



# Ex-situ LIBS analysis of WEST divertor wall materials

**Peeter Paris, Indrek Jõgi**  
**University of Tartu**

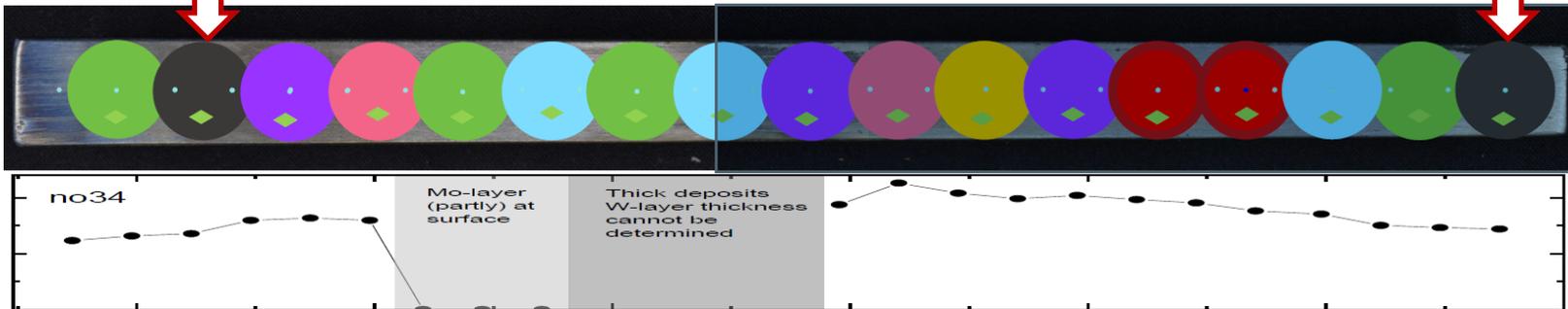


This work has been carried out within the framework of the EUROfusion Consortium and has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 633053. The views and opinions expressed herein do not necessarily reflect those of the European Commission.

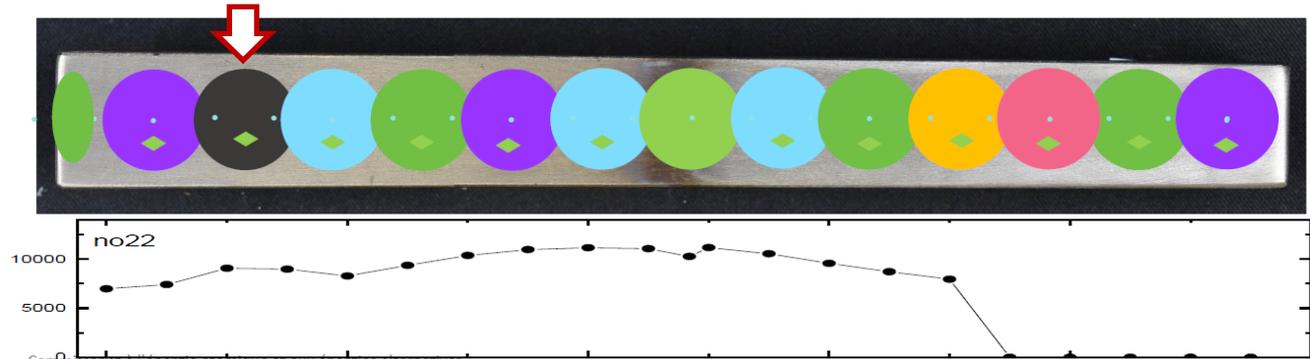
# Samples for LIBS studies



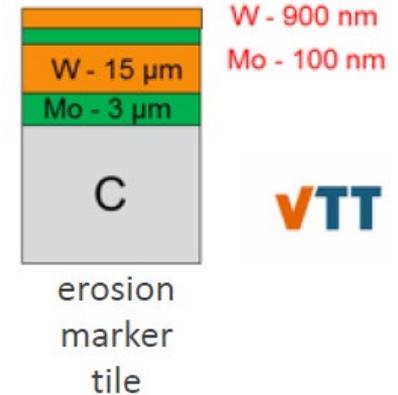
C3-34i: 17 samples



C3-22o: 13 samples



- VR (NRA, PIXE, ERDA)
- + IPPLM (SEM, TEM)
- VTT (SIMS)
- RBI (RBS, toF ERDA)
- JSI ( $\mu$ NRA, ERDA)
- IAP (GDOES)
- UT (LIBS)

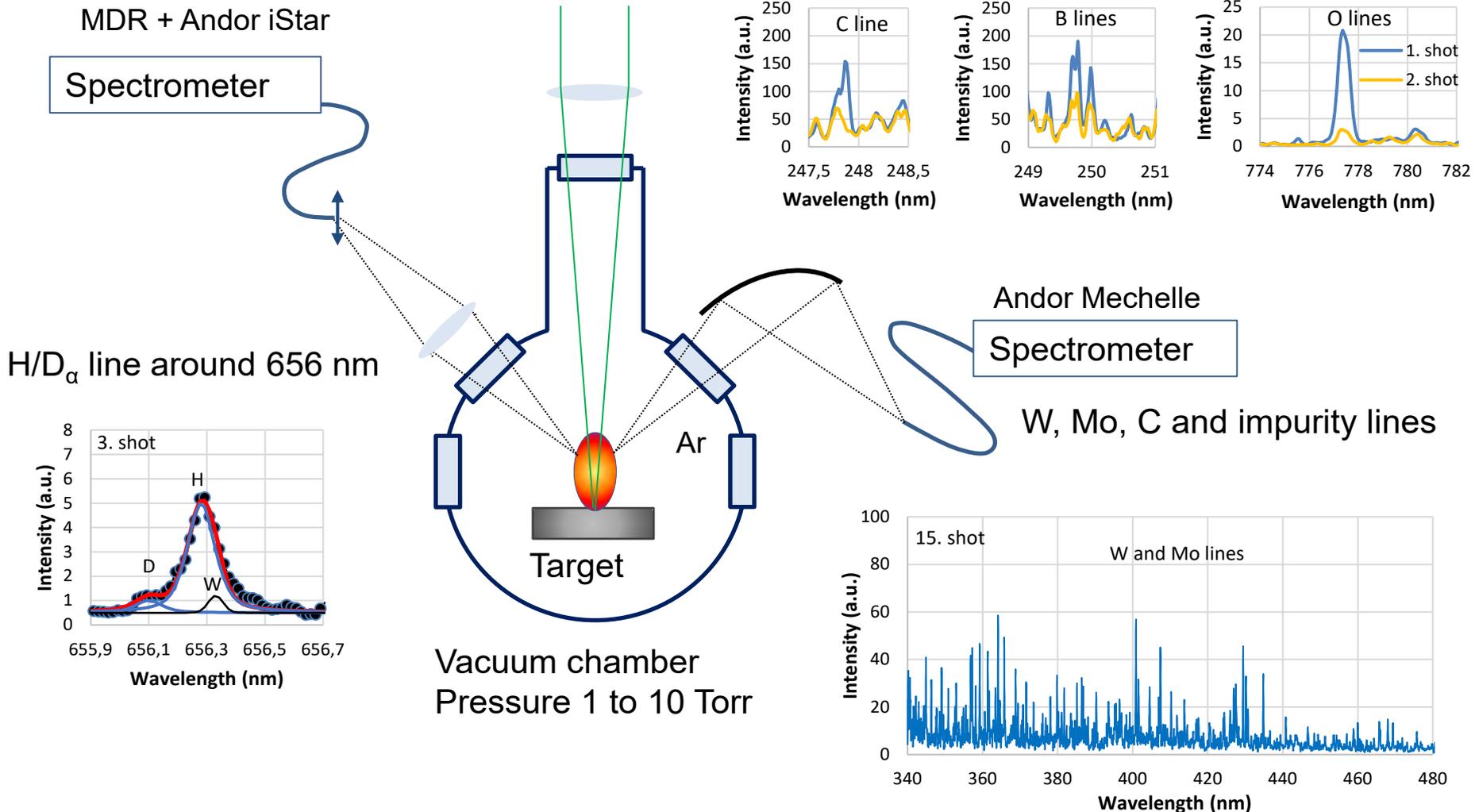


Samples originate from regions with small erosion and deposition

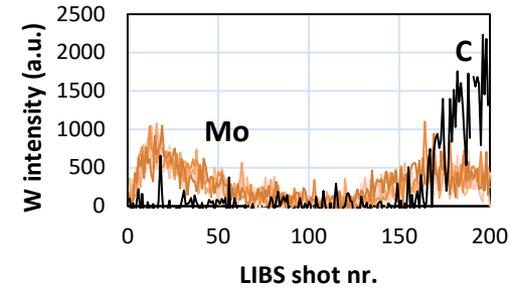
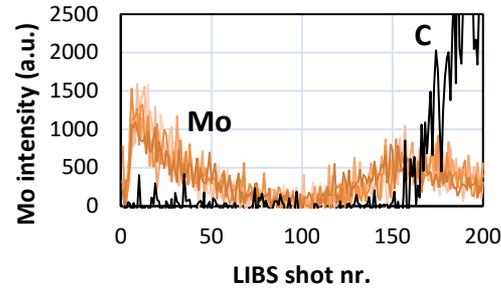
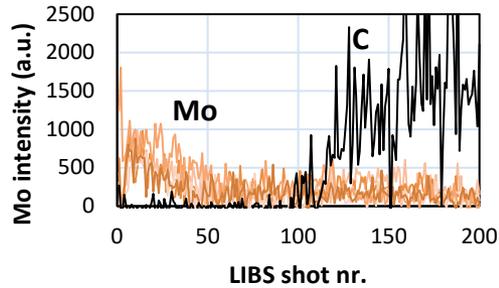
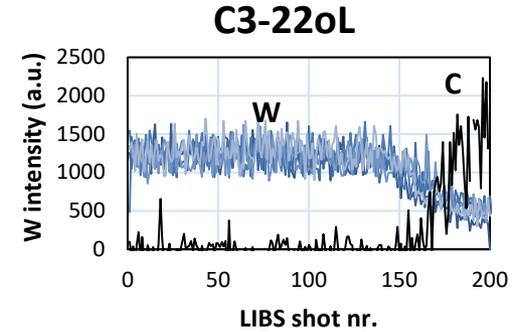
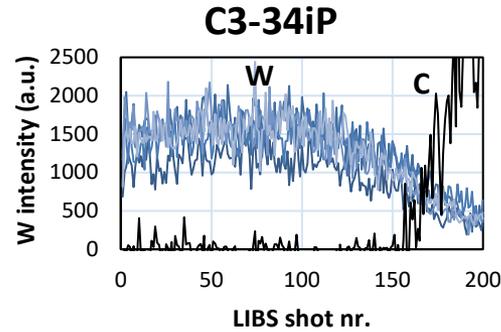
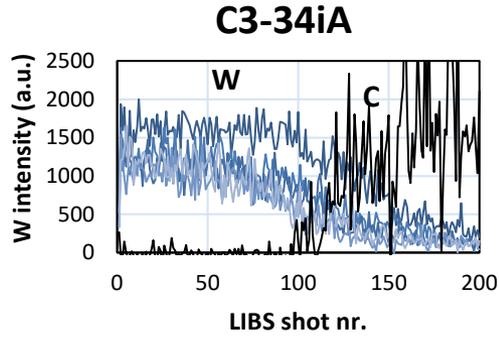
# Experimental setup for LIBS measurements



Laser beam (532 nm, 6 ns), 0.5 Hz, 120 mJ, 33 J/cm<sup>2</sup>



# LIBS depth profiles from 5 different spots on samples



Average ablation rate 100 nm/shot

## Impurities on the surface

