

## Technical Sessions, Wednesday

### Plenary Session 02

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Date / Time : Wednesday, April 24 / 08:30-10:30

Place : 2F, Room A (Grand Ballroom A)

Session Chair : Damian Brennan (UKAEA, UK) / Magnus Schloesser (KIT, Germany)

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#### PL4 08:30-09:10

**Progress of Tritium Science and Technology for Fusion Energy in China**

Shuming Peng\*

*China Academy of Engineering Physics, China*

#### PL5 09:10-09:50

**Tritium Activities at the University of Rochester's Laboratory for Laser Energetics**

W. T. Shmayda\*, M. Sharpe, C. Fagan, M. D. Wittman, R. F. Earley

*Laboratory for Laser Energetics, USA*

#### PL6 09:50-10:30

**Tritium-Related Activities in the RF**

Arkadiy Yukhimchuk\*

*The Russian Federal Nuclear Center – All-Russian Scientific Research Institute of Experimental Physics, Russian Federation*

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## Oral Session 05

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### O5A

Date / Time : Wednesday, April 24 / 11:00-12:30

Place : 2F, Room A (Grand Ballroom A)

Session Chair : Anthony Busign (NITEK USA, Inc., USA) / Paul Cloessner (SRNL, USA)

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#### O5A.1 11:00-11:25 [I.O]

##### **Qualification Tests for Detritiation to Validate Scrubber Column Technology for Use at ITER DS with a Pilot-Scale Scrubber Column**

Yuki Edao<sup>1\*</sup>, Rie Kurata<sup>1</sup>, Yasunori Iwai<sup>1</sup>, Kanetsugu Isobe<sup>1</sup>, Toshihiko Yamanishi<sup>1</sup>, Takumi Hayashi<sup>1</sup>, Scott Willms<sup>2</sup>

<sup>1</sup>National Institutes for Quantum and Radiological Science and Technology, Japan, <sup>2</sup>International Thermonuclear Experimental Reactor, France

#### O5A.2 11:25-11:50 [I.O]

##### **Physico-Chemical Methods of Handling Tritiated Water and Gas Streams**

Mikhail B. Rozenkevich\*, Alexey N. Bukin, Sergey A. Marunich, Eldar P. Magomedbekov, Yury S. Pak, Irina L. Rastunova, Igor L. Selivanenko

*D. Mendeleev University of Chemical Technology of Russia, Russian Federation*

#### O5A.3 11:50-12:10

##### **TCAP Parameter Optimization Using Fractional Factorial Experimental Design**

Xin Xiao\*, Henry T. Sessions

*Savannah River National Laboratory, USA*

#### O5A.4 12:10-12:30

##### **Development and Operation of a Water Detritiation Facility Based on CECE Technology**

Jingwei Hou, Chao Chen, Chengjian Xiao, Heyi Wang, Xiaolong Fu, Xiulong Xia, Yu Gong, Shuming Peng\*  
*China Academy of Engineering Physics, China*

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## Oral Session 05

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### O5B

Date / Time : Wednesday, April 24 / 11:00-12:25

Place : 2F, Room B (Grand Ballroom B)

Session Chair : Steve Phillips (Premium Analyse, France) /  
Aleksy Vasilyev (IIE, Russian Federation)

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#### O5B.1 11:00-11:25 [I.O]

##### Organically Bound Tritium (OBT) - New Challenges

Baglan Nicolas<sup>1</sup>, Peron<sup>2</sup>, Baglan<sup>1</sup>

<sup>1</sup>The French Alternative Energies and Atomic Energy Commission, France, <sup>2</sup>Subatech, France

#### O5B.2 11:25-11:45

##### Characterisation and Treatment Methods Used for JET Tritiated Waste

Robert Vale\*, Damian Brennan, James Bromley, Dave Coombs, Xavier Lefebvre, Steve Reynolds, Tomas Rey  
United Kingdom Atomic Energy Authority, UK

#### O5B.3 11:45-12:05

##### Development of Fast Response Detector for Tritium Measurements in Dynamic Mode in Fusion Reactor

Zhilin Chen\*, Shuming Peng, Ping Chen, Guanyin Wu, Yang Yang  
China Academy of Engineering Physics, China

#### O5B.4 12:05-12:25

##### High Purity HD for Cross Calibration of Hydrogen Isotopologue Analytics

Robin Groessle<sup>1\*</sup>, Tim Brunst<sup>2</sup>, Bennet Krasch<sup>1</sup>, Sebastian Mirz<sup>1</sup>

<sup>1</sup>Karlsruhe Institute of Technology, Germany, <sup>2</sup>Max Planck Institute for Physics, Germany