## Three awardees recognized in the 2021 Rittinger Award

In a ceremony held digitally at the closing session at the 13<sup>th</sup> IEA Heat Pump Conference in Jeju Korea, Jussi Hirvonen, Finnish Heat Pump Association, Professor Ruzhu Wang, Shanghai Jiao Tong University and the Center for Environmental Energy Engineering (CEEE), University of Maryland were given the prestigious Peter Ritter von Rittinger International Heat Pump Award, the highest international award in the air conditioning, heat pump and refrigeration field.

The award highlights outstanding contributions to the advancement of international collaboration in research, policy and market development and applications for energy-efficient heat pumping technologies that result in environmental benefits. It is awarded every three years in conjunction with the International IEA Heat Pump Conference. Mr. Stephan Renz, Chair of the Executive Committee of Technology Collaboration Programme of Heat Pumping Technologies (HPT TCP) by IEA, presented the awardees:

"It is my great pleasure to recognize these dignified nominees and honour them with the most prestigious prize in the field of heat pumping technologies", said Mr. Stephan Renz during the ceremony. Our award winners are undoubtedly some of the most influential individuals in the history of IEA HPT TCP." Laudation speeches were held for all the awardees by members of the Rittinger Award Selection Committee – by Mr. Per Jonasson for Jussi Hirvonen, by Dr. Sophie Hosatte for Prof. Ruzhu Wang and by Prof. Eckard Groll for CEEE.

M. Sc. Jussi Hirvonen, was the initiator of heat pump business in the Finnish market and because of his tireless work, Finland has become one of the leading countries using heat pumps for space heating. Jussi's 20 years of remarkable lifework in the heat pump sector also includes a large number of commitments in different positions and organizations which have forwarded heat pump business locally and globally. Jussi was the founder member establishing Finnish Heat Pump Association and as well founder member establishing European Heat pump Association (EHPA). He was also one of the members establishing Eesti Soojuspumpa Liit (ESPL) heat pump association into Estonia. Finland participating IEA HPT TCP program was also consequence of Jussi Hirvonen activity.

**Prof. Ruzhu Wang** is full professor and the director of Institute of Refrigeration and Cryogenics, Shanghai Jiao Tong University (since 1993). His institute has been recognized a world leading research institute in Refrigeration and Heat Pump Technology. Prof. Wang's major contributions related to heat pumping technologies include adsorption heat pumps, desiccant based heat pumps and dehumidification, vapor compression heat pumps, absorption heat pumps, and heat pump applications in green building energy systems and industrial waste heat recovery. He has written 12 Books regarding Refrigeration and Heat Pump Technologies (3 in English published by Wiley, Elsevier and Springer respectively). His publications have been extensively cited, thus he has been recognized as 2017 & 2018 Clarivate Highly Cited Researcher in the world.

Center for Environmental Energy Engineering (CEEE), this team of researchers from the Center for Environmental Energy Engineering at the University of Maryland works on cutting-edge heat pump technology research. They have one of the world's most comprehensive research portfolio on a wide range of heat pumping technologies both in terms of experiments and modeling. This remarkable group of researchers brings a wealth of experiences and expertise to the heat pump research community. Their contributions led to significant gains in technological development. They work collaboratively with researchers from other fields, other countries, and other institutions leading to great breakthroughs in both energy efficiency, improved performance, and reduction of manufacturing and energy costs.

The team from the Center for Environmental Energy Engineering that received the Rittinger Award lead by:

- Dr. Reinhard Radermacher, Director of the Center and Minta Martin Professor of Engineering, Professor of Mechanical Engineering
- Dr. Yunho Hwang, Co-Director and Research Professor
- Dr. Vikrant Aute Co-Director and Research Scientist
- Dr. Jiazhen Ling, Assistant Research Professor
- Mr. Jan Muehlbauer, Faculty Specialist and Laboratory Director

## About the Peter Ritter von Rittinger International Heat Pump Award

The Rittinger award is named after Peter Ritter von Rittinger, the Austrian engineer who designed and installed the first known heat pump in 1855. The award celebrates the technical skills and entrepreneurial spirit of Rittinger that is shared by the award winners.

## IEA Technology Collaboration Programme on Heat Pumping Technologies and Heat Pump Centre

The IEA Technology Collaboration Programme on Heat Pumping Technologies (HPT TCP) is a non-profit organisation under which the participants cooperate in projects in the field of heat pumps and related heat pumping technologies such as air conditioning, refrigeration and working fluids (refrigerants). HPT TCP is organized under the auspices of the International Energy Agency (IEA) and was founded in 1978. The current member countries are Austria, Belgium, Canada, China, Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, South Korea, Sweden, Switzerland, United Kingdom and the United States.

HPT TCP carries out a strategy to accelerate the use of heat pumping technologies in all applications where they can reduce energy consumption and reduce carbon emissions for the benefit of the environment. The Heat Pump Centre (HPC) is the international communication service and programme office of the HPT TCP. HPC links people and organisations worldwide in the field of heat pump technology.

Read more: www.heatpumpingtechnologies.org

For further information on the Peter Ritter von Rittinger International Heat Pump Award, please contact Heat Pump Centre:

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