

## Supplementary information

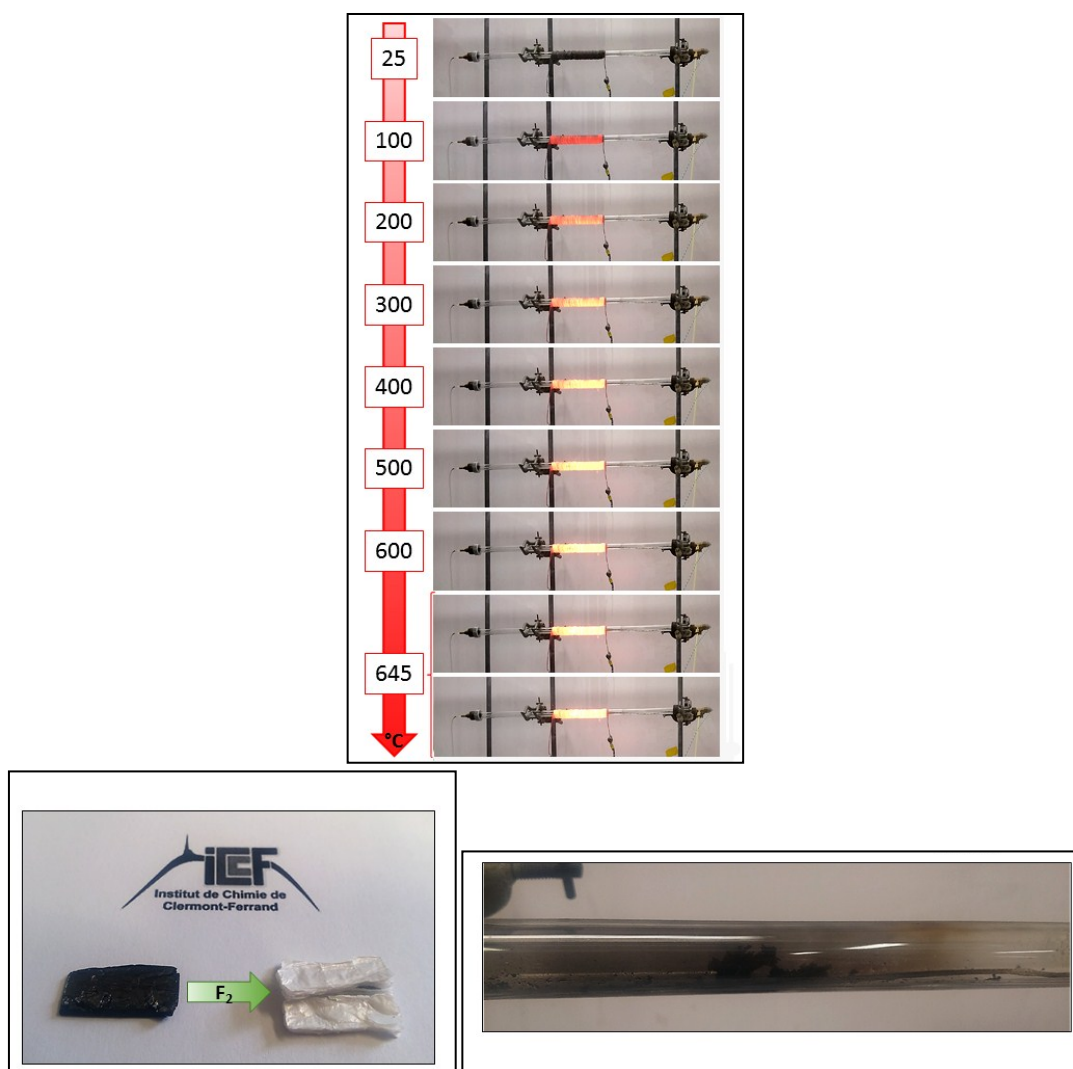


Figure SI 1: Picture of the experimental setup used for the fast thermal exfoliation of fluorinated carbons and pictures of the morphology of the *FG* before (white and thin) and after the exfoliation (black and exfoliated)