FOR IMMEDIATE RELEASE

Trans Ionics Corporation Announces a Major Advance in Process to Separate Ethanol from Water for Production of Fuel-Grade Ethanol

The Woodlands, TX May 8, 2008 - Trans Ionics Corporation announced today that it has made an major improvement to its **ESep** process for ethanol/water separation, which, according to studies completed, will significantly improve its energy efficiency and further differentiate it from traditional distillation.

The Energy Independence and Security Act of 2007 mandated the use of 36 billion gallons of ethanol in U. S. gasoline by 2022, 21 billion gallons of which must come from non-corn based feeds such as sugar and cellulose. Recent increases in the price of corn has further intensified the "food for fuel debate" and may prevent the corn ethanol industry from even achieving the 15 billion gallons per year they are allotted.

"Our goals for development of any new separation process are to save at least 30% in capital cost and 30% in operating costs versus the next best competition. Our first process iteration for **ESep** was more tailored to retrofits of existing ethanol plants where we would replace the rectification section of the distillation system and operate on a feed containing 50-60 % alcohol." says Dr. Robert C. Schucker, President and CEO of Trans Ionics. "This is not unlike what a number of our competitors are doing. While this can save energy, it does require the presence of a portion of the distillation system called the beer column, which may be a negative in new construction due to the cost of stainless steel."

The latest discovery by Trans Ionics' researchers for the first time provides a simple and cost effective solution for new construction. "Beer" produced by fermentation and containing from 3 – 15% alcohol is fed to the **ESep** unit where a simple extraction process removes ethanol selectively, leaving behind the water. The recent advancement that makes this process energetically viable is the subject of a recent patent application; and cannot be discussed. "However, the results are startling," says Dr. Schucker.

Trans Ionics is contemplating the construction of a 500,000 – 1,000,000 gallon per year large pilot/small production unit to demonstrate the process using fermentation of molasses to produce the ethanol. "This is an easier process than one using corn because we don't have to break down the starches to get sugars. They are already in the feed."

Applications for the Advanced **ESep** process include retrofits to existing ethanol plants as well as new construction for corn, sugar and cellulosic-based processes.

About Trans Ionics Corporation

Trans Ionics Corporation is a premier research and development firm that is creating new and improved separation technologies for the petroleum, petrochemical, environment and power generation industries. For further information, please contact Dr. Robert C. Schucker, at (281) 296-5585 or visit Trans Ionics' website at http://www.transionics.com.