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Sol-gel synthesis and characterization of HfB₂ powders

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Sol-gel synthesis and characterization of HfB_2 powders

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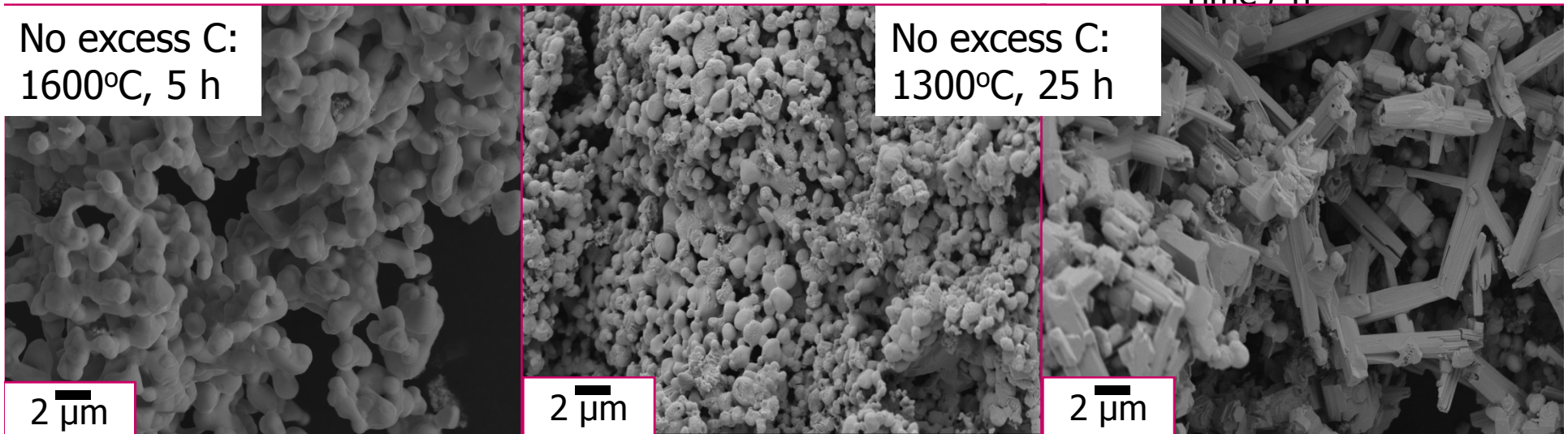
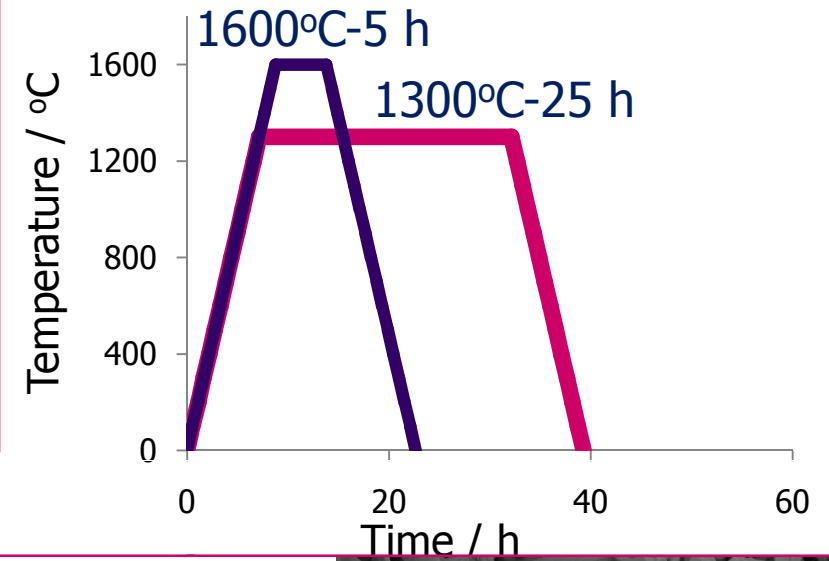
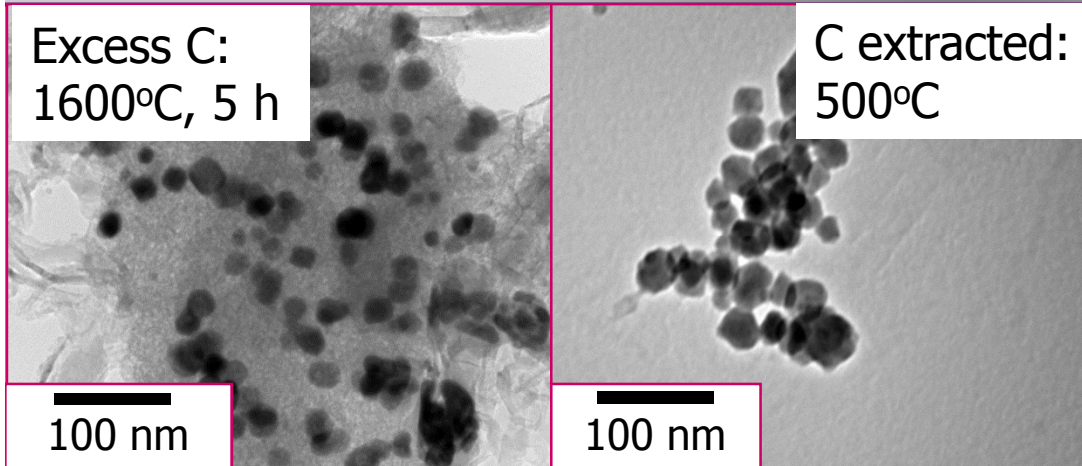
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15 May 2012

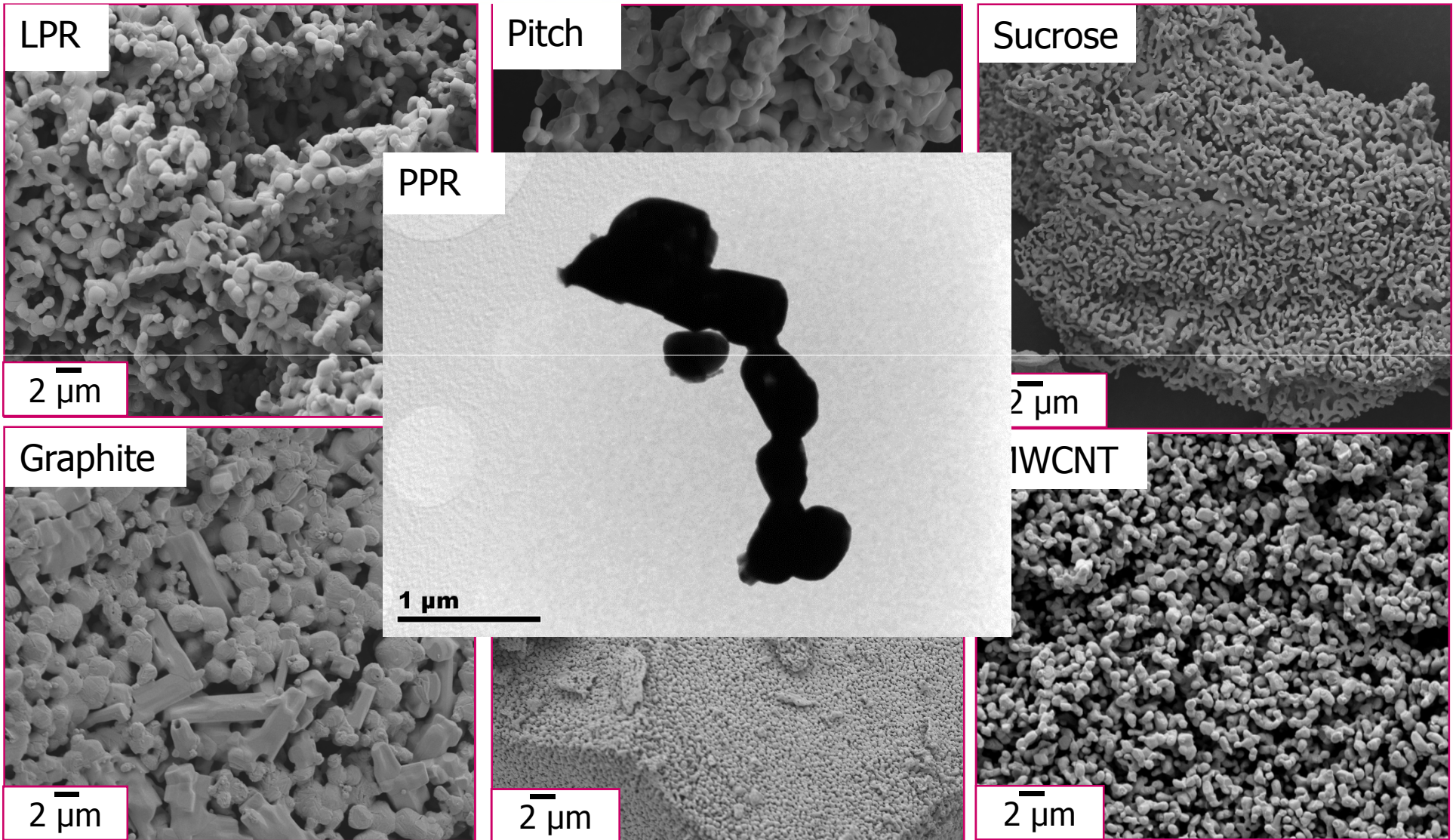
HfB₂ precursor synthesis

- i. Carbon content
 - Excess carbon and stoichiometric carbon
- ii. Heat treatment for carbo/borothermal reduction reaction
 - 1300°C (with the help of AFRL) and 1600°C

Heat treatment used and the resulting microstructure



HfB₂ powder microstructure depending on the C sources



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