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# On the Publication of the Winter Issue of Valqua Technology News



I would like to thank all of you for following Valqua Technology News, and I offer you my best wishes for 2022.

Last year, the global COVID-19 pandemic continued unabated, causing significant impacts on global industry. But amid all this, the pandemic resulted in progress in the construction of a service infrastructure using IT technology and in the development of communication tools, and new business and project processes have become standardized as well. Meanwhile, the business environment around us reflects a growing interest in sustainability, and I am aware that there are a variety of technical discussions around the achievement of carbon neutrality. Also, with networks creating connections between all conceivable things, the management of the information obtained through these networks has become an important business issue. The supply and demand of semiconductors and related components also came to be discussed from the BCP perspective, a new phenomenon this year.

Amid such a business environment, for the last year we have been promoting a variety of initiatives under the concept of Corporate Transformation (CX) in order to achieve the major goals we have set for the 100th anniversary of our founding in 2027. In the area of technology development, we will focus more closely on the open innovation activities that we have already begun in order to successfully evolve into an H&S company. In an era where technology is developing at an extremely fast pace, it is essential that we implement agile, high-quality technology development so that we can continuously deliver new technology solutions to customers. That's why Valqua believes that it is essential to consider collaboration with research institutions, academia, and companies that possess excellent technologies, both in Japan and overseas, with no restrictions on the format. This is also the foundation for the system of collaboration with technology venture companies that we have already announced.

We have accumulated technologies in the fields of seal engineering and material design through our many years of technical activities. Our CX activities in technology development in the future will be based on these technologies, and we will use the open innovation described above to evolve further. Specifically, we intend to use techniques such as materials informatics to create materials with new functions and fuse them with digital information to lead to the construction of new services. One example of this, as mentioned in our previous issue, is developing technology for predictive maintenance using the IoT. Development has already reached the stage where the technology is ready to be introduced to the public, and we hope you look forward to seeing these solutions put to use in actual production sites in the near future.

Under such circumstance, this issue of Technology News will cover application technologies for seal engineering—which was the starting point for Valqua's technology—and sensing technology using new materials as well as methods to consider the appropriate direction for future technology development from the IP perspective. I hope you all find these articles helpful, and I appreciate your continued support of our products and services and for Valqua Technology News.

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