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PRESS RELEASE

CC Biotech LLC, Rockville MD, developing advanced separations technologies for large molecules, is awarded an SBIR phase I grant from the National Science Foundation for the project 'Spiral Countercurrent Chromatography for the Separation of Carbon Nanotubes'. The new technique has been applied for the first time to successfully purify single wall carbon nanotube species which are semi-conductors. The application will enable the processing of potent semi-conductors to be added to sensor circuits. The implications of this R&D have wide application to not only bio-sensor devices, but also in the preparation of nanotech molecules as therapeutic nanoparticles and conjugates for drug delivery. The spiral CCC process has high mass loading capacity and exquisite selectivity for bio-molecule and other large molecule



separations. The methods and processes developed in this project will enable the burgeoning field of semi-conductors in material science research all over the world. The activity of the purified carbon nanotubes are assayed in field effect carbon nanotube transistors, conducted in collaboration with Fuzbien Technology Institute, Inc. Rockville MD.

Pictured is the new **spiral CCC preparative chromatograph** that is being manufactured at CC Biotech. The large-scale machine can run almost

1Liter volume of solvents, enough to purify 5-10 g of material. This is truly large-scale for research laboratory work. The separation process takes place in rotors that have flow-through channels with specialized designs for large molecules using non-denaturing solvents. The machine's delivery is expected in 2 to 3 months for the first customers.

For more information about CC Biotech's products and research services the contact information is given below.

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