

ZirChrom Separations Inc. To Develop New Class of Chiral Chromatography Products

Project Funded through Phase II Small Business Innovative Research (SBIR) Grant from the National Institute of Health (NIH)

(Anoka, MN) – (February 16, 2005) ZirChrom Separations, Inc. announced today a project to develop a new class of chiral stationary phases (CSPs) for analytical and preparative-scale high performance liquid chromatography (HPLC). The new class of CSPs is based on the modification of zirconia through the use of Lewis base anchors. The project is funded through a Phase II SBIR grant totaling over \$700,000 from the National Heart, Lung and Blood Institute of the NIH.

The goal of this project is to develop a rapid screening technique for the evaluation of chiral selectors anchored to a zirconia platform. The project will be completed utilizing the Lewis base anchoring technology developed by ZirChrom during Phase I studies.

"One of the major innovations in our approach is the use of Lewis base anchor groups to anchor chiral selectors to a zirconia surface. When used for fast screening of chiral selectors with an intermediate removal step, a single zirconia column can be used to determine the optimal chiral stationary phase for a given target molecule. The use of a single column with the ability to be transformed to one of a variety of stationary phases represents a new approach to chiral chromatography. This approach is also applicable to preparative scale separation, which implies that one can use the same substrate for different preparative separations by just cleaning off the old chiral selector, sterilizing the column and attaching a new chiral selector for a different purpose," said Dr. Clayton McNeff, CEO, ZirChrom.

Chromatography is the major chemical methodology used to separate, detect and quantify organic and inorganic biological chemicals. It is universally accepted as the most important analytical technique in drug discovery and production.

About ZirChrom Separations

ZirChrom Separations, Inc. is a company formed in 1995 and located in Anoka, Minnesota. ZirChrom manufactures a full line of zirconia-based high performance chromatographic materials for analysis and purification by high performance liquid chromatography (HPLC).

