

Division Plasma Edge and Wall

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Confirmation Letter Riho Endoh

This letter is to confirm Mrs Riho Endoh's research stay at the Max-Planck-Institut für Plasmaphysik (IPP) in Garching.

With the group of Prof. Takumi Chikada at Shizuoka University Mrs Endoh works on the topic of ceramic hydrogen isotope permeation barriers. Specifically her research interest is directed at the production and investigation of Zirconia coatings stabilised with Yttria (YSZ).

IPP Garching operates devices for analysis and coating deposition, which complement the work at Shizuoka University. These are located in the Project Plasma-Wall Interaction headed by Prof R. Neu (see www.ipp.mpg.de/16523/pww). With the help of IPP staff Mrs Endoh worked on coating facilities, ion beam analysis as well as the analysis of X-ray diffraction data during her stay at IPP Garching.

During Mrs Endoh's stay a number of YSZ coatings were deposited in two different coating facilities with a variety deposition parameters. One of her goals, i.e. the deposition at varying substrate temperatures, could not be addressed during her stay due to failure of the heating device. Mrs Endoh also gathered experience in ion beam analysis at IPP's 3 MV tandem accelerator. Ion beam analysis allows the measurement of coating thicknesses as well as the analysis of the chemical composition. The analysis of the deuterium distribution in samples after deuterium exposure is also a standard technique in IPP's accelerator laboratory; also here Mrs Endoh gathered experience. She also presented her research topic in a seminar talk about permeation barrier coatings during her stay.

In summary, Mrs Endoh had a successful stay at IPP Garching. We are sure that Mrs Endoh can benefit from the experience she gained at IPP during her future research career.

Best regards Max-Planck-Institut für Plasmaphysik

Dr. Hans Maier

Direktorium:

Prof. Dr. Sibylle Günter (Vorsitzende)

Prof. Dr. Thomas Klinger

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