

Published online 6 May 2010 | Nature | doi:10.1038/news.2010.227

News

New director floated for international fusion reactor

Second management change in recent months for ITER.

Geoff Brumfiel

The multibillion-dollar fusion experiment ITER may be getting a new director-general. Osamu Motojima, a distinguished Japanese physicist, is being floated as the project's new chief, *Nature* has learned. ITER, based in the south of France, has suffered from repeated delays and cost overruns.

Motojima would replace Kaname Ikeda, a former Japanese diplomat and nuclear engineer who has led the programme since its inception in 2007. Ikeda was originally appointed for a five-year term, and his departure would be the second high-level management change for the fusion reactor in recent months. In February, Europe's project head, Didier Gambier, was replaced by British physicist Frank Briscoe (see ['Delays prompt reshuffle at ITER fusion project'](#)).

Neil Calder, ITER's spokesperson, confirmed that the organization would be considering management changes at the next council meeting in June. "ITER is evolving very quickly and is now moving into a construction phase," he says. "There is a logical need to adapt the management structure to this need." However, Calder would not confirm whether Motojima is a candidate for the directorship.

ITER is a massive device that researchers hope will prove the viability of nuclear fusion as a power source. The experiment will heat and squeeze hydrogen isotopes inside a doughnut-shaped reactor vessel until they fuse together to form helium. The energy released by the machine should be roughly ten times the power it consumes.

ITER's seven member states — Europe (encompassing the European Union and Switzerland), Japan, the United States, South Korea, China, Russia and India — originally hoped to build the project for €5 billion (US\$6.3 billion) and to have it completed in 2016 (see ['Fusion deal signed'](#)). But, after an extensive design review, that cost is expected to double, and ITER's first experiments are now expected no earlier than late 2019.

The European Union, which has struggled to come up with additional funds for the project, [announced](#) on 5 May that it faces a €1.4-billion funding gap for its portion of the construction between 2012 and 2013. Among the options being considered to cover the shortfall are greater contributions from European Union member states or a redistribution of existing funds within the EU budget.

Last summer, ITER's council appointed Won Namkung, an accelerator physicist at the Pohang Accelerator Laboratory in South Korea, to lead a management review. The group's report, which has not been made public, was discussed at ITER's council meeting last November and is believed to have called for changes to management, according to sources.

Job done

The project's possible new leader, Motojima, is a 61-year-old physicist with a long career in fusion research. From 1999 to 2002, he oversaw construction of the Large Helical Device (LHD) at the National Institute for Fusion Science in Toki City, Japan. The LHD is a type of fusion machine known as a stellarator, which uses a complex, twisted loop of magnets to hold a hot gas. Although stellarators can theoretically confine their fuel better than the simple doughnut-shaped ITER device, they are much more complex to engineer. A stellarator project in Germany has been beset by budget overruns and delays, and an experiment in the United States was cancelled in 2008 owing to its rising costs.

Although the Japanese budgeting process makes it difficult to tell whether the LHD ran into similar problems, "they got the job done on schedule", says Hutch Nielson, a physicist at Princeton Plasma Physics Laboratory in New Jersey who directed the US stellarator project. "I think Motojima's record there was a complete success."

Nielson adds that Motojima is well-known and respected within the community as a frank but friendly scientist with a clear understanding of project management. "He's a



Osamu Motojima is tipped to be the next head of the ITER fusion project.

National Institute for Fusion Science

ADVERTISEMENT

very charming individual; very straightforward, excellent people skills," he says.

Motojima's nomination is expected to be approved soon and will be formally discussed at the June council meeting. Once in place, some observers believe he might make further changes at the top. "I wouldn't be surprised if there's a huge shake-up in ITER management under him," says one fusion scientist familiar with the project, who asked not to be named citing the ongoing discussions of Motojima's candidacy.

Comments

If you find something abusive or inappropriate or which does not otherwise comply with our [Terms](#) or [Community Guidelines](#), please select the relevant 'Report this comment' link.

Comments on this thread are vetted after posting.

There are currently no comments.

Add your own comment

This is a public forum. Please keep to our [Community Guidelines](#). You can be controversial, but please don't get personal or offensive and do keep it brief. Remember our threads are for feedback and discussion - not for publishing papers, press releases or advertisements.

You need to be registered with Nature to leave a comment. Please log in or register as a new user. You will be re-directed back to this page.

[Log in / register](#)

Nature ISSN 0028-0836 EISSN 1476-4687

[About NPG](#)
[Contact NPG](#)
[RSS web feeds](#)
[Help](#)

[Privacy policy](#)
[Legal notice](#)
[Accessibility statement](#)
[Terms](#)

[Nature News](#)
[Naturejobs](#)
[Nature Asia](#)
[Nature Education](#)

[About Nature News](#)
[Nature News Sitemap](#)

Search:

© 2010 Nature Publishing Group, a division of Macmillan Publishers Limited. All Rights Reserved.
partner of AGORA, HINARI, OARE, INASP, CrossRef and COUNTER