



## **Combining technology and foresight to deliver materials and solutions essential for the development of society**

Our Digital Solutions business contributes to the semiconductor manufacturing industry in many areas, most notably for photoresists, which are key components in the manufacturing process. JSR is a global leader in the development and production of cutting-edge EUV photoresists as well as next-generation metal oxide photoresists. We also provide display materials clients need to meet demand for high image resolution, compact, and low power consumption products.

The Life Sciences business's operations range from pharmaceuticals manufacturing as a contract development and manufacturing organization (CDMO) and contract research organization (CRO) to diagnostics products including in vitro diagnostics (IVD) and bioprocess materials (BPM). Our fully integrated worldwide system for supporting client processes improves the probability of success of biopharmaceutical development and shortens development periods.

Our Plastics business is led by the JSR Group's Techno UMG Co., Ltd., a leading supplier of ABS resin materials to industries ranging from automotive to home appliances and construction. The company also specializes in developing added-function products, such as specialty products for automobiles and materials with low environmental impact.

We are also looking ahead to the future by integrating AI, quantum computing, and other new technologies into our operations, applying data science to materials informatics, and pursuing open innovation with external research institutions to advance basic research and applied technologies.

## **Developing diverse human resources to stimulate innovation**

Innovation is born from the inspiration to explore new possibilities. Our diverse human resources are the foundation for our growth. For each employee to realize their own potential, it is essential that we all understand and respect each other. Our diversity, equity, and inclusion initiatives increase engagement and create an environment where employees can grow as individuals. By providing an environment where each employee can pursue their personal development and potential, we are nurturing human resources that will realize innovation in the future.

## **Taking on new challenges with a management foundation enabled for swift strategy execution**

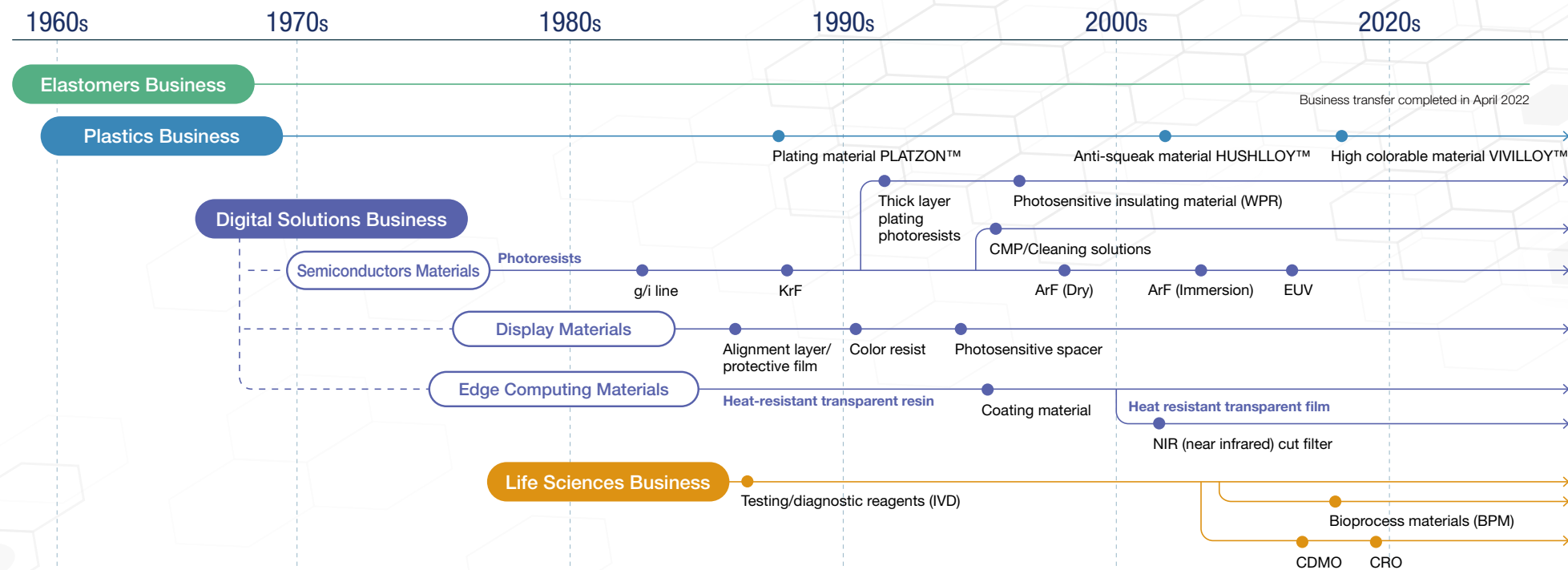
JSR Corporation's business structure has been constantly evolving since our establishment as Japan Synthetic Rubber Co., Ltd. in 1957 as we pioneered cutting-edge technologies to meet the changing needs of society. Today our business portfolio is centered on our three businesses of Digital Solutions, Life Sciences, and Plastics.

On June 25, 2024, JSR made a new beginning by entering a strategic partnership with JIC Capital, Ltd. and delisting our shares from the public stock market. This move gives our management a solid foundation that will enable us to execute our business strategies faster than ever. With this new partnership, JSR Group will work as a solidified unit to become a resilient, sustainable, and highly competitive presence in the global marketplace.

# Trajectory for Business Innovation

Since its founding in 1957, JSR has pushed for scientific progress and implementation as a precision technology company standing at the very finest cutting edge. Its ongoing task is to explore new fields essential to the world without limiting our own potential and seeking the inspiration to discover new possibilities.

## The History of JSR



### Contribution to society through business (impacts)

**For example,  
the spread of  
automobiles**



We launched domestic production of synthetic rubber in 1960 and contributed to the development of motorization. Moreover, plastics are now used for interior materials, contributing to ride comfort.

**For example,  
the spread of  
electronics**



Achieving greater die shrink through photoresists used in semiconductor manufacture and contributing to high performance electronic device development and the growth of the IT industry.

**For example,  
at the height of  
LCD televisions**



Utilizing our polymer technology, we have developed a wide range of product lineups that contribute to high brightness and high definition LCD displays. In addition, our products have also contributed to the spread of flat-screen televisions.

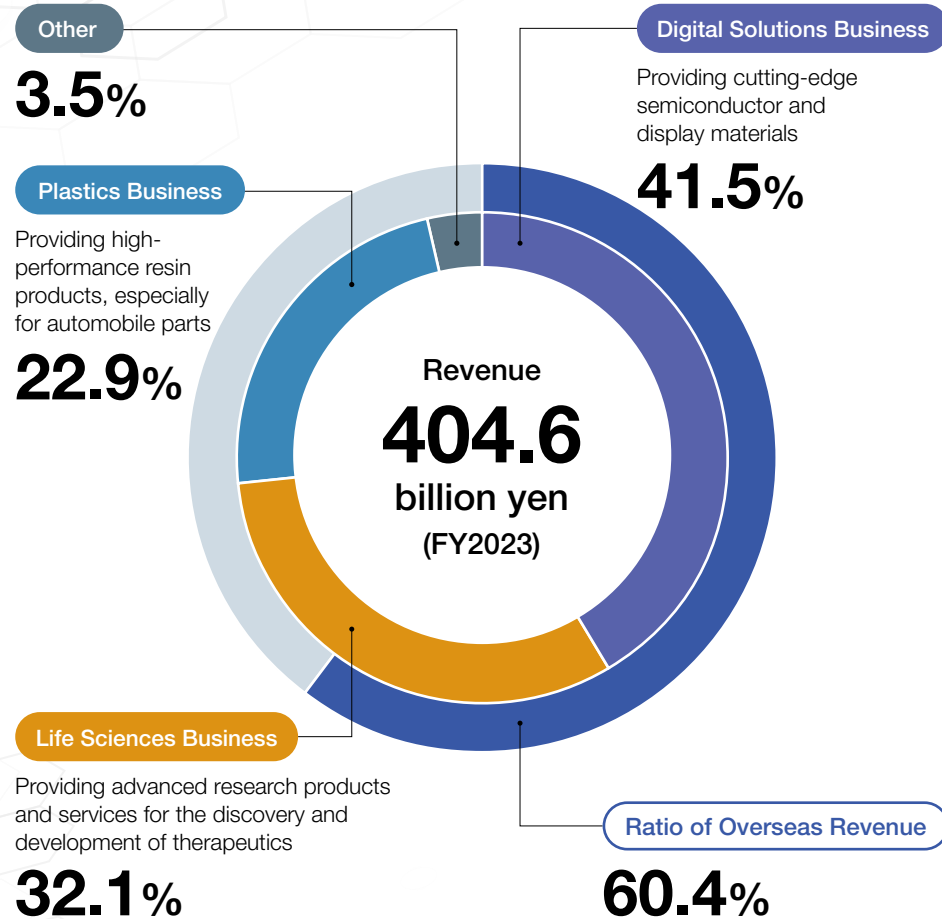
**For example,  
the development of  
biopharmaceuticals**



We have established an integrated support structure including materials, diagnostic reagents, drug discovery support services, and more, as we continue contributing to resolving biopharmaceutical development issues.

## JSR by the Numbers (FY2023)

### JSR Business Segments



### Total Number of Group Employees

**7,997**

\* Number of consolidated employees as of March 31, 2024.

Of this number, 4,370 employees work at overseas business sites.

### R&D Expenses

**31.8 billion yen**

\* FY2023 results (April 1, 2023–March 31, 2024)  
Whole JSR Group, including contract research expense of goods purchased.

We are committed to research and development for future technologies.

### Global Network

**Japan**  
**20** locations

**Overseas**  
**46** locations

\* As of August 1, 2024

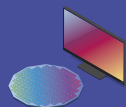
We are expanding our business globally.

### Percentage of annual paid leave taken

**91.1%**

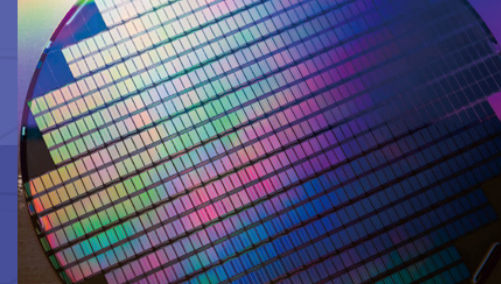
\* FY2023 results (April 1, 2023–March 31, 2024)  
Including employees seconded from JSR.

We encourage a work-life balance.



# DIGITAL SOLUTIONS BUSINESS

Providing cutting-edge semiconductor and display materials



## Semiconductor Materials

Semiconductor manufacturing requires high-performance materials for the formation of integrated circuits and high-density packaging. The JSR Group offers a variety of high-performance materials to leading edge global semiconductor customers.

### Strengths

- Stable supply of high-quality products
- Flexible development, sales, and production that meets customer requirements
- Product development and problem-solving capabilities based on polymer/organic synthetic technologies and analytic technologies
- Strong relationships with semiconductor customers based on the performances

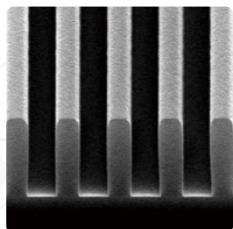
### JSR Group Position

Applications	PCs, smartphones, servers, automobiles, etc.
Customers	Semiconductor device manufacturers
JSR Group	<b>Semiconductor materials</b> Photoresists, CMP materials, etc.

## Semiconductor Front End Process

## Semiconductor Manufacture Postprocessing

### Lithography Materials



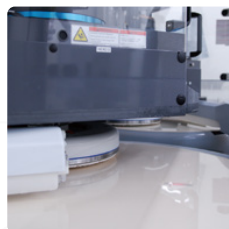
**Higher performance and process shrink integrated circuits**

Contributes to increased performance, power saving, and process shrink in manufacturing semiconductor devices.

#### Main Products

- Photoresists (g-line, i-line, KrF, ArF, EUV [CAR, MOR])
- Topcoat materials for immersion lithography
- Spin-on hardmask materials (organic, inorganic)

### CMP Slurry/Cleanser and Process Materials



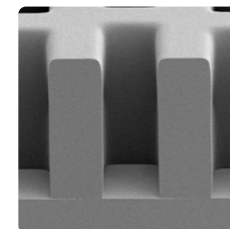
**Increased layering/greater precision in multilayer wiring construction**

Used in chemical-mechanical polishing (CMP) processes for wiring layer and insulation layer films, as well as cleaners to remove residues left on wafer surfaces during semiconductor processing.

#### Main Products

- CMP slurries
- CMP cleaning solutions
- Functional cleaning solutions

### Advanced Packaging Materials



**Greater precision/performance of high-density implementation**

Used for wiring formation, IC chip mounting, and printed circuit board in the assembly process of semiconductor manufacturing, which is becoming increasingly dense and three dimensional, and contributes to the higher performance and reliability of packaging systems for electronic devices.

#### Main Products

- Thick layer plating photoresists for bumps and fine redistribution layers
- Photo-imageable dielectric materials
- Low transmission loss materials for high speed beyond 5G communication





## Edge Computing Materials/ Display Materials

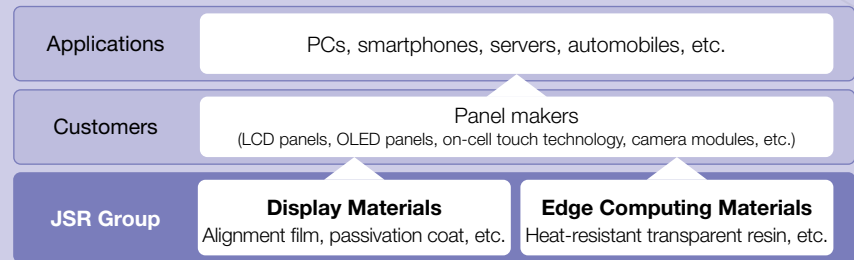
We offer materials for use in increasingly diverse digital products such as big screen televisions, smartphones, tablets, PCs, and more.

We also offer solutions for customers through a wide variety of high-performance devices that achieve high resolution and brightness while also aiding in environmental protection through energy and electricity conservation.

### Strengths

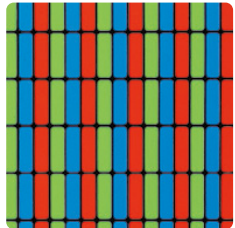
- Products with high market share
- Sales and production systems compatible with customer needs
- Technical prowess grounded in polymer technology

### JSR Group Position



### Display Materials

#### LCD Materials



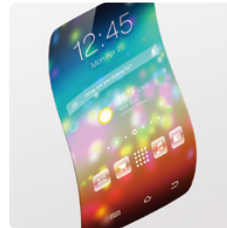
**Higher image quality/  
reduced weight/  
lower power consumption**

Multi-layer films used for liquid crystal displays (LCD) and performance increasing materials.

#### Main Products

- Alignment film
- Organic insulation film
- Color resist
- Protective film
- Photosensitive spacer

#### OLED Materials



**Higher image quality/  
reduced weight/  
lower power consumption**

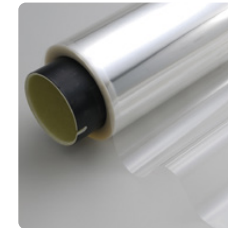
Used as a material to construct organic light-emitting diode (OLED) displays and on-cell touch technology.

#### Main Products

- Encapsulation material
- Planarization layer
- Light extraction material
- Low-temperature curable insulating film
- Low-temperature curable black matrix

### Edge Computing Materials

#### Heat Resistant Transparent ARTON™



**Higher image quality**

A transparent resin with excellent optical properties, dimensional stability, and heat resistance. It is applied to optical corrections for displays and camera modules that enable photographic imaging with natural colors.



## LIFE SCIENCES BUSINESS

Providing advanced research products and support for drug candidate identification and development process

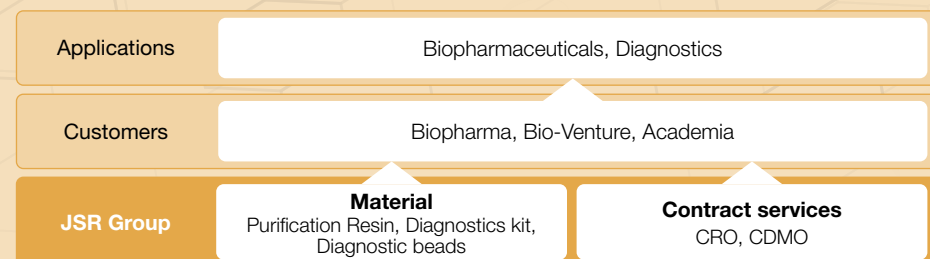


JSR Group offers a contract development and manufacturing organization (CDMO) business for biologics, a contract research organization (CRO) business, in vitro diagnostics (IVD) business, and bioprocess materials (BPM) business. Every group company works as one for global delivery of integrated process support, from biopharmaceutical candidate identification to commercial manufacturing. Offering this integrated support business contributes to increased biopharmaceutical development success rates and a shortened development timeline.

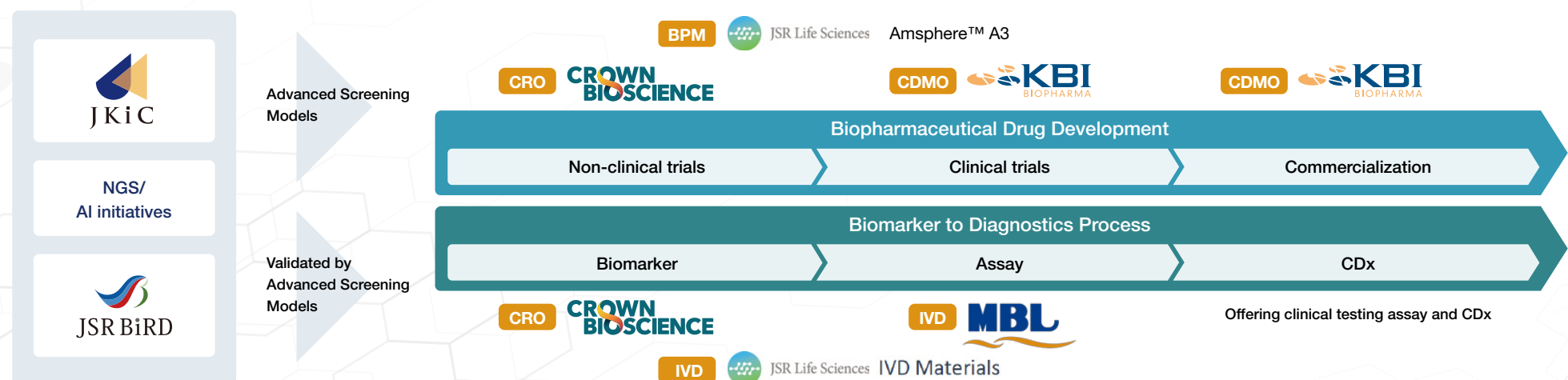
### Strengths

- Synergies leveraged by advanced expertise and technology of group companies
- Structured to support the entire process from biopharmaceutical drug candidate identification to commercial manufacturing
- Excellent support in developing complicated biopharmaceutical drugs
- Quality assurance system refined by the JSR Group's Semiconductor Materials Business
- World-class technology and advanced solutions for mammalian cell line development
- Supplying innovative materials to diagnostic reagent and biopharmaceutical companies

### JSR Group Position



### Group Synergy to Develop One-stop Services



\* Please refer to page 12 for our research and development support organizations.

## CRO

### Contract Drug Candidate Identification and Development Service



#### Selection of eligible compounds for development

Preclinical drug discovery and development services including translational platforms to advance oncology, immuno-oncology, and inflammation

## CDMO

### Contract Service for Biopharmaceutical Drug Development and Manufacturing



#### Support for both development and quality assurance

Biopharmaceuticals development services from cell line development, process development, to clinical/commercial API manufacturing

## IVD

### Research and Diagnostic Products



#### Accurate and efficient diagnostics

Used as a material for in vitro diagnostic reagents to isolate and purify biodistribution molecules such as proteins, nucleic acids, and cells, which improves accuracy and efficiency for disease diagnosis, which is key to more personalized medicine.

#### Main Products

- Magnetic beads for diagnostic reagents
- Latex beads for immunodiagnostic reagents
- Blocking reagents

## BPM

### Bioprocess Products



#### Manufacturing process optimization

A next-generation affinity resin that integrates precise polymer synthesis, surface modification, and genetic engineering technology, which contributes to optimization of the biopharmaceutical drug manufacturing process.

#### Main Products

- Protein A affinity chromatography resin, Amsphere™ A3





# PLASTICS BUSINESS

Supplying high-performance resin products, particularly for automotive parts



Products from JSR Group company Techno-UMG, particularly ABS resins, are born from flexible technological capabilities that can address diverse needs and carry unique character comprising a variety of special qualities.

The company also works on supporting resin parts development and planning, providing reliable quality to users around the world with high value-added products.

## Strengths

- Development of strategic products using our proprietary technology
- Marketing capability to cultivate a wider and deeper market
- Global sales locations and SCM system
- Establish product life cycle through following promotion of a circular economy
- Research and development of biomass raw materials

## JSR Group Position

Applications

Automobiles, home appliances, etc.

Customers

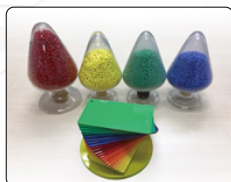
Automotive industry (interior and exterior parts)  
Other manufacturers (home appliance parts, construction parts, etc.)

JSR Group

Standard ABS

**High added-value items**  
HUSHLLOY™, VIVILLOY™, PLATZON™, etc.

## ABS Resin



A full lineup

Used in automotive parts, electrical appliances, and building material parts, taking advantage of its high practical resistance, impact resistance, processability, and weather resistance.

- General grade
- Heat-resistant grade
- Flame-resistant grade
- Weather-resistant grade

## HUSHLLOY™ Anti-squeak Material



Noise damping/  
parts  
reduction

HUSHLLOY™ prevents an unpleasant squeaking noise from plastic joints. This anti-squeak effect lasts forever and reduces costs and need for damping felt, tape, or grease.

**Applications** Car navigation panels, cup holders, etc.

## PLATZON™ Plating Material



Productivity/  
efficiency

PLATZON™ has excellent plating adhesion strength and can be applied to an extremely wide range of production conditions, contributing to improved productivity and yield.

**Applications** Plating for automotive interior decorative parts, such as steering wheels

## VIVILLOY™ Highly Colorable Material



Reduction of  
environmental  
impact/  
efficiency

VIVILLOY™ is a highly colorable material that reproduces depth and vividness close to that of painted materials, even without paint. It contributes to the omission of the painting process, reduction of total costs, and reduction of environmental impact.

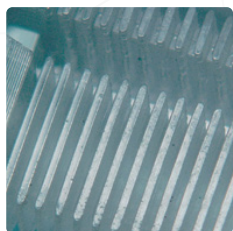
**Applications** Automotive exterior parts, such as radiator grills



## OTHER BUSINESSES

To better use its high level of technological capabilities to contribute to society, JSR generates a variety of products through its unified group business development and open innovation with corporate/academic/research institute collaboration.

### Stereolithography Systems



#### Miniaturization/higher precision

Three-dimensional objects are prepared as slices in CAD, and the corresponding patterns are then used to build layers of UV-curable resin with a UV laser beam. The stereolithography system repeats these steps producing beautiful and extremely precise objects.

- Industrial 3D printer
- UV-curable resin

### Holter Monitor Heartnote™



#### Improved detection

Holter Monitor Heartnote™ can take continuous ECG measurements for up to seven days without interfering with daily life with simple chest affixation. This can enable more frequent detection of paroxysmal atrial fibrillation\*, which can be difficult to detect with conventional tests (24-hour measurement).

\* Arrhythmia that causes cerebral infarction

## R&D and Quality/Production

The JSR Group seeks to develop cutting-edge technology to produce new value and contribute to solving social issues by offering the public outstanding products based on its focus on high quality.



### Research and Development

There are two primary missions in the Research and Development Division: to conduct Business Support Development in fields that are currently being developed and new or applied research in peripheral areas, and to conduct Next-generation Technology Research, such as seed research, where future growth is expected.

Our priority in Business Support Development is cooperating with the value chain within the JSR Group, from development to manufacturing, sales, and logistics. In addition to actively integrating R&D activities with business operations, such as actively encouraging direct interaction between researchers and customers to delve deeper into their needs, we are building an ecosystem that can provide global and timely support for customers' businesses by enhancing technical services in each country in which we operate.

Regarding Next-generation Technology Research, we are engaging in a variety of initiatives such as accelerating overall R&D operations through the application of computer technology and data science, conducting research into the development of

innovative materials with advanced functions and characteristics for the creation of new businesses. Furthermore, JSR is exploring the principles behind functionality in its product development and promoting attempts to develop differentiating products at JSR-UTokyo Collaboration Hub, CURIE. Especially in new fields, we are supporting open innovation such as joint research with domestic and international academic research institutes. In the life science field, the JSR-Keio University Medical Chemistry Innovation Center (JKIC) is working in a variety of research areas by combining medical perspectives with our knowledge of materials development. Furthermore, JSR Bioscience and Informatics R&D center (JSR BiRD) was established at King Skyfront, an international strategic base in Tonomachi, Kawasaki City, Kanagawa Prefecture, as an open innovation center for next-generation medicine and materials informatics, working to create value for the future and contribute to a safe, secure, and prosperous digital and sustainable society with a low environmental impact.

### Quality/Production

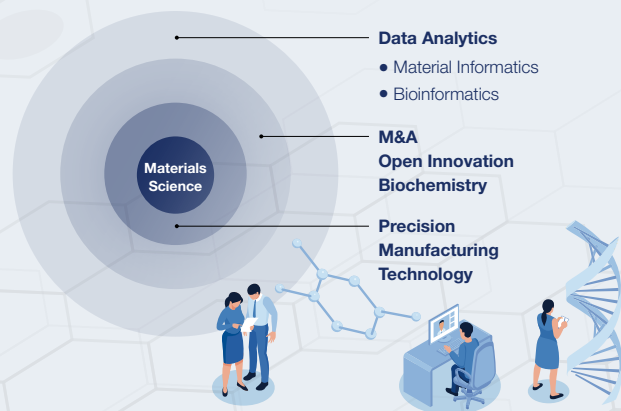
In our production technology group and process development group, we go beyond merely seeking high performance, we emphasize market competitiveness by achieving both consistently performing products and profitability.

We utilize the results of R&D in blending optimized production processes and facilities planning to ensure that opportunities to introduce new products to the market are seized.

We work to make constant improvements and ensure the safety, environmental protection, and quality in our manufacturing. In particular, the active adoption of digital

transformation (DX) technologies helps us promote the efficiency of manufacturing processes using automation technologies and raise the level of quality even higher.

Also, by visualizing energy patterns, we can help reduce electricity waste and contribute to improved energy efficiency and reduced environmental impact. Our Technical Departments not only deal with addressing the daily issues of production work, but also actively promote initiatives to improve product quality and develop production technologies.



## Research & Development Organizational Chart

### Business Support Development

#### Electronic Materials

##### Fine Electronic Materials Development Center



- Lithography Materials Lab.
- Lithography Solution Lab.
- Device Integration Materials Lab.
- Process Materials Lab.

#### Display Materials

##### Display Solution Development Center



- Active Solution Materials Lab.
- Process Solution Materials Lab.
- Display Solution Materials Lab.
- Advance Solution Research Lab.

#### Edge Computing

##### Edge Computing Div.



- Edge Device Materials Lab.

#### Life Sciences

##### Life Sciences Business Group Companies

**CROWN  
BIOSCIENCE**

**JSR Life Sciences**

**MBL**

**KBI  
BIOPHARMA**

### Next-generation Technology Research

#### RD technology and digital transformation center



##### Materials Informatics Initiative

##### Innovative Materials Laboratory

##### Industry-Academia Collaboration

##### JSR-UTokyo Collaboration Hub, CURIE



##### Industry-Academia Collaboration

##### JSR-Keio University Medical and Chemical Innovation Center (JKiC)



##### JSR Bioscience and informatics R&D center (JSR BiRD)





## JSR's Network in the World

The JSR Group operates in 20 locations in Japan and 46 locations overseas.  
Here are just a few of our group enterprises.

### DIGITAL SOLUTIONS BUSINESS

D-MEC LTD.  
Inpria Corporation  
JSR (Shanghai) Co., Ltd.  
JSR ARTON Manufacturing Co., Ltd.  
JSR Electronic Materials (Shanghai) Co., Ltd.  
JSR Electronic Materials Korea Co., Ltd. JSR  
Electronic Materials Singapore Pte. Ltd. JSR  
Electronic Materials Taiwan Co., Ltd. JSR  
Micro (Changshu) Co., Ltd.  
JSR Micro Korea Co., Ltd.  
JSR Micro Kyushu Co., Ltd.  
JSR Micro N.V.  
JSR Micro Taiwan Co., Ltd.  
JSR Micro, Inc.  
YAMANAKA HUTECH CORPORATION

### LIFE SCIENCES BUSINESS

Crown Bioscience International  
JSR Life Sciences Corporation  
JSR Life Sciences, LLC  
KBI Biopharma, Inc.  
MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.

### PLASTICS BUSINESS

JAPAN COLORING CO., LTD.  
Techno-UMG Co., Ltd.

### OTHER BUSINESSES

JEY-TRANS CO., LTD.  
JN System Partners Co., Ltd.  
JSR Active Innovation Fund ,LLC  
JSR Business Services Co., Ltd.  
JSR Logistics & Customer Center Co., Ltd.  
JSR North America Holdings, Inc.



Please see our website for more.

► **Main Group Enterprises**

[https://www.jsr.co.jp/jsr\\_e/company/group.html](https://www.jsr.co.jp/jsr_e/company/group.html)



### Company Name

JSR Corporation

### Date of Establishment

December 10, 1957

### Capital

¥23,370 million \* As of March 31, 2024

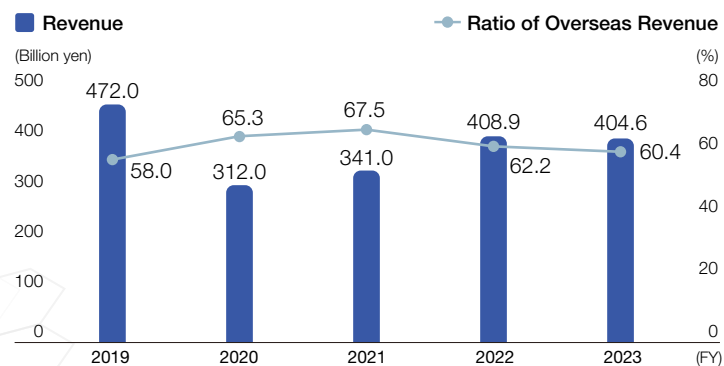
### Revenue

¥404.6 billion (FY2023)

### Total Number of Group Employees

7,997 \* Number of consolidated employees as of March 31, 2024.

### Revenue / Ratio of Overseas Revenue



### Offices and Sites

#### Head Office

Shiodome Sumitomo Bldg.,  
1-9-2 Higashi-Shimbashi, Minato-ku, Tokyo  
105-8640 Japan  
Tel: 81-3-6218-3500  
Fax: 81-3-6218-3682

#### Yokkaichi Plant

100 Kawajiricho, Yokkaichi-shi, Mie  
510-8552 Japan  
Tel: 81-59-345-8000  
Fax: 81-59-345-8111

#### Fine Electronic Materials Development Center Display Solution Development Center

Edge Device Materials Lab.  
100 Kawajiricho, Yokkaichi-shi, Mie  
510-8552 Japan  
Tel: 81-59-345-8084  
Fax: 81-59-345-8118

#### Tsukuba Site

25 Miyukigaoka, Tsukuba-shi, Ibaraki  
305-0841 Japan  
Tel: 81-29-856-1001  
Fax: 81-29-856-1003

#### JSR-Keio University Medical and Chemical Innovation Center (JKiC)

35 Shinanomachi, Shinjuku-ku, Tokyo  
160-8582 Japan  
Tel: 81-3-6274-8602  
Fax: 81-3-6274-8649

#### JSR Bioscience and informatics R&D center (JSR BiRD)

3-103-9 Tonomachi, Kawasaki-ku,  
Kawasaki-shi, Kanagawa  
210-0821 Japan  
Tel: 81-44-874-1930  
Fax: 81-44-299-2150

