



Department of Biotechnology
Ministry of Science and Technology
Government of India

DBT



National Institute of
Advanced Industrial Science
and Technology

AIST

DBT - AIST

International **L**aboratory
for **A**dvanced **B**iomedicine

DAIILAB



Since Oct. 3, 2013



Newsletter
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Background: Under the Joint Statement towards Japan-India Strategic and Global Partnership of December 2006, signed by the prime ministers of India and Japan, the National Institute of Advanced Industrial Science & Technology (AIST), Japan concluded a comprehensive **Memorandum of Understanding (MoU)** with the Department of Biotechnology (DBT) of the Ministry of Science and Technology, India on February 12, 2007. After the successful completion of the first term of MoU the two institutes entered the second term 2012-2018. The MoU involved bilateral collaboration on three themes - Bioinformatics, Biomedicine and Glycosciences. Under this agreement, AIST and DBT scientists have been collaborating on selected projects at both ends. Four workshops, two at each side, were held for exchange of ideas, information and research results, besides exchange of personnel, and to develop closer cooperation and collaboration between the two institutions. Several joint publications in international peer reviewed journals emerged from this bilateral research cooperation.



A Step up from Bilateral MoU to a Joint Laboratory: In order to promote close and effective collaboration, DBT and AIST have set up a joint laboratory, DAILAB (DBT-AIST International Laboratory for Advanced Biomedicine) at Biomedical Research Institute (BRI), AIST, Japan. DAILAB aims to conduct basic to applied research on disease prevention and therapeutics for increasing the Quality of Life (with focus on old age). The collaborative research will offer a global frontage to both the institutions (AIST and DBT) and will help in training young talents at both sides. This is the first time that the AIST and DBT are hosting an International laboratory in Life Sciences & Biotechnology.

Signing and Opening Ceremony of DAILAB@BRI by AIST President, Dr. R. Chubachi and DBT Secretary, Prof. K. VijayRaghavan was held on Oct 3, 2013 at AIST, Tsukuba in the presence of dignitaries including the DBT delegates. The occasion was also graced by the presence of Her Excellency Ms. Deepa Gopalan Wadhwa, Ambassador of India to Japan.



Under the leadership of Dr. Yumoto and Dr. Ohmiya, four senior scientists, Dr. Kaul, Dr. Wadhwa, Dr. Ohnishi and Dr. Doi will host young researchers from India in DAILAB and collaborate for a defined goals that are set in project supported by AIST President's special budget.

Several young researchers from India are expected to join DAILAB and perform jointly with AIST researchers for short and long term projects.



In addition to the joint research & personnel exchange, DAILAB will hold advanced training workshops for young talents from both the countries and at both ends. It will also make efforts to engage industry for feasibility studies and application outcomes at a later stage.

Highlights of activities 2014

- **1st AIST International Imaging Workshop, January 19-25, 2014:** DBT-AIST International Laboratory for Advanced Biomedicine conducted a one-week full residential training course entitled as the 1st AIST International Imaging Workshop from January 19-25, 2014. The workshop engaged 15 young selected researchers from 9 countries including India, Malaysia, Thailand, Indonesia, Korea, China, Iran, Nigeria and Russia. Intensive one-week program including lectures in the mornings by experts in the field not only from AIST but also from Tokyo, Osaka and Saitama universities was followed by hands-on microscope training in the afternoons. It ranged from the principles of light microscopy to high-end spectral and high-resolution imaging instructed by AIST experts with assistance from Nikon, Olympus and ATTO corporations. Small working groups (5 participants/group), personal attention, comfortable stay at the sakura kan and enjoyable interaction was marked as instrumental to high efficacy and enjoyable training and learning. A tour to Olympus and Carl Zeiss showrooms in Tokyo was organized on the last day for providing a feel of connectivity of science to technology and was thoroughly appreciated at all ends including organizers, trainees and industries. The workshop ended with an informal dinner where all participants/organizers bid farewell to each other with a message of full accomplishment. The trainees commented that besides the world-class technologies in AIST, they were also moved with Japanese politeness, patience and perfection of performance, and wish to practice these in the their daily lives. The organizers felt happy about having portrayed high-end and gentle impression of AIST to many countries through this workshop and wished good luck to the young participants for their science adventures.

Glimpses from the 1st AIST International Imaging Workshop held at Biomedical Research Institute



- **2nd AIST International Imaging Workshop:** December 2014 (tentative)
- **DAILAB Research Exchange & Training Openings:** on going

- **MoA for Joint Laboratory at Regional Center for Biotechnology (RCB) India:**

The National Institute of Advanced Industrial Science & Technology (AIST), Japan and The Regional Centre for Biotechnology (RCB) initiated a new partnership to further capacity building initiatives in bio-imaging and biotechnology. The Memorandum of Agreement (MoA) was signed on March 4, 2014 by Dr. Yoshihiro Ohmiya, Director, Biomedical Research Institute, AIST and Dr. Dinakar M. Salunke, Executive Director, RCB on behalf of the participating institutions in a function presided over by Dr. K. VijayRaghavan, Chairman, BoG of RCB and Secretary to the Govt. of India, Department of Biotechnology. The occasion was graced by Dr. Noboru Yumoto, Director General (Life Sciences) and Vice President, AIST, Mr. Shigeru Aoyagi, Director, UNESCO, Delhi Office, Mr. Yasuhisa Kawamura, Charge d' Affaires, Embassy of Japan in Delhi and Dr. Madhan Mohan, Advisor, DBT, Govt. of India. The initiative through the partnership will enhance career opportunities for scientists and researchers working in biomedical, clinical, and other related areas of biotechnology and thereby complementing the existing bilateral research cooperation between the two countries. DAILAB is scheduled to extend to RCB at its new campus at Health Biotech Science Cluster (HBSC) Faridabad, India that is scheduled to be functioning from early next year.

AIST delegation visited the RCB, site under construction, on March 4, 2014.



- **DAILAB Executive Team**

- Patron - N. Yumoto, Vice President and Director-General Life Science & Biotechnology, AIST
- Executive Director - Y. Ohmiya, Director, Biomedical Research Institute (BRI)
- Coordinator - S. Kaul, Chief Senior Research Scientist, BRI
- Leader - R. Wadhwa, Prime Senior Research Scientist, BRI
- Fellow - Y. Onishi, Group Leader, Physiologically Active Substances Research Group, BRI
- Fellow - M. Doi, Group Leader, Molecular Neurobiology Group, BRI

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