JADA(日本国内機関)によるITER計測システムの開発 Development of the ITER diagnostic systems by JADA

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The first ITER diagnostic procurement arrangement for Micro Fission Chambers was concluded in April in 2012. The MFC is a pencil size gas counter containing fission material (235U) and will be installed upper and lower outboard behind the blanket module in the two toroidal locations. Design activities toward the preliminary design review, expected in the next year, are being carried out. Installation method of tri-axial MI cables has been investigated. Signal noise test of the signal transmission system and thermal cycle test of the MI cable were successfully carried out.

Following the conceptual design review in 2012, JAEA/JADA concluded the procurement arrangement of Poloidal Polarimeter, Edge Thomson Scattering, Divertor IR Thermography and Divertor Impurity Monitor with the ITER Organization and JAEA in this August.

The rest of the JADA systems are the thermo couples for the outer divertor target and the port engineering for the Upper #10 and Lower #2. The third PA is expected to conclude before the end of 2013.

Conceptual design of the supervisory systems for the ITER diagnostic systems in JADA is being studied. The conceptual design will be implemented and tested by using CODAC cubicles in 2013.

