

Prof. Dr.
Hiroshi Yamada

National Institute for Fusion Science
322-6 Oroshi-cho, Toki
Gifu 509-5292, Japan
Phone: +81-572-58-2200, Fax: +81-572-58-2620
E-mail: yamada.hiroshi [at] nifs.ac.jp



Road Map of Large Research Projects in Japan – On Complementary Roles of Big Science and Small Science

Large-scale experimental projects, which embody *Big Science*, do not subsume entire relevant scientific researches. While large-scale projects converge at well-defined scientific missions with absorbing knowledge from related fields, an essential point of science is dynamism of evolution and diversity of knowledge through seeding and rhisoming. In Japan, the way how large research projects should be has been discussed and assessed intensively in many occasions and at multiple levels in these years. In particular, the Science Council of Japan has recommended the Japanese Master Plan of Large Research Projects⁽¹⁾ and then the Ministry of Education, Culture, Sports, Science and Technology has summarized the Road Map by the assesment of this Master Plan. It is pointed out in these processes that researches which have been considered as *Small Science* should be reconsidered as large-scale researches based on a mediating network of relevant knowldege. This talk will discuss the initiative shown in these discussions together with the role of Inter-University Research Cooperations like NINS.

References

(1) Recommendation “Japanese Master Plan of Large Research Projects”, 17 March 2010, Science Council of Japan, available at <http://www.scj.go.jp/ja/info/kohyo/pdf/kohyo-21-t90-e2.pdf>

CV

1987 – 1989	Research Associate, Institute of Plasma Physics, Nagoya University
1989 – 1995	Research Associate, National Institute for Fusion Science (NIFS)
1995 – 2004	Associate Professor, NIFS
2004 – 2010	Scientific Research Senior Specialist, Ministry of Education, Culture, Sports, Science and Technology
2004 – Present	Professor, NIFS
2004 – Present	Professor, The Graduate University of Advanced Studies
2009 – Present	Executive Scientific Director, Large Helical Device Project, NIFS
2010 – Present	Science Adviser, Ministry of Education, Culture, Sports, Science and Technology
2011 – Present	Member, Science and Technology Advisory Committee, ITER Council
2011 – Present	Member, Scientific Advisory Board, Max Planck Institute for Plasma Physics