



Masao Horiba Awards 堀場雅夫賞

Call for Application 2008

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 using high-level science and technology. Although researches on analytical technologies are extremely important, the necessity for such high-level technologies has not been well recognized among the general public, or among 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, 2008,
Dr. Masao Horiba





2008 Masao Horiba Awards

2008 Masao Horiba Awards

In 2003, to mark the 50th anniversary of HORIBA, Ltd., HORIBA Group established an award for young scientists in analytical science outside the group companies. This award is intended to support researchers who are devoting themselves to research and development of innovative technology in analysis and measurement. It also aims to strengthen the position of analytical and measurement technology within scientific and industrial world. The field for the award is decided each year with a focus on the principles and elemental technologies fostered by HORIBA. The award values unique research and development with the findings and potential that deserves a global recognition.

The target field for the 2008 Masao Horiba Awards is the measurement and analytical technologies related to internal combustion engines used for mobility sources, especially vehicles. The field includes the measurement technologies for combustion in internal combustion engines, the accompanying phenomena, emission, and after-treatment system.

The history of automotive emission gas regulation can be traced to the Muskie Act implemented in the state of California in 1970, after the serious air pollution problems in Los Angeles in 1960's. Since 1964, HORIBA Group Companies have been providing a range of emission gas analyzing instruments using various principles. During the past 40 years, the performance of internal combustion engines has achieved a remarkable progress in reducing environmental burdens, which makes emission gas much cleaner. On the other hand, problems to be solved in developing new automotive engines, such as decreasing microparticles in emission gas, improving mileage to slow global warming, and shifting to alternative energy sources, are becoming highly complex. Measurement relating to combustion and combustion emissions is essential to solve these problems, thus is becoming increasingly important as a fundamental technology in automobile development.

We look forward to receiving many applications from those who are actively engaged in researches in this significant field that ranges from the basics to practical applications. An applicant who is competent to be a future leader and can contribute to the development of analytical and measurement technologies is highly evaluated.

Dr. Kozo Ishida
Chief of the Organizing Committee for the 2008 Horiba Masao Awards
Executive Vice President
HORIBA, Ltd.



Guidelines for the 2008 Masao Horiba Awards

Outline

The purpose of this award is to encourage and recognize scientists and engineers with relatively short research 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 selected field for 2008 Masao Horiba Awards is the following measurement and analytical technologies related to internal combustion engines used for mobility sources, especially vehicles.

1. Researches on the theory or fundamentals of the measurement technologies related to internal combustion engines.
2. Researches on measurement technologies related to internal combustion engines, which are potentially applicable for the advanced research and development in the selected field.

The measurements include those of the combustion in internal combustion engines and the accompanying phenomena, emission, and after-treatment systems. The internal combustion engines are limited to those used on the mobility sources such as vehicles.

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 problems in the field eligible for this award.

Potential of the applicant is highly evaluated rather than his/her present 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 2008 Masao Horiba Awards at the award ceremony.

A supplementary award will also be made. In the first year, a cash prize of JPY500,000 yen will be presented. Recipients will receive the same amount yearly for the next two years as research subsidy.

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. 14, 2008 and that the winners continue to meet the eligibility described above.

Application for the 2008 Masao Horiba Awards

Applicants are required to submit

- i) a completed application form for The 2008 Masao Horiba Awards with seven additional copies,
- ii) a signed recommendation letter written by the director/president of the institution or his/her supervisor using the designated form, with seven copies and
- iii) maximum three publications which are central to the applied research, eight copies each.

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 30, 2008.

Screening

The members of the Screening Committee for the 2008 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 2008 Masao Horiba Awards

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

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

Deputy Chairperson: Prof. Takeyuki Kamimoto, Professor Emeritus, Tokyo Institute of Technology

Judges: Prof. Hajime Fujimoto, Doshisha University (Faculty of Science and Engineering)

Prof. Yasuhiro Daisho, Waseda University (Graduate School of Creative Science and Engineering)

Prof. Atsumu Tezaki, University of Toyama (School of Science and Engineering)

Prof. David E. Foster, Phil and Jean Myers Professor of Mechanical Engineering, Engine Research Center, University of Wisconsin Madison

Dr. Masayuki Adachi, President & CEO, HORIBA International Corporation

Mr. Nobutaka Kihara, Manager, HORIBA, Ltd. (Automotive Test Systems Division)

Results

Applicants will be notified of the results of the screening by the end of July, 2008

Award Ceremony and Commemorative Seminar

Award ceremony and commemorative seminar for 2008 Masao Horiba Awards, followed by a reception, will be held on October 14, 2008 at Shiran Kaikan, Kyoto University, Kyoto, Japan.

Publication of Awarded Researches

Award-winning researches will be published worldwide in HORIBA's technical journal *Readout* (HORIBA Technical Reports).

