

11th International Workshop on Hydrogen Isotopes in Fusion Reactor Materials

Tuesday, May 29

until 12:00 Arrival

12:30 - 13:45 Lunch

The length of all presentations (except the evening talk on Tuesday 20:00) is 20 min including discussion

13:45 - 14:00 Welcome and Information

14:00 - 14:20 *T. Tanabe*

Revisiting carbon materials as plasma facing materials of a fusion reactor

14:20 *V.G. Stankevich, N.Yu. Svechnikov, Y.V. Zubavichus, A.A. Veligzhanin, V.A. Somenkov, L.P. Sukhanov, B.N. Kolbasov, A.M. Lebedev, and K.A. Menshikov*

Observation of nanostructural elements of thick homogenous hydrocarbon films redeposited from T-10 tokamak plasma discharge

14:40 *I. Arkhipov, N. Klimov, V. Stankevich, V. Budaev, and K. Vukolov*

Characterization of Hydrocarbon Films Deposited under Conditions of the Pulsed and Steady-State Plasma Discharges

15:00 *Tamara J. Finlay, James W. Davis, Anthony A. Haasz*

Hydrogen Isotope Exchange in DIII-D Codepoints

15:20 *Masabumi Nishikawa*

Recovery Efficiency of Trapped Tritium on Tritium Balance in a D-T Fusion Reactor

15:40 - 16:00 Coffee Break

16:00 *M. Rubel, V. Philipps, A. Huber, D. Ivanova, P. Petersson, B. Schweer and M. Zlobinski*

Fuel Removal from Plasma-Facing Components: Overview of Methods Tested on Materials from the TEXTOR Tokamak

16:20 *L. Mercadier, J. Hermann, A. Semerok, C. Grisolia*

Laser-Induced Breakdown Spectroscopy Investigations for Tokamak applications

16:40 *J. P. Coad, S. Brezinsek, D. Douai, S. Gruenhagen, T. Loarer, G. F. Matthews, R. Neu, V. Philipps and EFDA-JET Contributors*

Comparative Fuel Retention In JET With The ITER-like Wall And The Carbon Wall

17:00 *S. I. Krasheninnikov, J. Guterl, A. Yu. Pigarov, R. D. Smirnov, E. D. Marenkov, A. A. Pisarev, and I. V. Tsvetkov*

Modeling of Hydrogen Retention and Coupled Plasma-Wall Interactions

17:20 *Evgeny Marenkov, V. Kurnaev, A. Lassa, K. Nordlund*

Molecular Dynamic Simulation of KeV Hydrogen Molecular Ions Interaction With Solids

17:40 - 18:20 *time for discussion*

18:30 Dinner

20:00 - 20:45 *After dinner talk by Alexander Pisarev*

Adsorption of Hydrogen on Metal Surface

Wednesday, May 30

8:00 - 9:00 Breakfast

- 09:00 *N. Juslin, F. Sefta, and B. D. Wirth*
Modeling H and He interactions in W
- 09:20 *Yu. Gasparyan, V. Efimov, A. Mednikov, and A. Pisarev*
Fine Structure of TDS Spectra of Deuterium from Tungsten
- 09:40 *Armin Manhard, K. Schmid, T. Dürbeck, and W. Jacob*
Unambiguous Determination of the Binding Energies for Deuterium in Tungsten
- 10:00 *T. Otsuka and T. Tanabe*
Thermal release mechanism of hydrogen implanted in metals by plasma exposure

10:20 - 10:40 Coffee Break

- 10:40 *Masakatsu Fukumoto, T. Nakano, K. Itami, T. Wada, and Y. Ueda*
Deuterium retention and desorption from vacuum plasma splayed tungsten coating irradiated by deuterium and carbon mixed ion beam
- 11:00 *Yuji Hatano, Jie Shi, Teo Nozaki, Tomonori Tokunaga, Hideo Watanabe, Naoaki Yoshida, Takuya Nagasaka, Ryuta Kasada, Akihiko Kimura*
Gas-Driven Hydrogen Isotope Retention in VPS Tungsten
- 11:20 *Y. Zayachuk, M.H.J. 't Hoen, P.A. Zeijlmans van Emmichoven, I. Uytendhouwen, and G. van Oost*
Deuterium retention and surface modification of tungsten and tungsten-tantalum alloys as a result of high-flux deuterium plasma exposure
- 11:40 *T. Sizyuk and A. Hassanein*
The Effects of Co-deposited Carbon Impurities as Surface Barrier for Hydrogen Recycling in Tungsten

12:30 - 14:00 Lunch

- 14:00 *Tomohisa Taguchi, M. Kobayashi, K. Kawasaki, Y. Miyahara, N. Ashikawa, A. Sagara, N. Yoshida, Y. Hatano, Y. Oya, and K. Okuno*
Correlation between irradiation defects formation and deuterium retention behavior in tungsten under $C^+-D_2^+$ simultaneous implantation
- 14:20 *M.H.J. 't Hoen, B. Tyburska-Püschel, K. Ertl, M. Mayer, A.W. Kleyn, H. Schut, P.A. Zeijlmans van Emmichoven*
Deuterium Retention in Pre-Irradiated Tungsten Exposed to High-Flux Plasmas
- 14:40 *O. V. Ogorodnikova, S. Markelj, K. Sugiyama, I. Čadež, Yu. Gasparyan, V. Efimov*
Atomic and Low-energy Deuterium Interaction with Selfdamaged Tungsten
- 15:00 *Leon Begrambekov, A. Kaplevsky, Ya. Sadovsky, P. Shigin and S. Vergasov*
The Particle Trapping in Stainless Steel in Oxygen Contaminated Hydrogen Plasma
- 15:20 *Y. Sakuma, N. Matsunami, N. Ohno, M. Tokitani and S. Masuzaki*
Depth Distribution Of Deuterium In Fe₂O₃ Under Low Energy Deuterium Plasma

15:40 - 16:00 Coffee Break

- 16:00 *N.P. Bobyr, A.V. Spitsyn, A.V. Golubeva, M. Mayer, Yu.M. Gasparyan, V.S. Efimov, V.M. Chernov*
Deuterium Retention in the V-4Cr-4Ti Alloy
- 16:20 *Tatiana Kompaniets, E.Denisov, I.Shikin, A.Yukhimchuk jr.*
Hydrogen Interaction With RAFM Steel Rusfer-EK-181
- 16:40 *A.V. Golubeva A.V. Spitsyn, M. Mayer, Yu.M. Gasparyan, N.P. Bobyr, V.M. Chernov, O.V. Ogorodnikova*
Deuterium Retention in Low Activated Ferritic-Martensitic Steels
- 17:00 - 18:00 Discussion

18:30 Dinner

Thursday, May 31

8:00 - 9:00 Breakfast

- 09:00 *J.S. Hu, G.Z. Zuo, S.Zhen, J.G. Li, B. Cao, D. K. Mansfield, L.E. Zakharov*
Lithium coating for recycling and H/(H+D) control in EAST/HT-7
- 09:20 *F. L. Tabarés, D. Tafalla, E. Oyarzabal and A. B. Martín-Rojo*
Studies of Isotope Interchange on Lithium in TJ-II
- 09:40 *J. Roth, B. Wampler, S. van Deusen, M. Oberkofler*
D retention in and out-gassing from BeO on Be
- 10:00 *Robert D. Kolasinski, Norman C. Bartelt, Josh A. Whaley, and William R. Wampler*
Fundamental Hydrogen Interactions with Beryllium Surfaces

10:20 - 10:40 Coffee Break

10:40 - 12:00 Discussion

12:30 - 14:00 Lunch

14:00 Departure