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SAFE & Sustainable Textiles



HEIQ

“Antimicrobial fabric treatments will be a big part of our future”

*- Carlo Centonze and
Dr. Murray Height,
HeiQ founders*

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In conversation with HeiQ founders, Carlo Centonze and Dr. Murray Height

“Antimicrobial fabric treatments will be a big part of our future”

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HeiQ – pronounced [‘ haikju] – stands for the “hike” on which Carlo Centonze and Dr. Murray Height, the two company founders, came up with the HeiQ idea. “HeiQ” also stands for High Quality Materials and for IQ – intelligent materials. The two founders met at ETH and became friends. On a hike in the Swiss mountains, after five days their companions started keeping their distance because of

the two friends’ smelly outdoor clothes. This was the inspirational kick the two entrepreneurs needed for developing a new textile odor control technology, HeiQ Fresh, and founding the company HeiQ. Today, HeiQ Fresh is used on more than 500 million garments worldwide, by world-renowned brands like Patagonia, Burton, Hanes, New Balance, Odlo and Mammut.

HeiQ is driven by the spirit of innovation and over years continued to develop new products and textile technologies. HeiQ’s goal is to improve the lives of billions of people by perfecting an everyday product: Textiles. Combining three

areas of expertise – scientific research, specialty materials manufacturing and consumer ingredient branding – HeiQ helps partners brands to innovate and create differentiating and sustainable textile products.

HeiQ's headquarters are in Switzerland and subsidiaries in USA, Australia, China, Portugal, and Taiwan. With an annual manufacturing capacity of 35,000 tons at sites in the USA, Switzerland, and Australia, HeiQ serves its specialty chemical technologies to over 1,000 textile mills in over 60 countries worldwide. The company works with a local sales force and distribution partners around the world to be able to talk to local customers at eye level in their own language.

In an exclusive chat, the founders spoke on a host of topics, including the company's products, key global markets, its antimicrobial solutions, and presence in India, among others.

We began by asking the founders about the range of products and solutions that HeiQ offers, to which Carlo Centonze replied: "HeiQ has become synonymous with innovation in textiles. HeiQ has a range of key textile technologies that enhance the fabric materials of our clients with comfort and safety enhancing functionalities, e.g. adding antiviral and antimicrobial protection, activated cooling, odor control, air cleaning functionality, eco-friendly water repellency or UV protection, to describe just a few. HeiQ technologies focus on making textiles more functional, such as our latest innovation HeiQ Viroblock NPJ03 which adds an antiviral function to textiles, more comfortable and more sustainable."

"HeiQ's activated cooling technology HeiQ Smart Temp is very popular in the sportswear industry, especially for next-to-skin items. Today, HeiQ Smart Temp provides 900 million garments per year with the ability to effectively respond to temperature conditions and achieve optimal cooling and comfort. This year, HeiQ Smart Temp has gained additional popularity as treatment for the inside layer of face masks. While HeiQ Viroblock makes the mask fabrics resistant to viruses and bacteria, HeiQ Smart Temp provides wearers with cooling and comfort. Feeling hot while wearing a face mask is one of the main reasons that people wear their masks incorrectly, e.g. just covering the mouth, not the nose. PFC-free HeiQ Eco Dry, an eco-friendly water repellent widely used in Patagonia, Burton and The North Face outdoor jackets, is now also used in the outer layer of facemasks," he added.



HeiQ CEO and daughter

Before launching a new product into a market, HeiQ makes sure it complies with all applicable regulations. HeiQ is ZDHC and Oeko-Tex conform and a bluesign systems partner of the earliest hour, a holistic system that stands for sustainable textile processing and manufacturing. HeiQ is motivated to achieve greener, more sustainable chemistry and new processes that help textile mills use less water and energy, while also saving time and cost, and increased output to provide them with the economic benefit to improve community wellbeing outside of the textile world.

Going into details regarding the key global markets that HeiQ caters to, Carlo Centonze mentioned: "HeiQ maintains close relationships with apparel and home textile brands situated mostly in Europe, North America and Japan. HeiQ advises brand partners on value-adding textile functions and fosters innovation partnerships to develop new textile technologies tailored to the brand. Many HeiQ innovation stem from the dialogue with brand partners, where we develop concepts together. On the textile manufacturing side, HeiQ maintains close relationships with mills mostly situated in South East Asia, South Asia, especially India, and China, as well as Europe and America."

Given the current COVID-19 pandemic, are there specific antimicrobial solutions offered by HeiQ? Responding to this question, Carlo Centonze stated: "Yes. Early in 2020, when the Corona pandemic swept the world and dealt the global textile industry a heavy blow, our team reacted very quickly. It was fortunate that a few years earlier HeiQ had undertaken research into an antiviral function with another Swiss start-up. Dr. Thierry Pelet, one of the eight members of the HeiQ Scientific Board, is the virologist whose expertise contributed a lot towards accelerating



HeiQ Viroblock on face mask

the development of this technology. Within a frantic two-month period we launched our antiviral textile technology HeiQ Viroblock NPJ03 – just two hours after Switzerland declared a state of emergency and mobilized the army. The HeiQ team worked late nights and through weekends to make this happen. A more usual time span to launch a textile treatment is nine to twelve months.”

HeiQ Viroblock NPJ03 is a combination of HeiQ’s vesicle and silver technologies. The HeiQ vesicle technology targets enveloped viruses, such as the SARS-CoV-2 (COVID-19) virus strain, providing rapid virus destruction, while the HeiQ silver technology inhibits the replication of both bacteria and deactivates viruses. The two mechanisms of attack result in a speed in locking down and destroying the virus that is unparalleled in the industry.

HeiQ Viroblock NPJ03 is 72% bio-based and made with cosmetic-grade ingredients that can all be found on the INCI (International Nomenclature Cosmetic Ingredient) list, making it a leading choice for safety among antiviral treatments on the market. HeiQ Viroblock NPJ03 has been certified hypoallergenic, skin-safe and non-cytotoxic. Dynamic air flow tests performed on treated masks over a period of eight hours showed that no components of the treatment were released into the airstream exiting the mask. People wearing a treated mask can have complete confidence in the technology.

According to the company, HeiQ Viroblock NPJ03 is among the first textile technologies in the world to be proven effective against SARS-CoV-2 (COVID-19) in the laboratory. While coronaviruses resemble each other and HeiQ Viroblock NPJ03 had been successfully tested against legacy coronavirus strains, tests against the latest novel coronavirus took time. At the beginning of June, tests conducted at the Peter Doherty Institute for Infection and Immunity in Melbourne, Australia, established that treated fabric

demonstrated antiviral action against the SARS-CoV-2 virus strain. The result indicated a SARS-CoV-2 virus reduction of 99.99% relative to the inoculum control.

“The confirmation of antiviral activity of HeiQ Viroblock against SARS-CoV-2 was an important milestone. This data forms part of our ongoing efforts to help provide textiles with greater levels of protection against viruses and contribute to efforts towards mitigation of the global pandemic,” Dr. Murray Height remarked.

Carlo Centonze observed how the current COVID-19 pandemic is a huge problem for the textile industry because of the global downturn in consumption due to lock-down measures and people’s fear of the virus. “The textile industry has been hard hit by this slump and HeiQ worked day and night to



provide mill partners with an antiviral technology to meet the shift in demand.”

“Products that protect people from the virus are in high demand. HeiQ Viroblock NPJ03 provides textile manufacturers with a tool to produce antiviral fabrics that help keep people safe and in turn also help keep HeiQ clients in business. We see it as our moral obligation to support our mill partners in India and Asia with all our strength,” Carlo Centonze explained.

Growing presence in India

HeiQ has already made a mark for itself in the Indian market. According to Carlo Centonze, HeiQ continues to see significant growth in the Indian market and is proud of the long-term partnership with Intexso Biochem Private Limited (Intexso).

HeiQ and Intexso began their partnership more than seven years ago and it has been very successful. Based in Mumbai, Intexso is the sole distributor for HeiQ products in India and offers technical guidance for product applications in the region. India has become a global innovation



Umweltpreis 2019 Environmental Award Carlo Centonze

hub for apparel and home textiles, and team Intexso is at the forefront with more than three decades of experience.

Intexso has grown HeiQ's presence in India with HeiQ's full product range, including the latest product HeiQ Viroblock NPJ03. Some examples of Intexso/HeiQ customers include Vardhaman Fabrics, Birla Century, Shahi Exports, Donear Industries, Nahar Fabrics and RSWM, to mention only a few.

"HeiQ is appreciative of having a long-term trusted partner in Intexso Biochem in India. As India is an innovation hub for textiles, this partnership lines up with our DNA and values to differentiate, innovate and improve the lives of billions of people by perfecting the everyday product of textiles", pointed out Carlo Centonze.

Echoing similar sentiments Avinash Orpe, Founder-Director of Intexso stated that Intexso is honored to be the sole HeiQ partner and distributor in India. He added that the company's mission – to work with a spirit of innovation and vision of supplying our customers with innovative, quality products – aligns with that of HeiQ's mission perfectly and makes the partnership seamless.

In 2019, HeiQ opened new offices in Shanghai, China, and in Taiwan to serve customers in the region more closely and offer support.

Throwing light on HeiQ's recent partnerships with some of the top names in the Indian textile industry, Carlo Centonze said: "HeiQ brand and mill partners in India include

Donear Industries, Indocount, Vardhaman Fabrics, Birla Century, Shahi Exports, Nahar Fabrics, and RSWM, all names that resonate with their commitment to innovation and quality."

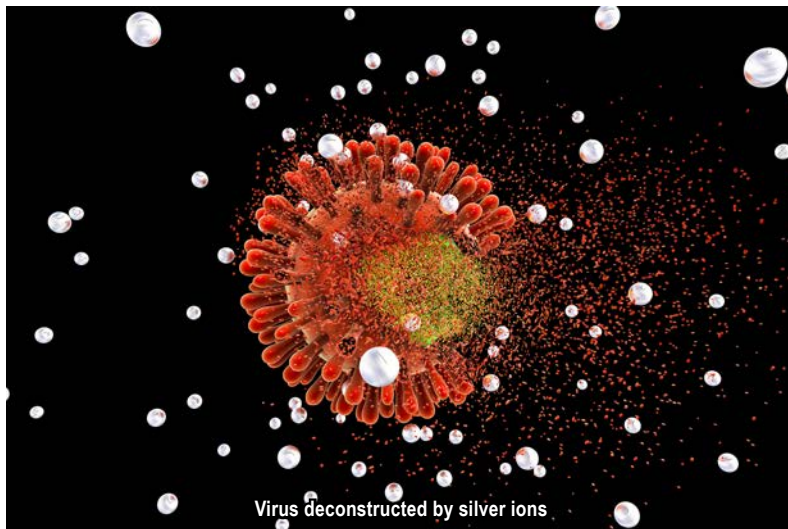
He continued: "Indian textile manufacturers look for high-level cooperation in their textile innovation partners. We are satisfied that our Indian clients take product quality validation very seriously and are stringent about verifying claims. Indian clients also appreciate collaboration on the marketing side, where HeiQ's dedicated marketing team adds value by providing hangtags, legally backed claims and graphic design material, with years of experience in making technical concepts understandable to end-consumers."

Given the fact that there are other organizations offering similar solutions globally, why should a customer consider partnering with HeiQ? Listing the key reasons Carlo Centonze elaborated: "HeiQ is a versatile partner that offers a broad range of textile treatment technologies that can be combined. HeiQ's textile innovations have won major awards such as the Swiss Technology Award and the Swiss Environmental Award. With a dedicated innovation team and depth of technical capability, HeiQ has one of the most creative forces for innovative products in the market. HeiQ's latest innovation, the antiviral textile treatment HeiQ Viroblock, has quickly gained world-wide recognition this year, not only inside the industry but also outside it at

an end-consumer level. HeiQ clients benefit greatly from HeiQ's ingredient brand power which affords a premium to any treated products."

"Since the company was founded in 2005, it has never rested on its laurels, but always pushed functional textile development further. HeiQ is recognized as an innovator in textiles. Clients benefit from this innovation drive by being the first to launch new treated products to the market. HeiQ places great value on product innovation, ideally in cooperation with a major brand partner," he said.

Dr. Murray Height explained that a robust manufacturing and R&D infrastructure is one



of the key strengths of the company. "HeiQ has a dedicated internal product development team of 12 chemists and achieves its research objectives primarily through a wide research network with engaged partnership with researchers at universities and institutes around the world."

Aligned with emerging market trends

The COVID-19 pandemic has changed the dynamics of the textile market globally. Speaking about the emerging consumer trends that they see post COVID pandemic in terms of increasing preference for specially treated fabrics with antimicrobial treatment, Carlo Centonze explained: "With shops closed for months and people forbidden to leave their homes, everybody will have money saved up to spend. HeiQ predicts that antimicrobial and antiviral fabrics will be sought after. End-consumers will be more than willing to invest in functional textiles, and especially look to

invest in home textiles. After months in lockdown, people have realized the importance of having a cozy home to relax in. Relaxation also depends on a feeling of safety, which antimicrobial fabrics can provide."

"Textiles are part of everyday life; they always surround us. The global pandemic showed the need for hygiene as well as clean, sanitized surroundings. Most of us probably washed our hands more in the first half of this year than during our whole life before that! COVID-19 opened a whole new chapter for the development of antimicrobial surfaces and textiles. Face masks have become a necessary new product line even for sports brands. In this new era, it makes sense for the fashion industry to offer inherently protective garments. As does offering antiviral textiles and surfaces make sense for

the décor and home textiles industries. PPE apparel, smart textiles, wearables, and protective clothing for the fashion, sportswear, interiors, and hospitality industries as a matter of course are part of our future. It has all the hallmarks of becoming a big business."

Drawing attention to the fact that people emerging from global lock-down will be used to the "new normal" where seemingly no surface is safe, and look for safe spaces outside their homes as well, Carlo Centonze further added: "They will expect employers and public transport to provide that. E.g. office chairs and bus seats will have to be antivirally treated for people to feel comfortable and safe. COVID-19 will likely not be the last pathogenic emergency to sweep across the world. It is good to be prepared. Yes, antimicrobial fabric treatments will be a big part of our future."



HEIQ
VIROBLOCK

Make your fabrics resistant to viruses and bacteria

Effective in minutes

What does it do?

HeiQ Viroblock NPJ03 is an antiviral and antibacterial agent for textiles, making the surface of any fabrics more resistant to pathogens, including bacteria and viruses. It has been tested effective against SARS-CoV-2 (COVID-19).

How does it work?

A unique combination of HeiQ's innovative vesicle technology and high-performance silver for antiviral and antibacterial effect, HeiQ Viroblock NPJ03 attracts the oppositely charged viruses and depletes the viral membrane of its cholesterol content, thereby destroying the virus.

Brands, fabric producers or OEM manufacturers are not allowed to make unauthorised healthcare claims with the HeiQ, Viroblock or HeiQ Viroblock trademark(s). Please consult your HeiQ contact in case of questions.

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FRESH

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odor control

HEIQ
PURE

Antimicrobial and
odor control

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**SWISS
TECH
INSIDE**

Tested effective against
SARS-CoV-2
(COVID-19)