

Detailed Program
for the third biennial
Schaap Chemistry Symposium
Hope College, Holland, MI
July 13-14, 2023

Thursday, July 13, 2023

- 9:30am Check-in / packet pick-up (*for those not checking into hotel Wednesday evening*) Haworth Prefunction Lobby
Poster setup (*will remain up for duration of Symposium*) Haworth Ballroom 136/144
Find your abstract, or consult the table on the inside back cover of this book, to know which Poster # you have been assigned!
- 10am – 1pm OPENING SESSION** – Prof. Jason G. Gillmore presiding **Haworth Ballroom 134**
- 10:00am **Welcome and Introductory Remarks**
- 10:15am OPENING KEYNOTE (KL1): **Prof. Jen Heemstra**, Washington University in St. Louis
“A chemical biology toolbox for probing A-to-I RNA editing”
- 10:55am ST01 **Jane E. DeGroot**, Hope College
“First steps toward new 4-substituted BF₂-azo dyes”
- 11:10am ST02 **Bryan J. Forrest**, Hope College
“Exploring the effectiveness of novel directing groups for rhodium-catalyzed decarbonylation”
- 11:25am ST03 **Anna Koppin**, Hope College
“Assessing the function of lysine 473 in the trafficking of the cystine/glutamate transporter, System xc-”
- 11:40am **Break** (*feel free to browse posters!*) Haworth Ballroom 134/136/144
- 12:00pm ST04 **Dr. Michael R. Bergman**, Northeastern University
“Features of lens proteins that support lifelong vision”
- 12:15pm ST05 **Dr. Caitlin R. Lacker**, University of Wisconsin
“Functional group permutation: the conversion of alcohols to ethers through an atom exchange strategy”
- 12:30pm ST06 **Dr. Nuwandi Ariyasingha**, Wayne State University
“Disposable and handheld clinical-scale HP propane hyperpolarizer for pulmonary MRI”
- 12:45pm Announcements
- 1pm – 2pm LUNCH** **Phelps Dining Hall**

After lunch the symposium moves to the A. Paul Schaap Science Center for the afternoon.

2:20-3:20pm Student Short Talks in parallel sessions**Schaap 1000, Schaap 1019**

Schaap 1000 Prof. Meagan Elinski presiding	Schaap 1019 Prof. Elizabeth M. Sanford presiding
2:20 ST07 Amanda J. Smith , University of Illinois at Urbana-Champaign, <i>"Ferropoptosis and transcatheter chemoembolization for the treatment of liver cancer"</i>	2:20 ST11 David V. Price , Hope College <i>"Biodegradable metallopolymer: synthesis and polymerization of cyclic carbonate monomers with pendant metallocenes"</i>
2:35 ST08 Connor Bovia , Hope College <i>"Influence of nanoparticle chemical composition on in situ hydrogel friction"</i>	2:35 ST12 Kiera M. Estes , Purdue University <i>"Synthesis of materials for applications in protein structural determination by cryoEM"</i>
2:50 ST09 Chiamaka Peace Uzoewulu , NC State U. <i>"Isotopic labeling strategies for biomolecules in ionic liquid and hexafluoroisopropanol"</i>	2:50 ST13 Nathaniel G. Larson , Montana State U. <i>"Unconventional site-selectivity in palladium cross-couplings of dichloroheteroarenes."</i>
3:05 ST10 Carson C. Cole , Rice University <i>"Design of a rapidly folding collagen heterotrimer by optimizing specificity"</i>	3:05 ST14 Victoria L. Cinnater , Duke University <i>"Synthesis and photophysics of highly electron-deficient porphyrin oligomers"</i>

3:20pm Break (light refreshments available)**Schaap Sci. Ctr. Atrium****3:40pm Panel A: Industrial Careers in Chemistry****Schaap 1000**

Prof. Traci L. Smith presiding

Panel B: Faculty Careers at Undergraduate Institutions**Schaap 1019**

Prof. Kristin Dittenhafer-Reed presiding

4:40pm Break**Schaap Sci. Ctr. Atrium****5:00-5:45pm Student Short Talks in parallel sessions****Schaap 1000, Schaap 1019**

Schaap 1000 Prof. Kenneth L. Brown presiding	Schaap 1019 Prof. Elizabeth M. Sanford presiding
5:00 ST15 Emily E. Williford , Washington U St Louis <i>"Structure-based design of bisubstrate tetracycline destructase inhibitors that block flavin redox cycling"</i>	5:00 ST18 Joshua Morales Campos , Notre Dame <i>"Isolation of catalytic sites in 2D extended solids through atom-transfer/exchange reactions."</i>
5:15 ST16 Ryan M. Kosko , University of Rochester <i>"A bio-nano hybrid system for photochemical hydrogen production"</i>	5:15 ST19 Madison Shaffer , Michigan State Univ. Bioeconomy Institute, <i>"Optimizing the molecular design of pyridinium anolytes for energy storage applications"</i>
5:30 ST17 Olivia Sprys-Tellner , Hope College <i>"The effects of iron oxide nanoparticle exposure on a sentinel species: house sparrows as the new canary in the coalmine"</i>	5:30 ST20 Christopher Haines , Penn State Univ. <i>"Research in the Nacsa Group at Penn State: New approaches in electron transfer to develop synthetic organic transformation"</i>

5:45pm – 6:30pm Optional Building Tours**Schaap Science Center***Meet Hope undergraduate student and faculty tour guides in the Atrium for tours leaving every 15 minutes or so.*

Feel free to hang out in the Science Center until dinner (in the plaza right outside if the weather is fair), or you have time to go back to the Haworth Hotel before dinner to freshen up or change for dinner (and hopefully for the beach!).

FAIR WEATHER THURSDAY EVENING PLANS

6:30-7:30pm Picnic Dinner in Van Andel Plaza

just north of Schaap Sci. Ctr.

For air-conditioned dining and additional table space, feel free to bring your meal inside to tables in Schaap 1118.

8:00pm Motor coaches to Holland State Park Beach for dessert, optional swimming, and sunset over Lake Michigan!

Departing from Haworth Inn & Conference Center circle drive 7:45-8pm, returning by 10pm.

ALTERNATE INCLEMENT WEATHER THURSDAY EVENING PLANS

7-8:30pm Indoor "Picnic" Dinner & Dessert

Haworth Ballroom 134

8:30-11pm Motor coaches will run shuttles back and forth from Haworth to BAM! Family Fun Center

Bar, Bowling, Arcade, Billiards, Laser Tag, Indoor Ropes Course, Axe-Throwing, Escape Rooms, at your own expense. Information / discount available on flyer in your folder.

Friday, July 14, 2023

8:20am Panel C: Graduate School in Chemistry

Haworth Ballroom 134

Prof. Jason G. Gillmore presiding

Coffee & light breakfast available at 8:00am.

All university graduate students, postdocs, and faculty are encouraged to come share your insights with all Hope students expected to attend.

9:20am POSTER SESSION (with light refreshments)

Haworth Ballroom 136/144

11:20am Lunch on your own

8th St., downtown Holland

Local dining options provided in your packet.

1 – 3pm CLOSING SESSION – Prof. Jason G. Gillmore presiding

Haworth Ballroom 134

1:00pm ST21 Caleb Brzezinski, Hope College

"Extending computational chemistry to larger systems"

1:15pm ST22 Michael L. Taylor, JD, Harness Intellectual Property

"Chemistry after the classroom and inside an IP attorney law office"

1:30pm ST23 Emmanuela Chukwuezi, MS, Grand River Aseptic Manufacturing

"Topics in biopharmaceutical aseptic manufacturing."

1:45pm Break (last chance to browse posters!)

Haworth Ballroom 134/136/144

2:00pm CLOSING KEYNOTE (KL2): Prof. Jen Heemstra, Washington University in St. Louis

"Navigating the choices that shape your career"

2:35pm Concluding remarks, Surveys

3:00pm Please take down posters promptly (*must vacate space by 3:15pm*)

Haworth Ballroom 136/144

4:00pm Shuttle to GRR departs Haworth Inn & Conference Center (for preregistered guests only)

(two additional shuttles will depart on Saturday morning for those spending Friday night)