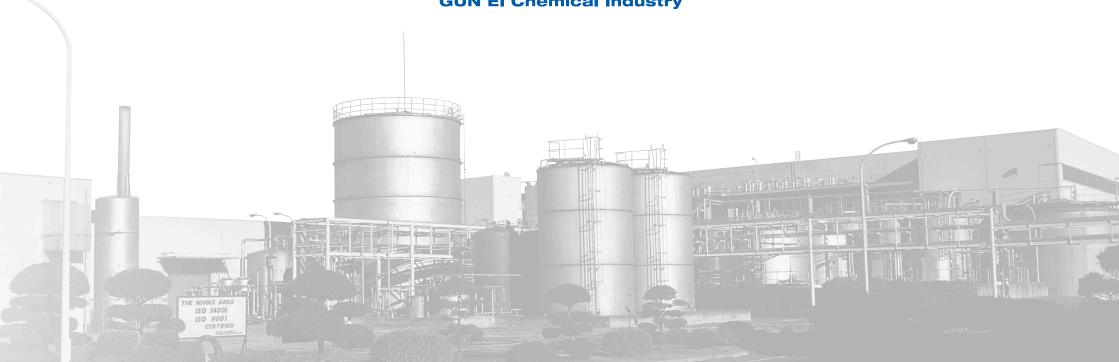
化学のココロ。

GCI

GUN El Chemical Industry





Our passion for chemistry drives our innovative work in resins and new materials.

Much like a boy who loves chemistry, employees at GCI take pleasure in conducting experiments, and this passion has fueled our growth. As a professional group of chemists, GCI of Japan is determined to help industry advance and to introduce new technologies and materials to the world. We are chemists to the core, striving to build a leading chemical company and serve as a pioneer manufacturer of chemical materials. We hope that this brochure will convey to all our readers our love of and dedication to chemistry.

History GCI gives shape to the dreams of science. [What has GCI created?] 1946 GCI founded as Gunma Nutrition and Medicine, and begins the manufacture and sale of starch. 1951 Manufacture of phenolic resin for industrial use begun. Company name changed to Gun Ei Chemical Industry Co., Ltd. 1953 1979 GCI listed on the First Section of the Tokyo Stock Exchange. 1982 GCI begins manufacture of Kynol fiber. 1990 GCI founds Thai GCI Resitop Co., Ltd. and begins producing phenolic resin in Thailand. 1992 GCI headquarters relocated to Shukuorui-machi, Takasaki City. 2012 GCI founds India GCI Resitop Pvt.Ltd. and begins producing Casting Materials in India. Acquired 100% ownership of TOHOKU ULOID INDUSTRY CO., LTD. 2014 GCI founds American GCI Resitop, Inc. and begins selling synthetic resin in U.S.A. 2018 Transition to Prime Market of the Tokyo Stock Exchange. 2022

From food, an ordinary part of life, to industry, in which the state-of-the-art is always in demand, GCI has worked to sustain people's daily lives through materials which are largely invisible in the end product.

While they may be invisible, these materials are responsible for the birth of new technologies and for progress that might not have been achieved without them. This pursuit of new materials drives the engine of society.

We believe our products are, in a sense, the energy that moves society forward.

<Chemical Products> Electronic industry materials Semiconductor encapsulants Grinding wheels Technology for **■**Technology Fields Friction materials synthesizing resins Felt materials Laminates Reinforcement of paper and cloth Coatings Casting materials **Main Products** Core **Primary** Refractories Phenolic resins **Technology** Uses Heat insulation materials Starches Plywood Moldings Rubber, cement and tires Aerospace development Technology for Water treatment glycating starch and grains <Foods> Confectionery Beverage Seasoning / Condiment

Our corporate motto is "Be Lean, Be Diligent, and Act Rationally" while our mission is to contribute to society and to develop a better future through chemistry. Here in the 21st century, though, the world faces major economic and political change, and today, we are reexamining our role in the midst of these changes. Part of that role is to put into practice our belief that manufacturing is one of the noblest areas of the service industry. With these

beliefs as our motto, we must move forward to blaze new trails. The collaboration between chemistry and food, our two fields of specialization, is thus critical to achieving our vision of "green" chemistry. Today, we emphasize to our younger workers that extending into

them to fully exploit their
strengths and truly
contribute to society.
Based on our belief that
manufacturing is the
highest form of service
industry, GCI continues to

improve and grow.

"green" chemistry will enable

Yoshikazu Arita Chairman

Since its establishment, GCI has contributed to improving people's lives and building a better future through the research and development of chemical products for use in automobiles, housing and electronic materials, and sugars for use in food. As technological advances continue to accelerate, our aim is to become a company that can contribute to society by utilizing our knowledge of and ideas about chemicals that we have developed over the years and by gaining, through our marketing activities, an accurate understanding of market needs. GCI and our overseas affiliates will continue to build a richly diverse and vibrant group of companies that remains constantly curious and always ready to take on new challenges. We will continue to utilize

the benefits of our chemical and food products as we strive to deliver a prosperous and environmentally aware society in which everyone can live healthy and vibrant lives.

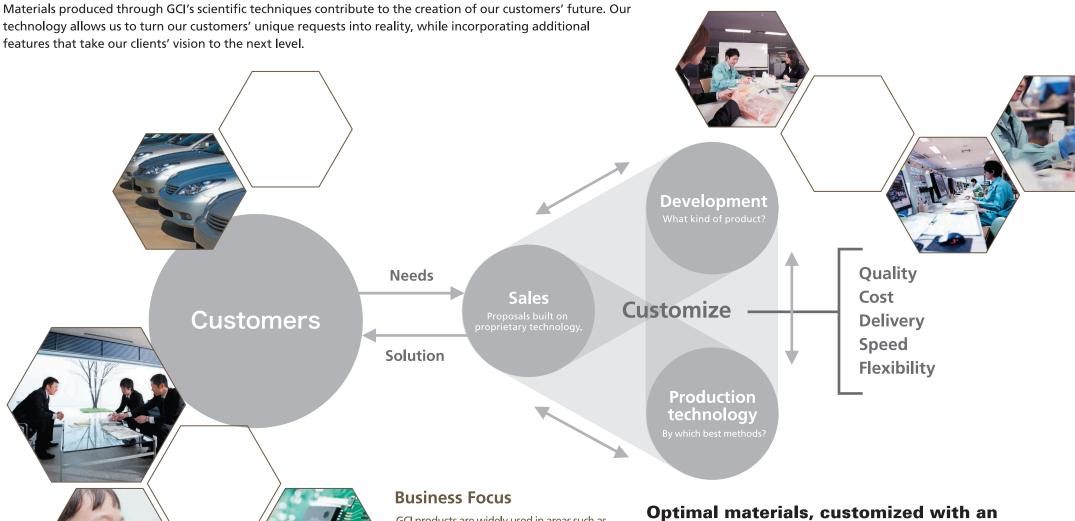
Kiichirou Arita
President & CEO

Since it's founding in 1946, GCI has developed and furthered a wide range of technologies.

GCI started off manufacturing and selling sugar and starch products, and soon expanded to offering phenolic resins for industrial use. For the nearly 75 years since our inception, we have grown into a unique chemical manufacturer offering two main product lines, phenolic resins and sugar/starch products. Behind that growth are the generations of associates who joined GCI with one key mission in mind: to provide innovative products that benefit society, an attitude that has enabled GCI to flourish as a research and development-driven company. Our goal is to expand into new fields by producing original technologies and products which will serve current market needs while addressing the new values of a changing society going forward.



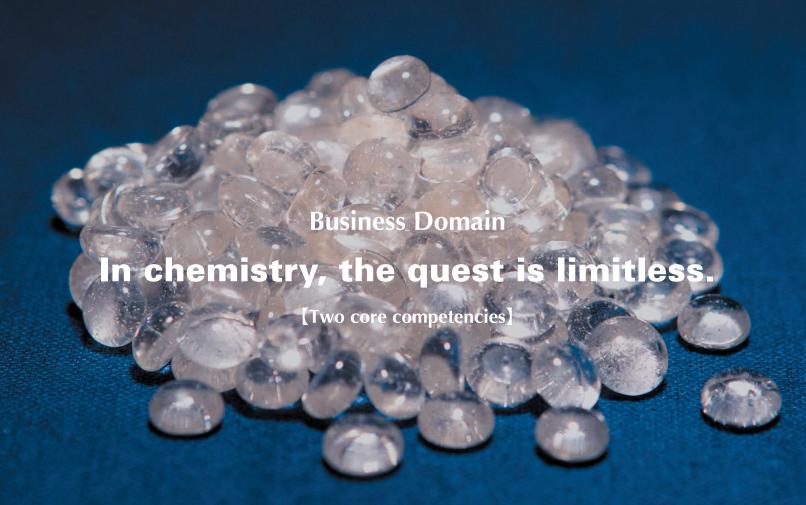
Chemical science, food science



GCI products are widely used in areas such as semiconductors, housing and construction, and the automobile and food manufacturing industries, with specifications for materials varying from customer to customer. To meet these diverse individual requirements, our proposals focus on arriving at the best possible solution for each customer in terms of five key components: Quality, cost, delivery, speed and flexibility.

Optimal materials, customized with an accurate understanding of the customer's needs.

GCI is deeply committed to developing strong relationships with its customers in order to offer the best possible solutions. Research and development, production technology, and sales work together as a team. This means that no matter what problem or demand arises, whether in product design or mass production, our expert sales staff is able to quickly grasp a customer's requirements and share that information with the rest of the team. This approach enables us to customize each product to meet a specific customer's needs. If called for, improvements can be swiftly implemented to optimize products even as they reach the production line, making it possible for us to offer the right solution in a timely manner.



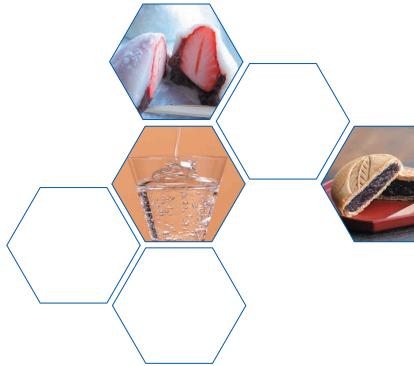
GCI provides unique products in diverse industrial fields, based primarily around our Chemical Science and Food Science divisions. In addition to Resitop, our flagship chemical brand acclaimed for its outstanding performance and used by a large number of manufacturers, our Food Science Division has also introduced a wide range of products to the market.

Chemical Products Business

The potential of resins find wide application.

Due to its unique properties, Resitop, a chemical product manufactured by GCI, is widely used not only in molding, but for binders, additives, electronic industry materials, building and construction materials and the cutting-edge materials used for space development. Today, Resitop has become an essential material in almost all areas of industry. As a leading manufacturer of materials in Japan, GCI strives to improve the quality of Resitop while fully exploiting its potential, actively searching for original, creative applications in new fields of industry.





Food Products Business Unique technology for isomerizing saccharides.

Isomerization—the process of converting starch first into glucose, then fructose—takes place in our fully—automated plants. Although glycation is commonly accomplished after starches are extracted from each type of grain, GCI has invented a technology of direct glycation, which requires no extraction process. As a result, we succeeded in preserving the natural flavors of the grain. The various glucoses produced through this process are highly moisture-retaining and less sweet, allowing the natural taste to come through. It is this type of technology and original thinking that allows GCI to meet our clients' diverse requirements, and these materials are now indispensable in the manufacture of a wide range of products, from beverages, to snacks, to processed foods.



GCI contributes through the development of unique materials not only in existing fields such as electronics and foods, but in energy, the environment, and other areas aimed at the creation of a carbon-neutral society.





GCI is the world's only manufacturer of Kynol, a novoloid fiber into which phenol-formaldehyde is melted and spun taking full advantage of our proprietary technology. Kynol fibers offer outstanding inherent flame, heat, electrical and chemical resistance. Due to these superior characteristics, fibrous activated carbon made from Kynol is widely used in projects such as those involving the environment.

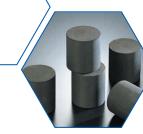
(Research and Development Capabilities and Potential)

Improving our core technologies for the future.

The future offers a number of possible directions.

Our limitless quest to produce new materials has driven us to advance research and development primarily in our core technology competencies, and we will continue to drive the advancement of that core technology to generate new value for society.





Ensuring a more abundant future for consumers and society.

As a unique chemical company, our ability to survive global competition relies on building solid research and development capabilities and conveying a clear message to society. For example, enzyme technologies we have accrued since our founding are used to create completely new functional food products, benefitting individual health and healthcare in general. We are also dedicated to the achievement of a recycling society through the development of environmentally-friendly industrial materials produced from natural materials like sugar. Our efforts extend to offering solutions to energy-related issues, taking full advantage of our cutting-edge technology in carbon nanofibers and other areas. Our goal is to open pathways to new fields of business through R&D, always with an eye towards a more abundant future.









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