



# Masao Horiba Awards 堀場雅夫賞

10th Anniversary

Call for Applications  
2013

## Message from Dr. Masao Horiba

It is extremely important for scientists and technical experts to understand and clarify substances for which the content, properties and behavior are as yet unknown. Solutions to these challenging problems require analytical instruments which use high-level science and technology. Although research on analytical technologies is extremely important, the necessity for such high-level technologies has not been well recognized among the general public or academic circles. This award has been established in the hope that it will provide a level of encouragement and motivation to academic persons who are working to establish new analytical fundamentals, an area that may be unspectacular but is key to all scientific fields. HORIBA looks forward to receiving many applications for this year's award.

April, 2013.  
Dr. Masao Horiba





## 2013 Masao Horiba Awards

### 2013 Masao Horiba Awards

To mark the 50th anniversary of HORIBA, Ltd. in 2003, the HORIBA Group established an award to recognize young scientists' contributions to analytical science. This award is intended to support scientists, outside the HORIBA Group companies, who are devoting themselves to research and development of innovative technology in analysis and measurement. In addition, it aims to strengthen the position of analytical and measurement technology within the scientific and industrial world. Each year a technical field is targeted from the principles and fundamental technologies related to HORIBA's R&D activities. The award values unique research and development with the findings and potential that deserve global recognition.

For the 2013 Masao Horiba Awards, we are calling for entries on innovative research related to the measurement of environmental water and water used in industrial processes.

The earth is blessed with approximately 1.35 billion km<sup>3</sup> of water. With such abundance, it is often described as the "water planet." However, the amount of easily accessible fresh surface water, such as river water and lake water, is no more than 0.1 million km<sup>3</sup>, which is only about 0.01% of the total surface water. In addition, water resources are not distributed evenly around the globe. In the Middle East and some areas of Africa, chronic water shortages are problematic. Even water-rich areas have been experiencing extreme climate change and have difficulty in securing stable water resources. Considering the growing global population, securing sufficient water resources is an increasingly critical issue for all humankind. For the sustainable utilization of our precious water resources, it is essential to preserve and monitor existing resources as well as purify and recycle available water. Measurement has a significant role to play in providing quantitative information for such water management.

For these reasons, the measurement of environmental water and water used in industrial processes is the designated field for the 2013 Masao Horiba Awards. We welcome and encourage applicants who are engaged in the study of basic technologies for water measurement and have potential to become future leaders for measurement technologies.

Dr. Kozo Ishida  
Chief of the Organizing Committee for 2013 Masao Horiba Awards  
Executive Vice President  
HORIBA, Ltd.



# Guidelines for 2013 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.

## Target Technology Fields

The 2013 Masao Horiba Awards calls for applications on innovative research in the measurement of environmental or industrial water properties. The research should fall into one or more of the following areas.

1. Research for new principles or new approaches to measure general water properties, e.g., pH, conductivity, turbidity, various ions, chemical oxygen demand, etc..
2. Research using established or conventional technologies, that has the potential to provide new solutions to water measurement issues.
3. Research to establish the continuous measurement of water properties which currently are only measurable by batch analyses.

The measurement for environmental water means the measurement for river water, lake water, sea water, ground water and rain water. The measurement for industrial water properties means measurement in the process of treatment for service water, sewage, industrial wastewater, seawater desalination, etc.. The measurement should be for ensuring water safety and for effective industrial water utilization.

## 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.

## Incentive

A certificate of commendation will be presented to each recipient of the 2013 Masao Horiba Awards at the award ceremony.

A supplementary award will also be made. Research subsidy of JPY500,000 yen 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, 2013 and that the winners continue to meet the eligibility described above.

## Application for the 2013 Masao Horiba Awards

Applicants are required to submit:

- i) a completed application form for the 2013 Masao Horiba Awards with 7 additional copies,
- ii) a signed recommendation letter written by the director/president of the institution or his/her supervisor using the designated form, with 7 copies and
- iii) a maximum three publications which are central to the applied research, 8 copies each.

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

## Submission Deadline

Applicants must submit the above application documents to the HORIBA Group company employee who invited them to apply for the award by Friday, May 24, 2013.

## Screening

The members of the Screening Committee for the 2013 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 2013 Masao Horiba Awards

Honorary Chairperson: Dr. Masao Horiba, Supreme Counsel, HORIBA, Ltd.

Chairperson: Mr. Atsushi Horiba, Chairman, President and CEO, HORIBA, Ltd.

Deputy Chairperson: Dr. Koji Suzuki, Professor,  
Faculty of Science and Technology, Department of Applied Chemistry, Keio University

Judges: Dr. Charles R. Goldman, Distinguished Professor of Limnology Emeritus,  
Environmental Science & Policy, University of California Davis

Dr. Yoshihisa Shimizu, Professor,  
Research Center for Environmental Quality Management,  
Graduate School of Engineering, Kyoto University

Dr. Hiroaki Tao, Director,  
Research Institute for Environmental Management Technology,  
National Institute of Advanced Industrial Science and Technology (AIST)

Dr. Kazuhiro Mae, Professor,  
Department of Chemical Engineering, Kyoto University

Dr. Yoshihiro Mori, Manager,  
Liquid measurement R&D, HORIBA, Ltd.

Dr. Katsunobu Ehara, Business owner of water analysis,  
Process & Environmental segment strategy office, HORIBA, Ltd.

## Results

Applicants will be notified of the screening results by the end of July, 2013.

## Award Ceremony and Commemorative Seminar

Award ceremony and commemorative seminar for the 2013 Masao Horiba Awards, followed by a reception, will be held on October 17, 2013 at Shiran Kaikan, Kyoto University, Kyoto, Japan.

## Publication of Awarded Research

Award-winning research will be published in HORIBA's technical journal Readout, HORIBA Technical Reports.

