

# Sunday, 28 July

## 8am

Workshop and Demo Prep |SB-258

## 8:30am

Experiential Chemistry: A hands-on laboratory-based course for non-majors

JSB-218

ChemMatters: Building Curiosity and Encouraging Science Literacy ISB-108

Introduction to Integrating Green Chemistry and Sustainability in Undergraduate Teaching Laboratories ISB-114

Activities to develop international standards for ethics in chemistry ISB-231

Designing and implementing highengagement collaborative group work activities in chemistry classrooms ISB-243

Peak Potential: Affordable Solutions for Instructing Electrochemical Techniques |SB-244

Moving Students From Description to Explanation with VisChem

ISB-347

Cultivating Inclusivity and Equity in the Classroom

JSB-357

## 10am

Break

### 10:15am

Play It to Remember It; Effective Activities to Engage Student Learning ISB-108

Teaching Essential Chemistry Content Through Demonstrations

ISB-244

### 11:45am

Lunch

## 1pm

Chemistry Education Research: Graduate Student Research Symposium |SB-321

S306: The Post-Exam Classroom: Using Authentic Assessments to Build 21st-Century Skills

CP-103

S310: Professional Development for Pre-College Educators: Grants, Technology, and Resources within the Education Community

CP-111

S191: ACS-CES Award Symposium for Incorporation of Sustainability into Chemical Education

CP-114

S218: Building Bonds: Fostering a Sense of Belonging in Large-Enrollment Chemistry Courses

CP-139

S278: Implementing Active Learning in the First Two Years of Chemistry Coursework

CP-153

S61: Engaging Students in Organic Chemistry

CP-155

S77: Low Barrier Professional Development

CP-183

S36: Assessment Instruments: Design, Development, and Evaluation

CP-201

S91: Catalyzing Innovations in Chemistry Education Research: Harnessing the Power of Machine Learning and Generative Artificial Intelligence

CP-208

S177: Assessment and Measurement in Research and Practice

CP-211

S307: TA Training with Global Graduate Students

CP-220

S25: General Chemistry Lab: Curriculum and Best Practices

CP-222

S223: Solutions to Success: First- and Second-year Initiatives and Programs to Support STEM Diversity

CP-287

S225: Innovative Assessments in Introductory Chemistry Courses: Introducing More Effective Ways to Determine What Your Students Know CP-297

S109: Organic Chemistry for Non-Chemistry Majors

JSB-203

S0: General Papers

JSB-213

S267: Chemistry Education Research: Graduate Student Research Symposium

ISB-321

Collaborative Huddle Engaging Magnification: CHEM

JSB-218

Using Pipet Bulb Rockets to Introduce Stoichiometry

ISB-208

Assessment of Impacts of Green Chemistry Curriculum

ISB-114

It's All Fun and Games When Everyone Learns!

ISB-231

Teaching Essential Chemistry Content Through Demonstrations

JSB-244

Food in the Chemistry Class

JSB-261M

REAL Chemistry: Relevant, Equitable, Active Learning Courseware for General Chemistry

JSB-357



Continued from Sunday, 28 July

2:30pm

Break

2:45pm

S306: The Post-Exam Classroom: Using Authentic Assessments to Build 21st-Century Skills

CP-103

S310: Professional Development for Pre-College Educators: Grants, Technology, and Resources within the Education Community

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S91: Catalyzing Innovations in Chemistry Education Research: Harnessing the Power of Machine Learning and Generative Artificial Intelligence

CP-208

S177: Assessment and Measurement in Research and Practice

CP-211

S307: TA Training with Global Graduate Students

CP-220

S25: General Chemistry Lab: Curriculum and Best Practices

CP-222

S223: Solutions to Success: First- and Second-year Initiatives and Programs to Support STEM Diversity

CP-287

S225: Innovative Assessments in Introductory Chemistry Courses: Introducing More Effective Ways to Determine What Your Students Know

CP-297

S237: Learning Chemistry Beyond the Traditional Classroom

JSB-203

S0: General Papers

ISB-213

S267: Chemistry Education Research: Graduate Student Research Symposium ISB-321

Manipulatives for Chemistry: Helping Kids See

ISB-108

Building a kinetics unit plan using American Association of Chemistry Teachers (AACT) resources

JSB-244

5pm

Welcome to BCCE 2024

Singletary Center

5:30pm

Kevnote

Monday, 29 July

7am

Breakfast

Champions Kitchen, inside Gatton Student Center

8am

Workshop Demo and Prep

JSB-258

8:30am

S86: Survival Skills 101: A Guide for Newer Teachers

CP-103

S88: Bridging the Gap Between Secondary and Higher Education Chemistry

CP-111

S242: Integrating Green Chemistry and Sustainability into Chemistry Education

CP-114

S218: Building Bonds: Fostering a Sense of Belonging in Large-Enrollment Chemistry Courses

CP-139

S214: Active Learning Strategies in Chemistry with Large Enrollment Lectures

CP-153

S61: Engaging Students in Organic Chemistry

CP-155

S32: Inclusive Practices for Unrepresented Groups in STEM

CP-179

S36: Assessment Instruments: Design, Development, and Evaluation

CP-201

S156: Educational Research in the Science Classroom

CP-208

S177: Assessment and Measurement in Research and Practice

CP-211



#### Continued from Monday, 29 July

S260: From Theory to Practice: Showcasing How CER Researchers Apply Theories and Methods for Inquiry CP-220

S25: General Chemistry Lab: Curriculum and Best Practices

CP-222

S34: Activation Barriers to Well-being: Challenges and Approaches to Promoting Well-being for Students, Faculty, and Staff

CP-287

S199: Best Practices in Academic Advising and Mentoring

CP-297

S255: Biochemistry Education: Discussions of the Lecture Learning Environment

ISB-103

S241: ChemEd X Presents Demonstrations to Engage Your Students and Augment Student Learning

ISB-121

S237: Learning Chemistry Beyond the Traditional Classroom

ISB-203

S267: Chemistry Education Research: Graduate Student Research Symposium ISB-321

Centering High School Chemistry Class on Making Sense of Phenomena ISB-218

Inclusive first day and syllabus tips ISB-108

The POGIL Project Workshop: Fundamentals of POGIL

ISB-114

From pedagogical research to classroom implementation

ISB-231

Transforming Chemistry Education: The Power of Personification, Storytelling, and Inclusivity

ISB-243

Reimagining Introductory Chemistry Laboratory Curriculum: Skills-Based, Competency-Focused Lab Curriculum ISB-337

Fueling Education Transformation: The Dynamic Chemistry of Community-Based Learning

ISB-347

Computational Chemistry in Your Learning Space

JSB-357

### 10am

Break

## 10:15am

S86: Survival Skills 101: A Guide for **Newer Teachers** 

CP-103

S263: The Evolution of ALEKS Organic Chemistry

CP-111

S242: Integrating Green Chemistry and Sustainability into Chemistry Education CP-114

S218: Building Bonds: Fostering a Sense of Belonging in Large-Enrollment Chemistry Courses

CP-139

S214: Active Learning Strategies in Chemistry with Large Enrollment Lectures

CP-153

S61: Engaging Students in Organic Chemistry

CP-155

S32: Inclusive Practices for Unrepresented Groups in STEM CP-179

S82: Small Teaching - Making Modest but Powerful Changes to Improve Student Learning

CP-183

S36: Assessment Instruments: Design, Development, and Evaluation

CP-201

S156: Educational Research in the Science Classroom

CP-208

S132: The Theory and Practice of Analytical Chemistry In the Classroom

CP-211

S260: From Theory to Practice: Showcasing How CER Researchers Apply Theories and Methods for Inquiry CP-220

S25: General Chemistry Lab: Curriculum and Best Practices

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S34: Activation Barriers to Well-being: Challenges and Approaches to Promoting Well-being for Students, Faculty, and Staff

CP-287

S255: Biochemistry Education: Discussions of the Lecture Learning Environment

ISB-103

S241: ChemEd X Presents Demonstrations to Engage Your Students and Augment Student Learning

ISB-121

S237: Learning Chemistry Beyond the Traditional Classroom

ISB-203

S267: Chemistry Education Research: Graduate Student Research Symposium

ISB-321

Integrating Artificial Intelligence in Chemistry Education: Strategies for Enhancing Higher Ed Learning

ISB-108

Digital Learning Strategies for K-12 Chemistry Classrooms

ISB-243

### 11:45am

Lunch



#### Continued from Monday, 29 July

## 2pm

S103: Opportunities from AACT: Programs and Professional Learning CP-111

S242: Integrating Green Chemistry and Sustainability into Chemistry Education CP-114

S133: Active and Inquiry Learning in the Chemistry Teaching Laboratory
CP-139

S214: Active Learning Strategies in Chemistry with Large Enrollment Lectures

CP-153

S61: Engaging Students in Organic Chemistry

CP-155

S217: Cultivating Inclusivity and Equity in the Classroom

CP-179

S82: Small Teaching - Making Modest but Powerful Changes to Improve Student Learning

CP-183

S36: Assessment Instruments: Design, Development, and Evaluation

CP-201

S175: Reflections from Pandemic Teaching and Beyond: Caring for our Students While Learning to Care for Ourselves and Each Other

CP-208

S132: The Theory and Practice of Analytical Chemistry In the Classroom CP-211

S260: From Theory to Practice: Showcasing How CER Researchers Apply Theories and Methods for Inquiry CP-220

S25: General Chemistry Lab: Curriculum and Best Practices

CP-222

S34: Activation Barriers to Well-being: Challenges and Approaches to Promoting Well-being for Students, Faculty, and Staff

CP-287

S49: Cross-Course or Whole Curriculum Reform Efforts

CP-297

S255: Biochemistry Education: Discussions of the Lecture Learning Environment

JSB-103

S241: ChemEd X Presents Demonstrations to Engage Your Students and Augment Student Learning

JSB-121

S206: "Message In A Bottle": How Do We Reach Generation Z in Class?

JSB-203

S159: Beyond Open Educational Resources (OER): User Experience, Benefits, Challenges and Opportunities

ISB-213

S267: Chemistry Education Research: Graduate Student Research Symposium |SB-321 Empowering Tomorrow's Molecule Innovators: Design Thinking, Sustainable Solar Cells, and Digital Molecule Making Workshop

ISB-218

Beyond canceling: Developing authentic proportional reasoning in chemistry ISB-208

A Day in the Life of an Academic: Case Studies in Support of Your Diversity, Equity, Inclusion (DEI) and Belonging Work

JSB-108

A "Micro-Scale" Community of Practice for Promoting Student Engagement in General Chemistry: Discuss, Dream, Develop, and Practice

ISB-114

The POGIL Project Workshop: Realworld Context and POGIL

ISB-231

A Chemical Inquiry: Let's Master Equilibrium!

JSB-243

American Association of Chemistry Teachers (AACT) Resources for AP Chemistry

JSB-244

Foundations for Chemistry Education Research & Publications

ISB-347

Teaming up with undergraduate Learning Assistants (LAs) to foster active and inclusive chemistry learning environments

JSB-357

## 3:30pm

**Break** 

## 3:45pm

S229: ELIPSS and Beyond: Celebrating the work and impact of 2023 James Flack Norris Awardees Renée Cole, Juliette Lantz, and Suzanne Ruder

CP-103

S66: Views from the Classrooms of Award Winning Chemistry Teachers CP-111

S242: Integrating Green Chemistry and Sustainability into Chemistry Education CP-114

S133: Active and Inquiry Learning in the Chemistry Teaching Laboratory

CP-139

S214: Active Learning Strategies in Chemistry with Large Enrollment Lectures

CP-153

S61: Engaging Students in Organic Chemistry

CP-155

S217: Cultivating Inclusivity and Equity in the Classroom

CP-179

S82: Small Teaching - Making Modest but Powerful Changes to Improve Student Learning

CP-183



#### Continued from Monday, 29 July

S258: Teaching and Learning in the Al Revolution

CP-201

S175: Reflections from Pandemic Teaching and Beyond: Caring for our Students While Learning to Care for Ourselves and Each Other

CP-208

S132: The Theory and Practice of Analytical Chemistry In the Classroom CP-211

S45: 3D Printing in Chemical Education: Engaging Students and Creating Tools for Active Learning

CP-220

S47: Beyond Confirmatory Experiences: Teaching in the Chemistry Laboratory CP-222

S34: Activation Barriers to Well-being: Challenges and Approaches to Promoting Well-being for Students, Faculty, and Staff

CP-287

S49: Cross-Course or Whole Curriculum Reform Efforts

CP-297

S255: Biochemistry Education: Discussions of the Lecture Learning Environment

ISB-103

S206: "Message In A Bottle": How Do We Reach Generation Z in Class? ISB-203 S159: Beyond Open Educational Resources (OER): User Experience, Benefits, Challenges and Opportunities |SB-213

S267: Chemistry Education Research: Graduate Student Research Symposium ISB-321

Copper: Two Inquiries to Begin and End the School Year

JSB-243

Facilitating Lesson Plan Development for Chemistry Outreach Opportunities ISB-244

# Tuesday, 30 July

### 7am

#### Breakfast

Champions Kitchen, inside Gatton Student Center

#### 8am

Workshop and Demo Prep JSB-258

### 8:30am

S229: ELIPSS and Beyond: Celebrating the work and impact of 2023 James Flack Norris Awardees Renée Cole, Juliette Lantz, and Suzanne Ruder

CP-103

S66: Views from the Classrooms of Award Winning Chemistry Teachers CP-111 S164: Inside the Division of Chemical Education

CP-139

S59: Engaging Students & Curriculum Development in Large Classes

CP-153

S61: Engaging Students in Organic Chemistry

CP-155

S83: Developing Mechanistic Reasoning in Organic Chemistry: Research and Practice

CP-179

S82: Small Teaching - Making Modest but Powerful Changes to Improve Student Learning

CP-183

S239: Exploration of Student-centered Assessments in Chemistry Education CP-201

S233: Computers in Chemical Education CP-208

S132: The Theory and Practice of Analytical Chemistry In the Classroom CP-211

S75: Alternative Pathways in General Chemistry: Meeting the Needs of Varied Student Populations

CP-220

S47: Beyond Confirmatory Experiences: Teaching in the Chemistry Laboratory CP-222

S114: Integrating Humanities into Chemistry Education

CP-287

S60: Promoting Global Collaboration in Chemistry Education: Insights from International Initiatives

CP-297

S254: Biochemistry Education: Discussions of the Laboratory Learning Environment

ISB-103

S21: Grading for Growth

JSB-121

S188: Process Oriented Guided Inquiry Learning (POGIL) in the Classroom and laboratory

ISB-203

S267: Chemistry Education Research: Graduate Student Research Symposium ISB-321

A Tale of Two Platforms: Using Achieve and Smart Worksheets in Labs

ISB-218

Making the Most of the Syllabus: Centering Learning from the Start

JSB-108

An ACS Exams committee experience: Writing and editing exam items as well as considering partial credit assignment of incorrect responses in the writing process

ISB-114

LibreTexts: Building your OER textbook for your class

ISB-231

The POGIL Project Workshop: Introduction to POGIL Labs

ISB-243



#### Continued from Tuesday, 30 July

Art and Archaeology-Inspired Chemistry Labs and Activities

JSB-244

Real Intelligence (Still) Beats Artificial Intelligence: Engaging Students with Inquisitive Molecular Modeling

JSB-337

Summative rubric evaluation for the assessment of mechanism questions in the second-year organic chemistry course sequence

ISB-347

Backward-Design Your Laboratory Course

JSB-357

## 8:35am

S242: Integrating Green Chemistry and Sustainability into Chemistry Education CP-114

#### 10am

Break

### 10:15am

S229: ELIPSS and Beyond: Celebrating the work and impact of 2023 James Flack Norris Awardees Renée Cole, Juliette Lantz, and Suzanne Ruder CP-103

S66: Views from the Classrooms of Award Winning Chemistry Teachers CP-111 S242: Integrating Green Chemistry and Sustainability into Chemistry Education CP-114

S164: Inside the Division of Chemical Education

CP-139

S59: Engaging Students & Curriculum Development in Large Classes

CP-153

S83: Developing Mechanistic Reasoning in Organic Chemistry: Research and Practice

CP-179

S158: Designing and Facilitating Chemistry Learning Environments Anchored in Phenomena

CP-183

S239: Exploration of Student-centered Assessments in Chemistry Education CP-201

S233: Computers in Chemical Education CP-208

S132: The Theory and Practice of Analytical Chemistry In the Classroom CP-211

S75: Alternative Pathways in General Chemistry: Meeting the Needs of Varied Student Populations

CP-220

S47: Beyond Confirmatory Experiences: Teaching in the Chemistry Laboratory CP-222

S114: Integrating Humanities into Chemistry Education

CP-287

S60: Promoting Global Collaboration in Chemistry Education: Insights from International Initiatives

CP-297

S254: Biochemistry Education: Discussions of the Laboratory Learning Environment

JSB-103

S21: Grading for Growth

JSB-121

S124: George R. Hague Memorial AP/IB Chemistry Symposium

ISB-203

S37: Chemistry Education Research: Undergraduate Student Research Symposium

JSB-213

S267: Chemistry Education Research: Graduate Student Research Symposium ISB-321

Beyond "verbatim" transcription: Using techniques from applied linguistics to enhance the analysis of classroom talk in chemistry education research

JSB-108

## 11:45am

Lunch

## 2pm

S167: Playing Fun-tastic Games in Chemistry

CP-103

S230: Honoring Laura Trout: Making POGIL at the High School Level a Reality CP-111

S242: Integrating Green Chemistry and Sustainability into Chemistry Education CP-114

S164: Inside the Division of Chemical Education

CP-139

S59: Engaging Students & Curriculum Development in Large Classes

CP-153

S298: Present and Future Directions in Organic Chemistry Laboratory Courses CP-155

S83: Developing Mechanistic Reasoning in Organic Chemistry: Research and Practice

CP-179

S158: Designing and Facilitating Chemistry Learning Environments Anchored in Phenomena

CP-183

S239: Exploration of Student-centered Assessments in Chemistry Education

CP-201

S233: Computers in Chemical Education CP-208

S98: Effective Approaches to Inclusive Chemistry Education

CP-211

S136: Data-driven Approaches for Using Interactive Online Courseware to Improve Learning and Increase Equity CP-220



#### Continued from Tuesday, 30 July

S47: Beyond Confirmatory Experiences: Teaching in the Chemistry Laboratory CP-222

S114: Integrating Humanities into Chemistry Education

CP-287

S228: Multilingual Learners in Chemistry

CP-297

S253: Biochemistry Education in Honor of Vicky Minderhout

ISB-103

S174: Disrupting Grading

JSB-121

S124: George R. Hague Memorial AP/IB Chemistry Symposium

JSB-203

S37: Chemistry Education Research: Undergraduate Student Research Symposium

ISB-213

S267: Chemistry Education Research: Graduate Student Research Symposium

ISB-321

Classroom Exercises for General and Organic Chemistry Involving Wildlife Forensics and Food Fraud

ISB-108

ACS Custom Exams: How you can build and use an ACS exam that fits your needs while still having national data for comparison.

JSB-114

ADAPT: LibreTexts Online Homework System

JSB-231

The POGIL Project Workshop: Student-Centered Learning in the Laboratory: The Science Writing Heuristic Approach

JSB-243

A Culminating General Chemistry Laboratory Experiment that Reviews Key Learning Goals Using Natural Pigments

JSB-244

Reducing Barriers to Learning with Digital Chemistry Notebooks

ISB-337

Aligning laboratory experiments with learning objectives for focused formative assessment

JSB-347

Active Learning in Organic Chemistry: Backward Design

ISB-357

## 3:30pm

Break

## 3:45pm

S167: Playing Fun-tastic Games in Chemistry

CP-103

S230: Honoring Laura Trout: Making POGIL at the High School Level a Reality CP-111

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S164: Inside the Division of Chemical Education

CP-139

S59: Engaging Students & Curriculum Development in Large Classes

CP-153

S298: Present and Future Directions in Organic Chemistry Laboratory Courses CP-155

S83: Developing Mechanistic Reasoning in Organic Chemistry: Research and Practice

CP-179

S158: Designing and Facilitating Chemistry Learning Environments Anchored in Phenomena

CP-183

S131: Engaging Students using the Chemistry of Beverage Alcohol CP-201

S233: Computers in Chemical Education CP-208

S98: Effective Approaches to Inclusive Chemistry Education

CP-211

S136: Data-driven Approaches for Using Interactive Online Courseware to Improve Learning and Increase Equity CP-220

S47: Beyond Confirmatory Experiences: Teaching in the Chemistry Laboratory CP-222

S114: Integrating Humanities into Chemistry Education

CP-287

S228: Multilingual Learners in Chemistry

CP-297

S174: Disrupting Grading

JSB-121

S124: George R. Hague Memorial AP/IB Chemistry Symposium

ISB-203

S37: Chemistry Education Research: Undergraduate Student Research Symposium

ISB-213

S267: Chemistry Education Research: Graduate Student Research Symposium

JSB-321

Writing equitable assessments: Strategies for chemistry educators and chemistry education researchers to construct more accessible and inclusive assessments

ISB-108

# Wednesday, 31 July

#### 7am

#### Breakfast

Champions Kitchen, inside Gatton Student Center



#### Continued from Wednesday, 31 July

## 8am

Workshop and Demo Prep JSB-258

### 8:30am

S303: Teaching Chemical Safety In The Classroom/Laboratory

CP-103

S275: Integrating Forensic Science Courses Into the Curriculum and Growing Forensic Science Programs

CP-111

S268: Greener Practices for Organic Chemistry Labs

CP-114

S164: Inside the Division of Chemical Education

CP-139

S59: Engaging Students & Curriculum Development in Large Classes

CP-153

S84: Active Learning in Organic Chemistry

CP-155

S76: Mixing It Up With Informal Chemistry Education: An Unconventional Chemistry Circus -Where Formal Meets Fun!

CP-183

S131: Engaging Students using the Chemistry of Beverage Alcohol CP-201

S252: Connecting Course Based and Traditional Research Experiences
CP-208

S40: Communities of Practice Transforming Chemistry Education CP-211

S75: Alternative Pathways in General Chemistry: Meeting the Needs of Varied Student Populations

CP-220

S31: Current Research on the Undergraduate Chemistry Laboratory CP-222

S114: Integrating Humanities into Chemistry Education

CP-287

S42: Scaffolding and Assessing Professional Skills and Science Practices in the Undergraduate Curriculum: Addressing the 2023 ACS Guidelines

CP-297

S271: Pedagogical Innovations for Upper Division Labs

ISB-103

S174: Disrupting Grading

JSB-121

S299: Artificial Intelligence in Chemistry Education

ISB-203

ISB-108

S267: Chemistry Education Research: Graduate Student Research Symposium |SB-321

Inventorying in-lab opportunities to engage in expert-like thinking

Introduction to Machine Learning in Chemistry using Python. Part 1: Working with a data set and building a chemistry machine learning model. Part 2: Building data sets and cheminformatics models

ISB-114

Writing Competitive Grant Proposals |SB-221

The POGIL Project Workshop: Classroom Facilitation

ISB-231

From Seed to Tree: Integrating Racial, Social, and Environmental Justice Principles into your Chemistry Curriculum

ISB-243

3D Printable Resources for Engaging Students in the Exploration of Instrument Design and Performance: Inexpensive and User-Friendly Instrument Kits for STEM Educators ISB-244

Active Learning in Organic Chemistry: Improve student learning and engagement with formative assessment and collaborative learning |SB-337

Transitioning from Excel to Python for Chemistry Lab Data Analysis

ISB-347

Integrating Open Educational Resources (OER) into the Chemistry Curriculum with OpenStax and Aktiv Chemistry

ISB-357

### 10am

Break

### 10:15am

S204: Innovations, Practices, and Challenges in Large Enrollment Laboratory Courses

CP-103

S275: Integrating Forensic Science Courses Into the Curriculum and Growing Forensic Science Programs

CP-111

S268: Greener Practices for Organic Chemistry Labs

CP-114

S164: Inside the Division of Chemical Education

CP-139

S59: Engaging Students & Curriculum Development in Large Classes

CP-153

S84: Active Learning in Organic Chemistry

CP-155

S244: Research Investigations in STEM Identity in Chemistry Learning Environments

CP-179

S76: Mixing It Up With Informal Chemistry Education: An Unconventional Chemistry Circus -Where Formal Meets Fun!

CP-183



#### Continued from Wednesday, 31 July

S131: Engaging Students using the Chemistry of Beverage Alcohol CP-201

S138: Course-based Undergraduate Research Experiences (CUREs): Assessments, Barriers and Opportunities

CP-208

S40: Communities of Practice Transforming Chemistry Education CP-211

S75: Alternative Pathways in General Chemistry: Meeting the Needs of Varied Student Populations

CP-220

S31: Current Research on the Undergraduate Chemistry Laboratory CP-222

S57: Art and Archaeology as a Vehicle to Teach Core Chemical Concepts

CP-287

S42: Scaffolding and Assessing Professional Skills and Science Practices in the Undergraduate Curriculum: Addressing the 2023 ACS Guidelines

CP-297

S271: Pedagogical Innovations for Upper Division Labs

ISB-103

S174: Disrupting Grading

ISB-121

S299: Artificial Intelligence in Chemistry Education

JSB-203

S74: Engaging Students in Physical Chemistry

JSB-213

S267: Chemistry Education Research: Graduate Student Research Symposium

JSB-321

Engaging Organic Chemistry Students Using an Effective Active-Learning Approach

JSB-108

### 11:45am

Lunch

## 2pm

S204: Innovations, Practices, and Challenges in Large Enrollment Laboratory Courses

CP-103

S163: ChatGPT in the Classroom: Empowering Educators with Al

CP-114

S164: Inside the Division of Chemical Education

CP-139

S84: Active Learning in Organic Chemistry

CP-155

S244: Research Investigations in STEM Identity in Chemistry Learning Environments

CP-179

S38: Team-Based Learning: Implementation, Practice, and Evaluation

CP-183

S194: Trends in GOB Chemistry CP-201

S138: Course-based Undergraduate Research Experiences (CUREs): Assessments, Barriers and Opportunities

CP-208

S40: Communities of Practice Transforming Chemistry Education

CP-211

S75: Alternative Pathways in General Chemistry: Meeting the Needs of Varied Student Populations

CP-220

S31: Current Research on the Undergraduate Chemistry Laboratory CP-222

S57: Art and Archaeology as a Vehicle to Teach Core Chemical Concepts

CP-287

S20: ChemEd X: Engaging with Contributors

CP-297

S276: Designing and Implementing CUREs for 1st and 2nd year Chemistry Courses

JSB-103

S72: Re-envisioning Grading and Assessments for Enhanced Student's Learning Experience

ISB-121

S74: Engaging Students in Physical Chemistry

JSB-213

S267: Chemistry Education Research: Graduate Student Research Symposium

JSB-321

Do we test what we want to test?: From learning outcomes to an assessment plan to using assessment results to inform classroom and programmatic targets

JSB-108

The POGIL Project Workshop: Teaching computational chemistry using Chemcompute

ISB-231

The POGIL Project Workshop: Development and Implementation of Guided Inquiry Experiments for Physical Chemistry

ISB-244

OK I know about active learning but how do I do it?

JSB-337

Introduction to IONiC / VIPEr: Using and Sharing Inorganic Chemistry Education Resources

JSB-347

Enhancing Assessment of Student Learning in Your CURE

ISB-357

## 3:30pm

Break



#### Continued from Wednesday, 31 July

## 3:45pm

S204: Innovations, Practices, and Challenges in Large Enrollment Laboratory Courses

CP-103

S163: ChatGPT in the Classroom: Empowering Educators with Al

CP-114

S231: Active Learning in the Organic Chemistry Laboratory

CP-153

S84: Active Learning in Organic Chemistry

CP-155

S244: Research Investigations in STEM Identity in Chemistry Learning Environments

CP-179

S38: Team-Based Learning: Implementation, Practice, and Evaluation

CP-183

S194: Trends in GOB Chemistry CP-201

S138: Course-based Undergraduate Research Experiences (CUREs): Assessments, Barriers and Opportunities

CP-208

S75: Alternative Pathways in General Chemistry: Meeting the Needs of Varied Student Populations

CP-220

S31: Current Research on the Undergraduate Chemistry Laboratory CP-222

S57: Art and Archaeology as a Vehicle to Teach Core Chemical Concepts

CP-287

S20: ChemEd X: Engaging with Contributors

CP-297

S276: Designing and Implementing CUREs for 1st and 2nd year Chemistry Courses

ISB-103

S72: Re-envisioning Grading and Assessments for Enhanced Student's Learning Experience

JSB-121

S74: Engaging Students in Physical Chemistry

ISB-213

S267: Chemistry Education Research: Graduate Student Research Symposium |SB-321

# Thursday, 1 August

### 7am

#### **Breakfast**

Champions Kitchen, inside Gatton Student Center

### 8:30am

S106: Al and Machine Learning as Agents of Change in Chemistry Education

CP-114

S231: Active Learning in the Organic Chemistry Laboratory

CP-153

S84: Active Learning in Organic Chemistry

CP-155

S261: STEM Outreach

CP-183

S194: Trends in GOB Chemistry

CP-201

S138: Course-based Undergraduate Research Experiences (CUREs): Assessments, Barriers and Opportunities

CP-208

S176: Lessons Learned as a Chemistry Lecture/Lab Coordinator

CP-211

S195: Big 10 Gen Chem Labs: Advances, Innovations, and Challenges

CP-222

S57: Art and Archaeology as a Vehicle to Teach Core Chemical Concepts

CP-287

S203: Learning from Failure

CP-297

S72: Re-envisioning Grading and Assessments for Enhanced Student's Learning Experience

JSB-121

S74: Engaging Students in Physical Chemistry

JSB-213

S267: Chemistry Education Research: Graduate Student Research Symposium

JSB-321

Real Intelligence (Still) Beats Artificial Intelligence: Engaging Students with Inquisitive Molecular Modeling

JSB-108

WebMO Hands-On Workshop

JSB-114

Chemistry with Unity

JSB-243

Aligning ELIPSS transferable skill rubrics with assessment needs

ISB-337

Development and Implementation of a Learning Model Where Students Experience the Scientific Research Process Through Bioinformatic Protein Modeling

ISB-347

Online certification courses to help experimental graduate students incorporate molecular modeling into their research

ISB-357

### 10am

Break



### Continued from Thursday, 1 August

## 10:15am

S106: Al and Machine Learning as Agents of Change in Chemistry Education

CP-114

S231: Active Learning in the Organic Chemistry Laboratory

CP-153

S84: Active Learning in Organic Chemistry

CP-155

S261: STEM Outreach

CP-183

S194: Trends in GOB Chemistry

CP-201

S138: Course-based Undergraduate Research Experiences (CUREs): Assessments, Barriers and Opportunities

CP-208

S176: Lessons Learned as a Chemistry Lecture/Lab Coordinator

CP-211

S195: Big 10 Gen Chem Labs: Advances, Innovations, and Challenges

CP-222

S57: Art and Archaeology as a Vehicle to Teach Core Chemical Concepts

CP-287

S203: Learning from Failure

CP-297

S72: Re-envisioning Grading and Assessments for Enhanced Student's Learning Experience

JSB-121

S74: Engaging Students in Physical Chemistry

ISB-213