**FAMA F** Center for Additive Manufacture of Advanced Ceramics

Novem<u>ber 4<sup>th</sup> 2021</u>

## **Tentative Agenda**

Nov 4 <sup>th</sup> EST		Speaker
10:00 -10:30	Introduction: Center vision and activities	CAMAC Leadership
10:30 -11:00	Invited Talk: "Working at the National Lab: Energy and Ceramics"	Corson Cramer (ORNL)
11:05 - 12:30	Proposal presentations: 10 mins proposal (7 mins +Q&A)	See Appendix A
12:30 - 1:00	Break: Zoom breakout rooms will be open	Open to all
1:00 1:30	Industry opportunities and challenges:	
	<ul> <li>"Manufacturing Opportunities with DANC"</li> </ul>	
	Presenter: Phil Williams	
	(Defense Alliance of North Carolina - DANC)	
	<ul> <li>"Update on the NIST ceramics AM project"</li> </ul>	
	Presenter: Igor Levin	
	(NIST)	
	(Contact <u>bamullan@uncc.edu</u> if you wish to avail of this opportunity at the next CAMAC meeting)	
1:30- 2:15	University Capabilities:	
	o NC State – C. Xu	
	<ul> <li>NC A&amp;T – S. Desai</li> </ul>	
	<ul> <li>UNC Charlotte – Y. Chen &amp; B. Mullany</li> </ul>	
2:15-2:30	Wrap Up:	CAMAC Director
2:30	Networking: Adjourn to Remo for Networking :	Open to all

**Technical Assistance:** 

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**Center Website:** 

https://camac.charlotte.edu/









## **Appendix A – Proposal Presentations**

Time	Title	Presenter
11:05	Development of Molecular Dynamics Capabilities for Additively Manufactured Ceramics in Ballistic Applications	Alireza Tabarraei (UNCC) / Praveen Ramaprabhu (UNCC)
11:17	Discrete Element Method Analysis of Ceramic Powders for Advanced Manufacturing	Taher Abu-Ledbeh (NC A&T)
11:29	Stereolithography of Silicon Carbide	Steve Schmid (UNCC) / Brigid Mullany (UNCC)
11:41	Additive Manufacturing of Ceramic Materials for Artificial Bone Grafts	Cheryl Xu (NC State) / Ahmed El-Ghannam (UNCC)
11:53	Ultrafast High-temperature Sintering for Additive Manufacturing of Ceramics	HaiTao Zhang (UNCC)
12:05	3D printing/Additive manufacturing of photocurable silicone carbide-polymer composite with densified microstructures	Erina Baynojir Joyee (UNCC)/ Ahmed El-Ghannam (UNCC)
12:17	Spatial Analysis of Additively Manufactured Ceramic Surfaces	Brigid Mullany (UNCC)







