

3D Printing Ice

Researchers from CMU College of Engineering developed a 3D printing process for creating tiny ice structures.

- Opportunity to use environmentally friendly material
- Biocompatibility
- Clean internal voids
- Ice structures can be used for reverse molding, and is easily removed from the mold (through melting or sublimation)
- Doesn't require support structure
- Potential for tissue engineering

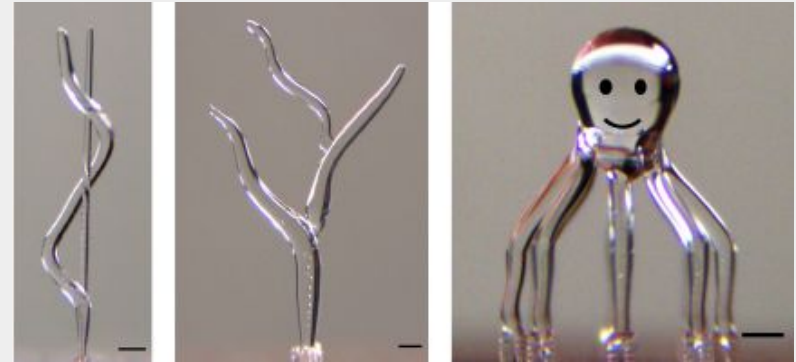
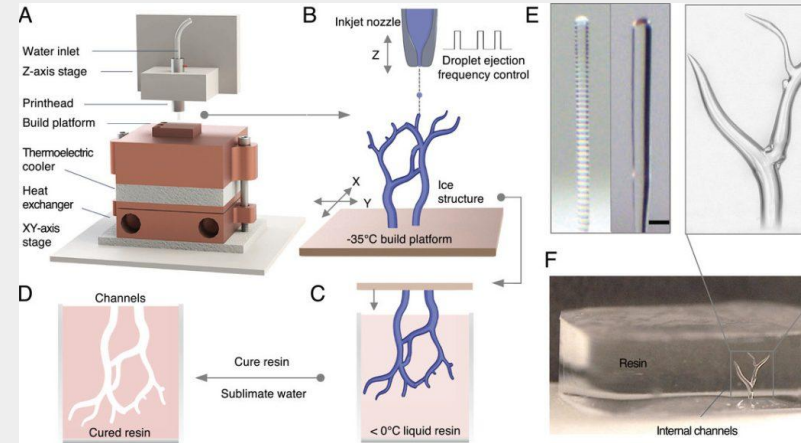
Printing:

- Modulates frequency of water droplets
- On a -35°C temp controlled platform

Sources:

<https://engineering.cmu.edu/news-events/news/2022/08/02-3d-ice.html>

<https://onlinelibrary.wiley.com/doi/10.1002/adv.202201566>



Helix

Tree

Octopus