

### **Press Release**

# Freudenberg's Innovation Award honors:

# New simulation process that revolutionizes materials science

Weinheim, June 6, 2019. The Freudenberg Innovation Award was presented yesterday to the "Atomistic Simulations" project as an outstanding innovation example. The Freudenberg global technology group has established a new process that can be used to fundamentally better understand and optimize the friction in materials, lubricants and seals. "Atomistic Simulations" involve computer-based methods to describe the movement and interactions of molecules and atoms, allowing for analysis of which material pairings are particularly well suited for specific applications. This knowledge can be used to design energy-saving products for industrial applications, ensuring top levels of efficiency. Friction, wear, and maintenance costs are kept to a minimum.

A Freudenberg team of developers and technicians from the Freudenberg business areas, Freudenberg Technology Innovation, Freudenberg Sealing Technologies, EagleBurgmann and Klüber Lubrication proved for the first time how effective this approach can be. The Fraunhofer Institute for Mechanics of Materials in Freiburg, Germany also played a vital role. The result was a fast and functional solution for a Canadian power plant operator.

In addition to the "Atomistic Simulations" innovation, the "Freudenberg Innovation Award" presented four other finalist projects that illustrate how intensively Freudenberg is researching improvements for its customers. The projects included a modular catheter concept, a high-tech material for clothing, an environmentally

#### **Press Contact**

Cornelia Buchta-Noack
Freudenberg & Co. KG
Head of Corporate Communications
Tel. 06201 80-4094
Fax 06201 88-4094
cornelia.buchta-noack@freudenberg.communications@freudenberg.com
www.freudenberg.com

Dr. Astrid Kasper
Freudenberg & Co. KG
Deputy Head of Corporate Communications
Tel. 06201 80-6688
Fax 06201 88-6688

astrid.kasper@freudenberg.com



friendly coating with high corrosion resistance and improvements to the industrial processes for sealing fuel cells. The award is Freudenberg's highest internal award that honors outstanding innovation achievements by company employees.

"Current technological change is far-reaching, particularly in digitalization, mobility and sustainability," said Dr. Tilman Krauch, Head of Innovation at the Freudenberg Group. "Having an even deeper understanding of complex technological interdependencies is becoming more important. It is a challenge we are happy to face."

In 2018, Freudenberg invested some 444 million euros in research and development activities - over 17 million euros more than in the year before. 3,590 employees work in this area around the world.

"Our innovation strength helps create added value for our customers and society," says Dr. Mohsen Sohi, CEO of the Freudenberg Group. "We work together as a team to advance excellence, efficiency and sustainability and expand our successful company."

You can find out more: <a href="www.freudenberg.com/technologies/inno-vation/freudenberg-innovation">www.freudenberg.com/technologies/inno-vation/freudenberg-innovation</a>.

## **About the Freudenberg Group**

Freudenberg is a global technology group that strengthens its customers and society long-term through forward-looking innovations. Together with its partners, customers and research institutions, the Freudenberg Group develops leading-edge technologies and excellent products and services for more than 40 markets and for thousands of applications: seals, vibration control components, technical textiles, filters, specialty chemicals, medical products, and the most modern cleaning products.

Strength of innovation, strong customer orientation, diversity, and team spirit are the cornerstones of the Group. The 170-year-old company holds strong to



its core values: a commitment to excellence, reliability and pro-active, responsible action.

In 2018, the Freudenberg Group employed approximately 49,000 people in some 60 countries worldwide and generated sales of more than €9.4 billion. For more information, please visit <a href="https://www.freudenberg.com">www.freudenberg.com</a>