

## Press release

Hanau, November 24, 2015

### **New technique for miniaturizing medical implants receives 2015 Heraeus Innovation Award**

**2015 Heraeus Innovation Award goes to a new ceramic platinum composite. Miniaturization of medical devices will allow for new types of treatment, including for newborns.**

The winner of the Konrad Ruthardt Award for the "Best Heraeus Innovation," one of this year's Heraeus Innovation Awards, will revolutionize the design and the applicabilities of future medical implants. Thanks to the innovative Heraeus material system made of ceramic and platinum (CerMet), smaller, more robust and more advanced electrical feedthroughs from the implant to the body can be produced at significantly lower cost. At 0.15 mm, the electrical circuit paths in the CerMet feedthroughs are only two times thicker than a human hair. This will make it possible in the future to fit even infants with miniaturized medical implants, in order to increase the chances of survival and quality of life of the little patients.

"In the future, we will enable to treat patients of any age with miniaturized medical implants," says Heraeus CEO Jan Rinnert, underscoring the significance of this innovation. "Medical implants produced using cermet technology are smaller and more advanced and integrate additional functions."

For this revolutionary technological leap, the innovation won in addition the Customer Focus Award, which was conferred for the first time and acknowledges the best innovation from the customers' point of view. The customer's jury opted for the CerMet technology, as this revolutionary solution could allow completely new applications for medical treatments in the area of neuro-stimulation, especially in the brain. More than three million medical devices are implanted each year to help manage such chronic conditions as cardiac arrhythmia, Parkinson's, deafness or blindness.

#### **Innovations are part of the Heraeus DNA**

Heraeus CEO Jan Rinnert was impressed by the quality of the submitted projects at the award ceremony last week in Hanau, Germany, and paid tribute to the outstanding team performance of this year's finalists. "The projects prove once again that innovation is firmly established in our DNA. I am particularly pleased about the direct feedback from our customers, because our innovations are meant to make our customers more

successful. And this year's Top Teams with their great products and processes will contribute decisively to this."

An innovative tool for hedging precious metal transactions was this year's winner of the Richard KÜch Award for "Best Cooperation." With "Flexible Forward" Heraeus customers can hedge precious metals at a given time, then take delivery in various amounts over an agreed period of time. This gives them a higher level of certainty with regard to future prices. With revenues of approximately 12.2 billion euros, Heraeus is one of the world's largest traders in precious metals.

A total of 26 projects were submitted for the Innovation Award, from which the jury, after conferring twice, selected seven finalists. The finalists were competing for the Konrad Ruthardt Award, named for physicist Dr. Konrad Ruthardt (1906-1989), founder of the Heraeus physical laboratory and co-developer of high-vacuum technology, in the category of "Best Innovation" for a product, process or business model, as well as in the category of "Best Cooperation" for the best innovation achieved through outstanding internal and external cooperation. The "Best Cooperation" award bears the name of physicist and chemist Dr. Richard KÜch (1860-1915), who was Heraeus's first head researcher and inventor of the "Original Hanau" artificial sunlamp. Since the Heraeus Innovation Awards were initiated in 2003, nearly 280 product innovations have been submitted, resulting in a total of 43 winners.

Heraeus, the technology group headquartered in Hanau, Germany, is a leading international family-owned company formed in 1851. With expertise, a focus on innovations, operational excellence and an entrepreneurial leadership, we strive to continuously improve our business performance. We create high-quality solutions for our clients and strengthen their competitiveness in the long term by combining material expertise with technological know-how. Our ideas are focused on themes such as the environment, energy, health, mobility and industrial applications. Our portfolio ranges from components to coordinated material systems which are used in a wide variety of industries, including the steel, electronics, chemical, automotive and telecommunications industries. In the 2014 financial year, Heraeus generated product revenues of €3.4 bn and precious metal revenues of €12.2bn euros. With around 12,600 employees worldwide in more than 100 subsidiaries in 38 countries, Heraeus holds a leading position in its global markets.

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