**REVIEW OF OPERATIONS**

**CHEMICALS AND RESINS**

- **Poval**
  Poval resin/Butyral resin/PVA film
- **EVAL**
- **Isoprene Chemicals**
  SEPTON/HYBRAR/Aroma chemicals/Pharmaceutical intermediates
- **Methacrylic**
  Methacrylic resin/Methacrylic sheets/Synthetic marble

**FIBERS AND TEXTILES**

- **Man-Made Leather**
  CLARINO/AMARETTA/PARCASSIO
- **KURALON/KURALON K-II**
- **New-type polyester**
  SOPHISTA
- **Non-Woven Fabrics**
  KURAFLEX
- **Fastening Materials**
  MAGIC TAPE

**HIGH-PERFORMANCE MATERIALS, MEDICAL PRODUCTS AND OTHERS**

- **High-performance materials**
  Opto-screens/GENESTAR/Liquid crystalline polymer film
- **Medical Products**
  Dental materials/Artificial kidneys/Contact lenses
- **Environmental Businesses**
  Industrial membranes/Activated carbon

**Regarding the change in segments**

In response to changes in the business environment, and using the momentum of our implementation of the in-house company system, we reorganized our previous four business segments into three: Chemicals and Resins, Fibers and Textiles, and High-Performance Materials, Medical Products and Others.
PERFORMANCE IN
THE FISCAL YEAR ENDED MARCH 31, 2003

Net sales of Chemicals and Resins grew 20.8%, or ¥24,896 million, to ¥144,690 million. Operating income jumped 28.6% to ¥19,947 million, an increase of ¥4,441 million. The performance of poval and EVAL remained strong, particularly overseas. High-value-added methacrylic products, including those for optoelectronic applications, posted sales growth, while sales of isoprene-related products and elastomers expanded in both domestic and overseas markets, with elastomers showing particularly substantial growth. These developments contributed to growth in both revenues and profits.

Poval  The recovery of demand in Asia, expansion of the Chinese market, acquisition in fiscal 2001 of the PVA and PVB operations of Clariant, and subsequent establishment of Kuraray Specialities Europe all contributed to the expansion of Kuraray’s poval business. A recovery was seen in demand for PVA film for use in LCDs, and the new manufacturing facilities that came on line in April were operating steadily. The poval business as a whole achieved increases in both revenues and profits.
EVAL Despite the rising price of crude oil in the United States, sales of the EVOH resin EVAL for use in food packaging were healthy, and demand for use in plastic fuel tanks rose steadily not only in the U.S., but also in Japan, Europe and China. The EVAL business, as a result, posted gains in revenues and profits.

Methacrylic Resin Products Increased demand for methacrylic resin was evident, both as a material for molding and in sheet form. Demand for use in such high-value-added products as light guide plates and front panels for RPTVs was particularly strong. This business also achieved growth in revenues and profits.

Isoprene Chemical Products Production of isoprene-related products at our U.S. plant commenced in September 2003. Sales of thermoplastic elastomers were healthy, mainly in the European and U.S. markets. In the field of fine chemicals, the vitamin-related products business has been affected by falling market prices, but pharmaceutical intermediates, agrochemical intermediates and aroma chemicals showed solid growth. Diols and other specialty chemicals also saw increases in sales volume. As a result, the isoprene-related business posted increases in revenues and profits.

REGIONAL CONDITIONS

Japan Domestic operations were affected by Japan’s poor economic conditions, but high-value-added products showed steady growth, as did demand for poval and methacrylic resin for optical applications. Demand for EVAL for use in plastic fuel tanks expanded, and with the emergence of new applications allowed solid growth. Demand for thermoplastic elastomers also expanded.

Europe To meet rising demand for EVAL in Europe for use in plastic fuel tanks and food packaging, EVAL Europe is expanding production capacity by 12,000 tons. The expanded facilities are scheduled to come on line in the third quarter of fiscal 2004. Kuraray Specialities Europe performed well during its inaugural year, posting net sales of approximately ¥16.0 billion. In addition, the operating loss resulting from the amortization of goodwill was much smaller than expected due to healthy sales in Europe.

North America We commenced production of the thermoplastic elastomer SEPTON at a subsidiary in Texas in an effort to increase U.S. sales, and commenced full-bore marketing based on customer evaluations. Thriving demand for EVAL for use in plastic fuel tanks and food packaging continued.
Asia  Riding the wave of recovery in Asia’s markets, sales of poval grew steadily. Demand increased for EVAL in China for plastic fuel tank applications, and in Korea and Taiwan for food-packaging applications. Also in Korea and Taiwan, demand for methacrylic resins for use in light guide plates was healthy, and demand for SEPTON for general applications rose significantly.

OUTLOOK

In the Chemicals and Resins business, the global expansion of poval, EVAL, thermoplastic elastomers and other core businesses is expected to continue. Sales growth of EVAL is projected in China and other Asian markets, as well as in Japan, Europe, and the U. S., through expansion into untapped markets.

Building on the momentum gained from the successful launch of Kuraray Specialities Europe, the poval-related business will seek to generate synergies from manufacturing, sales and development on a global level. In the SEPTON thermoplastic elastomer business, we will bring SEPTON Company of America’s new plant into full operation at an early date in response to the growth of domestic and overseas markets.

In the methacrylic resin business, optoelectronics applications will be the driver for growth. In response to growing demand for use in computer LCDs and RPTV screens, we will double our capacity to manufacture methacrylic resins for molding, effective October 2003. Expanded facilities for manufacturing methacrylic resin sheets are scheduled to open in April 2004. These two measures will significantly strengthen our manufacturing organization.

Methacrylic Resin: Transparent, weather-resistant, color fast, and workable methacrylic resin is used in light guide plates for LCDs, automobile taillights, lighting fixtures and a broad range of other applications. Methyl methacrylate, an intermediate product in the manufacture of methacrylic resin, is used as a resin modifier and a paper coating.

Industrial Cleaner: A highly safe and easy-to-handle cleaner with a host of industrial uses, our industrial cleaner has excellent detergent properties, is simple to recycle and is soluble in both water and oil.

Aroma Chemicals: The Company uses isoprene to manufacture over 30 aroma chemicals and base oils for use in cosmetics and toiletries, including Linalool (lily of the valley scented) and Citral (lemon scented).

Pharmaceutical Intermediates: Kuraray produces intermediates for anti-viral agents, anti-hypertension agents, antibiotics, and other pharmaceuticals using its fine-chemical technology.

Methacrylic Sheets: Superior transparency makes this material ideal for signboards, building materials, aquaria, and many other uses. Recently, demand has grown for methacrylic sheets for use in LCD light guide plates and front screens for other types of display.

Synthetic Marble: An application of methacrylic resin, this material has the look of natural marble, and is being used in modular kitchens, bathtubs and sinks.

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**FIBERS AND TEXTILES**

1. Kuraray Trading Co., Ltd. (Hanoi branch)  
   1. Sales of Kuraray products  
2. Haru-Kuraray GmbH  
   1. €1.0 million  
   2. Sales of man-made leather in Europe
3. Kuraray Europe GmbH  
   1. €31.2 Million  
   2. Sales of Kuraray products in Europe
4. Lorica Sud S.r.l  
   1. €9.9 million  
   2. Processing and sales of man-made leather in Europe
5. Kuraray Co., Ltd.  
   1. ¥88,955 million  
   2. Manufacture and sales of Kuraray products
   1. ¥120 million  
   2. Sewing of Kuraray products
7. Kuraray Hong Kong Co., Ltd.  
   1. HK$4.65 million  
   2. Processing and sales of Kuraray products in China and Southeast Asia
8. Kuraray Trading Co., Ltd. (Shanghai branch)  
   1. ¥150 million  
   3. Sewing and sales of Kuraray products
9. Kuraray Trading Co., Ltd. (Berlin branch)  
   1. ¥150 million  
   3. Sewing and sales of Kuraray products
10. Kuraray Trading Co., Ltd. (Hong Kong branch)  
    1. ¥150 million  
    3. Sewing and sales of Kuraray products
11. Kuraray Trading Co., Ltd. (Jakarta branch)  
    1. ¥150 million  
    3. Sewing and sales of Kuraray products

**NET SALES**  

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Capital</th>
<th>Activities</th>
<th>Manufacturing facility</th>
<th>Marketing base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haru-Kuraray GmbH</td>
<td>¥2.0 million</td>
<td>1. Sales of man-made leather in Europe</td>
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<td>Kuraray Europe</td>
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<td>2. Sewing of Kuraray products</td>
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<tr>
<th>Year</th>
<th>¥ millions</th>
<th>%</th>
<th>Total: ¥322,524 2003</th>
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<tr>
<td>02</td>
<td>114,767</td>
<td>34.1%</td>
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<tr>
<td>03</td>
<td>109,915</td>
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**OPERATING INCOME**  

<table>
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<th>Year</th>
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<th>%</th>
<th>Total: ¥33,070 2003</th>
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<tr>
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<tr>
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<td>4,801</td>
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</table>

**CAPITAL EXPENDITURE**  

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<thead>
<tr>
<th>Year</th>
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<th></th>
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<tr>
<td>02</td>
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<td></td>
</tr>
<tr>
<td>03</td>
<td>4,655</td>
<td></td>
</tr>
</tbody>
</table>

**PERFORMANCE IN THE FISCAL YEAR ENDED MARCH 31, 2003**

Net sales in Fibers and Textiles declined 4.2%, or ¥4,852 million, to ¥109,915 million, but operating income surged 27.4%, or ¥1,034 million, to ¥4,801 million. The decline in net sales resulted from the falloff of polyester sales, while the increase in income was brought by the rationalization of polyester operations and a recovery in CLARINO sales.

**KURALON** Demand for KURALON for use as an asbestos substitute and for use in fiber-reinforced cement (FRC) led to healthy sales, and the water-solubility of KURALON K-II led to expansion of demand for this product, as well. However, demand from the agricultural and fisheries industries contracted, and sales of KURALON overall were flat, although profits increased.

**Polyester** Although market conditions remained severe, Kuraray split off its polyester filament fiber operations into a separate company in October 2001, and in April 2002 transferred the clothing-use textile business to a Group trading company. Together with these efficiency-enhancing measures, we accelerated our shift to differentiated materials and continued to shrink unprofitable operations. As a result, although sales declined, we significantly reduced the magnitude of the net loss in this business. In April 2003, we transferred our staple fiber manufacturing division to a newly established subsidiary, and are seeking to improve profitability through specialization in highly differentiated materials and materials for use within the Kuraray Group.

**Man-Made Leather** The man-made leather business achieved increases in both revenues and profits, as measures taken by the Company to increase the use of CLARINO in athletic shoes and other footwear have recently shown results. In addition, sales were strong of CLARINO for use in clothing in the domestic market, and in interior furnishings in the U.S. market. This business is on the road to full recovery. Well-known manufacturers of athletic shoes are starting to use PARCASSIO, which feels like natural leather, and this market is growing steadily.
Non-woven Fabrics and Fastening Materials  The weak domestic market for non-woven fabrics and the instability of the restaurant industry have resulted in falling prices in the non-woven fabrics business. However, by increasing sales volume we have held net sales level, although profits have declined. The shift of users overseas and other factors produced decreases in revenues and profits in the hook and loop fastener business. In response to the trend toward local procurement, the Company will establish a manufacturing and sales subsidiary in Shanghai that will commence sales in October 2003.

REGIONAL CONDITIONS

Japan  In its polyester business, the Company is working to expand the market for its proprietary polymer products, and sales are growing steadily. Demand for CLARINO for use in shoes and miscellaneous goods was steady. Sales of KURALON to the fisheries and agriculture industries were weak, but sales for use as a rubber reinforcer, in paper and in non-woven fabrics stabilized.

Europe  Demand for KURALON for use in civil engineering applications was steady. There has as yet been no full-scale recovery in sales of CLARINO, but we have begun to see indications of its use in interior furnishings and other applications.

North America  Sales of KURALON as a rubber reinforcer were stable, and sales of man-made leather have been strengthened through unified operations with Kuraray America, Inc. achieving healthy performance largely on the strength of sales for use in interior furnishings.

Asia  The maneuverability of branches of Kuraray Hong Kong Co., Ltd. in Taiwan and China has strengthened pipelines to users, which has brought steadily growing use of man-made leather in the world’s leading athletic shoe brands.

OUTLOOK

Use of KURALON as a rubber reinforcer is increasing, and we are accelerating our development of the civil engineering and construction markets for KURALON K-II.

We are increasing the profitability of our polyester business by expanding sales of unique products that use our proprietary polymers, such as SOPHISTA.

The use of man-made leather in athletic shoes continues to expand, and through strong marketing efforts we will promote growth in sales volume for use in automobile seats, a field we had not previously emphasized. By strengthening marketing capabilities and rationalizing costs, we brought our operating ratio to 85% in fiscal 2003, and are working toward a goal of 100% in fiscal 2005.
HIGH-PERFORMANCE MATERIALS, MEDICAL PRODUCTS AND OTHERS

PERFORMANCE IN THE FISCAL YEAR ENDED MARCH 31, 2003

Net sales in this segment declined 4.7%, or ¥3,382 million, to ¥67,919 million. Operating income jumped 23.1%, or ¥1,562 million, to ¥8,322 million. Our domestic affiliates posted declines in revenues, but opto-screens, dental materials, GENESTAR, hollow-fiber membranes, and activated carbon contributed to increased revenues and profits.

Optoelectronics products Sales of RPTV screens in the U.S. remained strong, and demand increased in the Chinese market as well. Revenues and profits both rose.

Medical Products Sales of dental materials expanded steadily, chiefly in Europe and the U.S. The profitability of the contact lens business recovered as a result of cost reductions and expanded sales of new lens-care products. However, sales of medical devices were affected by the Japanese government’s reductions in pharmaceutical prices. Sales in the medical products business were flat, although profit growth was achieved.

High-Performance Materials The heat-resistant resin GENESTAR was widely used in connectors and other electronic parts, and development of the automotive market
Opto-screens: Rear-projection TV (RPTV) screens are produced by applying precision molding technology to methacrylic resin. As digital high-definition TV and DVD players proliferate, demand for RPTVs is expected to grow, especially in the United States and China.

Industrial Membranes: Kuraray has developed microfiltration membranes capable of filtering microparticles ranging in size from 0.003 to 3 microns, which are widely used in water filtration, wastewater treatment and other industrial applications.

GENESTAR: A new polyamide resin that is resistant to heat, water and abrasion, this material is used in mobile telephones, computers, such electronics parts as connectors and switches, and auto parts. GENESTAR is also well suited for use in lead-free resin-core solders, which makes its heat resistance all the more attractive.

Dental Materials: High-performance dental adhesives and filling materials produced by Kuraray Medical Inc. have established a strong presence in the market by virtue of their superior adhesiveness, strength and ease of use. The Company also markets an all-purpose cement that bonds metal caps and implants, and dental resin developed for aesthetic dental repair.

Liquid Crystalline Polymer Film: This high-performance material has a low water-absorption rate, electrical properties, and dimensional stability. We are expanding sales for use in circuit board substrates.

Activated Carbon: With its ability to absorb and eliminate odors and contaminants, this material is used in water filters, air-conditioning filters and many other applications. Growth in demand for use in capacitors is expected.

for GENESTAR also progressed steadily. We worked to expand our environment-related business, and a local government selected our large-pore hollow-fiber membrane for use in the city’s water purification facility.

Others Activated carbon sales at domestic affiliate Kuraray Chemical Co., Ltd. were healthy. Although the business environment was harsh for our other affiliates, progress was made in the enhancement of operational efficiency. This allowed growth in profits for this sector overall, despite lower revenues.

REGIONAL CONDITIONS

Japan The medical products business was affected by the Japanese government’s pharmaceutical price reductions, but improved profitability was achieved through growing sales of such environment-related products as activated carbon and high-performance membranes, higher sales of GENESTAR and rationalization at domestic affiliates.

Europe and North America Sales of dental materials were healthy in Europe and North America, and sales of opto-screens for RPTVs were strong in North America.

Asia Demand for opto-screens in China increased, while government approval and the establishment of agency sales routes strengthened dental material and contact lens operations. The foundation is in place for the Company’s entry into the Chinese market.

OUTLOOK

In the medical products field, we will increase sales by strengthening our direct-sales organization for dental materials in Europe and North America, and increasing our export ratio. In China, where we have built a sales organization, we will intensify efforts to expand sales of dental materials and contact lenses.

In our opto-screens business, the Optical Device R&D Center, opened in March 2003, will work to develop products that match market needs, while a planned April 2004 expansion of production facilities will respond to burgeoning demand in China and the United States.

We will develop GENESTAR into a significant material that can make a contribution to earnings by accelerating the advance of automotive applications and other market-development efforts.