

## AWARDS &amp; HONORS

# International Recognition of Kyoto University's Research



**Prof. Susumu Kitagawa**

Director of The Institute for Integrated Cell-Material Sciences (iCeMS)

## INTERVIEW »

## Do not be Discouraged

*By criticism from anyone or to go against current trends.*

Susumu Kitagawa is a pioneer in the field of porous metal-organic frameworks. He has been the recipient of many prestigious honors including the de Gennes Prize in 2013 from the Royal Society of Chemistry (RSC), the Humboldt Prize in 2009, and a Thomson Reuters Citation Laureate in 2010. In this interview, we sat down with him and got an inside look at his research philosophy.

— *What is your personal motto as a researcher?*

**Kitagawa:** My motto is to be an “unbending blade of grass in the wind.” A Chinese philosopher named Zhuangzi once

said that “strong winds test the rigidity of grass” — meaning that adversity is a test of character. Just like this unbending blade of grass, I want to be an unwavering researcher. To do so, self-discipline and the pursuit of knowledge are essential. Only through such patience and diligence can I withstand strong winds — meaning, not to be discouraged by criticism from anyone or resist being just a follower of current trends. Moreover, I must maintain a strong conviction and unshakable scientific disposition.

I also keep in mind another of Zhuangzi's proverbs that states “the usefulness of uselessness,” which led us to finding novel uses for lattice-like porous coordination polymers (PCPs) that we had discovered. The holes in the lattices at first appeared to be useless, empty spaces, but by ignoring conventional thinking we realized that PCPs are in fact extremely useful.

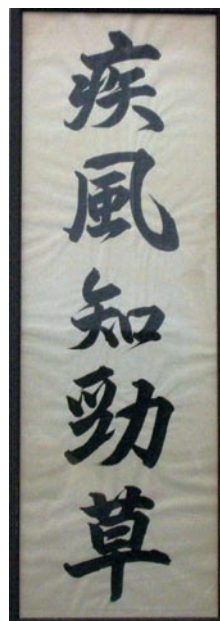
— *What is your future vision as a scientist?*

**Kitagawa:** I hope that PCPs we develop can be used for practical applications in the world. For example, materials that are able to store or transform CO<sub>2</sub> and methane may serve as essential tools to solve energy and environmental issues.

I also seek to train young people who are unwavering and resolute, like an unbending blade of grass. Since there are many talented, young scholars at iCeMS, one of my ongoing missions is to turn them into world-class researchers.



The “Three Cs”: the requirements to become world-class researchers that Prof. Kitagawa imparts to young researchers



The motto of “strong winds test the rigidity of grass” hangs on the wall of Prof. Kitagawa's laboratory

WEB [www.icems.kyoto-u.ac.jp/e/](http://www.icems.kyoto-u.ac.jp/e/) (WPI-iCeMS)

**TOPIC** Prof. Tasuku Honjo the Order of Culture Awarded

Tasuku Honjo, a professor emeritus in Graduate School of Medicine, received the Order of Culture in 2013. The Order of Culture (*Bunka-kunshō*) is Japan's most prestigious cultural award conferred by the Emperor in recognition of outstanding contributions to the development of art, culture, science and technology. Honjo received the award for his academic achievements and for playing a leading role in the development and advancement of molecular immunology research.



**Tasuku Honjo**

*Professor Emeritus, Kyoto University,  
Professor, Graduate School of Medicine*  
[www2.mfour.med.kyoto-u.ac.jp/E\\_Home.htm](http://www2.mfour.med.kyoto-u.ac.jp/E_Home.htm)

\*Please refer to the following link for more information on Kyoto University researchers who have been awarded the Order of Culture:

**WEB** [www.kyoto-u.ac.jp/ja/profile/intro/honor/award\\_b/culture](http://www.kyoto-u.ac.jp/ja/profile/intro/honor/award_b/culture)

**TOPIC** Two KU professors Selected as Persons of Cultural Merit

Tetsuro Matsuzawa, a professor in the Primate Research Institute, and Tadao Yoshikawa, a professor emeritus of Kyoto University, were selected as Persons of Cultural Merit (*Bunka Kōrōsha*) in 2013. The award of Person of Cultural Merit is Japan's second highest cultural honor after the Order of Culture, and is given to those who have made outstanding cultural contributions.

Matsuzawa is a pioneer who has uncovered the evolutionary origins of human cognition and behavior through his unique research on chimpanzee intelligence. Yoshikawa is an authority on the history of thought in Middle Ages China. He is renowned for significantly influencing the development of Sinology through his creative research tracing Chinese intellectual history.



**Tetsuro Matsuzawa (left)** *Professor, Primate Research Institute*  
[langint.pri.kyoto-u.ac.jp/langint/staff/tetsuro\\_matsuzawa.html](http://langint.pri.kyoto-u.ac.jp/langint/staff/tetsuro_matsuzawa.html) (Japanese only)

**Tadao Yoshikawa (right)** *Professor Emeritus, Kyoto University*  
[ja.wikipedia.org/wiki/吉川忠夫](http://ja.wikipedia.org/wiki/吉川忠夫) (Japanese only)

\*Please refer to the following link for more information on KU researchers who have been designated as Persons of Cultural Merit:

**WEB** [www.kyoto-u.ac.jp/ja/profile/intro/honor/award\\_b/cultural\\_merit](http://www.kyoto-u.ac.jp/ja/profile/intro/honor/award_b/cultural_merit)

**TOPIC** The Kyoto University Shi-Shi Award

The Kyoto University Shi-Shi Award was established in November 2012 to honor Kyoto University scholars for outstanding efforts and achievements in education, research, and social service. The first award ceremony was held in June 2013.

The first recipients of the award:

**Koichiro Oshima**  
*Professor/Director, Agency of Health, Safety and Environment*

**Shuichi Kawai**  
*Professor/Director, Research Institute for Sustainable Humanosphere*

**Susumu Kitagawa**  
*Professor/Director, Institute for Integrated Cell-Material Sciences (iCeMS)*



**Yasushi Kosugi**  
*Professor, Graduate School of Asian and African Area Studies*

**Shigekazu Nagata**  
*Professor, Graduate School of Medicine*

**Shinya Yamanaka**  
*Professor/Director, Center for iPS Cell Research and Application (CiRA)*

**WEB** [www.kyoto-u.ac.jp/ja/news\\_data/h/h1/news7/2013/130627\\_1.htm](http://www.kyoto-u.ac.jp/ja/news_data/h/h1/news7/2013/130627_1.htm) (Japanese only)

## HONORS

## Award Winning Researchers

The following is a list of just some of the Kyoto University researchers who have received international awards — a testimony to the university's intellectually fertile environment and culture of academic freedom.

**Nobel Prize** *in Physics*

**Hideki Yukawa** (1949), **Sin-Itiro Tomonaga** (1965),  
**Makoto Kobayashi** (2008), **Toshihide Maskawa** (2008)

*in Chemistry*

**Kenichi Fukui** (1981), **Ryoji Noyori** (2001)

*in Physiology or Medicine*

**Susumu Tonegawa** (1987), **Shinya Yamanaka** (2012)

**Fields Medal** **Heisuke Hironaka** (1970), **Shigefumi Mori** (1990)

**Gauss Prize** **Kiyosi Itō** (2006)

**Lasker Award** **Susumu Tonegawa** (1987), **Yasutomi Nishizuka** (1989),  
**Yoshio Masui** (1998), **Shinya Yamanaka** (2009)

**Japan Prize** **Makoto Nagao** (2005), **Masatoshi Takeichi** (2005)

\*Photos provided by the Japan Prize Foundation

**Kyoto Prize** **Chushiro Hayashi** (1995), **Kiyosi Ito** (1998),  
**Shinya Yamanaka** (2010), **Masatoshi Nei** (2013)

\*Photos provided by the Inamori Foundation

- Die Schaudinn-Hoffmann-Plakette** ◆ **Shin-ichi Matsumoto** (1965)
- Huxley Memorial Medal** ◆ **Itani Junichiro** (1984)
- Order of the White Elephant - 3<sup>rd</sup> Class** ◆ **Yoneo Ishii** (1987)
- Ross G. Harrison Prize** ◆ **Tokino Okada** (1989)
- Salem Prize** ◆ **Shishikura Mitsuhiro** (1992)
- Robert-Koch-Preis** ◆ **Shigekazu Nagata** (1995), **Shinya Yamanaka** (2008),  
**Tasuku Honjo** (2012)
- The Keio Medical Science Prize** ◆ **Nakanishi Shigetada** (1996), **Masatoshi Takeichi** (2001),  
**Koichi Tanaka** (2002), **Yoshinori Fujiyoshi** (2005),  
**Shimon Sakaguchi** (2008), **Kenji Kangawa** (2009)
- Frank Nelson Cole Prize** ◆ **Hiraku Nakazima** (2003)
- John Dawson Prize** ◆ **Tetsuya Sato** (2005)
- Yuri Gagarin Medal** ◆ **Hiroshi Matsumoto** (2006)
- Booker Gold Medal** ◆ **Hiroshi Matsumoto** (2008)
- The Ulysses Medal** ◆ **Shuh Narumiya** (2008)
- L.S.B. Leakey Prize** ◆ **Toshisada Nishida** (2008)
- Prix du Rayonnement de la langue et de la littérature françaises** ◆ **Kazuyoshi Yoshikawa** (2010)
- de Gennes Prize** ◆ **Susumu Kitagawa** (2013)

