

PRESS RELEASE

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WACKER Presents Innovation Award for the Development of New Silicone Resins for Optical Bonding Applications

Munich, September 8, 2020 – Munich-based chemical Group WACKER has honored Korean employees SeungA Lee and JungEun Lee with the Alexander Wacker Innovation Award for the development of new silicone resins for optical bonding applications. Additionally, and for the first time, WACKER also presented this award in the Lifetime Achievement category – for outstanding performance during an individual’s career. It went to Amit Paul of Wacker Metroark Chemicals, WACKER’s Kolkata-based joint venture, which makes silicone specialties for the Indian market and for international customers in the consumer goods industry. On account of the coronavirus pandemic, both awards, each worth €10,000, were presented at an online event today.

SeungA Lee and JungEun Lee work at the Center of Electronics Excellence, a Group research institute in Seoul. They developed customized solutions based on novel UV-crosslinkable silicone gels for the burgeoning market for high-quality non-reflective displays. In a process called optical bonding, the silicone gel bonds the thin cover glass with the electronic layers beneath. The display is made non-reflective by filling the gap with gel and, thus, forcing out the air.

Silicone gels differ from other systems based on organic materials due to their stability and resistance to environmental influences, even after many years of service. As a result, they are widely used in sophisticated applications, such as large instrument-panel displays, restaurant-menu touchscreens, multi-functional sports watches and, above all, in the automotive industry. In every vehicle class, car makers are increasingly turning to ever-larger displays that are bonded with silicone gel. Such displays are indispensable for handling state-of-the-art connectivity systems. Furthermore, they open new design opportunities for car interiors, such as curved dashboard displays.

As in the past, a key reason for the notable success of WACKER's new product line is that customers receive products tailored to their individual needs. "The prize winners from our South Korean Application Technology department developed UV-crosslinkable silicone resins in close collaboration with a number of electronic-sector customers and, based on their specifications, tailored solutions precisely for various applications," said Christian Hartel, member of Wacker Chemie AG's Executive Board. "Their work has enabled WACKER to become a leading silicone manufacturer in the highly attractive optical-bonding market."

In total, 30 teams applied for the 2020 Alexander Wacker Innovation Award – a new record. The finalists included Amit Paul from Wacker Metroark Chemicals in Kolkata. His team successfully developed water-free silane oligomer-surfactant mixtures for treating cement compounds. This additive renders the cement hydrophobic during grinding, which achieves energy savings of up to 50 percent.

Moreover, hydrophobic cement gives concrete and mortar compounds water-repellent properties.

This and other developments achieved during his 35 years of service – first at Metroark and later – since 1999 – at the Wacker Metroark Chemicals joint venture – are the reasons why Amit Paul has been honored with the Alexander Wacker Innovation Award in the Lifetime Achievement category. He is the first Group employee to win this prize.

Amit Paul's achievements include the development of a silicone fluid emulsion of especially low particle size. It is used worldwide by an international consumer-goods manufacturer in its premium hair-care brand to ideally combine suppleness, shine and combability. He also made a significant contribution toward the introduction of hydro-silylation technology at the Kolkata site, where a plant for manufacturing functional silicone fluids went on stream in 2018 – the first of its kind on the Indian subcontinent. These specialties are used as high-performance additives in diverse applications, such as in cosmetic and varnish formulations and in plant protection.

“Throughout his career at WACKER, Amit Paul has excelled with his dedication and truly remarkable pioneering spirit”, noted board member Christian Hartel in his speech honoring the award winner. “He always had our customers' needs and their business firmly in view and developed customized solutions for them which were crowned with success in a short time. He has made a valuable contribution toward driving forward WACKER's silicone business.”

About the Alexander Wacker Innovation Award

Since 2006, the Munich-based chemical company has honored employees' outstanding R&D work at its annual research symposium. Named after the company's founder, the €10,000 "Alexander Wacker Innovation Award" is conferred for outstanding performance not only in product innovation, process innovation and basic research, but also in the Lifetime Achievement category.



JungEun Lee (left) und SeungA Lee (right) from Wacker Chemicals Korea received the Alexander Wacker Innovation Award for the development of novel silicone resins for optical bonding applications. (Photo: WACKER)



Amit Paul, head of research at Wacker Metroark Chemicals (India) with his Lifetime Achievement Award – the very first time WACKER has presented it. (Photo: WACKER)

Note:

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<http://www.wacker.com/pressreleases>

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The Company in Brief:

WACKER is a globally active chemical company with some 14,700 employees and annual sales of around €4.93 billion (2019). WACKER has a global network of 24 production sites, 23 technical competence centers and 51 sales offices.

WACKER SILICONES

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

WACKER POLYMERS

Polyvinyl acetates and vinyl acetate copolymers and terpolymers 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