**About the Study Tour**

Environmental biotechnology is the application of biotechnology principles and techniques to the study and management of the natural environment. It involves the use of microorganisms and other biological agents to perform various tasks that are beneficial to the environment, such as cleaning up contaminated sites, enhancing soil health, and reducing greenhouse gas emissions.

The 2024 STIC Policy Study Tour will provide the participants with a broad perspective on how environmental biotechnology is approached and regulated in the U.S., and how these practices can be adapted to their home countries in Southeast Asia. This program structure aims to balance educational sessions, practical exposure, and collaborative discussions, ensuring that the participants gain comprehensive insights into the role of environmental biotechnology in policy and sustainable development, particularly tailored to the needs and challenges of Southeast Asian countries.

Sponsored by the U.S. Department of State's Bureau of East Asian and Pacific Affairs Office of Multilateral Affairs (EAP/MLA) and implemented by Arizona State University (ASU), the US ASEAN Science, Technology, and Innovation Cooperation (STIC) Program focuses on three major activities: a U.S.-based policy study tour in Washington D.C., an online portfolio of upskilling content through a Virtual Talent Mobility Portal, and an annual regional conference with technical and innovation tracks and grant competitions for research, publishing, and venture creation.

The 2024 STIC Policy Study Tour will seek collaborations with the following key U.S. government agencies:

* **Bureau of Oceans and International Environmental and Scientific Affairs (OES):** This bureau within the U.S. State Department focuses on international environmental and scientific affairs, making it a key partner for a program with international participants.
* **U.S. Environmental Protection Agency (EPA):** The EPA is a key agency for environmental issues, including biotechnology. They can provide expertise on regulations, sustainability practices, and the latest in environmental technologies.
* **U.S. Department of Agriculture (USDA):** For topics related to agricultural biotechnology, the USDA is an essential partner. They can offer insights into biotechnology in food production, sustainable agricultural practices, and policy development.
* **U.S. Department of Energy (DOE):** The DOE can contribute knowledge on bioenergy and the role of biotechnology in renewable energy sources.
* **National Science Foundation (NSF):** The NSF supports fundamental research in all areas of science and engineering, including environmental biotechnology.
* **U.S. Agency for International Development (USAID):** USAID could play a role in discussions about how biotechnology can aid in development and sustainability goals in ASEAN countries.
* **U.S. Trade and Development Agency (USTDA):** This agency is involved in the development of sustainable infrastructure and could provide insights into how biotechnology intersects with economic development and trade.
* **Bureau of East Asian and Pacific Affairs (EAP):** As the sponsor of the STIC Program, EAP can discuss U.S. foreign policy and relations in the Asia-Pacific region and provide geopolitical context.

Potential Collaborative Activities with USG Agencies:

* **Expert Lectures and Panels:** Inviting experts from these agencies to speak or participate in panels.
* **Site Visits:** Organizing tours of relevant facilities or research centers associated with these agencies.
* **Collaborative Workshops:** Jointly hosting workshops or sessions with specialists from these agencies.
* **Policy Discussions:** Facilitating discussions between ASEAN policymakers and U.S. policy experts.
* **Roundtable Discussions:** With representatives from these agencies to discuss common goals and challenges.
* **Policy Maker Meetings:** Arranging meetings with high-level officials for more in-depth policy discussions.
* **Access to Research and Data:** Leveraging the resources and data available through these agencies for the benefit of the program participants.

**STIC Sustainable Biotechnology Policy Study Tour**

One-week program in Washington D.C.

Summary Agenda:

[STIC 2024 Study Tour](https://docs.google.com/spreadsheets/d/1u8I1CB8j_2Q3LuSq74HSvWqZWjCP9BODeDgU9CLk9jc/edit#gid=0)

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| **Arrival Day: Saturday, March 9, 2024** | |
| Participants will arrive at different times throughout the day and will check into their hotel rooms. | |
| **Tours: Sunday, March 10, 2024** | |
| 12:00 p.m. - 5:00 p.m. | STIC will provide participants with a program orientation followed by a networking and team-building activity through a day tour of Washington, D.C. |
| 6:00 p.m. - 8:00 p.m. | Group Dinner |
| **Day 1: Monday, March 11, 2024** | |
| 8.00 a.m. – 9.00 a.m. | **ACTIVITY: Check-In and Networking**  *Address: ASU in Washington D.C. 1800 I St. NW, 8th floor* |
| 9.00 a.m. – 9.30 a.m. | **EVENT: Opening Ceremony and Welcome Remarks**   * **Speakers TBD**   Group Photo |
| 9:30 a.m. – 10:30 a.m. | **KEYNOTE: The Role of Environmental Biotechnology in Sustainable Development**  *Presenter:* ***TBD***  The keynote will provide valuable insights into the current sustainable development challenges facing the ASEAN region and the steps that are being taken to address these challenges. The presentation will help participants understand the importance of collaboration, best practices, and rules-based multilateral cooperation in order to achieve sustainable development, particularly tailored to the needs and challenges of Southeast Asian countries. |
| 10:30 a.m. – 11:00 a.m. | **ACTIVITY: Coffee / Tea Break and Networking** |
| 11:00 a.m. – 12:00 p.m. | ***PRESENTATION: STIC Program and Agenda Overview***   * ***Jose A. Quiroga****, Director, US-ASEAN STIC Program, ASU (TBC)*   *This presentation will provide an overview of the U.S. – ASEAN Science, Technology, and Innovation Cooperation (STIC) Program and its components. The session will also review the agenda for the STIC sustainable biotechnology study tour.* |
| 12:00 p.m. – 1:00 p.m. | **ACTIVITY: Lunch and Networking** |
| 1:00 p.m. – 2:30 p.m. | **WORKSHOP: Understanding Environmental Biotechnology – Basics and Beyond**  In this workshop, participants will delve into the foundational principles and advanced applications of environmental biotechnology. Led by experts from key U.S. government agencies, including the U.S. Environmental Protection Agency (EPA) and the National Science Foundation (NSF), the session aims to provide a comprehensive understanding of the diverse techniques and practices involved in applying biotechnology to environmental management. |
| 2:30 p.m. – 4:00 p.m. | **ACTIVITY: Networking Event**  Participants will introduce themselves to the group and will provide short briefings on their country’s efforts in cybersecurity. In addition, they will share their goals and desired outcomes of the program. This will develop an open dialogue, trust, and communication among the group. |
| 4:30 p.m. | **Adjourn**  Participants will return to the hotel to prepare for dinner. |
| 6:00 p.m. – 8:00 p.m. | **Group Dinner Address TBD** |
| **Day 2: Tuesday, March 12, 2024** | |
| 9:00 a.m. – 12:00 p.m. | **SITE VISIT:**  *Address: TBD*  A local biotech facility or research center focusing on waste management and pollution control. |
| 12:00 p.m. – 1:00 p.m. | **ACTIVITY: Lunch and Networking** |
| 1:00 p.m. – 2:30 p.m. | **SEMINAR: Biotechnological Innovations in Waste Management**  Led by experts from the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), and other relevant agencies, this session will explore cutting-edge biotechnological innovations in waste management. It will showcase successful initiatives, discuss the regulatory landscape, and examine the potential policy implications of integrating biotechnological solutions into waste management practices. This seminar aims to foster a deeper understanding of how biotechnology can revolutionize waste management processes for a more sustainable future. |
| 2:30 p.m. – 3:00 p.m. | **ACTIVITY: Coffee / Tea Break and Networking** |
| 3:00 p.m. – 4:30 p.m. | **GROUP DISCUSSION: "Policy Implications of Biotechnological Solutions in Waste Management"**  Facilitated by experts in environmental policy and regulation, this group discussion will delve into the intricate policy considerations surrounding the implementation of biotechnological solutions in waste management. Participants will have the opportunity to engage in a constructive dialogue, sharing their perspectives and gaining valuable insights into crafting effective policies that support the integration of biotechnological solutions in waste management practices. |
| 4:30 p.m. | **Adjourn**  Participants will return to the hotel to prepare for dinner. |
| 6:00 p.m. - 8:00 p.m. | **Group Dinner Address TBD** |
| **Day 3: Wednesday, March 13, 2024** | |
| 8:30 a.m. – 10:00 a.m. | **Seminar: “Innovations in Water Treatment Technology”**  Experts from the U.S. Environmental Protection Agency (EPA), the Bureau of Oceans, and the International Environmental and Scientific Affairs (OES) will delve into the latest innovations in water treatment technology. Case studies and presentations will highlight advancements aimed at ensuring clean and sustainable water sources. |
| 10:00 a.m. - 1:00 p.m. | **SITE VISIT: Water Treatment Facility (TBD)**  *Address: TBD*  Participants will embark on a 60-minute guided tour of a state-of-the-art water treatment facility, accompanied by experts from the EPA and OES. This hands-on experience will provide insights into the processes involved in water purification and the application of cutting-edge technologies. |
| 1:00 p.m. – 2:00 p.m. | **ACTIVITY: Lunch and Networking** |
| 2:00 p.m. – 3:30 p.m. | **Discussion: "Designing Sustainable Water Treatment Projects”**  Facilitated by experts from relevant environmental agencies, this group activity will focus on collaboratively designing sustainable water treatment projects. Participants will work together to formulate actionable proposals that leverage innovative solutions to address water quality challenges. |
| 3:30 p.m. – 4:00 p.m. | **ACTIVITY: Coffee / Tea Break and Networking** |
| 4:00 p.m. – 5:00 p.m. | **Case Study Presentations: “Global Approaches to Water Management”**  Representatives from the U.S. Department of Agriculture (USDA), U.S. Department of Energy (DOE), and the National Science Foundation (NSF) will showcase successful case studies highlighting diverse approaches to water management. This session aims to foster cross-disciplinary learning and collaboration, allowing participants to gain valuable insights into effective water treatment strategies worldwide. |
| 5:00 p.m. | **Adjourn**  Participants will return to the hotel to prepare for dinner. |
| 6:00 p.m. - 8:00 p.m. | **Group Dinner**  *Address: TBD* |

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| **Day 4: Thursday, March 14, 2024** | |
| 8:30 a.m. – 10:00 a.m. | **LECTURE: “The Impact of Biotechnology on Sustainable Agriculture”**  Led by experts from the U.S. Department of Agriculture (USDA) and the National Science Foundation (NSF) this lecture will examine the profound impact of biotechnology on sustainable agriculture. The lecture aims to equip participants with a well-rounded understanding of the dynamic relationship between biotechnology and the agricultural sector. |
| 10:00 a.m. – 1:00 p.m. | **SITE VISIT:**  *Address: TBD*  Visit to a Research Farm/Institute |
| 1:00 p.m. – 2:00 p.m. | **ACTIVITY: Lunch and Networking** |
| 2:00 p.m. - 3:00 p.m. | **WORKSHOP: Policy Approaches to Biotech in Agriculture**  This workshop with representatives from the U.S. Department of Agriculture (USDA) focuses on exploring policy approaches to biotechnology in agriculture and provides participants with the opportunity to engage in discussions about the regulatory frameworks that govern biotechnological innovations in agriculture. The workshop aims to foster a deeper understanding of the crucial intersection between policy development and the successful integration of biotechnology in agriculture. |
| 3:00 p.m. – 4:30 p.m. | **Roundtable: “Balancing Food Security and Environmental Sustainability”**  A roundtable discussion with policymakers and experts from the U.S. Department of Agriculture (USDA) will facilitate a dialogue on the policy considerations and strategic approaches necessary to harmonize the goals of enhancing food security while mitigating the environmental impact of agricultural practices. Participants will have the opportunity to share experiences, discuss regional challenges, and collaboratively identify solutions that promote a sustainable and resilient future for agriculture in Southeast Asian countries. |
| 4:30 p.m. | **Adjourn**  Participants will return to the hotel to prepare for dinner. |
| 6:00 p.m. - 8:00 p.m. | **Group Dinner**  *Address TBD* |

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| **Day 5: Friday, March 15, 2024** | |
| 9:00 a.m. – 9:30 a.m. | **Discussion: Sharing insights and Lessons Learned**  The round-up discussions will contribute to a holistic understanding of the program's impact and set the stage for the final presentations and future collaborative efforts. |
| 9:30 a.m. – 10:30 a.m. | **Group Presentations: Proposals for Implementing New Ideas in their Home Countries**  In this session, participants will present the collaborative project proposals developed during the program. The presentations will provide a platform for participants to showcase their collective efforts, receive constructive feedback, and inspire further collaboration to lay the foundation for future initiatives in environmental biotechnology within the ASEAN region. |
| 10:30 a.m. – 11:00 a.m. | **ACTIVITY: Coffee / Tea Break and Networking** |
| 11:00 a.m. – 12:00 p.m. | **FREE TIME**  Catch up on work, prepare for the presentation on Friday or schedule other meetings in DC |
| 12:00 p.m. – 1:00 p.m. | **LUNCH** |
| 1:00 p.m. – 2:30 p.m. | **EVENT: Closing Ceremony**  Certificates of completion will be awarded, and participants will be acknowledged for their active engagement and valuable contributions to the program. The closing ceremony marks the official conclusion of the week-long tour and sets the stage for participants to carry forward the knowledge and insights gained in their respective professional journeys. |
| 2:30 p.m. – 3:00 p.m. | **ACTIVITY: Coffee / Tea Break and Networking** |
| 3:00 p.m.– 3:30 p.m. | **EVENT: Feedback Session**  Designed to gather insights, suggestions, and recommendations for the improvement of future policy study tours, the feedback session allows participants to share their thoughts on the program structure, content, and overall experience. |
| 6:00 pm - 8:00 p.m. | **Closing Dinner**  *Address: TBD*  Celebrating the successful completion of the Environmental Biotechnology Policy Study Tour. An opportunity to foster lasting connections. |