MESOFILTER™

Mesofilter Company Fact Sheet

About Mesofilter

Mesofilter, founded in 2005, develops and manufactures innovative nanotechnology to filter hazardous contaminants from water and air. Mesofilter is improving human health by providing the world with clean water and air free of dangerous arsenic, heavy metals, bacteria, viruses, and radioactive elements that currently poison hundreds of millions of people. Mimicking the functionality of the human nose, the company filters water and air without using pressure, chemicals, electrical potential, or plastic with no hazardous filtration byproducts or wastewater. The technology was originally funded by an EPA Clean Water Act 319 grant in 2004. It integrates meso-ceramics with natural cellulose and its arsenic and lead removal capability has been tested and certified by NSF International. For more information visit: http://www.mesofilter.com.

Management

Founder, Chief Executive Officer and Chief Scientist: Liangjie Dong
Chief Operating Officer: Sophia Zhang
Chief Information Officer: Wei Su
Chair of Advisory Board: Dr. Walt J. Atkins, Jr.

Mesofilter Products

MicroNose™ is the first generation filtration technology invented by Liangjie Dong at the University of Hawaii in 2005, which imitates the human nose, a highly effective filtering system. An iron-coated pottery granule with more than 1000 nm sized pores, MicroNose filters and immobilizes harmful pollutants and is the basis for the future generation products.

MesoNose™ is the second-generation of filtration technology. MesoNose is composed of ceramic granules made from natural clay containing millions of tiny 40-50 nm size “noses” with billions of nano Zero Valent Iron needles. The needles function like hooks to capture bacteria, inactivate viruses, and adsorb heavy metals and radioactive elements. The smaller pores dramatically increases the removal efficiency and has an adsorption speed more than 60 times faster than MicroNose. It adsorbs and seals the arsenic and lead, immobilizing the toxic metals, and inactivating bacteria and viruses.

NanoNose™ Water Purifier is the first drinking water pitcher to reduce arsenic and lead to below the Environmental Protection Agency (EPA) and World Health Organization (WHO) health advisory levels. Certified by NSF International, NanoNose filters drinking water to reduce arsenic to at or below 10 parts per billion (ppb) in addition to removing other harmful pollutants such as lead, mercury, bacteria, viruses and radioactive elements.

Mesopaper™ is the latest filtration medium, built to bring clean water to anyone, anywhere. It is the only paper able to filter and immobilize harmful pollutants such as heavy metals, arsenic, bacteria, viruses and radioactive elements without pressure, chemicals, electrical potential, plastic, or additional equipment. The paper is biodegradable and made of three layers sandwiched with MesoNose powder wrapped in bamboo fibers. One square foot of paper can purify 10 gallons of water with no wastewater or hazardous byproducts. Mesopaper can be molded into various shapes such as pour-through filters, straw filters, and industrial filtration cartridges. It is the only paper in the world to pass NSF/ANSI 53 certification for the removal of arsenic and lead

Applications include:

Industrial	Emergency	Agricultural	Personal	Air Filtration
Industrial wastewater treatment Nuclear and radioactive water treatment Highway runoff control Mining site acid runoff filtration Marine oil spills	Disaster (i.e. hurricane, flood, earthquake, etc.) relief Personal emergency kits Toxic wastewater spill in-situ treatment	Agriculture irrigation Aquiculture and fish farming River, lake, pond, and other slow moving water purification Groundwater purification	Household water filtration Outdoor recreation Travel	Medical Masks and hazmat suits Automotive air filtration Heating, ventilation, and air conditioning (HVAC)

Market Dynamics

Polluted water and air sickens and kills millions each year. According to the Best Water Technology Group, global water consumption doubles every 20 years, twice as fast as population growth and by 2025, it is estimated that more than a third of the world's population will not have access to clean drinking water. Arsenic poisoning alone affects 200 million people worldwide and in the United States alone, 170 million people drink water containing cancer-causing, radioactive elements.

According to the Centers for Disease Control and Prevention (CDC) and WHO, arsenic, lead, and mercury are the three most hazardous threats to human heath, and the consumption of these hazardous materials often comes from contaminated water and air. Diseases caused by these contaminates include skin, lung, and bladder cancer, black foot, kidney problems, reduced intelligence, muscle weakness, and more. There are no effective treatments for the various diseases caused by arsenic exposure, and lead poisoning can have serious permanent and untreatable impacts on children's brain development.

Providing an easy and affordable filtration system to remove arsenic, lead, mercury and other dangerous contaminants from water and air is the only way to dramatically limit exposure and reduce the associated risks.

Godman Sachs estimates that the global market is worth more than $400 billion, and will have a long-term annual growth rate of 4-6%.

Financials/Funding

Mesofilter earned $3.5 million in revenues in 2017. To date, Mesofilter has raised $1 million USD in an angel round of funding.

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