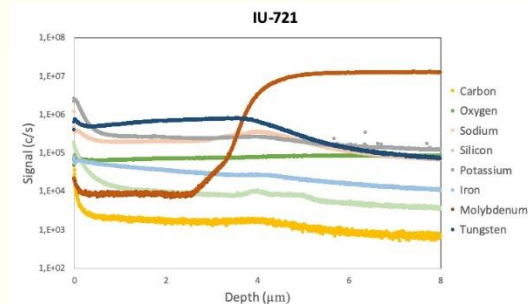
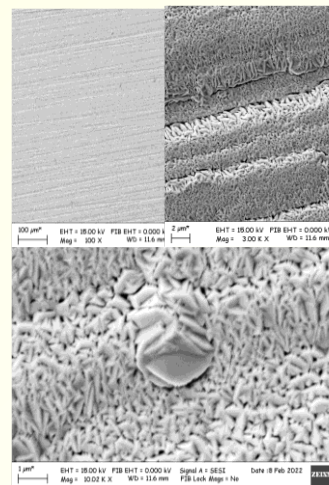
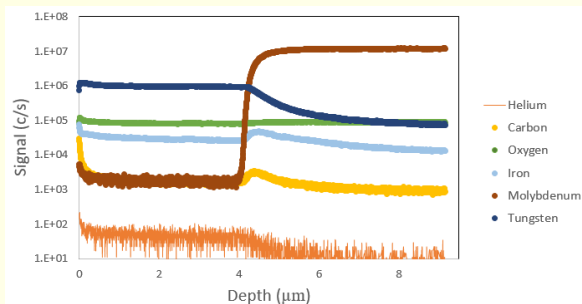
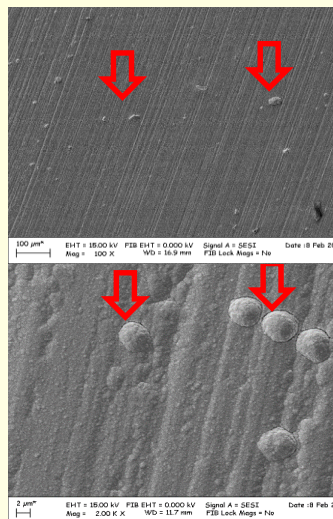


W Eu2 91_11/12: Mo/W (4.9 μm) + 5% He

- **SEM:** granular (spheres), homogeneous film. Frequent presence of **aggregates**.
- **SIMS:** very homogeneous film. Small W diffusion into Mo? Small C, and Fe contamination at surface and at the interface W/Mo (likely during deposition). Helium cannot be detected.

W IV 721_23: Mo/W (5.2 μm)

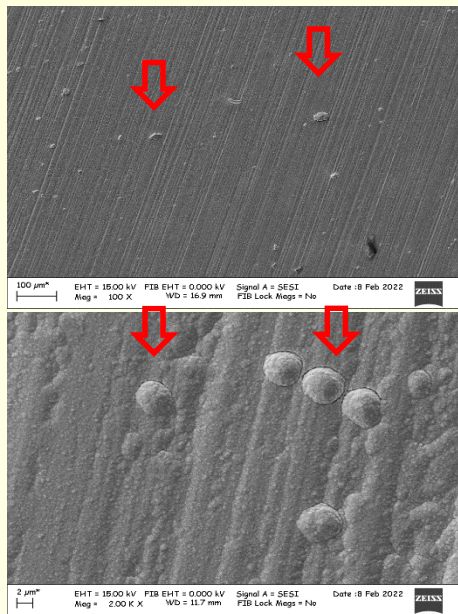
- **SEM:** granular (elongated). Does not cover all substrate. It looks like a nanoporous film.
- **SIMS:** non-homogeneous film. Some surface and interface contamination (C, Mo, Na, Si and K). Looks like sand, hands... W and O concentration increase with depth. Mo diffusion into the W at $\sim 3 \mu\text{m}$, mixed film?.



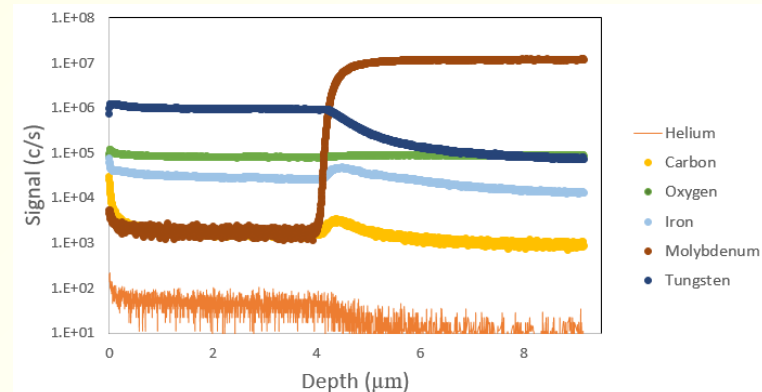
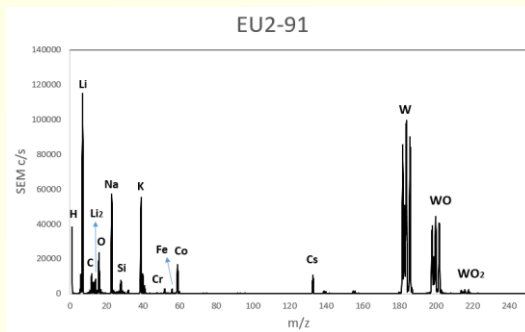


EXTRA SLIDES

- **SEM:** granular (spheres), homogeneous film with the same rugosity (lines) as the substrate. Frequent presence of aggregates. Film and aggregates have the same composition by EDX.
- **SIMS:** very homogeneous film with sharp interface. Perhaps small W diffusion into Mo (although it may be an artifact). Small C, and Fe contamination at surface and at the interface W/Mo (likely during deposition). Helium cannot be detected. Presence of Li is due to contaminants in SIMS device. Film thickness estimated by profilometry, $4.2 \pm 0.3 \mu\text{m}$, is similar to the provided.

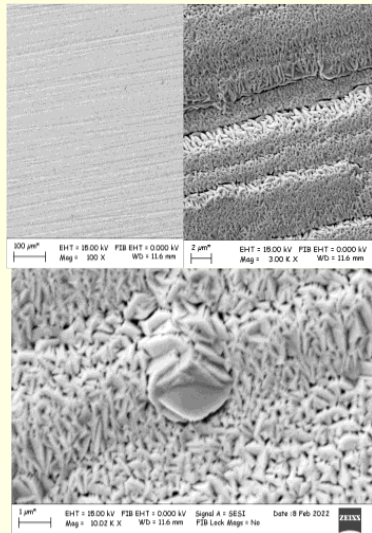


Surface



W IV 721_23: Mo/W ($5.2 \mu\text{m}$)

- **SEM:** granular (elongated), film with the same rugosity (lines) as the substrate. Does not cover all the substrate. It looks like a nanoporous film, or specially made to simulate a certain type of codeposits.
- **SIMS:** non-homogeneous film. Some surface contamination (C, Mo, and Na, Si and K). W and O concentration increase with depth while Fe, Na, Si and K decrease. Mo diffusion into the W film starting at $\sim 3 \mu\text{m}$ with a slope change, looks like a mixed film. Small Na (and also Fe, Si and K) contamination at the interface. Presence of Li is due to contaminants in SIMS device. Na, Si and K are typical contaminants from ambient: hands, sand, etc. Film thickness complex to estimate by profilometry due to likely mixing at interface: $3.7 \pm 1.0 \mu\text{m}$.



Surface

IU-721

