



Executive Officer
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Operational Headquarters

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Implementation of material business to materialize infinite possibilities and contribute to society


Hitachi Chemical started manufacturing electrical insulating varnishes for domestic electric motors in 1912 as part of Hitachi Ltd., and has produced countless products in the 101 years since, using various properties of organic, inorganic and metallic materials. What we have pursued over all these years is “finding infinite possibilities of individual materials, giving them a concrete shape to meet customer needs, and ultimately helping society develop.” We celebrated our 50th anniversary and stepped toward the next half-century last year. In addition to the material and process technologies we have accumulated to date, we will optimally exploit our newly obtained wisdom and ingenuity to offer breathtaking, valuable products to our customers in the next 50 years. We believe this is how best to achieve our corporate slogan “Working On Wonders: WOW.”

This technical report presents challenges in the fields of telecommunication, display, the environment and energy.

[Improving the ability to propose solutions in the telecommunication and display fields]

Technological development and commercialization are very fast in these fields, as typically seen in the accelerated development of 3D packages in semiconductor products, or the rapid expansion of touch-panel application. Accordingly it is crucial for us to be ready to develop technologies at any time, and immediately propose solutions to our customers. We have made proposals to our customers for their material systems using our extensive product lineups; ranging from preprocessing materials such as CMP slurries and interlayer dielectrics for semiconductors, to postprocessing materials, including die attach films, encapsulation resins, and package substrate materials. Recently we also introduced a cutting-edge evaluation system in the Advanced Packaging Technology Center to enhance our ability to make proposals. We will launch the so-called “open laboratory” approach to invite our customers to evaluate various combinations of materials using our system. Through this approach, our proposals not only include combinations of materials but also extend to semiconductor and mounting processes.

In the display field, we have a high market share in the display circuit connection films and moisture-proof insulating materials. In addition, we have successfully marketed optical clear adhesive films that improve the durability and clearness of touch panels, and transparent conductive films with lower electric resistance and larger flexibility than the ITO electrode. We will increase the pace at which we create new products in this field, and improve our ability so that we offer total solutions in display materials in future.



In the telecommunication and display fields, where changes in products and technologies may accelerate in future, we will strive to play a major role in technological innovation in these fields by swiftly identifying customer needs and immediately proposing optimal solutions by combining our materials.

[Improving the ability to develop new products in the environment and energy fields]

Increased concern over environmental impacts such as climate change and a review of dependency on nuclear energy will spawn a steady expansion of environmental and energy markets in future. Although our business has centered on electronics to date, we must also focus on developing new technologies and products in these fields. In the renewable energy field, our products on the market range from solar battery materials such as electro-conductive films for connecting the tab and the solar battery electrode without solder, to heat-resistant insulating resin pastes. We will also develop sliding brushes for wind power generators and separators for fuel cells in future using inorganic material technologies.

In the field of lithium-ion batteries, mainly used in consumer products such as PCs and mobile equipment to date, and increasingly applied to automobiles and industrial products recently, we already boast a large share in the anode market, and will also promote the development of materials for lithium-ion batteries. We will concentrate our management resources in this field to accelerate product development and business expansion, and make it the second pillar of the Advanced Performance Materials Operational Headquarters.

[Improving resin materials and technologies]

We must improve fundamental resin technologies to develop new products in these two fields, in other words, present our new capabilities. Material technologies, including those in resin design for controlling resins at a particle level, and nanotechnology for applying nano-level particles, will become increasingly important. Hitachi Chemical provides all functional materials ranging from base polymers to applications. To capitalize on such corporate characteristics, we will promote innovations in fundamental resin technologies by strategically allocating development resources and through active collaboration with outside research organizations.

When global markets are expanding and dynamically changing, Hitachi Chemical Group will establish a foundation for production overseas to meet the needs of our global customers promptly, and R&D and business operations in proximity to our customers.

The catalyst for this comes in the form of the three genes inherited within Hitachi Chemical Group: “Spirits of Trail Blazer” to challenge new things unhesitatingly, “Flexibility” to respond to the changing era and market, and “Strong Customer Orientation.” Hitachi Chemical will reaffirm these genes before advancing into the new half-century, and continue to offer our customers values to realize our corporate vision “Contribution to Society through the Development of Superior Technologies and Products.”