

A photograph of the Austin skyline, featuring several tall skyscrapers and a bridge over a body of water, likely the Colorado River. The sky is clear and blue.

**June 14-17, 2027 | Austin, Texas**

**2027 Bioremediation, Land Opportunity,  
Optimization & Minerals (BLOOM) Conference**

# **Call for Abstracts**

**Abstracts due November 16, 2026**

**[battelle.org/bloom-conference](https://battelle.org/bloom-conference)**

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**The 2027 Bioremediation, Land Opportunity, Optimization & Minerals (BLOOM) Conference** will be held June 14-17, 2027, at the JW Marriott Austin (110 East 2nd St., Austin, TX, 78701).

Since 1991, Battelle's Bioremediation Symposium has been one of the world's leading forums for scientists, engineers, regulators, site owners, consultants, and industry practitioners to share applied research, field experience, and emerging technologies. The BLOOM Conference represents the evolution of this renowned event, expanding its focus to reflect the changing landscape of environmental remediation and sustainable resource management.

Battelle's BLOOM Conference will serve as a forum for the global environmental community to explore the latest advances in bioremediation, land optimization, and resource recovery—three interconnected disciplines that are increasingly shaping how contaminated sites and waste streams are managed and transformed.

This expanded vision acknowledges that remediation today extends far beyond contaminant cleanup. Environmental professionals are increasingly challenged

to not only restore impacted land and water resources, but also unlock broader environmental, economic, and societal value from these efforts. As a result, the conference will highlight innovative approaches that integrate biological treatment technologies with strategies for beneficial land reuse, ecosystem restoration, mineral and resource recovery, circular economy principles, and the sustainable management of complex waste streams.

Bioremediation will remain the cornerstone of the technical program and a defining element of the conference identity. Attendees can continue to expect the high quality scientific and applied content that has made Battelle's Bioremediation Symposium a premier event for more than three decades. Building upon that foundation, BLOOM will also explore how remediation projects can support long-term land optimization objectives, create new opportunities through resource and mineral management, and help transform environmental liabilities into valuable assets.

## Conference Overview

Short courses will be offered on Monday, June 14, 2027. The Plenary Session will convene Monday evening, after which the Welcome Reception and Exhibit Hall will open. The technical program will be conducted Tuesday, June 15, through Thursday, June 17, with platform talks, panel discussions, and learning lab presentations during the day and poster receptions Tuesday and Wednesday evenings. Attending students will have the opportunity to participate in a poster competition, as well as networking and career development opportunities.

We hope you will submit an abstract to be considered for the program. **Abstracts are due November 16, 2026.** The program will be developed based on the abstract review conducted by the Program Committee and the Session Chairs.

The platform and poster sessions will be organized around the following major themes:

- Innovations in Bioremediation Technologies
- Bioremediation Implementation Practices
- Application of Bioremediation to Complex Sites
- Plastics and Microplastics in the Environment
- Advanced Tools for Assessing Bioremediation
- Beneficial Land Reuse
- Ecosystem Restoration
- Unconventional Feedstock for Mineral Recovery
- Circular Economy and Long-Term Management of Complex Waste Streams
- Data, AI, and Digital Tools
- Biomining, Bioleaching, and Biological Metal Recovery
- Mining-Impacted and Produced Water: Treatment and Resource Recovery
- Policy, Economics, and Community Engagement for Remediation to Recovery

See pages 4-5 for the anticipated scope of the technical program and page 6 for information on preparing and submitting an abstract.



## The Conference is organized and presented by Battelle.

Battelle's environmental engineers, scientists and professionals offer focused expertise to government and industrial clients in the U.S. and abroad. Combining sound science and engineering solutions with creative management strategies, Battelle works with clients to develop innovative, sustainable and cost-effective solutions to complex problems in site characterization, assessment, monitoring, remediation, restoration, and management.

Every day, the people of Battelle apply science and technology to solving what matters most. At major technology centers and national laboratories around the world, Battelle conducts research and development, designs and manufactures products, and delivers critical services for government and commercial customers. Headquartered in Columbus, Ohio, since its founding in 1929, Battelle serves the national security, health and life sciences, and energy and environmental industries.

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## Conference Sponsors

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## Technical Program Scope

Examples of anticipated presentation topics are listed below. The list is numbered to provide an easy means of referencing these topics on your abstract submittal form; see the "Submittal" paragraph on page 6.

**This is not a list of sessions, nor is it a comprehensive list of topics. Abstracts are welcome on all relevant topics.**

### Innovations in Bioremediation Technologies

- 1a. Advances in Amendment Formulation
- 1b. Cometary Biodegradation and Methane Cycling
- 1c. Enhanced Methods for Biodegradation/Biotransformation of Organic and Inorganic Contaminants
- 1d. Advances in Heat-Enhanced Bioremediation
- 1e. Optimization of Classical Bioremediation Technologies
- 1f. PFAS and PFAS Precursors Biotransformation Research
- 1g. Advances in Biological Wastewater Treatment Processes
- 1h. Engineered Microbial Platforms for Contaminant Degradation

### Bioremediation Implementation Practices

- 2a. In Situ Bioremediation Applications
- 2b. Innovative and Efficient Amendment Delivery Strategies
- 2c. Biobarrier Installation and Management
- 2d. Emerging Contaminants
- 2e. Challenges in Application of Bioremediation Tools

### Application of Bioremediation to Complex Sites

- 3a. Bioremediation in Complex Geological Settings
- 3b. Bioremediation Case Studies
- 3c. Bioremediation Approaches for the Innovative Management of Large or Dilute Plumes
- 3d. Impacts of Mixed Contaminants on Biodegradation
- 3e. PFAS Background, Source and Forensic Considerations

### Plastics and Microplastics in the Environment

- 4a. Microplastics and Nanoplastics: Biodegradation and Environmental Effects
- 4b. Potential Upcycling of Plastics
- 4c. Regulatory Framework/Analytical Methods for Microplastics
- 4d. Rubber Biodegradation

### Advanced Tools for Assessing Bioremediation

- 5a. Tools for Site Assessment and Bioremediation Monitoring
- 5b. Molecular Tools for Bioremediation Assessment
- 5c. Biosensing and Biodetection of Contaminants
- 5d. High Resolution Site Characterization
- 5e. Modeling and Monitoring Approaches to Improve Remedy Design and Implementation
- 5f. Improved Conceptual Site Models that Include Biodegradation Data

### Beneficial Land Reuse

- 6a. Brownfield and Superfund Redevelopment: From Liability to Durable Asset
- 6b. Brightfields: Siting Renewable Energy, Storage, and Data Center Infrastructure on Remediated Land
- 6c. Risk-Based Closure, Land Use Controls, and Long-Term Stewardship
- 6d. Repurposing Legacy Mine Lands and Industrial Sites
- 6e. Rooted in Recovery: Advances in Phytoremediation for Contaminated Sites
- 6f. Soil Health, Agriculture, and Solar on Formerly Contaminated Land
- 6g. Redevelopment Economics, Community Engagement, and Liability Management

### Ecosystem Restoration

- 7a. Mine Land Reclamation and Recovery of AMD-Impacted Watersheds
- 7b. Contaminated Estuary/Wetland/Floodway/Riparian Restoration
- 7c. Post-Remediation Ecological Monitoring and Habitat Recovery
- 7d. Microbially-Guided Ecosystem Restoration: Linking Biogeochemical Processes to Watershed Recovery
- 7e. Resilience in Restoration Design
- 7f. Rebuilding Ecosystems through Native Plant Community Establishment
- 7g. Forest Restoration as a Tool for Beneficial Land Reuse

### **Unconventional Feedstock for Mineral Recovery**

- 8a.** Turning Mine Waste into Feedstock: Tailings, Waste Rock, Ash, Slag, and Legacy Sites
- 8b.** Recovery of Critical Minerals from Industrial and Municipal Waste Streams
- 8c.** Lithium Brines: Traditional versus Unconventional Sources, Technologies, Costs and Recovery Efficiencies
- 8d.** Characterization and Resource Assessment of Legacy Waste Feedstocks

### **Circular Economy and Long-Term Management of Complex Waste Streams**

- 9a.** Bioremediation Combined with In Situ Critical Material Production
- 9b.** Biocementation and Stabilization
- 9c.** Life Cycle Assessment and Remediation Metrics
- 9d.** Future Material Recycling Opportunities
- 9e.** Long-Term Management and Reuse of Residual Waste Streams

### **Data, AI, and Digital Tools**

- 10a.** AI-Driven Exploration and Resource Characterization
- 10b.** Machine Learning for Process Optimization and Recovery Yield
- 10c.** AI/ML Applications in Remediation Design and Performance Prediction
- 10d.** Digital Twins, Sensors, and Automated Monitoring Networks
- 10e.** Data Management, Quality, and Model Validation

### **Biomining, Bioleaching, and Biological Metal Recovery**

- 11a.** Biosorption, Bioaccumulation, and Biomineralization for Metal Capture
- 11b.** Engineered Biosystems for Selective Metal Recovery
- 11c.** Bio-Assisted Separation and Purification of Critical Minerals
- 11d.** Scale-Up, Bioreactor Design, and Field Demonstration of Biorecovery
- 11e.** Microbial Ecology of Mine and Metal-Impacted Environments

### **Mining-Impacted and Produced Water: Treatment and Resource Recovery**

- 12a.** Scaling Direct Lithium Extraction (DLE) from Non-Traditional Brines
- 12b.** Acid Mine Drainage Treatment and Metal Recovery
- 12c.** Produced Water and Geothermal Brine Management and Reuse
- 12d.** Passive/Semi-Passive Treatment Technologies
- 12e.** Secondary Products from Mine Water Treatment
- 12f.** Residuals Handling and Disposal

### **Policy, Economics, and Community Engagement for Remediation to Recovery**

- 13a.** Permitting and Regulatory Pathways for Recovery at Remediation Sites
- 13b.** Liability, Ownership, and Risk Allocation for Legacy Waste Feedstocks
- 13c.** Supply Chain Economics and Offtake Models for Recovered Materials
- 13d.** Community Engagement and Education/Workforce Development
- 13e.** Funding, Incentives, and Public-Private Partnership Models

## Program Committee

### Conference Chairs

Mike Henrichs (Battelle)  
Michael Meyer, PMP, RG, LEG, LHG (Battelle)

### Technical Steering Committee

Tyler Brown, Ph.D., P.G. (University of Wyoming, School of Energy Resources)  
Jana Heisler White, Ph.D. (Battelle)  
Jeffrey Davis, Ph.D. (AFCEC)  
Brandon Holzbauer-Schweitzer, Ph.D. (Jacobs)  
Kate Kucharzyk, Ph.D. (Battelle)  
Edgar Lara-Curzio (Oak Ridge National Laboratory)  
John McKernan, ScD, CIH (U.S. EPA)  
Travis McLing, Ph.D. (Idaho National Laboratory)  
Karina Rogers, P.Eng. (HDR, Inc.)  
Logan Schultz, Ph.D. (Trihydro)  
Mahsa Shayan, Ph.D., PE, P.Eng. (Geosyntec)  
Kent Sorenson, Ph.D., PE (Allonia)  
Dawn M. Wellman, Ph.D. (Savannah River National Laboratory)

## Abstract Preparation and Submittal

**Abstracts are due November 16, 2026.**

The program will be developed through a multilevel review by the Program Committee and the session chairs, beginning in late November 2026. **To ensure full opportunity for placement in the program, abstracts should be submitted by the due date. The submission page will remain open until program capacity is reached.** Because more than 500 abstracts are expected, abstracts must be well-written, clearly and concisely outlining the material proposed for presentation.

Primary (presenting) authors should be confidently committed in their ability to attend the in-person Conference and should carefully read and understand all abstract submission and program placement terms and conditions before submitting an abstract.

**Abstracts with a pronounced commercial or marketing slant will not be accepted.** Abstracts must convey the information reviewers will need to assess the scope of the work and the data likely to be available at the time of the presentation, determine its relevance, compare it with other proposed presentations, and, if accepted for the program, assign it to an appropriate session.

**Format, Content & Required Subheadings.** Format requirements and an example abstract are available on the Abstract Specifications and Submittal page.

**NOTE:** Abstracts must be organized under the following required subheadings—**Background/Objectives, Approach/Activities, and Results/Lessons Learned.**

**Submittal.** Abstracts are to be submitted online only via the link on the **Abstract Specifications and Submittal** page. Abstracts submitted by email will not be accepted or reviewed. The submittal form will require complete contact information (postal mailing address, phone number, and email) for the corresponding/presenting author and for all co-authors.

**Program Placement.** Technical program placement and format preference requests (platform or poster) may be entered on the submission form but are not guaranteed. Final decisions on session placement and format are made by the program committee and Session Chairs and will be based on best overall design of the Conference program.

If the corresponding/presenting author is unable to commit to presenting either a platform OR a poster, based on the Program Committee's final placement, please do not submit an abstract. Withdrawals and cancellations received after placement assignments have been made create a significant disruption to the technical program and degrade the overall Conference experience for all attendees.

**Notification of Acceptance/Placement.** In late February 2027, the corresponding/presenting author of each abstract will be notified by email of the placement decision. If the abstract was accepted, this email will state the session and format (platform or poster) to which it was assigned and provide information on preparing the presentation and submitting an updated abstract shortly before the Conference.

### Technical Program Participant Registration

**Requirement.** Financial assistance is not available to support registration or other costs of attending the Conference. All presenting authors (platform and poster), session chairs, and panel participants are expected to register and pay the standard technical-program registration fees. Registration fees are the major source of funding for the Conference, and a significant percentage of registrants will make presentations or chair sessions.

**Inquiries.** Questions about abstract preparation and submittal should be addressed to [bloomconf@battelle.org](mailto:bloomconf@battelle.org).

## Student Participation

Students will find participation valuable to their career development. In addition to the technical information gained by attending presentations and visiting exhibits, students will be able to meet and talk with environmental professionals representing a wide range of work experience and employers.

**Reduced Registration Rate.** The student rate is approximately half the university rate (see registration fee table on page 8) and provides full access to all technical sessions, exhibits and meals. Full-time students are eligible; documentation of current enrollment is required.

**Student Poster Competition.** Students with abstracts accepted for the technical program as poster presentations will be given the opportunity to participate in a poster competition. Posters will be judged by a panel of experts and the winner will receive a prize. Student registrants will be contacted by the Conference Office closer to the event to opt-in to the poster competition.

**Career KickStarter.** This event is intended for students and young professionals (less than 5 years in their field). It is a program designed to foster networking and mentorship within the environmental sector.

Participants will be matched with an experienced professional in a mentorship relationship, which both mentee and mentor are committed to sustaining for 1 year.

Mentors will guide students through constructive feedback, share professional insights and industry knowledge, connect students to relevant professional networks, meet regularly to track progress toward goals, and provide consistent encouragement throughout the mentoring relationship.

All participation is voluntary and there is no additional cost to attend the KickStarter program, but pre-registration is required to match mentors and mentees. A target of 20-30 professionals is desired for successful implementation.

Information about becoming a corporate sponsor for the student events may be found on the Conference **Sponsors & Exhibitors** page.

## Closing Reception Sponsor



## Short Course Proposals

***Proposals are due December 2, 2026.***

Courses on topics within the general scope of the Conference will be offered on Monday, June 14, the day before the technical program begins.

Proposals will be evaluated, and the point-of-contact will be notified of the results in February 2027. Accepted courses will receive information about scheduling and how course registrations will be handled.

See the **Short Course** page for details on proposal content and submittal instructions.

## Learning Lab Proposals

***Proposals are due December 2, 2026.***

Generate exposure, demonstrate use, or solicit feedback for a technology, software, prototype, or tool in a 25-minute, hands-on demonstration, or user experience, in the Learning Lab. If selected, there is no additional fee to participate. Selection decisions will be based on the best overall design of the Conference program.

See the **Learning Lab** page for details on proposal content and submittal instructions.

## Exhibits

**Exhibit space will open for general sale on January 19, 2027.**

Organizations that provide innovative technologies, services, consulting expertise, or research solutions that support sustainable land management, environmental remediation, resource recovery, circular economy initiatives, and related environmental and engineering challenges are invited to exhibit.

Successful exhibitors are committed to engaging with a highly technical audience of industry leaders, researchers, regulators, and practitioners, and fostering collaboration that drives real-world environmental impact. Whether showcasing emerging technologies, analytical capabilities, engineering services, or sustainability-focused products, prospective exhibitors should view BLOOM as an opportunity to share knowledge, build partnerships, and contribute to the future of land optimization and resource stewardship.

Networking events and food service will be located in the Exhibit Hall.

**Booth Selection.** Conference-level and Learning Lab sponsors receive priority booth selection and will be contacted in early January, before general sales open, to select their booth spaces. The **Sponsors and Exhibitors** page will contain links to the Exhibitor terms and conditions, the application form, and the floor plan showing available spaces.

**Exhibit Fee and Payment.** The fee for an 8-ft deep x 10-ft wide booth is \$3,600 if payment is made by February 12, 2027, and \$3,800 if paid later. Space will be assigned on a first-come, first-served basis, according to receipt of completed application and payment. The fee includes a 6-ft. skirted table, 2 standard side chairs, and a wastebasket.

See the **Sponsors and Exhibitors** page for additional details.

**Inquiries.** Please contact Danielle Johnikin (The Scientific Consulting Group, Inc.) at 301.670.4990, or send an email to [djohnikin@scgcorp.com](mailto:djohnikin@scgcorp.com).

## Conference Registration

In mid-January 2027, a link to online technical program and short course registration will be available on the **Registration** page. Exhibit booth staff will be registered by their exhibit managers.

The following technical program registration fees cover admission to all platform and poster sessions, exhibits, and all provided food and beverage events.

|                           | Paid by<br>April 5, 2027 | Paid after<br>April 5, 2027 |
|---------------------------|--------------------------|-----------------------------|
| Industry                  | \$1,200 USD              | \$1,295 USD                 |
| Gov/Univ*-Full Conference | \$1,065 USD              | \$1,175 USD                 |
| Govt./Univ.*-Two-Day      | \$710 USD                | \$820 USD                   |
| Student                   | \$525 USD                | \$575 USD                   |

\* The university fee applies to full-time faculty and other teaching and research staff, including post-doctoral students.

\*\* The student fee is reserved for full-time students through PhD candidates whose fees will be paid by their universities or who will not be reimbursed for out-of-pocket payment. Documentation of current enrollment is required.

See the Registration page for a complete list of terms and conditions. Registration terms and conditions are subject to change without notice and are applicable to all levels of registration, including booth staff and Sponsor/Exhibitor discounted registrants. No one under 18 years of age will be admitted to any conference event, including Exhibitor setup/teardown unless registered as a student. Valid student ID required upon check in.

**Payment.** Full payment is required to confirm registration. Checks are not accepted for attendee registration and payment may be made only by major credit card; Discover card is not accepted. Purchase orders are not accepted. Fees are not transferable to other Battelle Conferences. Conference information meant for attendees only (e.g., links to mobile apps, abstracts, and registration lists) will only be sent to individuals who are paid in full.

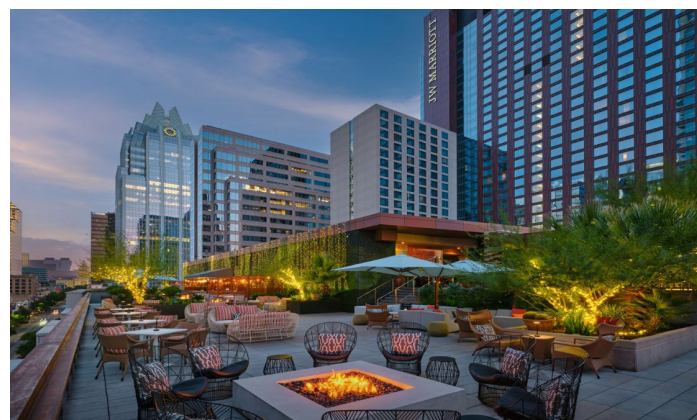
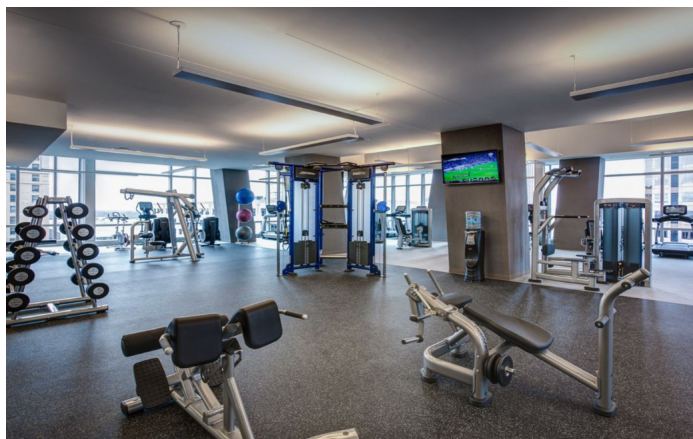
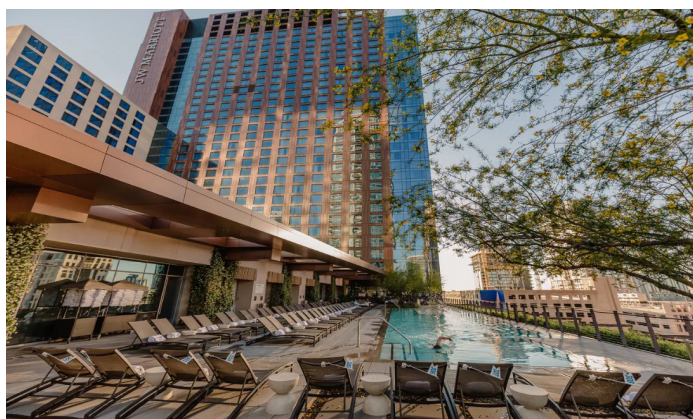
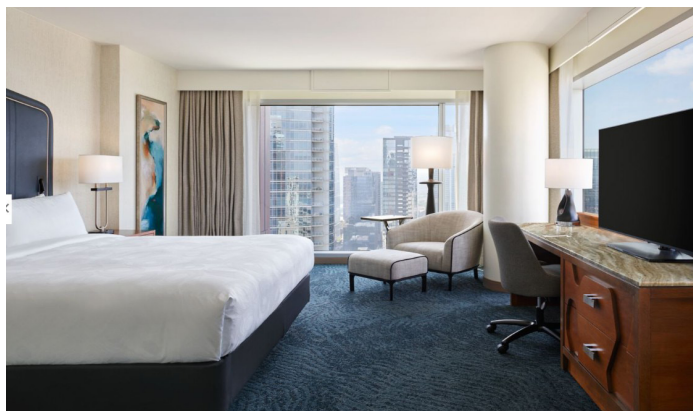


## Conference Venue and Hotel

The Conference will be held at the **JW Marriott Austin** (110 East 2nd St., Austin, TX. 78701). Information on room rates and reservation options will be available on the **Venue: Hotel and City** page in January 2027.

**Room Blocks.** A room block has been set aside at the JW Marriott Austin. The rates below are in effect for reservations made on or before 5:00 p.m. (CST) on Friday, May 28, 2027, unless rooms in the block sell out before that date.

The group rate at the JW Marriott Austin is \$315 per night (single/double) plus applicable taxes, fees, and assessments. Subject to availability of rooms at the time reservations are made, the group rate can be used for check-in as early as, Friday, June 11, and check-out as late as Sunday, June 20.



**The BLOOM Conference has a group rate agreement with only the JW Marriott Austin. We have not partnered with any travel agency or third-party for travel/hotel discounts. If you receive a call or email offering assistance in making hotel reservations or changing existing reservations, we advise caution.**

**The Conference has no agreement with any organization to contact participants and offer reservation assistance, nor have we provided attendee contact information to anyone for that purpose.**

**Please use only the reservation links provided on the "Venue: Hotel and City" page on the Conference website (available in January 2027) to make hotel reservations.**

## Inquires

### Conference Office

bloomconf@battelle.org

Sponsorship, exhibits, and registration:  
Danielle Johnikin (The Scientific Consulting Group, Inc.)  
djohnikin@scgcorp.com  
phone: 301.670.4990 | fax: 301.670.3815



## Downtown Austin is a lively destination packed with music, culture, and outdoor fun.

Explore Sixth Street's iconic live music venues, stroll along Congress Avenue for unique shops and dining, or enjoy the scenic trails and kayaking at Lady Bird Lake. The Texas State Capitol offers free tours for history buffs, while art lovers can visit the Contemporary Austin museum. Don't miss one of the iconic, must-see natural spectacles in Austin and head south to Congress Avenue Bridge at dusk to witness a mesmerizing flight of bats emerging. Guided walking food tours that leave from just outside the hotel explore local eats, historic neighborhoods, and hidden culinary gems.

See [austintexas.org](https://austintexas.org) for more information.



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