worked as a private consultant in Dayton, addressing analytical methods for a variety of applications worldwide. In 2011 Bob was named by his peers an American Vacuum Society Fellow. He is also a board member of the Mound Science and Energy Museum Association.

For additional details call 937-353-4457. The presentation is free and open to the public and has ample free parking.