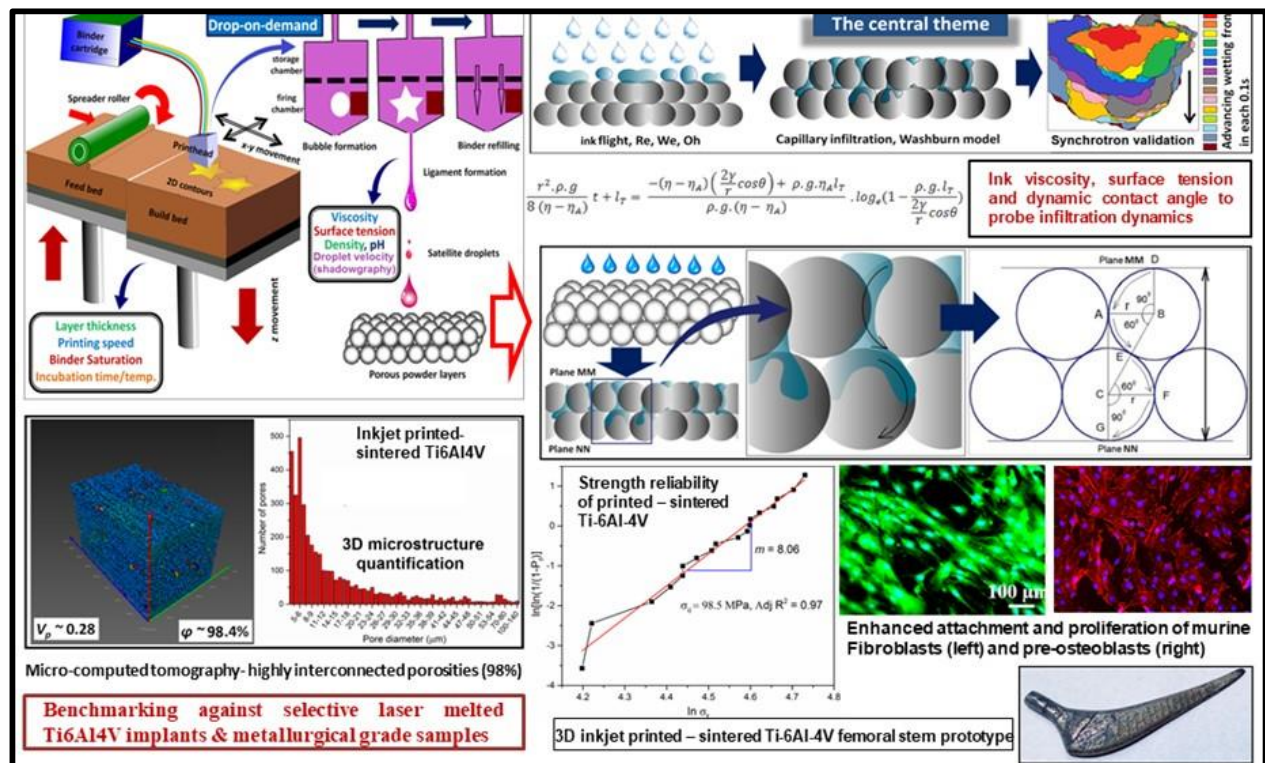


Srimanta Barui, Asish K Panda, S Nasakar, R Kuppuraj, Saptarshi Basu, Bikramjit Basu, **3D inkjet printing of biomaterials with strength reliability and cytocompatibility: Quantitative process strategy for Ti-6Al-4V**; *Biomaterials* 213 (2019) 119212.

Graphical Summary:



Significance/Impact

This paper addresses one of the unexplored domains in the field of additive manufacturing of biomaterials. This work describes the theoretical foundation of the binder penetration and related physico-chemical phenomenon during layer-by-layer assembly in binderjet 3D printing. The authors argue how the available theory cannot explain the experimental results, which are further investigated using high-throughput synchrotron analysis. This technology was developed in Bikramjit's lab, and this work was the basis for the recently granted patent.