



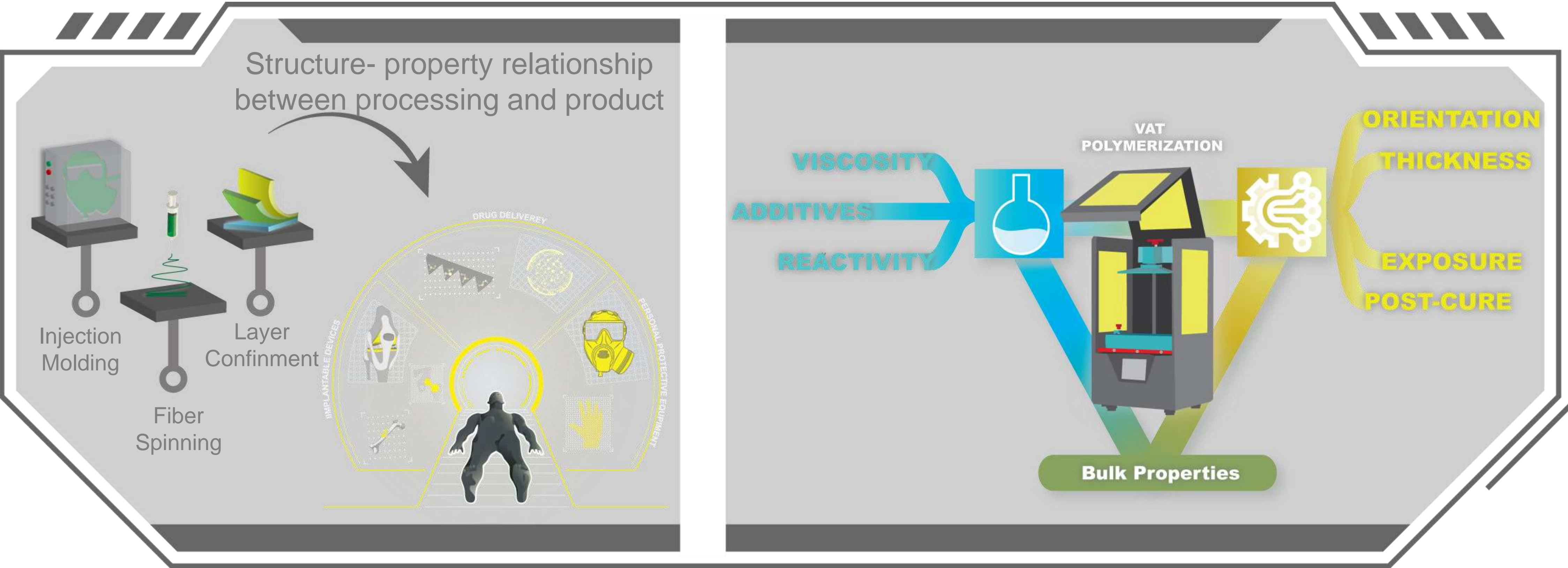
The Volume-Saving Elastomer Networks for Operational Materiel (VENOM) Product Suite: Utilizing advanced manufacturing techniques to produce lower-burden respiratory protective equipment

Kristian Van de Voorde¹, Anne Walker¹, Melissa Sweat¹, Zoe Madrid¹, Cody Kendig¹
¹U.S. Army Combat Capabilities Development Command Chemical Biological Center, Aberdeen Proving Ground, MD

CBDS+
 + Approved for public release; distribution is unlimited.



MOTIVATION



APPROACH



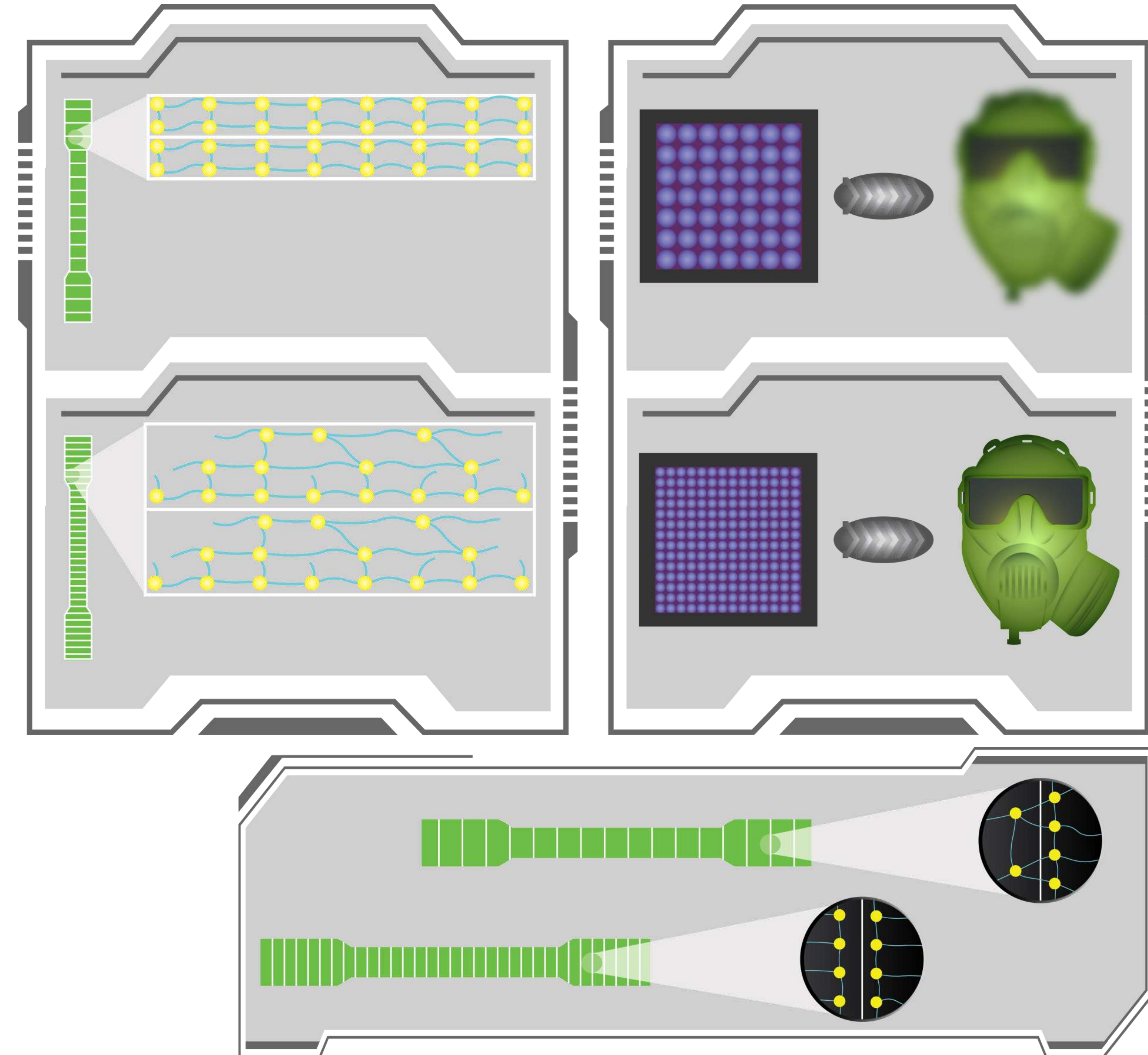
H1-10

Direction of print

Post-cure time (minutes)

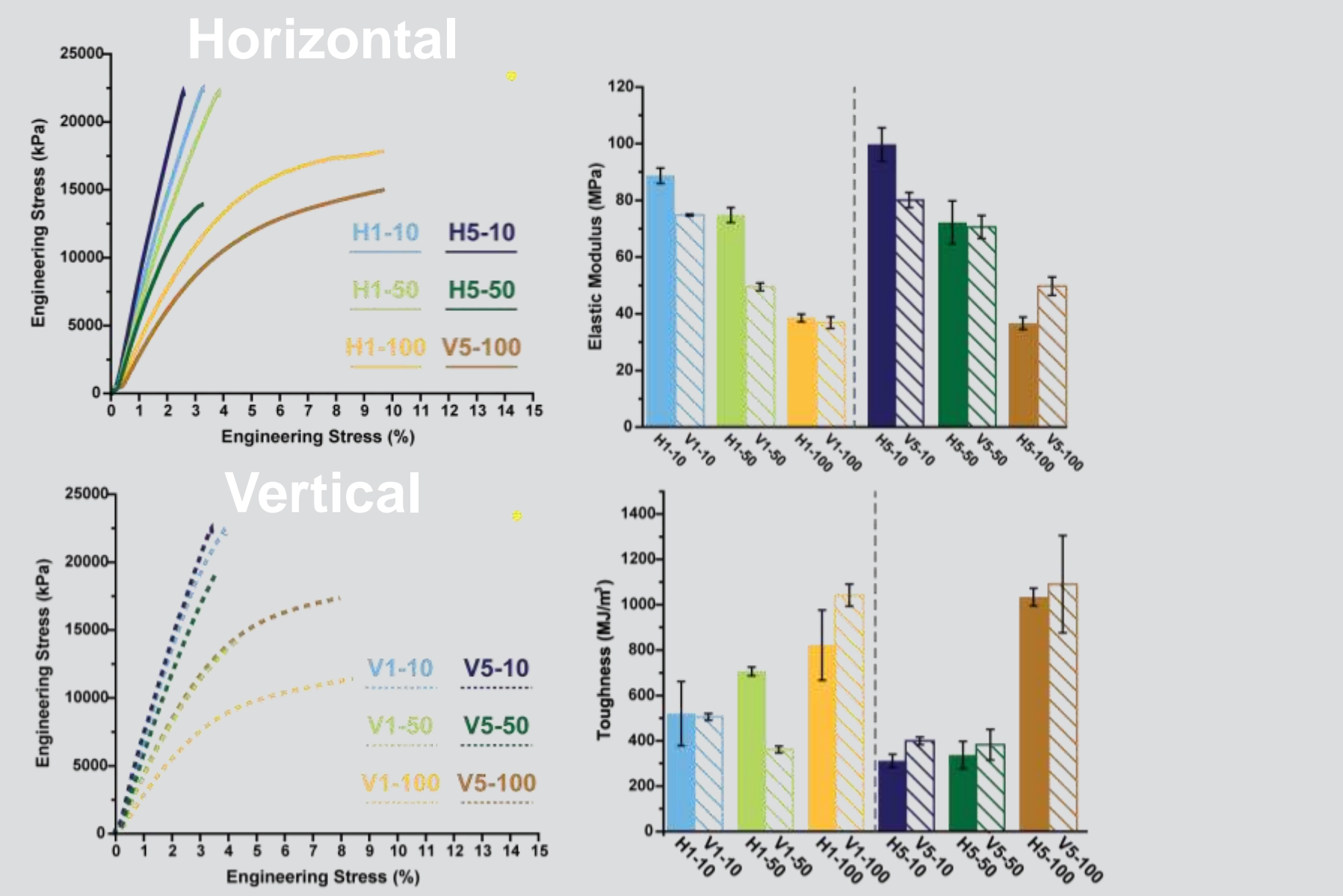
Layer thickness (μm)

CONCLUSION

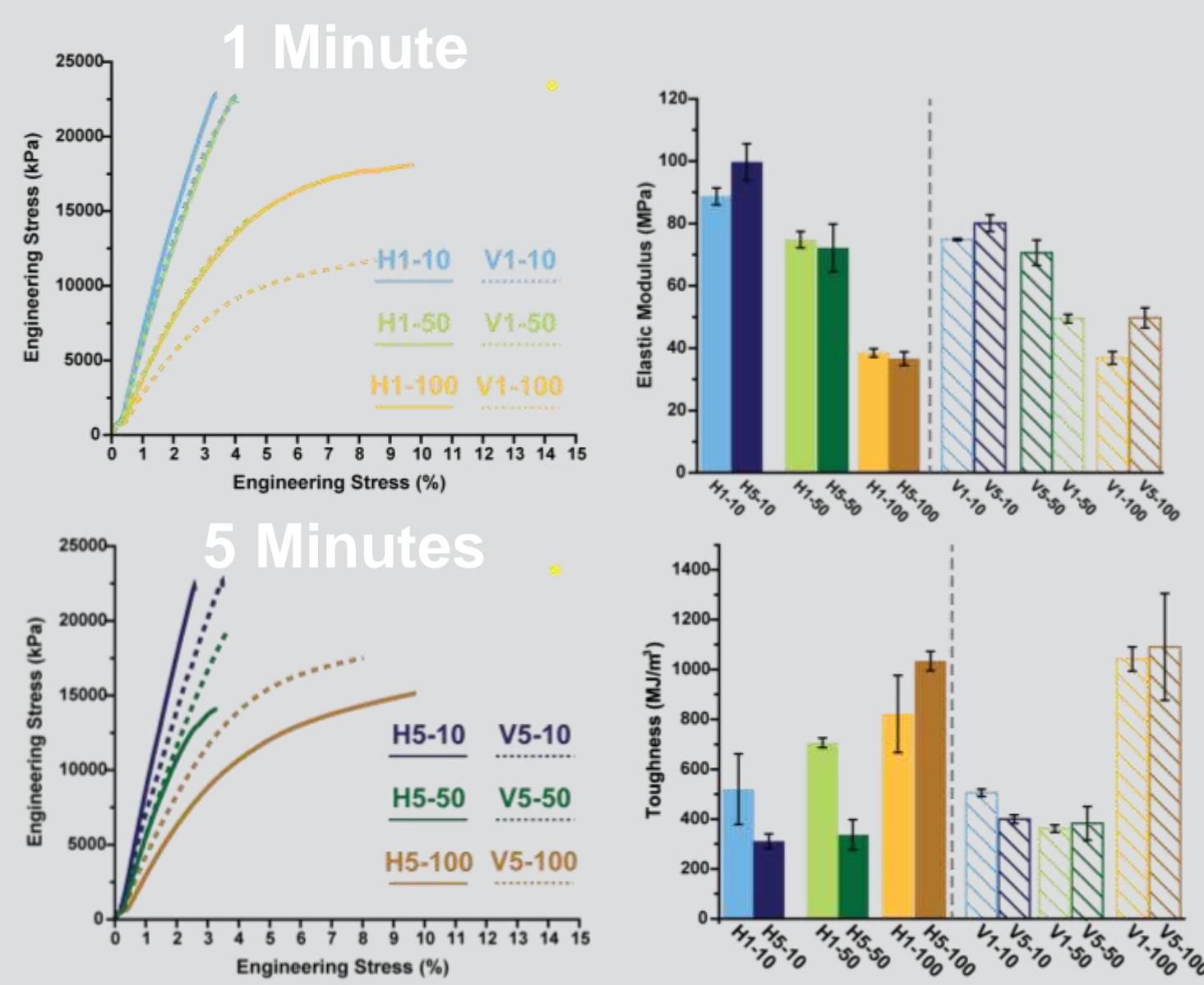


RESULTS: Tensile Testing

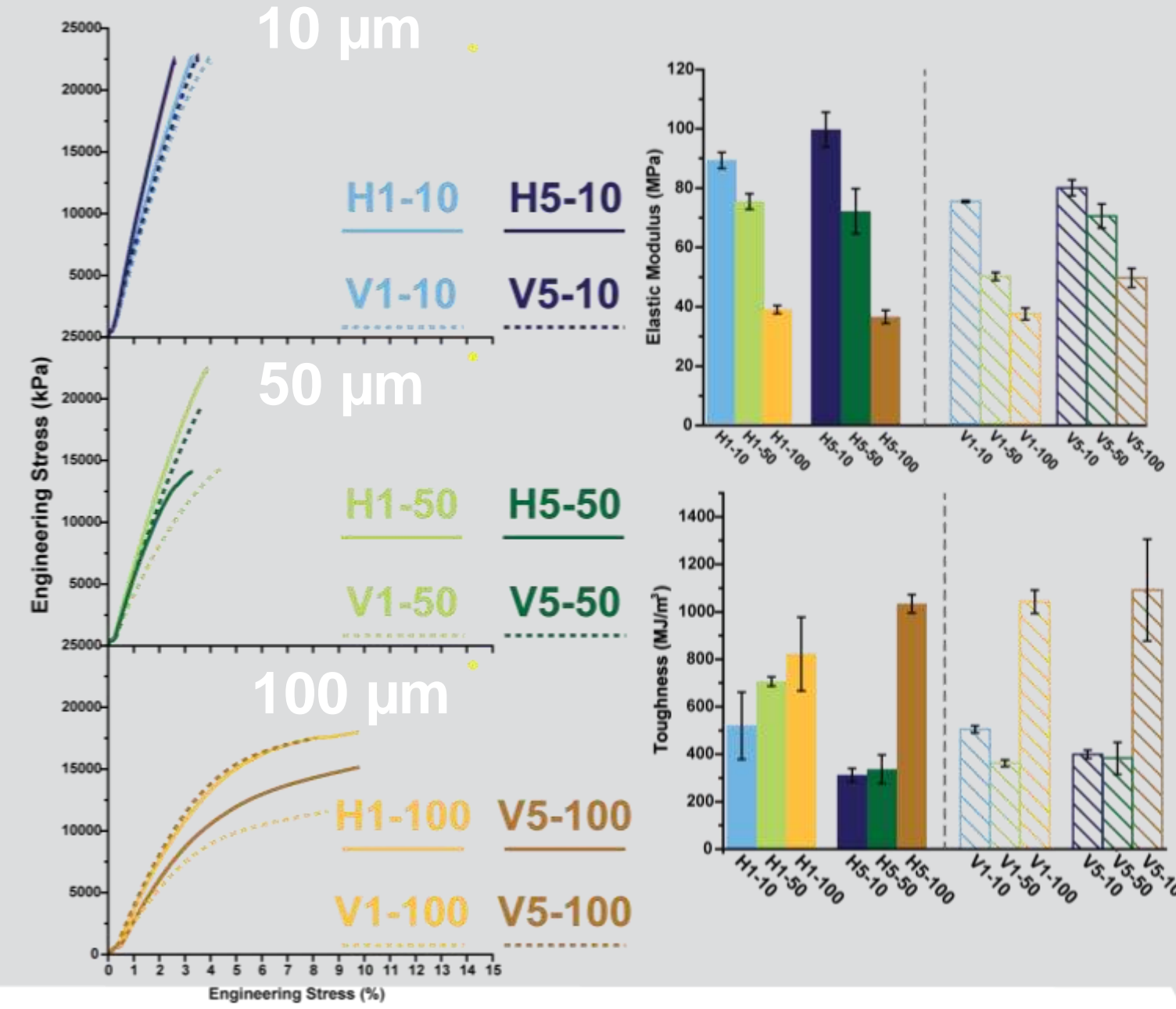
Effect of Print Direction



Effect of Post Cure



Effect of Layer Thickness



DEVCOM CBC @ DTRA CBD S&T Conference

Scan the QR Code to view all of CBC's
 2022 DTRA CBD S&T Conference materials
<https://cbc.devcom.army.mil/cbdst-conference/>

Acknowledgements: R&D funding for this project was provided by DTRA (Kendra McCoy) and FAMMS. The views expressed in this abstract are those of the authors and do not necessarily reflect the official policy or position of the Department of Defense or the U.S. Government.