

The 15th Anniversary of the Masao Horiba Award

A handwritten signature in black ink, appearing to read 'Atsushi H.' with a stylized flourish at the end.

Atsushi HORIBA

Masao Horiba Awards Director Chairman &
Group CEO, HORIBA, Ltd.

I hereby give a foreword for the 51st Readout issued about the 2018 Masao Horiba Award celebrating the 15th anniversary of the Award.

This Award was established in 2003 as a commemoration for the 50th anniversary of HORIBA, Ltd, and had been promoted to spotlight and support younger scientists making a consistent effort in the field of analysis and instrumentation essential for the progress of science and technology. The purpose of the award is to respect and sponsor the basic researchers of analysis and instrumentation technology which contributes as the foundation of many kinds of research and development and quality control activities in various fields of industry.

The HORIBA Group, commemorating the 65th anniversary this year in 2018, is aggressively devoting business resources for continuous development of new technology and products under the corporate slogan of “Joy and Fun” with a strong will to create state of the art and one of a kind products in the global market.

To develop and be proud of these top level products that achieve a large global share in the extensive world instrumentation system market, it is unrealistic to perform all development process by ourselves. So to that purpose we have worked closely in collaboration with academic institutes to apply new technologies to our products. Furthermore the “Masao Horiba Award” was established under the strong “passion” of our founder Masao Horiba to sponsor younger academia researchers since often they have a modest amount of support.

The Masao Horiba Award annually requires submissions oriented towards a particular analytical subject. On the first year of 2004, the subject was “pH measurement technology” which was the basic technology for the foundation of HORIBA, and the awards were won by

three researchers including Dr. Kiwamu Sue of Tohoku University, et al. Ever since that year, the award accepts entries with an annually specified theme that is relevant or popular. In 2012, the theme was “Radiation Measurement” following the accident of the Fukushima-1 nuclear power plant, where the award winner’s subjects were not directly related to the nuclear accident, but a medical application and measurements in nuclear physics. For 2016, the award theme was “Situational awareness technologies to enable autonomous driving”, where the winning subjects were image recognition logic, sensor signal analysis methods, or positioning methods without GPS. In this manner, the Horiba Masao Award intends to appreciate original and applicable basic research subjects even if the work was in a general way related to the topical subject of the year.

Technologies are being improved at an accelerated rate. In 2018, the award theme is “Advanced analytical and measurement technologies in semiconductor manufacturing processes” which is broadly similar to the 6th , 2009 Award themed “Non Destructive Surface Analysis for Semiconductor Related Materials” that focused on applications for material surface analysis. In this year, all of the award winners aim for developing instrumentation technology essential for the advanced plasma process control in future.

The awardees all say that recently there is a decline in basic fundamental research while universities or research institutes concentrate investment on trendy applications such as bio-technology, nano-technology, IoT (internet of things) and AI(artificial intelligence), causing a lack of funds for continuous investment in basic research. While specific applications do follow the trends of the time, fundamental research is perennially important and always necessary as the basis of every application. This fundamental work is what corporations like ourselves desire from academia and their research activities; therefore, our support is critically important.

I present this as the foreword to the 51st Readout wishing that the Masao Horiba Award is always involved in supporting basic fundamental research and truly provides a forum for young researches to get recognition for their efforts on an international stage.