

21ST CENTURY COE PROGRAMS IN TOKYO INSTITUTE OF TECHNOLOGY

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The 21st Century COE Program (Center of Excellence) has started as a new project sponsored by the Ministry of Education, Culture, Sport, Science, and Technology (MEXT) from the fiscal year 2002. It aims to form one of the most advanced international centers in every research field, which can focus research and education at an international level and foster potential leaders in the international community.

In the fiscal year 2003, proposals for this COE program were solicited in 5 research fields comprising 1) Medical Science, 2) Mathematics, Physics, Earth Science, 3) Mechanical, Civil, Construction Engineering and Others, 4) Social Science, 5) Interdisciplinary, Combined Fields, and New Disciplines and 611 research programs were submitted from 225 National/ Public/ Private Universities.

In the fiscal year 2003, 133 research programs were adopted, including 97 programs from the National universities (73%), 5 programs from Public universities (4%) and 31 programs from the Private universities (23%). Five research programs out of a total of 9 proposals from Tokyo Institute of Technology have been adopted for the fiscal year 2003, resulting in a total of 9 COE programs in our university including 4 programs adopted in the fiscal year 2002. Classifying by fields, we have 1 program in Mathematics, Physics, Earth Science, 3 programs in Mechanical, Civil, Construction Engineering and Others, and 1 program in Interdisciplinary, Combined Fields, and New Disciplines.

A budget of 960 million yen has been provided by MEXT for the 5 programs, which were adopted in the fiscal year 2003. It is noteworthy that the total provided budget for our 9 programs in the fiscal years 2003 and 2004 is over 1,580 million yen. Although MEXT will give us the midterm assessment, it will provide the budget for 5 years.

The 9 programs adopted in our Tokyo Institute of Technology listed below consist of strong research groups that are selected from the whole campus among the researchers who are internationally well known. We strategize making the global research basis as a key step towards realization of our university's objective of attaining the status of "World-leading university in science and technology".

Adopted Program and Project Leader in the fiscal year 2002

1. Prof. Hiroshi HANDA "Frontier System of Bioengineering"
2. Prof. Takakazu YAMAMOTO "Creation of Molecular Diversity and Development of Functionalities"
3. Prof. Hideo HOSONO "Nanomaterial Frontier Cultivation for Industrial Collaboration"
4. Prof. Shigehisa ARAI "Photonic Nano-Device Integrated Engineering"

Adopted Program and Project Leader in the fiscal year 2003

5. Prof. Tsuneya Ando “Nanometer-Scale Quantum Physics”
6. Prof. Shigeo Hirose “Innovation of Creative Engineering through the Development of Advanced Robotics”
7. Prof. Tatsuo OHMACHI “Evolution of Urban Earthquake Engineering”
8. Prof. Hiroshi SEKIMOTO “Innovative Nuclear Energy Systems for Sustainable Development of the World”
9. Prof. Sadaoki Furui “Framework for Systematization and Application of Large-scale Knowledge Resources”