

**13th International Workshop on Plasma-Facing Materials  
and Components for Fusion Applications**  
**1st International Conference on Fusion Energy Materials Science**  
- ORAL PRESENTATIONS -



**List of Invited Talks**

**Beryllium Qualification Activity for ITER First Wall Applications**

Vladimir Barabash

*ITER Organization, Route de Vinon sur Verdon, 13115 St Paul Lez Durance (France)*

**Modelling of radiation damage in tungsten including He production**

Charlotte Becquart

*Unité Matériaux et Transformations (UMET), Ecole Nationale Supérieure de Chimie de Lille,  
UMR 8207, Bat. C6, 59655 Villeneuve d'Ascq Cedex (France)*

**Overview of JET post-mortem results following the 2007-9 operational period, and  
comparisons with previous campaigns**

Paul Coad

*JET-EFDA, Culham Science Centre, OX14 3DB, Abingdon (United Kingdom)*

**Analysis of Structural Changes and High-Heat-Flux Tests on pre-damaged Tungsten  
from Tokamak Melt Experiments**

Jan Willem Coenen

*Forschungszentrum Jülich GmbH, 52425 Jülich (Germany)*

**ELM-simulation experiments under ITER-like conditions**

Gregory de Temmerman

*FOM Institute for Plasma Physics Rijnhuizen, Trilateral Euregio Cluster, P.O. Box 1207,  
3430 BE Nieuwegein (The Netherlands)*

**Wet-chemical methods for fabrication of tritium permeation barrier coatings**

Yuji Hatano

*Hydrogen Isotope Research Center, University of Toyama, 930-8555 Toyama (Japan)*

**Transport and screening of ejected tungsten in controlled melt experiments  
at ASDEX Upgrade**

Karl Krieger

*Max-Planck-Institut für Plasmaphysik, 85748 Garching (Germany)*

**Impact of disruption loads on plasma facing components**

Michael Lehnen

*Forschungszentrum Jülich GmbH, 52425 Jülich (Germany)*

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**Development of W/Cu Divertor Components for EAST**

Guang-Nan Luo

*Institute of Plasma Physics, Chinese Academy of Sciences, P. O. Box 1126, Hefei, 230031 (China)*

**The JET ITER-like Wall - Status and experimental programme**

Guy Matthews

*JET-EFDA, Culham Science Centre, OX14 3DB, Abingdon (United Kingdom)*

**Detailed Design of a Solid Tungsten Divertor Row for JET  
in Relation to the Physics Goals**

Philippe Mertens

*Forschungszentrum Jülich GmbH, 52425 Jülich (Germany)*

**Fatigue Lifetime and Power Handling Capability of Actively Cooled  
Plasma Facing Components for ITER Divertor**

Marc Missirlian

*CEA, IRFM, 13108 Saint-Paul-Lez-Durance (France)*

**Lifetime analysis of ITER first wall under steady state and off normal loads**

Raphael Mitteau

*ITER Organization, Route de Vinon sur Verdon, 13115 Saint Paul Lez Durance (France)*

**Hydrogen in Tungsten**

Joachim Roth

*Max-Planck-Institut für Plasmaphysik, 85748 Garching (Germany)*

**Deuterium Retention in and Release from Beryllium Resulting  
from High Flux Plasma Exposure**

Thomas Schwarz-Selinger

*Max-Planck-Institut für Plasmaphysik, 85748 Garching (Germany)*

**Lithium wall conditioning and surface dust detection on NSTX**

Charles Skinner

*Princeton Plasma Physics Laboratory, Princeton, NJ 08543 (USA)*

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**Recent Progress of Tungsten R&D for Fusion Application in Japan**

Yoshio Ueda

*Graduate School of Engineering, Osaka University, Osaka 565-0871 (Japan)*

**Tungsten Wire-Reinforced Tungsten Matrix Composites: Proof of principle**

Jeong-Ha You

*Max-Planck-Institut für Plasmaphysik, 85748 Garching (Germany)*

**Glass Ceramic Joined SiC/SiC: Properties after Nuclear Irradiation**

Monica Ferraris

*POLITECNICO DI TORINO, C.so Duca degli Abruzzi, 24, 10129 Torino (Italy)*

**Irradiation Induced Defects in Alloys Examined by Positron Annihilation Spectroscopy**

Christoph Hugenschmidt

*Technische Universität München, 85748 Garching (Germany)*

**Insight into defect properties created by irradiation in Fe-C provided by  
multiscale modelling coupled with resistivity recovery experiments**

Thomas Jourdan

*CEA -DEN, Service de Recherches de Métallurgie Physique, 91191 Gif-sur-Yvette (France)*

**Cs-corrected STEM investigations of an ODS ferritic steel for fusion applications**

Tomasz Plocinski

*Warsaw University of Technology, Woloska 141, 02-507 Warsaw (Poland)*

**Latest Achievements Utilizing the 3DXRD Technique for  
Non-destructive Characterization of Microstructures**

Søren Schmidt

*Technical University of Denmark, Risø-DTU (Denmark)*

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**Nanoindentation of Self ion Implanted Tungsten and Tungsten Alloys  
for Plasma Facing Applications**

David Armstrong

*University of Oxford, Oxford (United Kingdom)*

**Modelling of Beryllium Erosion/Deposition and Local Transport at  
ITER First Wall Blanket Modules Using the ERO code**

Dmitry Borodin

*Forschungszentrum Jülich GmbH, 52425 Jülich (Germany)*

**Overview of the Second Stage in the Comprehensive Mirrors Test in JET**

Darya Ivanova

*Kungliga Tekniska Högskolan – KTH (Royal Institut of Technology),*

*Alfvén Laboratory, Stockholm (Sweden)*

**Tungsten and carbon based PFCs erosion and eroded material deposition  
under ITER-like ELM and disruption loads at the plasma gun facility QSPA-T**

N. Klimov

*SRC RF TRINITI, Pushkovykh street, 12, 142190, Troitsk, Moscow Region (Russia)*

**Deposition of <sup>13</sup>C tracer in the JET MKII-HD divertor**

Jari Likonen

*VTT-Technical Research Centre of Finland, PO Box 1000, 02044 VTT – Espoo (Finland)*

**Comparison of deuterium retention for ion-irradiated and  
neutron-irradiated tungsten**

Yasuhisa Oya

*Shizuoka University, Radioscience Research Laboratory, Shizuoka, 422-8529 (Japan)*

**Deposition and Qualification of Tungsten Coatings Produced by Plasma Deposition in  
WF6 precursor Gas**

Volker Philipps

*Forschungszentrum Jülich GmbH, 52425 Jülich (Germany)*

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**Thermal shock response of fine and ultra fine grained tungsten based materials**

Gerald Pintsuk

*Forschungszentrum Jülich GmbH, 52425 Jülich (Germany)*

**Arcing in DIII-D as a Source of PFC Erosion and Dust Production**

Dmitry Rudakov

*University of California, San Diego, La Jolla, California 92093-0417 (USA)*

**Neutron tomography as a new method for 3D structure analysis of  
CFC as plasma facing material**

Burkhard Schillinger

*Technische Universität München, 85748 Garching (Germany)*

**Predicting time evolution of hydrogen co-deposition in ITER  
based on self consistent global impurity transport modelling**

Klaus Schmid

*Max-Planck-Institut für Plasmaphysik, 85748 Garching (Germany)*

**In-situ measurement of hydrogen isotope retention using  
ion beam analyses during plasma exposure**

Masato Yamagiwa

*Nagoya University, Graduate School of Engineering, Nagoya 464-8603 (Japan)*