# **Faculty Awards and Honors**

(July 2012-August 2013)

# 2012 Order of Culture

Professor Emeritus Shigeru Oda
Dr. Oda arrived as a lecturer at Tohoku University in 1949. Immediately after that he went to the United States by a grant from the
Rockefeller Foundation as one of the first exchange students after World War II. In 1953, he became Assistant Professor (presently
Associate Professor) and in 1959 Professor at Tohoku University School of Law. In 1968 Professor Oda was inaugurated as
an attorney for the German Government, and in 1976 as a judge of the Permanent International Court of Justice (presently the
International Court of Justice), He worked as the judge for 27 years, and currently has the longest tenure on record.
In 1985 He was appointed Professor Emeritus of Tohoku University, in 1991 inaugurated as the Vice President of the
International Court of Justice, in 2003 awarded the Grand Cordon of the Order of the Sacred Treasure, and in 2007
selected as a Person of Cultural Merits.

Awarded in November 2012

# Medal with Purple Ribbon Autumn 2013

#### Professor Emeritus Tokuji Miyashita

Recognized for his great contributions to polymer chemistry. In 1997, Dr. Miyashita received the Award from the Society of Polymer Science, Japan, and in 2012 the award for Outstanding Achievement in Polymer Science for his research on polymer nanosheet assemblies, in 2000 the BCSJ Award from the Chemical Society of Japan for his research on an innovative polymer sensor and polymer imaging system, in 2004 the Award of the Society of Pure and Applied Coordination Chemistry for the development of photoelectric conversion and photodiode systems, and in 2011 the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology (Prizes for Science and Technology) for his research on polymer nanosheet assemblies for film electronics. He has also contributed to the development of new hybrid polymer films with thermal stability and high transparency.



Awarded in April 2013

Awarded in November 2012



# Professor Tetsuya Terasaki, Graduate School of Pharmaceutical Sciences

Medal with Purple Ribbon Spring 2013

Tackling "research to clarify the mechanism of the drug distribution in the brain," Professor Terasaki has developed methods to investigate mechanisms in which the drug and/or endogenous compounds are pumped out from the brain to the blood across the capillary endothelial cells. These methods involve a novel technology for the simultaneous quantification of functional proteins by Shot-Gun LC-MS/MS method combined with in silico peptide selection criteria. This selection criterion is covered by a patent issued for Tohoku University in Japan, the United States, and EU. He is currently a Distinguished Professor who also works for the Tohoku Medical Megabank Organization and the Graduate School of Medicine.

Awarded in March 2013

# Japan Academy Prize

#### Professor Masataka Nakazawa, Director of the Research Institute of Electrical Communication

Succeeded in achieving a compact and a highly reliable erbium-doped fiber amplifier (EDFA) for the first time in the world. EDFA uses erbium-doped optical fibers and amplifies optical signals at a 1.55µm telecommunication window. EDFA has about 1000 times larger channel capacity than an electric amplifier. Since it is compact, uses little electric power, and has long service life, it has become to be extensively used in the world as optical repeaters for optical fiber communication systems. Thus, our highly informative society has been realized, where people around the world can exchange information instantly.



Professor Sato elucidated the mechanism of selective production of outstanding ova within the ovary. This discovery is indispensable for improving the propagation efficiency of mammalian. Namely, he discovered many important factors such as follicle stimulating hormones, factors for promoting ovum survival, an angiogenic growth factor, and ovum maturity suppression factors involved in ovum selection and maturization. Based upon these findings, not only has he contributed to develop efficient production technologies for large livestock such as cattle and swine but also for clinical application for human ovarian insufficiency.



# The 2012 IEEE GRSS Education Award

### Award Awarded in July 2012

Professor Hiroaki Shimokawa, Graduate School of Medicine

#### Professor Motoyuki Sato, Center for Northeast Asian Studies

At the international conference IGARSS 2012 held in Munich, Germany, Professor Sato received the Education Award from the Institute of Electrical and Electronic Engineers Geoscience and Remote Sensing Society (IEEE GRSS). This Award is granted to members who have made significant educational contributions to the field of remote sensing research. GRSS recognized that he has energetically lectured at graduate schools, for intensive courses, etc., including activities in foreign countries such as China and Russia in the field of Ground Penetrating Radar and microwave remote sensing, and contributed to researcher cultivation.



# Medical Award of The Japan Medical Association

#### Awarded in October 2012



# Professor Shimokawa is the authority in the world in the research of coronary artery spasms, which is important because it plays an important role in the pathogenesis of ischemic heart disease. He was awarded this time, because his achievements on "Experimental and clinical research on ischemic heart disease in the Japanese" were highly regarded. His broad fundamental and clinical research clarified the molecular mechanism and resulted in the development of new drugs. In addition, he contributed considerably to the world in research on vascular endothelium. He plays an active part also in Japan as Chairman of Tohoku University Medical Association and Chairperson of the Miyagi Prefecture Medical Association.

# The French 'Officier dans l'Ordre des Palmes Academiques'

#### Awarded in March 201

#### Professor Emeritus Tadashi Nomura

This award is one of the traditional awards of culture established by Napoleon I in 1808. He was praised for promoting France-Japan exchange over the years and having had significant results. Through the activities in the field of marine science and technology including his expertise aquafarming, biochemistry for marine organization and biological oceanography, he has supported France-Japan exchange. When oysters were on the verge of extinction in France, he was committed to exchange of oyster populations. He is also the pioneer who spread the technology of thalassotherapy in Japan.



Awarded in August 2013

# The IUPAC 2013 Distinguished Women in Chemistry or Chemical Engineering Award



#### Professor Kazue Kurihara, Advanced Institute for Material Research/Institute of Multidisciplinary Research for Advanced Materials

The International Union of Pure and Applied Chemistry (IUPAC) established the award as one of the projects for the International Year of Chemistry 2011. She was the second award winner from Japan. 1997 Professor at Tohoku University Research Institute for Reaction Chemistry, 2001 Professor at Tohoku University Institute of Multidisciplinary Research for Advanced Materials (due to reorganization), 2010 Professor at Tohoku University Advanced Institute for Material Research. Also, she acts as the Director of the Chemical Society of Japan and the Chairperson of the Committee for Chemistry of the Chemical Committee of Science Council of Japan.