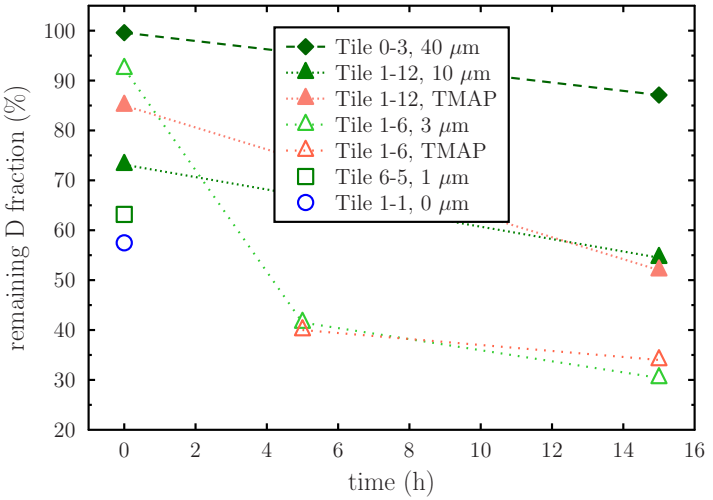
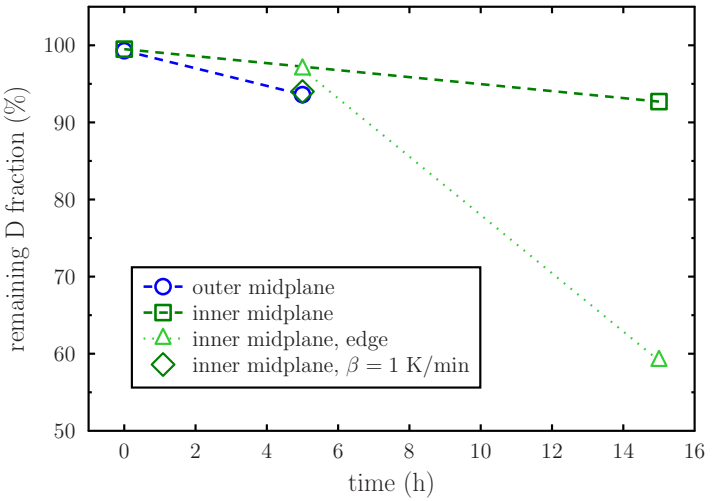
EXP/P6-2: Long-term fuel retention and release in JET ITER-Like Wall at ITER-relevant baking temperatures

- Fuel removal efficiency in JET-ILW studied at ITER-relevant baking temperatures
  - JET-ILW samples from **W divertor** and **Be main chamber**
  - Baking temperatures for **W divertor** 350°C, **Be limiters** 240°C
  - Annealing times 0, 5 and 15 hrs
  - Data collection with TDS
  - **Divertor** computational analysis with TMAP7 simulations
- *Deposits* in the **W divertor** have an increasing effect to the remaining fuel above baking temperature. After 15 hrs bake, highest remaining fuel fractions 54 and 87 % with deposit thicknesses 10 and 40 µm, respectively. Be deposits with some C, O.
- TMAP7 in good agreement with TDS of **divertor** deposits. Desorption maxima fitted with activation energies 0.75-0.8, 1.1 and 1.4 eV.
- *Deposit-free* bulk **Be limiter** samples with high remaining fraction: >90 % remained after 15 hrs bake. Remained fraction ~60 % only on the edge of the limiter.



Remaining fuel fractions in W divertor deposits after baking at 350°C.



Remaining fuel fractions in Be limiters after baking at 240°C.