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2017 NATIONAL INVENTORS HALL OF FAME INDUCTEE

Iver Anderson

Born October 7, 1953



Photo credit: Ames Laboratory

Lead-Free Solder

U.S. Patent No. 5,527,628

10 Things You Need to Know About Dr. Iver Anderson, Inventor of Lead-Free Solder

When inventions make our daily lives safer, we all benefit. Iver Anderson, inventor of lead-free solder, is living proof.

Anderson's solder — made from tin, silver and copper — is used in most consumer electronics today. Studies in the late 20th century showed that its predecessor, a lead-tin alloy, leaked into landfills and aquifers when discarded, threatening the environment and human health.

Besides minimizing toxic environmental impact and manufacturing costs, Anderson's lead-free solder can withstand greater stress, higher temperatures and temperature changes, more rugged settings, and resist corrosion that can weaken soldered connections. All of these factors play an integral role in the functionality and performance of smartphones, laptops, tablets and other devices.

Anderson's innovation will be celebrated this May as he is Inducted into the 2017 Class of the [National Inventors Hall of Fame](#).

Here are 10 facts you should know about Iver Anderson:

1. His invention of lead-free solder has eliminated tons of lead that has been released in the environment.
2. Today, 70 percent of electronic items in the world contain Anderson's lead-free solder (such as the device you are using right now to read this).
3. His invention turned modern technology into safe and nonhazardous devices that we use every day.
4. He is a firm believer that "what you do in science should have a reason."
5. As a child, he built Soap Box Derby cars and competed in races.
6. He is an avid alpine skier.
7. He is a senior metallurgist at the U.S. Department of Energy's Ames Laboratory in Iowa.
8. He specializes in teaching principles of materials science and engineering, physical metallurgy, powder metallurgy, solidification processing and joining.
9. He has received numerous awards, including recognition as a 2015 Fellow of The Minerals, Metals and Materials Society and the 2010 Iowa State University Award for Achievement in Intellectual Property.
10. He holds 39 patents.

To learn more about the 2017 Class of Inductees, visit <http://www.invent.org/honor/inductees/>.