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Itronics Demonstrates Innovative Method to Recover Zinc Powder

- Technical Breakthrough: An Emerging "Zero Discharge" Energy Saving Zinc Recycling Technology –

RENO, Nevada, March 17, 2015 -- Itronics Inc. (OTC: ITRO), a growing and diversified fertilizer, silver, and minerals producer, today announced a technical breakthrough by successfully testing electrowinning as a process to recover metallic zinc powder from zinc enriched liquids produced by leaching zinc oxide from zinc-bearing brass mill flue dust. The zinc leaching process (ZinLix Process) and the potential market scope were announced in a press release dated January 15, 2014.

"We know several things in researching this sector. The zinc market is tightening, there is a huge amount of raw material available and we are developing a less expensive, reliable process to produce zinc based on our track record of converting liquid wastes into award-winning fertilizers," said Itronics President Dr. John Whitney.

While zinc prices have remained relatively stable over the last two years, metal market analysts are forecasting that prices will rise substantially over the next two to three years due to mine closures because ore reserves have been mined out, delays in opening new mines, and continuing growth in worldwide demand for zinc products. "The timing for our process is excellent," said Dr. Whitney.

The Company's goal is to produce metallic zinc, either as a metallic powder or as solid zinc metal, for year round sale into established markets. In addition, part of the zinc recovered from the flue dust would be used seasonally as an ingredient for manufacturing Itronics' popular chelated liquid GOLD'n GRO zinc micronutrient fertilizers. "Our innovative zinc recycling technology is expected to eliminate the zinc-bearing waste completely by converting all components to salable goods. It is also energy saving," Itronics President said.

The business model for zinc-bearing flue dust recycling is similar to the silver-bearing photo-liquid recycling model that the Company is now expanding commercially. As stated in the January 15, 2014 Press Release, it is estimated that 300,000 tons of secondary brass and bronze smelter zinc-bearing flue dusts are generated annually in the United States. Once the Zinlix process is demonstrated on a large pilot scale for zinc-bearing secondary brass and bronze smelter flue dust, it could be combined with Itronics' already developed FeLix technologies to process steel mini-mill zinc-bearing flue dusts. It is estimated that one million tons of such flue dusts are generated annually in the United States.

The electrowinning process has been tested on a small laboratory scale using a proprietary electrolytic cell design. Itronics already has most of the equipment and materials needed for the early stage development work and it has the permitted R & D space within its manufacturing facility. The process is "zero discharge" and no waste is generated by the testing.

The ability to produce metallic zinc powder from the zinc enriched liquid produced by leaching zinc oxide from zinc-bearing flue dust is a technical breakthrough because the proprietary zinc-bearing liquid generated by the leaching process has never been tested for this purpose. The initial testing indicates that the zinc enriched liquid will work with high energy efficiency as an electrolyte for zinc recovery by electrowinning.

The process being developed by Itronics may use up to 40 percent less electrical energy compared to conventional zinc refining. Electric energy is a major component of current refined zinc metal production cost. Significantly lower electrical energy use would provide a strong economic driver for this development.

Successful pilot scale development would establish the design basis to build a large scale manufacturing plant specifically for processing secondary brass and bronze smelter flue dust and zinc-bearing electric arc furnace dust produced by steel mini-mills. A separate large scale facility that has rail service will be needed for a commercial zinc recycling operation.

The critical path process component needed to achieve commercial scalability is the actual design and operating parameters for the electrowinning cell. The technology to solubilize the zinc oxide from the flue dusts is already proven at a commercial scale and has been in use by Itronics for more than 10 years.

"Our goal with the new technology is to completely recycle the zinc-bearing flue dust by converting its components into salable goods, analogous to what we are doing with the silver-bearing photographic liquids," said Dr. Whitney. "We believe that our fertilizer manufacturing technology and related fertilizer market access and our existing permitting for pilot scale research and development will make this achievable within a reasonable time frame. Materials that are currently classified as hazardous waste will become commercial raw materials when used in our new zinc recycling process."

About Itronics

Headquartered in Reno, Nevada, Itronics Inc. produces GOLD'n GRO liquid fertilizers and silver bullion. Itronics, through its subsidiary Whitney & Whitney, Inc. is developing environmentally compatible mining technology and is now providing project planning and technical services to its mining affiliate Auric Gold & Minerals, Inc. It also operates the popular InsideMetals.com web site, <http://www.insidemetals.com>. which provides a value-added WORLD VIEW of Gold Producer Stocks, Mineral Producer Stocks, Junior Gold Stocks, and Junior Mineral Stocks.

Itronics has received numerous domestic and international awards that recognize its ability to successfully create and implement new environmentally clean recycling and fertilizer technologies.

The Company's environmentally friendly GOLD'n GRO liquid fertilizers, which are extensively used in agriculture, can be used for lawns and houseplants, and are available, along with liquid fertilizer injectors, at the Company's "e-store" catalog at <http://goldngro.com>. The popular Silver Nevada Miner bars are available at the Company's "e-store" catalog at <http://www.itromet.com>.

VISIT OUR WEB SITE: <http://www.itronics.com>

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