



Press Conference President of JST

November 7, 2014

Japan Science and Technology Agency

Science Agora 2014

How can we come together so as to build relations between our society and science ?

- **Dates:** Today to 9(Sun), 2014
- **Venue:** Odaiba district, Tokyo (The Miraikan, etc.)
- **Host:** Japan Science and Technology Agency (JST)
 - **Cohosts:** Advanced Industrial Science and Technology, Tokyo Metropolitan Industrial Technology Research Institute, Japan Student Services Organization, Tokyo Academic Park, and Tokyo Rinkai Fukutoshin Group
 - **Cooperation:** Fuji Television Network, INC.

*For the details on this program, please visit the following website:
<http://www.jst.go.jp/csc/scienceagora/>

1. Enriching Event Programs through the Participation of the Research Community

“Open House” to showcase JST’s virtual research institutes; and discussion on underlying issues in the research community, such as the fusion of diverse academic fields, interaction with society, research ethics, and personnel development.

2. Diversifying the Sector of Participating Stakeholders who are Involved in Science

Media, publishing industry, industrial society, government & administration, general citizens, next-generation personnel, etc.



Science Agora models after...

Annual Meeting of The American Association for the Advancement of Science (AAAS)

Organizer:

An internationally-renown NPO that aims to "advance science, engineering, and innovation throughout the world for the benefit of all people".

Purpose of the Meeting:

Thousands of leading scientists, engineers, educators, policymakers, and journalists gather together to discuss recent developments in science and technology. There are also networking occasions for attendees as well as for students and researchers to get a perspective from science and technology leaders.

Started in:

1848 (Organized 179 times in the past.)

Conducted:

Every year in February for 5 days.



Euro Science Open Forum (ESOF)

Organizer:

An internationally-renown NPO that was founded by members of Europe's research community, after they developed the concept of the European Association for the Advancement of Science (EAAS) modeling after AAAS.

Purpose of the Meeting:

- Showcase the latest advances in science and technology
- Promote a dialogue on the role of science and technology in society and public policy;
- Stimulate and arouse public interest, excitement and debate about science and technology.
- Provide various resources for young researchers, including career workshops.

Started in:

2004 (Organized 5 times in the past.)

Conducted:

Every two years in July or August for 5 days.

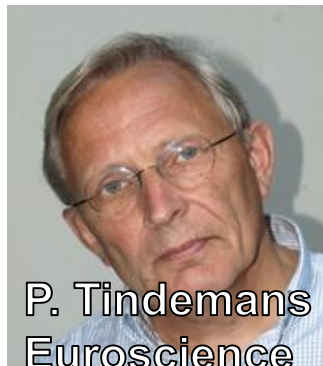
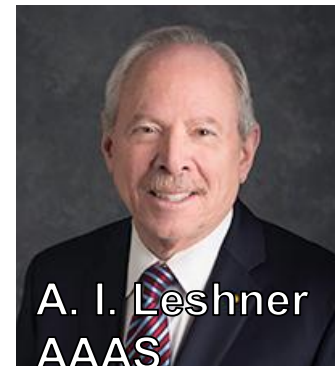
- Research communities in the US and Europe are strongly committed to “walking with various stakeholders in a society for the effectual advancement of science and technology”.
- Science Agora will provide such a venue for science and technology communities in Japan and promote dialogues between society and science.

Featured programs in Science Agora 2014 #1

Program #063: Agora Keynote Session

Science in Transition - Bridging Science, Society and Policy –
Venue: Miraikan Hall (Floor 7), Miraikan

Date: 15:30-18:00 Nov7th (Fri), 2014

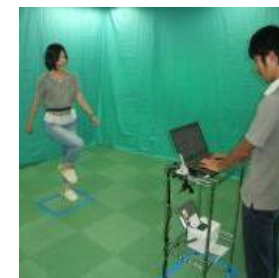


Renown leaders from Europe, the USA, Asia, and Africa share their views on roles and responsibilities of science in the 21st century as well as its relationship with society .
(Facilitator: Prof. Tateo Arimoto, GRIPS)

Program #002

Touch & Feel ! JST's Virtual Research Institute
Venue: Exhibition zone (Floor 1), Miraikan

Date: 10:00-17:00 Nov 7th (Fri)-9th (Sun), 2014



An exhibition to introduce 9 cutting-edge technologies produced by Japanese top researchers of JST-CREST, PRESTO and ERATO. Let's imagine & create our future by touching & experiencing smart gadgets and novel materials!

Featured programs in Science Agora 2014 #2

Program #154

Future Studio: Technology to Make Dreams Come True

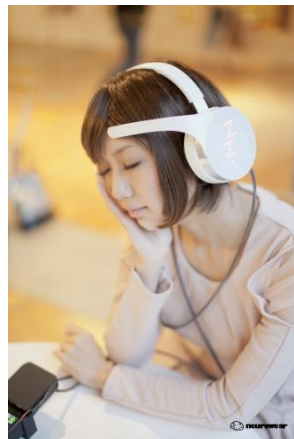
Venue: Fuji Television Wangan Studio (Floor 1)

Date: 10:00-17:00 Nov 8th (Sat)-9th (Sun), 2014

Step into the Future Studio and get a glimpse into leading edge technology that will make your dreams come true. Don't just look at it either, listen to it, touch it, experience it!



Prof.Sankai University of Tsukuba/CYBERDYNE Inc



CYBERDYNE Inc/ Sony Computer Science Laboratories, Inc.
Daiwa House Industry/ Dentsu Science Jam Inc.
Produced and directed by Japan Science and Technology Agency

Program # 171

Integration for Science and Technology Innovation

Venue: Tokyo International Exchange Center(TIEC)

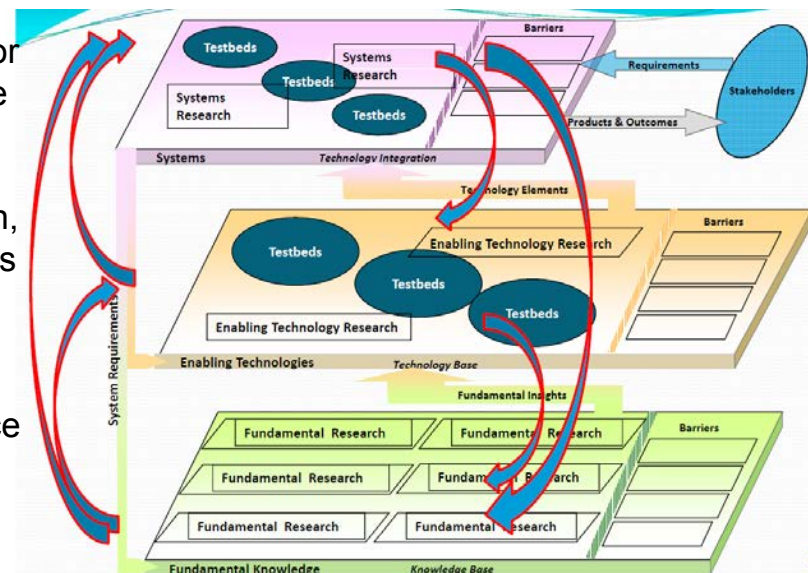
Date: 13:00-17:00 Nov 7th (Fri), 2014

Presenters:

Dr. Michiharu Nakamura, President, Japan Science and Technology

Mr. Kazuhiko Toyama, CEO, Industrial Growth Platform Inc.
and more...

Today, it is expected that science and technology will provide innovative solutions to our lifestyle and society. In order to encourage science and technology innovation, natural science and social science integration, as well as integration of ideas, technologies, components or processes are considered to be essential. In this session, we will discuss how we can promote integration toward science and technology innovation.

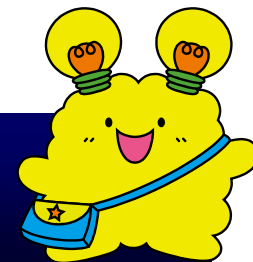


The 2nd Japan Junior High School Science Championships (JJHSSC)

The 2nd Championships

Schedule: December 5 (Fri) to 7 (Sun), 2014

Venue: The Sports, Cultural Complex "BumB" (2-1-3 Yumenoshima, Koto-ku, Tokyo)



- Outline**
- 47 participating teams representing each prefecture (six students per team)
 - One theoretical test and two types of practical tests (1 experiment and 1 manufacturing skill test)
 - Awards and exhibitions by sponsors are to be presented.

Japan Junior High School Science Championships (JJHSSC)

Initiated in FY2013 for the purpose of providing junior high school students with opportunities to learn that science is linked to real life and society and how valuable and fun it is to study science. Participating students are supposed to tackle scientific and mathematical competitions in teams.

Preliminary event "Let's experience JJHSSC!"

Date: November 9, 2014 (Sun) 10:20-16:45 (Four sessions)

Venue: International Conference Hall at Tokyo International Exchange Center

Themes: "Let's build towers with materials at hand!" "Paper clip motor racing"

(Reference website: <http://rikai.jst.go.jp/koushien-Jr/>)

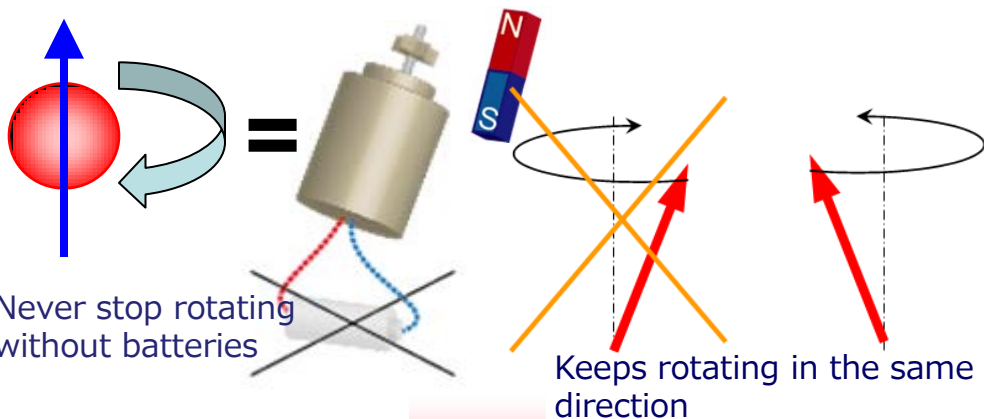
Strategic Basic Research Programs

A New Research Project

Research Project

Saito Spin Quantum Rectification

Characteristics of Electron Spin



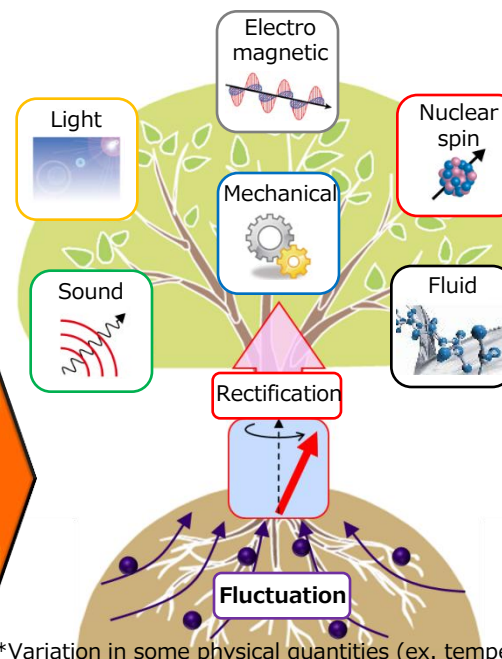
Research Director



Dr. SAITO Eiji

Professor at Tohoku University, Advanced Institute for Materials Research (AIMR) and Institute for Materials Research (IMR)

Spin Quantum Rectification



Developing rectification of fluctuations using electron spin into applications in a variety of ways

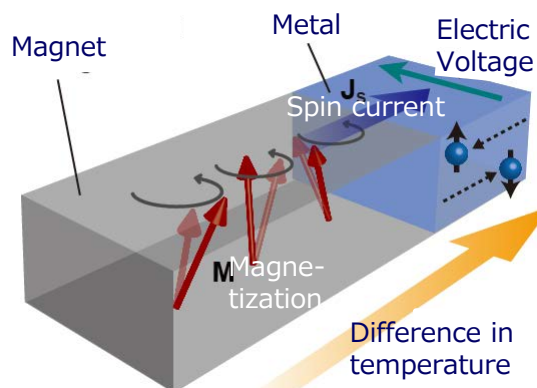
A new direction in science and technology permitting energy conversion and information processing **in materials themselves**

*Variation in some physical quantities (ex. temperature)

Potential to bring about a scientific and technological revolutionary trend → realizing a resource- and energy-saving society and new industries

Spin Seebeck effect

Generating spin currents and electricity from thermal fluctuation



Utilizing an innate ability of electron spin to rectify fluctuations (a physical law)

Simplification of the device structures and processes
Potentials for new functions