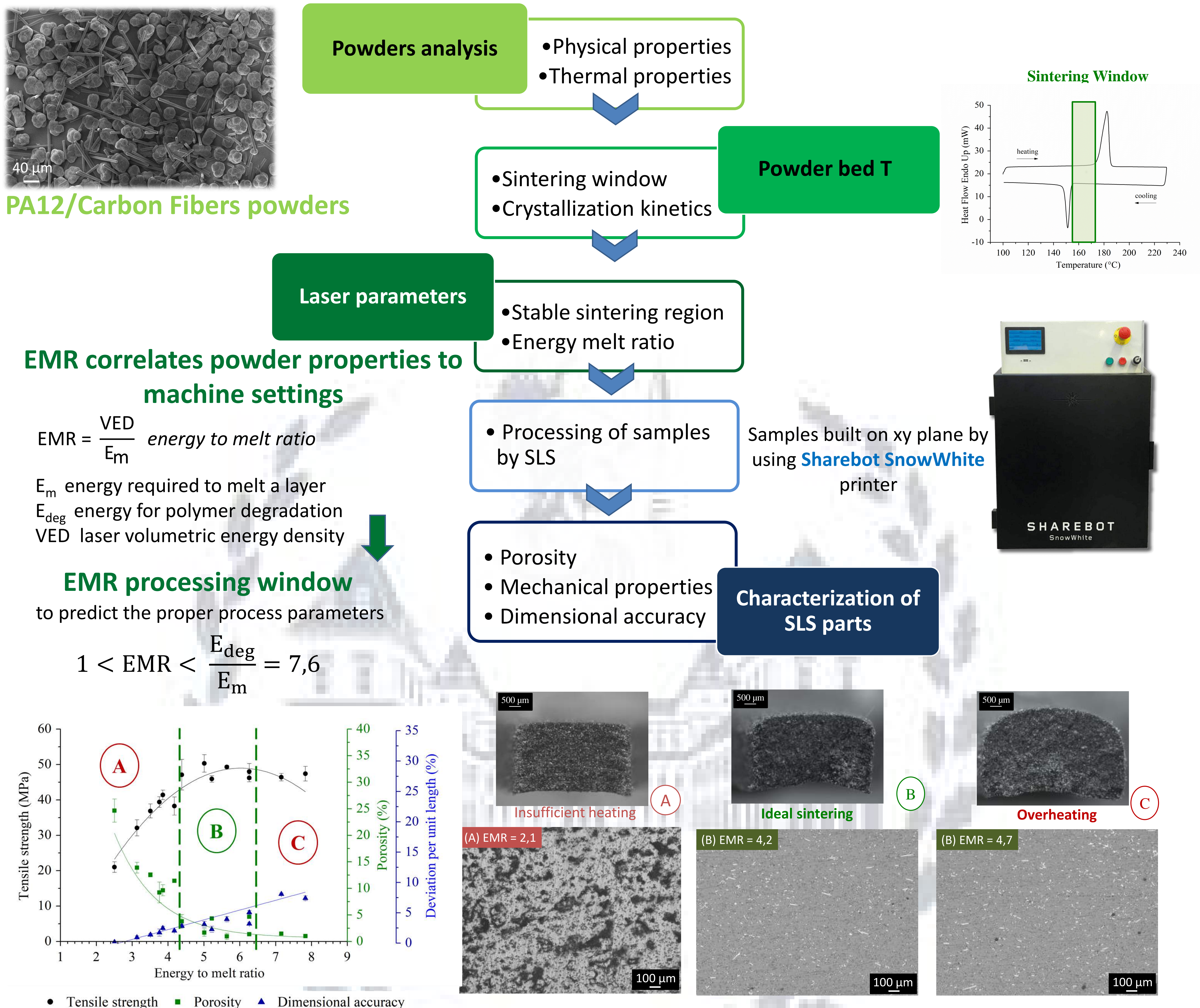


Selective Laser Sintering (SLS) process is widely used to produce polymer and composites parts in many fields. This study aims to develop a method, based on an energy input approach, to quantify the stable sintering region and predict the proper processing parameters of carbon fiber reinforced polyamide 12 composites (PA12 CF) built by SLS directly from powder properties.



Innovative approach to the development of conductive hybrid composites for Selective Laser Sintering

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Selective Laser Sintering (SLS) was used to manufacture electrically conductive polymer composites made of polyamide 12 reinforced with carbon fibres and graphite (PA12/CF/GP). Since material design is critical in developing conductive polymer composites, an innovative experimental technique is proposed to preliminary evaluate the electrical behaviour of the powders before SLS processing and select the most performing hybrid compositions.

