

**Materials Science in Extreme Environments University Research Alliance**  
**Annual Technical Review**  
June 25-27, 2025  
Agenda\_v12

Wednesday, June 25, 2025 (all times Eastern), **Focus: State of MSEE, RA1, CCRI, Poster Session**

Time	Topic	Presenter(s)
8:30-9:15	Registration & Continental Breakfast	
9:15-9:25	Welcome	Tim Weihs/Eric Riffle
9:25-10:00	State of the MSEE URA <ul style="list-style-type: none"> <li>Goals, organizational structure, top-level highlights, progress, and metrics</li> <li>Workforce development activities</li> </ul>	Tim Weihs/Todd Hufnagel
10:00-10:10	Remarks by JHU Vice Provost for Research	Denis Wirtz
10:10-10:20	Remarks by DTRA Leadership	Ms. Richardson
10:20-10:25	RA1: Materials Properties and Failure Description (Introduces RA and FAs)	Todd Hufnagel/Jacob Calkins/Jeff Davis/Suzanne Kelly
RA1- FA1: Materials Properties for Reducing Uncertainty		
10:25-10:45	Five-year overview	Todd Hufnagel
10:45-11:00	Coffee Break	
11:00-12:00	Annual update by individual PI	Todd Hufnagel Gena Miloshevsky Mike Shields Adib Samin
12:00-1:15	Lunch Break	
RA1-FA2: Materials Constitutive Models		
1:15-1:35	Five-year overview	Ryan Hurley
1:35-2:35	Annual update by individual PI	Ryan Hurley Lie Yang (KT Ramesh) Todd Hufnagel Sprint Project (Hurley)
2:35-2:50	Coffee Break	
Cross Cutting Research Initiatives (CCRI)		
2:50-2:55	Cross Cutting Research Initiatives (CCRI) (Introduces RA and FAs)	Mark Foster/Jeff Davis/Dave Petersen/Jacob Calkins
2:55-3:15	Five-year Overview	Mark Foster
3:15-4:15	Annual Update	Colin Goodman (Mark Foster) Mike Shields Yilmaz Korkman (Vishal Patel) Sprint Project (Yilmaz Korkmaz)
4:15-4:35	Poster Session Overviews (2 minutes) <i>Students, Postdocs, and Congressionally funded PIs</i>	TBD students (6) Julie Skippers (AFIT) Awotwi Baffoe (MSU) Aiden Tomov (JHU)
4:35-6:35	Poster Session (Refreshments to be served)	Student, Postdocs, & Researchers
6:35	Adjourn day 1	

Thursday, June 26, 2025 (all times Eastern), **Focus: RA3, RA4**

Time	Topic	Presenter(s)
8:15-9:00	Welcome & Continental Breakfast	
9:00-9:05	RA3: Chemistry in Extreme Environments (Introduces RA and FAs)	Nick Glumac/Dave Petersen/Jeff Davis/Suzanne Kelly
RA3-FA1: Nuclear Fireball Plasma Chemistry		
9:05-9:25	Five-year Overview	Davide Curreli
9:25-10:25	Annual Update	Davide Curreli Mark Phillips Nick Glumac Mike DeMagistris (Raj Sinha)
10:25-10:40	Coffee Break	
10:40-11:40	Annual Update	Harry Radousky/Emily Weerakkody Debbie Levin Hari Harilal Sprint Project (Glumac)
11:40-12:55	Lunch Break	
12:55-1:00	RA4: Photon-Material Interactions (Introduces RA and FAs)	Farhat Beg/Jacob Calkins
RA4-FA1: X-ray Induced Blow-off and Plasma		
1:00-1:15	Five-year Overview	Gena Miloshevsky
1:15-1:30	Annual Update	Gena Miloshevsky
RA4-FA2: Direct Laser Impulse		
1:30-1:50	Five-year Overview	Farhat Beg
1:50-2:35	Annual Update	Farhat Beg Javier Garay Harry Radousky
2:35-2:50	Coffee Break	
2:50-3:35	Annual Update	Jeffrey Rowland (Spielman group) Mathew Polek (Hari Harilal) Sprint project (Beg)
3:35-3:55	Poster Session Overviews <i>Students, Postdocs, and Congressionally-funded PIs</i>	TBD students (7) Jochen Mueller (JHU) Paulette Clancy (JHU)
3:55-5:55	Poster session (Refreshments to be served)	Student, Postdocs, & Researchers
6:00-8:00	Banquet Dinner	<i>Speaker Sarah Mineiro</i>

Time	Topic	Presenter(s)
8:15-9:00	Welcome & Continental Breakfast	
9:00-9:05	RA2: Materials and Manufacturing for Synergistic Effects (Introduces RA and FA)	Mike Zachariah/Jeff Davis/Suzanne Kelly
RA2-FA2: Tailoring Chemistry via Materials		
9:05-9:25	Five-year Overview	Mike Zachariah
9:25-10:40	Annual Update	Mike Zachariah Ed Dreizin Ruku Borah (Tim Weihs) Lori Groven Lorenzo Mangolini
10:40-10:55	Coffee Break	
10:55-11:00	RA3-FA2: High Temperature Properties and Chemistry of Agents and Simulants (Introduces RA and FAs)	Nick Glumac/Hergen Eilers/Jeff Davis
RA3-FA2: High Temperature Properties and Chemistry of Agents and Simulants		
11:00-11:20	Five-year Overview	Hergen Eilers
11:20-12:05	Annual Update	Hergen Eilers Nick Glumac Mark Phillips
12:05-1:20	Lunch Break	
1:20-2:05	Annual Update	Tim Weihs Bryan Wong Ed Dreizin
2:05-2:20	Coffee Break	
2:20-3:05	Annual Update	Andrea Zambon (Raj Sinha) Suresh Menon Gennady Gor
3:05-3:30	Closing remarks	Tim Weihs/Eric Riffle