We recently established a new market research firm Medicaroid Corporation (hereafter Medicaroid) together with Sysmex Corporation, a company with a wide-reaching network in the medical industry. This firm will develop, manufacture, and sell medical robots. The societies of Japan and many other developed nations are aging rapidly, leading to a rise in lifestyle-related diseases and escalating medical costs. The demands and needs for medical care, such as preventive medical care and tailored medication, are expanding and becoming increasingly multifaceted. As a result of these trends, the global demand for medical robots is expected to grow. To meet this demand, Medicaroid will plan products and construct a framework to support future development, manufacturing, and sales. Medicaroid operates out of the Kobe Biomedical Innovation Cluster a research and development zone on Port Island for advanced medical technology. This new firm will collaborate with medical institutes, such as university hospitals, corporations, and the local government to efficiently develop and market Japanese medical robots that can be sold around the world.

Kawasaki recently released two new medical robot models, the "MC004N" and "MS005N", on November 1, 2013. There has been a growing demand for robot-based process automation in the pharmaceutical industry to avoid human error and eliminate the risks of microbial contamination or exposure (*1) when handling medical products with high potency active pharmaceutical ingredient, such as anticancer drugs. The "MC004N" and "MS005N" were developed to meet these needs. The arms of these new robots have a flat and smooth surface covered with a chemical-proof coating. This coating makes each robot highly waterproof and easy to wash, thereby helping to prevent contamination. These new models are also extremely hygienic and meet the purity requirements for ISO Class 5 (*2). Thus, the "MC004N" and "MS005N" are ideal for use on medical and pharmaceutical production lines. A tooling cable can be placed inside of the arm each robot and run all the way to the apical flange, helping to minimize interference with peripheral equipment. Both models can be installed in confined spaces, or mounted on top of peripheral equipment. The "MC004N" is a 6-axis, vertically articulated robot with an arm that weighs a mere 25 kg. The "MS005N" is a 7-axis, vertically articulated robot with an arm made of highly durable stainless steel.

For more information about these products, please contact the nearest Kawasaki office.

*1 Exposure: Exposure of health-care professionals to bacteria, viruses, and toxic chemicals.
*2 ISO Class 5: Purity indicator based on the particle count per cubic meter. Established by the International Organization for Standardization (ISO).

SEMICON Japan 2013 will be held at Makuhari Messe from December 4 to 6. This annual exhibition, which was first held in 1977 and is now entering its 37th year, showcases the latest in semiconductor manufacturing equipment, materials, and other related products. Kawasaki Heavy Industries, Ltd. has taken part in the exhibition every year since 2000, and this year we plan to exhibit our most recent developments in clean robots for semiconductors and solar panels. For those planning to visit the exhibition, we invite you to stop by the Kawasaki booth (2B-612, Hall 2).

(SEMICON Japan 2013: http://www.semiconjapan.org/ja/)