

PRESS RELEASE

Number 46

The 2016 WACKER Silicone Award Goes to Alexander Filippou

Munich / Poznań, August 30, 2016 – Alexander Filippou, Professor of Inorganic Chemistry at the University of Bonn, Germany, received the 2016 WACKER Silicone Award. The award was presented yesterday evening at the eighth European Silicon Days in Poznań, Poland. The Munich-based chemical group thereby recognizes Filippou's groundbreaking work in the field of organosilicon chemistry. This includes isolation of a transition metal complex with a metal-silicon triple bond and synthesis of a stable silanone with a silicon-oxygen double bond. Filippou's work is also important to industry, for example for developing catalysts or silicones with novel combinations of properties. The WACKER Silicone Award, which includes €10,000 prize money, ranks alongside the American Chemical Society's Kipping Award as the most important international accolade in organosilicon chemistry.

In his speech, Robert Gnann, head of the WACKER SILICONES business division, praised Filippou as a researcher, who, with his achievements, has had a lasting influence on silicon chemistry. "Through his work, basic research has been given a new impetus, which is also to the benefit of the industry."

Filippou's research focuses include triple bonds between transition metals and elements of the carbon group, as well as stable molecules

of the elements silicon, germanium, tin and lead in their low oxidation states. Among his groundbreaking achievements were the isolation of a transition metal complex with a metal-silicon triple bond and thus of a silicon analog of a transition metal alkylidene complex (2010) and the synthesis of a stable silanone with a silicon-oxygen double bond (2014) and of a phosphasilenyliene with a silicon-phosphorus double bond (2015). "The chemistry developed by Professor Filippou and his team is of great importance both as regards catalysis and for an understanding of certain industrial processes. It may even be possible, one day, to develop silicones with new property profiles," said Gnann.

Professor Alexander Filippou, born in the city of Thessaloniki, Northern Greece, in 1958, began studying chemistry at the Technical University of Munich in 1976. In 1984 he gained his doctorate with the Nobel laureate Professor Ernst Otto Fischer with a dissertation on "New pathways of synthesis of anionic ketene and carbyne complexes of 16 Group elements through neutral-substituted carbyne-carbonyl compounds." He obtained his habilitation in 1992 on "metal-centered coupling reactions of C1 ligands". Filippou was subsequently a Professor of Inorganic Chemistry at Humboldt University of Berlin for twelve years. Since 2005, he has been a lecturer and researcher at the University of Bonn. In 2007, he was appointed director of the university's Institute of Inorganic Chemistry.

The WACKER Silicone Award was presented at the eighth European Silicon Days in Poznań, Poland. "Silicones are extremely versatile materials and have become indispensable thanks to their many useful properties," stressed WACKER Executive Board member Auguste

Willems to the audience of about 250 at the award ceremony. Demand for silicone in the industry has been growing for years. Experts estimate the market value of silicones at over eleven billion euros. "Because of their versatility and their large spectrum of properties, silicones are particularly interesting for innovative technologies," stressed Willems. "Silicone chemistry offers a variety of possibilities and development opportunities."

For years, the Munich-based chemical company has been promoting basic research at universities and institutes. An important pillar of this is the WACKER Institute of Silicon Chemistry at the Technical University of Munich. The company founded the institute in 2006 as an interface between academic and industrial research.

With the WACKER Silicone Award, the chemical company has recognized outstanding achievements in the field of organosilicon chemistry for almost three decades. "The Silicone Award is a central pillar for stimulating and promoting research activities," stressed Robert Gnann. With yesterday's award, the silicone award was presented to a well-known scientist for the 16th time.

Previous WACKER Silicone Award winners:

- 2014 Prof. Akira Sekiguchi (University of Tsukuba, Japan)
- 2011 Prof. Matthias Driess (Technische Universität Berlin, Germany)
- 2009 Prof. Ulrich Schubert (Technical University of Vienna, Austria)
- 2007 Prof. Dr. Yitzhak Apeloig (Israel Institute of Technology, Haifa)

- 2005 Prof. Mitsuo Kira (Tohoku University, Japan)
- 2003 Prof. Don Tilley (University of California at Berkeley, US)
- 2001 Prof. Manfred Weidenbruch (University of Oldenburg,
Germany)
- 1998 Prof. Robert Corriu (Université de Montpellier, France)
- 1996 Prof. Hubert Schmidbaur (Technical University of Munich,
Germany)
- 1994 Prof. Edwin Hengge
- 1992 Prof. Richard Müller and Prof. Eugene Rochow
- 1991 Prof. Hideki Sakurai (Science University of Tokyo, Japan)
- 1989 Prof. Robert West (University of Wisconsin, USA)
- 1988 Prof. Nils Wiberg
Prof. Reinhold Tacke (University of Würzburg, Germany)
- 1987 Prof. Peter Jutzi (Bielefeld University, Germany)
Prof. Norbert Auner (Goethe University Frankfurt, Germany)

Silicones

Silicones are the basis of materials with highly diverse product properties for virtually unlimited applications. Silicones are used in a broad variety of industries ranging from the automotive, construction and chemical sectors, through electrical and electronics, cosmetics and consumer care, metal processing and mechanical engineering, to textiles, pulp and paper. One of the world's leading producers of silicones, WACKER offers one-stop solutions for silicone-based products, services and strategies. In 2015, the WACKER Group earned annual sales of €1.94 billion, around 37 percent of consolidated sales, with the sale of silicones.



As part of the eighth European Silicon Days in Poznań (Poland), Prof. Alexander Filippou (center), Director of the Institute of Inorganic Chemistry at the University of Bonn, was distinguished with the WACKER Silicone Award 2016. He is shown here being congratulated by WACKER Executive Board member Auguste Willems (right) and WACKER SILICONES President Dr. Robert Gnann. (Photo: Wacker Chemie AG)






Prof. Alexander Filippou, Director of the Institute of Inorganic Chemistry at the University of Bonn, received the WACKER Silicone Award 2016 yesterday evening. The research award of the Munich-based WACKER Group was presented at the eighth European Silicon Days in Poznań, Poland.
(Photo: Wacker Chemie AG).

Note:

These photos are available for download at:
<http://www.wacker.com/pressreleases>

For further information, please contact:

Wacker Chemie AG
Media Relations & Information
Florian Degenhart
Tel. +49 89 6279 -1601
florian.degenhart@wacker.com
www.wacker.com
follow us on:   

The company in brief:

WACKER ist ein global operierender Chemiekonzern
with some 17,000 employees and annual sales of
around €5.3 billion (2015).
WACKER verfügt weltweit über 25 Produktionsstätten, 22 technische
Kompetenzzentren und 50 Vertriebsbüros

WACKER SILICONES

Silicone fluids, emulsions, rubber and resins; silanes; pyrogenic silicas;
thermoplastic silicone elastomers

WACKER POLYMERS

Polyvinyl acetates and vinyl acetate copolymers in the form of dispersible polymer
powders, dispersions, solid resins and solutions

WACKER BIOSOLUTIONS

Biotech products such as cyclodextrins, cysteine and biologics, as well as fine
chemicals and PVAc solid resins

WACKER POLYSILICON

Polysilicon for the semiconductor and photovoltaic industries

Siltronic

Hyperpure silicon wafers and monocrystals for semiconductor components