Press Release

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World Water Day 2014:
Disinfect drinking water and save energy at the same time

With long-life UV lamps, Heraeus helps to disinfect drinking water in an energy-saving and environmentally friendly way - whether in Hanau or New York

"Water and Energy" is the topic at the World Water Day 2014 held by the United Nations every year on March, 22. This year's World Water Day wants to emphasise the connections and interactions between water and energy and focuses on energy production and transmission, in particular for water power, nuclear power and thermal energy sources, and the use of water resources. The energy-efficient use of UV lamps for drinking water treatment is also a topic. Smart product solutions and UV technologies by Heraeus enable environmentally compatible, energy-saving and sustainable disinfection of drinking water. All over the world, municipal water works profit from this - from Hanau to New York.

The treatment of drinking water and used water with high-energy ultraviolet radiation for disinfection is an environmentally friendly method established for more than 100 years. It works without chemicals such as chlorine or ozone. Special UV lamps supplied by the specialty light sources division destroy microorganisms such as bacteria, viruses and parasites and help decompose chemicals that are detrimental to health. Neither the taste nor smell of the water are affected. The Hanau municipal utilities have been making use of the economic and ecological advantages of this drinking water treatment method for more than one year. To treat the water of a Hanau suburb, they have replaced chlorine disinfection in a water tower with a UV disinfection system supplied by Trojan. The system uses modern and long-life Heraeus amalgam lamps.

Long-life UV lamps enable compact disinfection plants

Due to a special production process, the Heraeus long-life UV lamps enable almost constant disinfection over the entire life of a lamp. Up to 90 percent of the original output is achieved even after a good 16,000 hours of operation, which is almost twice as long as usual commercial UV lamps. Thanks to the higher UV output and long service life, plant manufacturers such as Trojan need fewer lamps to design UV systems for disinfection. Moreover, the systems are low-maintenance and cost-efficient because lamps only need to be replaced after two or three years of operation. This provides a considerable potential for saving as regards number of lamps, system components, energy requirement, service intervals and cost of operation and maintenance. Compact disinfection systems are made possible, which further reduces the amount of space required.

12,000 UV lamps for the Big Apple

The water treatment plant put into service in New York at the end of 2013 is much larger. It is the world's largest UV disinfection system. Some 12,000 UV lamps in 56 so-called reactors, each the size of a truck and likewise supplied by Trojan, treat more than eight million cubic metres of water for the City of New York every day. Heraeus has supplied the initial UV lamp equipment. The water passes the special low-pressure gas discharge lamps and their UV light renders microorganisms innocuous within seconds. With this 'green' disinfection method, the city minimises its expenditure on maintenance and energy consumption for drinking water treatment to guarantee perfect drinking water for the metropolis.

Learn more about specialty light sources for water treatment at www.heraeus-noblelight.com.

For further information please conatct:
Dr. Jörg Wetterau
Corporate Communications
Head of Technology Media & Innovation
Heraeus Holding GmbH
Heraeusstraße 12-14
63450 Hanau
P +49 (0) 6181.35-5706
F +49(0) 6181.35-4242
E joerg.wetterau@heraeus.com
www.heraeus.com