



# Masao Horiba Awards 堀場雅夫賞

## Call for Applications 2017

### Message from the President

The Masao Horiba Award was established in 2003, to highlight innovative work in analytical measurement technologies. This information is critical to understanding many phenomena and, thus, forms the basis of new scientific research. These properties also form the foundation for the transition of materials to industrial production. For the product and process optimization, these analytical and measurement technologies are indispensable. I hope that the Masao Horiba Award, named after the founder of HORIBA, Ltd., will contribute to illuminating the achievement of researchers who are working hard in the field of analytical and measurement technology. We look forward to receiving many applications for this year's award.

March, 2017

Atsushi Horiba  
Chairman, President & CEO  
HORIBA, Ltd.



## 2017 Masao Horiba Awards

### 2017 Masao Horiba Awards

The Masao Horiba Award was created to encourage researchers and engineers in universities or public laboratories worldwide who are contributing to the field of science and technology through their research related to analysis and measurement. The application theme for the 2017 Masao Horiba award is, "Water measurement enriches people's lives."

Because water is crucial for life at every level, a precise understanding of various phenomena in water treatment can lead to breakthrough improvements in the quality of life worldwide. We are directly or indirectly involved with water in every aspect of what we consume; drinking water, agricultural crops, livestock, and pharmaceuticals. Water is also crucial to the environment that surrounds us, not only oceans, lakes, and rivers, but in groundwater, the saturation of water tables and the eco systems that depend upon them. As the demand for water increases each year due to industrial development and growing populations, the supply of clean drinking water decreases due to negative environmental factors. There is an inherent obligation to take appropriate measures so as to not adversely affect the water we use. By creating a balance between what we demand from the earth and what the earth can provide, we are helping ourselves.

In order to realize a sustainable supply of clean water, objective and quantitative evaluation of water is required and technologies that enable people to easily obtain these measurements quickly and accurately is imperative. Therefore, we welcome both domestic and overseas researchers who are ambitious and creative with their viewpoint of analysis and measurement technology to apply for this award.

Masayuki Adachi, Dr. Eng.  
Chief of the Organizing Committee for 2017 Masao Horiba Awards  
General Manager of Research & Development Division  
Senior Managing Director  
HORIBA, Ltd.



# Guidelines for 2017 Masao Horiba Awards

## Outline

The purpose of this award is to encourage and recognize scientists and engineers relatively early in their careers who are achieving distinguished results in the field of analytical science and technology. We cordially invite applications from researchers all over the world who are enthusiastically engaged in original research and development at universities or public research facilities.

## Eligible Field of Technology: "Water measurement enriching people's lives"

The application theme for the 2017 Masao Horiba award, which is the 14th meeting, is "Water measurement enriching people's lives". We are looking for water measurement technology and analytical technology enriching people's living standard from the following viewpoint.

- 1) Techniques related to in-situ measurement and analysis (for example, the techniques that can realize real-time measurement by installing or mounting in target areas.)
- 2) Technology combining water measurement and information processing technology (for example, ICT, IoT, AI)
- 3) Technologies that contribute to the advancement of automatic measurement (for example, maintenance free, non-sampling technology, etc.)

The water in this application includes not only environmental water (lake water, river water, seawater, groundwater) and industrial water (water supply system, sewer system, water treatment such as desalination), but also various kinds of liquids (drinking water, nutrient solution, culture solution, washing solution etc.). However, techniques related to measurement of body fluids and clinical tests are excluded.

## Eligibility of Applicant

An applicant should be a researcher or an engineer at a university or a public research facility worldwide, engaged in research and development in the field described above. The applicant should fulfill one of the following criteria:

- The applicant is expected to achieve outstanding academic or technological inventions or discoveries in research or development in a field eligible for this award.
- The applicant is expected to solve important academic or technological issues in the field eligible for this award.

Potential of the applicant is highly evaluated rather than his/her current achievement.

Applications from outside Japan must be made at the invitation from an employee of a HORIBA Group company.

## Incentive

A certificate of commendation will be presented to each recipient of the 2017 Masao Horiba Awards at the award ceremony.

A supplementary award will also be made. Research subsidy of JPY500,000 will be presented in the first year and the same amount yearly for the next two years.

The award and the supplementary award will be given on the condition that the winners accept the invitation to attend the award ceremony held in Kyoto on Oct. 17, 2017 and that the winners continue to meet the eligibility described above.

## Application for the 2017 Masao Horiba Awards

Applicants are required to submit:

- i ) an original completed application form with 1 copy for the 2017 Masao Horiba Awards and a CD-R or DVD which was stored in a PDF file form,
- ii ) an original signed recommendation letter written by the director/president of the institution or his/her supervisor using the designated form with 1 copy, and a CD-R or DVD which was stored in a PDF file form, and
- iii) a maximum three publications which are central to the applied research with 1 copy each, and a CD-R or DVD which was stored in a PDF file form.

For detailed information, please contact HORIBA office in your region.

## Submission Deadline

Applicants must submit the above original application documents with 1 copy, and a CD-R or DVD to the HORIBA Group company employee who invited them to apply for the award by Friday, May 19, 2017.

## Screening

The members of the Screening Committee for the 2017 Masao Horiba Awards listed below will determine the winners through examination of the achievements and future prospects of the applicants, based on their application documents.

## Screening Committee for the 2017 Masao Horiba Awards

Chairperson:	Mr. Atsushi Horiba, Chairman, President and CEO, HORIBA, Ltd.
Deputy Chairperson:	Dr. Satoshi Takizawa, Professor Department of Urban Engineering, The University of Tokyo
Judges:	Dr. Shane A. Snyder, Professor Department of Chemical and Environmental Engineering The University of Arizona
	Dr. Akio Imai, Director Center for Regional Environmental Research, National Institute for Environmental Studies
	Dr. Masaki Torimura, Senior Planning Manager Research and Innovation Promotion Headquarters, Environmental Management Research Institute, National Institute of Advanced Industrial Science and Technology
	Dr. Hiroharu Yui, Professor Department of Chemistry, Faculty of Science Division I, Tokyo University of Science
	Dr. So Takagi, Deputy Department Manager Core Technology Development Department, HORIBA Advanced Techno, Co., Ltd.
	Dr. Yoshihiko Kawaguchi, Team Leader Core Technology Development Department, HORIBA Advanced Techno, Co., Ltd.

## Results

Applicants will be notified of the screening results by the end of July, 2017.

## Award Ceremony and Commemorative Seminar

Award ceremony and commemorative seminar for the 2017 Masao Horiba Awards, followed by a reception, will be held on October 17, 2017 at Shiran Kaikan, Kyoto University, Kyoto, Japan.

## Publication of Awarded Research

Award-winning research will be published in HORIBA's technical journal *Readout*.

