



BASF'S INNOVATIVE MATERIALS ARE RESHAPING CONSUMER ELECTRONICS

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BASF'S INNOVATIVE MATERIALS ARE RESHAPING CONSUMER ELECTRONICS

As the world's leading chemical company, basf supplies critical materials for a wide range of products and applications that intimately impact our everyday lives – from footwear to automotive, paints to personal care.

In the realm of personal devices and multimedia technology, basf has a long history that stretches back to the 1930s, when the company was a pioneer of the analogue audio cassette. With the advent of the digital age, basf's offerings have evolved accordingly to suit growing manufacturing demands and modern user preferences.

“Over the past 30 years or so, basf has been a steady and integral partner in the field of consumer electronics, supplying cutting-edge materials for the production of key components in some of the most popular personal devices such as casio g-shock and the iphone,” says dr minli zhao, basf's vice president of consumer industry performance materials in asia pacific.

“Particularly at the turn of the 21st century, with the rise of mp3 players – and subsequently of smartphones – basf strengthened its focus on innovating novel materials for the consumer electronics market,” she adds.

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MYRIAD CUSTOMIZED SOLUTIONS FOR CONSUMER ELECTRONICS

TODAY, BASF OFFERS A BROAD SPECTRUM OF SOLUTIONS FOR THE WORLD'S MAJOR PLAYERS AND MARKET LEADERS IN CONSUMER ELECTRONICS.

The company's deep expertise in materials engineering enables it to formulate and customize effective and durable solutions for laptops, printers, keyboards, smartphones, antennas, chargers, protective covers, wearables, headsets, speakers, and more. The versatility of BASF materials makes them well-suited for a wide range of applications and ubiquitous components of modern electronic devices and peripherals.

"We currently support key markets across APAC such as Japan, Korea, China and ASEAN," Dr Zhao notes, "offering lightweight, low-density materials that have high chemical resistance and the ability to facilitate strong mobile, WiFi, Bluetooth and IoT connectivity."

She points out that the technical challenges in consumer electronics tend to be greater and more complex as compared to those in other sectors BASF serves. Ever-changing consumer trends and the rapid renewal of electronic devices, combined with the intricate demands of miniaturization and multifunctionality, exert a significant pressure on materials to constantly evolve and keep up with market requirements.



03

BREAKTHROUGH INNOVATION CALLS FOR CLOSE COLLABORATION

WHAT LIES AT THE CORE OF BASF'S SERVICES AND OFFERINGS IN CONSUMER ELECTRONICS IS INNOVATION. "AT BASF, WE TAKE PRIDE IN INNOVATION."



That is why we are constantly analyzing and improving our materials to ensure their relevance to the market and helping brands stay ahead of the competition,” Dr Zhao explains.

Besides extensive in-house research and experimentation, the process of innovation also involves open and transparent collaboration with key partners. The BASF team engages these clients in in-depth discussions and offers customized support at facilities such as the Consumer Electronics Competency Center (CECC) in Ansan, Korea.

In a collaboration with Casio, BASF helped create the G-Shock GBD-H1000 digital fitness watch, using BASF's Ultramid® Advanced N to manufacture the terminal header which contributes to power charging and data synchronization. With a wall thickness of 0.2mm and a weight under 0.1g, the Ultramid® Advanced N component contributes to downsizing while maintaining outstanding durability and high resistance to shock, water and chemicals, especially under the harsh conditions of extreme sports.

Another partner in innovation is Hamee, which employed the use of BASF's Elastollan® thermoplastic polyurethane (TPU) to produce protective mobile cases for the iPhone 12. This material possesses excellent scratch resistance, high durability, as well as anti-yellowing UV resistance and excellent transparency – both of which are ideal for creating a crystal-clear aesthetic for the product.

Looking ahead, Dr Zhao expects innovation at BASF to accelerate as their portfolio of materials for the consumer electronics industry expands. Their goal remains to offer precision, high-performance materials that help manufacturers push the boundaries of electronics design.

“We're continuing to study ways to enable 6G connectivity, geometrically sophisticated designs, plus sustainable production through the use of recyclable and biodegradable materials,” she says. “In short, we will aid our partners in the invention of leading-edge products that keep up with the market trends of tomorrow.”



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