

The 7th Belt and Road Teenager Maker Camp & Teacher Workshop (China–Arab Regional Project)



October 8th to 14th, 2023

Yinchuan City, Ningxia Hui Autonomous Region, China

Catalog

1. Introduction to the Event
2. Event Theme
3. Course Schedule
4. Preparation Items
5. Accommodation Arrangement
6. Dining Arrangement
7. Transportation
8. Travel Information
9. Other Matters
10. Contact Information

1. Introduction to the Event

The 7th Belt and Road Teenager Maker Camp & Teacher Workshop (China–Arab Regional Project)

Date: October 8th (Sunday) – 14th (Saturday), 2023

Host City: Yinchuan, Ningxia Hui Autonomous Region, China

Sponsors

China Association for Science and Technology (CAST)

Ministry of Science and Technology of the People's Republic of China (MOST)

Organizers

Children and Youth Science Center of CAST (CYSCC)

China Association of Children's Science Instructors

Ningxia Association for Science and Technology

Supporters

InterAcademy Panel on International Issues Science Education Programme (IAP SEP)

Economic Cooperation Organization Science Foundation (ECOSF)

Network of African Science Academies (NASAC)

Arab League Educational, Cultural and Scientific Organization (ALECSO)

2. Event Theme

Embracing Science and Technology for a Greener World

3. Course Schedule

Schedule

For Students

Time		Main Activities	Specific Location	
D a y 1	October 8th (Sunday)	Full Day	Arrival, Airport Pickup, Registration	Yinchuan Hotel
D a y 2	October 9th (Monday)	7:30-9:00	Breakfast	Yinchuan Hotel
		9:30-10:30	Opening Ceremony, Group Photo	Ningxia Science and Technology Museum
		10:30-12:00	Expert Science Popularization Reports	
		12:00-13:00	Lunch	
		13:00-15:30	Visit Ningxia Science and Technology Museum Visit Ningxia East-West Science and Technology Cooperation Achievements Exhibition at China-Arab States Expo	
		15:30-16:00	Science Popularization Activities	
		16:00-17:00	Science and Technology Innovation Exchanges	
		17:30-18:30	Dinner	

		19:00–20:30	Mid–Autumn Festival Special Activity	
D a y 3	October 10th (Tuesday)	7:30-8:00	Breakfast	Yinchuan Hotel
		08:00–12:00	A Tour of Helan Mountain Rock Art Site Park and Han Meilin Art Museum	Helan Mountain Rock Art Site Park
		12:00–14:30	Lunch	Ningxia Science and Technology Museum
		14:30–20:00	A Tour of and Dinner at Ningxia Rice–Fish Space Ecological Park	Ningxia Rice–Fish Space Ecological Park
D a y 4	October 11th (Wednesday)	7:30-8:30	Breakfast	Yinchuan Hotel
		09:00–12:00	Visit Ningxia Water Conservancy Museum	Ningxia Water Conservancy Museum
		12:00–13:00	Lunch	
		13:00–16:30	A Tour of Yellow River Ningxia Qingtongxia Water Conservancy Hub	
		16:30–17:30	Dinner	
		17:30–20:00	Visit Ningxia Desert New Energy Power Station and Check–in at Shapotou Hotel	Shapotou Hotel
		7:30-8:30	Breakfast	Shapotou Hotel

D a y	October 12th (Thursday)	8:30-9:00	Leave for Chinese Academy of Sciences Shapotou Desert Research and Experimental Station	Chinese Academy of Sciences Shapotou Desert Research and Experimental Station
		9:00-11:30	Visit Sand Prevention and Control Technology Achievements Exhibition and China Large-scale Weighing Lysimeter Group	
		11:30-13:00	Lunch	
		13:30-16:30	Fun at making "Straw Checkerboards"	
		17:00-18:00	Dinner	
		18:00-20:00	Topic experiment and exploration	
		20:00-22:00	Experience Stargazing at "Homeland of Stars" in the desert of Ningxia	"Homeland of Stars" Stargazing Base
		22:00-22:30	Shapotou Hotel	Shapotou Hotel
				8:00-8:30

D a y 5	October 13th (Friday)	09:00–12:00	Topic experiment and exploration	Chinese Academy of Sciences Shapotou Desert Research and Experimental Station
		12:00–13:00	Lunch	
		13:30–17:00	Summary of Findings	
		17:00–18:00	Dinner	
		19:00–21:00	Exchanges and Sharing at the Closing Session	
D a y 7	October 14th (Saturday)	Full Day	Leave for the Airport Terminal	/

For Teachers

Time		Main Activities	Specific Location	
D a y 1	October 8th (Sunday)	Full Day	Arrival, Airport Pickup, Registration	Yinchuan Hotel (To be determined)
		7:30-9:00	Breakfast	Yinchuan Hotel
		9:30–10:30	Opening Ceremony, Group	

D a y 2	October 9th (Monday)		Photo	Ningxia Science and Technology Museum
		10:30–12:00	Expert Science Popularization Reports	
		12:00–13:00	Lunch	
		13:00–15:30	Visit Ningxia Science and Technology Museum Visit Ningxia East–West Science and Technology Cooperation Achievements Exhibition at China–Arab States Expo	
		15:30–16:00	Science Popularization Activities	
		16:00–17:30	Teacher Workshop	
		17:30–18:30	Dinner	
		19:00–20:30	Mid–Autumn Festival Special Activity	
D a y 3	October 10th (Tuesday)	7:30–8:00	Breakfast	Yinchuan Hotel
		08:00–12:00	A Tour of Helan Mountain Rock Art Site Park and Han Meilin Art Museum	Helan Mountain Rock Art Site Park
		12:00–14:30	Lunch	Ningxia Science and Technology Museum

		14:30–20:00	A Tour of and Dinner at Ningxia Rice–Fish Space Ecological Park	Ningxia Rice–Fish Space Ecological Park
D a y 4	October 11th (Wednesday)	7:30-8:30	Breakfast	Yinchuan Hotel
		09:00–12:00	Visit Ningxia Water Conservancy Museum	Ningxia Water Conservancy Museum
		12:00–13:00	Lunch	
		13:00–16:30	A Tour of Yellow River Ningxia Qingtongxia Water Conservancy Hub	
		16:30–17:30	Dinner	Shapotou Hotel
		17:30–20:00	Visit Ningxia Desert New Energy Power Station and Check–in at Shapotou Hotel	
D a y 5	October 12th (Thursday)	7:30-8:30	Breakfast	Shapotou Hotel
		8:30-9:00	Leave for the Chinese Academy of Sciences Shapotou Desert Research and Experimental Station	Chinese Academy of Sciences Shapotou Desert Research and Experimental
		9:00–11:30	Visit Sand Prevention and Control Technology Achievements Exhibition Visit China Large–scale Weighing Lysimeter Group	

		11:30–13:00	Lunch	Station
		13:30–16:30	Fun at making “Straw Checkerboards”	
		17:00–18:00	Dinner	
		18:00–20:00	Topic experiment and exploration	
		20:00-22:00	Experience Stargazing at “Homeland of Stars” in the desert of Ningxia	“Homeland of Stars” Stargazing Base
		22:00-22:30	Shapotou Hotel	Shapotou Hotel
D a y 6	October 13th (Friday)	8:00-8:30	Breakfast	Shapotou Hotel
		09:00–12:00	Topic experiment and exploration	Chinese Academy of Sciences Shapotou Desert Research and Experimental Station
		12:00–13:00	Lunch	
		14:30–16:00	Teacher Workshop	
		17:00–18:00	Dinner	
		19:00–21:00	Exchanges and Sharing at the Closing Session	
D a y	October 14th (Saturday)	Full Day	Leave for the Airport Terminal	/

7				
---	--	--	--	--

Course and Activity Details

<p style="text-align: center;">"Straw Checkerboards" Sand Prevention and Control Technology Application Experiment and Experience (Belt and Road Maker Camp Participants)</p>	<p>Visits to the Science and Technology Achievement Exhibition Hall for teenagers and science teachers of Belt and Road Teenager Maker Camp to learn about the history, culture, and project details of sand prevention and control.</p> <p>Visits to field monitoring sites to observe and learn about desert vegetation diversity and conduct vegetation surveys.</p> <p>Visits to the large-scale technological installation, the "Northern China Sand Area Water Balance Automatic Simulation Monitoring System-Lysimeter Group," to understand the importance of technological applications in sand prevention and control. Through collaborative hands-on experiences, visitors may work together to make straw checkerboards and explore the knowledge related to sand prevention and control, experiencing how straw checkerboards can form a "green barrier" in the desert.</p> <p>On the theme of technological applications in the field of sand prevention and control using straw checkerboards, participants will be divided into three research groups: Soil</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Moisture Research Group, Shrub Investigation Research Group, and Line Transect and Quadrat Research Group, to carry out experimental activities. They will engage in experiential activities, such as sampling, investigation, and data analysis, incorporating different elements and technological applications of sand prevention and control in the field. Participants will bring the collected samples to the laboratory for group experiments, where they will understand the application value and data presentation of relevant technologies in the practical ecological management of sand prevention and control. This firsthand experience will emphasize the importance of technological applications in sand prevention and control. Finally, the results and content of the experimental projects will be summarized as interim achievements.

Group discussions and summarization will be conducted based on the results achieved through observation, investigation, experience, and experiments. Participants will present their project results in group presentations, which will be evaluated by science teachers. They will make revisions and refinements based on the evaluation feedback. Eventually, the outstanding project results

	<p>from this Maker Camp will be showcased and presented at the closing ceremony.</p>
<p>Technology Innovation Exchange Experience Course (Belt and Road Maker Camp Participants, "Talent Plan" Students and Teacher Representatives)</p>	<p>At the Youth Experience Center of Ningxia Science and Technology Museum, technology innovation–related courses will be conducted for the Belt and Road Maker Camp teenagers and Ningxia "Talent Plan" student representatives. The course content includes:</p> <ul style="list-style-type: none"> Mechatronics Master Intelligent Competition Artificial Intelligence Facial Recognition Smart Transportation and Autonomous Driving Yellow River Water Quality Purification Experiment
<p>Teacher Exchange Workshop (For Science and Technology Teachers)</p>	<p>Representatives from the fields of ecological environmental protection and sand prevention and control, as well as experts, scholars, and practitioners, along with all the teachers from the Belt and Road Maker Camp and representatives of science and technology teachers and practitioners from the entire region, will hold two teacher exchange workshops:</p>

	<p>Theme 1: Enhancing teachers' science and technology innovation practices through STEM teaching concepts.</p> <p>Theme 2: How science and technology teachers in the new era can promote green innovation and sustainable development in their country through experiential teaching.</p>
<p>Desert Stargazing Adventure</p> <p>(Belt and Road Maker Camp Participants)</p>	<p>At night, the Maker Camp participants will be arranged for a stargazing experience in the "Homeland of Stars". They will feel the awe-inspiring beauty brought by stargazing in the desert. They will attend a starry sky sharing session to learn about popular science knowledge related to astronomy. Utilizing astronomical telescopes, they will explore the mysteries of the night sky amidst the desert landscape. They will also have the opportunity to capture memorable moments by taking photos with the starry sky alongside their fellow participants.</p>
<p>"Desert Green Power": New Model of Photovoltaic Power Generation</p> <p>(Belt and Road</p>	<p>The desert photovoltaic power station covers an area of approximately 90,000 acres, with an annual power generation capacity of 5.78 billion kilowatt-hours. It can save 1.92 million tons of standard coal and reduce carbon dioxide emissions by 4.66 million tons. It represents a new beneficial exploration in terms of sand prevention, control, and utilization. The goal is to maximize</p>

<p>Maker Camp Participants)</p>	<p>the ecological and economic benefits of the sand industry.</p> <p>During the journey, participants will witness the exploration and formation of a new model of forest–sand industry integration that combines light, forest, and grass resources in the Shapotou area, utilizing climate resources such as sunlight for photovoltaic power generation.</p>
<p>Cultural Exploration Tour: Ningxia Water Conservancy Museum (Belt and Road Maker Camp Participants)</p>	<p>Participants will visit the Ningxia Water Conservancy Museum to learn about the historical development of Ningxia's economy, society, and water conservancy. They will have the opportunity to experience the rich culture and heritage of the ancient Ningxia Yellow River Irrigation Area, as well as the Yellow River culture that has thrived for thousands of years.</p>
<p>A Tour in Helan Mountain Rock Art Site and Han Meilin Art Museum (Belt and Road</p>	<p>Participants will explore the Helan Mountain Rock Art Site, experiencing the cultural charm brought by the millennia–old rock paintings. They will also visit the Han Meilin Art Museum in Yinchuan, where they can admire Mr. Han Meilin's artwork inspired by rock art and appreciate the sparks ignited by the</p>

<p>Maker Camp Participants)</p>	<p>ancient human civilization and contemporary wisdom.</p>
<p>Visiting the Model of Ecological Agriculture - Rice-Fish Space (Belt and Road Maker Camp Participants)</p>	<p>Participants will visit the Rice-Fish Space Ecological Leisure and Sightseeing Park in Ningxia, where they can experience a combination of agricultural history appreciation, scientific education, and lifestyle experiences. They will have the opportunity to understand the hard work involved in agriculture through the poem lines "Sweat dripped to the soil underneath the plant, every morsel of the meals comes with toil and pains". They can observe modern agricultural machinery used for cultivation, sowing, and harvesting. They could try to and get closer contact with the nature to witness the rapid development of modern agriculture. Additionally, they will have the chance to experience the process of ricecultivation.</p>
<p>Beyond Limits of the Moon - Mid-Autumn Festival Special Activity (Belt and Road</p>	<p>During the Mid-Autumn Festival, people look up at the sky and admire the bright moon, longing to reunite with their families and expressing their yearning for their hometown and loved ones. Participants will learn about the origin and stories of the traditional Chinese festival – the Mid-Autumn Festival. They will observe the moon and learn about related knowledge of lunar</p>

<p>Maker Camp Participants)</p>	<p>phases. They will also engage in hands-on activities such as making traditional palace lanterns, wearing traditional Chinese clothing, moon gazing, and enjoying mooncakes.</p>
<p>Opening Ceremony (Belt and Road Maker Camp Participants)</p>	<p>During the opening ceremony, 2-3 (to be confirmed) students from each country, dressed in traditional attire representing their respective nations, will walk onto the stage and proudly proclaim their declarations.</p>

4. Preparation Items

Just like in previous years, Maker Camp participants should prepare the following items:

Clothing, towels, slippers, hats, sunscreen, toiletries (shampoo,

soap...), umbrellas, writing tools, laptops, digital cameras, etc.

Laptops: It is recommended that students bring laptops for group discussions and prepare in advance team project presentations.

WiFi: Free WiFi will be provided at Ningxia Science and Technology Museum.

5. Accommodation Arrangement

Hotels in Yinchuan City and Shapotou, Zhongwei City.

Students and Teachers: 2 persons of the same sex in each room with breakfast included.

During the Maker Camp, Children and Youth Science Center of CAST (CYSCC) will provide hotel accommodation for students and teachers from October 8, 2023, to October 14, 2023.

CYCS will not cover for any extra stays at the hotel. Once the Maker Camp participants submit their travel information, the hotel reservation will be completed.

*Please note that students/teachers will share a room with another student/teacher of the same sex. Room confirmation numbers will not be provided. Please check in at the hotel reception desk directly.

6. Dining Arrangements

The dining arrangements during the Maker Camp are as follows: breakfasts and lunches provided from October 9, 2023, to October 13, 2023; dinners provided from October 8, 2023, to October 13, 2023.

*Halal food will be provided.

7. Transportation

Airport/Train Station \leftrightarrow Hotel: Airport/train station shuttle service will be provided only on October 8th, 2023, and October 14th, 2023. Upon arrival at Yinchuan Hedong International Airport/Yinchuan Train Station (please specify which station), please look for the staff members and volunteers holding the Maker Camp signs. They will arrange for the members to board our shuttle bus to the hotel, with an approximate travel time of 1 hour.

*Additional information, such as signage images, shuttle schedules, etc., will be sent to the respective country/region contacts before October 3, 2023 (Tuesday).

Local Transportation: Ningxia Science and Technology Museum (NSTM) will provide buses for all Maker Camp participants to attend activities arranged by NSTM.

* NSTM does not provide local transportation services for individuals but only offer transportation services for NSTM Maker Camp field activities.

Activities: Participation in NSTM 's field explorations and project activities is free of charge. The activity fees have been covered by NSTM.

*It is recommended to bring pocket money in case you would like to purchase items at the gift shop.

8. Travel Information

Weather

October is autumn in the Ningxia Hui Autonomous Region of China, with cool and pleasant weather. The average temperature ranges from 3°C to 17°C.

Electricity

China's electrical power supply is 220V/50Hz. Wall outlets are designed to accommodate two-pin plugs (round) and three-pin plugs (with two flat pins and a grounding pin). If necessary, please bring an adapter with you.

Medical Insurance

It is recommended that participating teams purchase appropriate travel and medical insurance in their own countries before departure. The organizers do not cover any medical expenses for students and teachers during the 7th Belt and Road Teenager Maker Camp & Teacher Workshop (China–Arab Regional Project). Please also carry the necessary personal medications with you.

Currency

The currency in China is the Chinese Yuan (CNY). It is recommended that Maker Camp participants carry some Chinese

Yuan before leaving for China, or they may exchange currency at the airport or local banks. Credit cards are also widely accepted in China.

Dress Code

There are no strict dress code during the Maker Camp. Casual attire is suitable for most occasions, but it is suggested to dress more formally and nicely for the opening ceremony and awards ceremony.

9. Other Matters

There will be cameras filming throughout the campsite. We appreciate your cooperation in advance.

10.Contact Information

For any further inquiries, please contact:

Ms. Luo Liling

Project Manager

Children and Youth Science Center of CAST (CYSCC)

Email: luoliling@cast.org.cn

Phone: +86-10-6851-0419

Fax: +86-10-6851-0419

Ms. Yang Feng

Deputy Director

Children and Youth Science Center of CAST (CYSCC)

Email: yangfeng@cast.org.cn

Phone: +86-10-6851-0419

Fax: +86-10-6851-0419

Ms. Zhou Lei

Staff

Ningxia Science and Technology Museum

Email: LLzhouL@126.com

Phone: +86-0951-5085112

Ms. Xu Chao

Staff

Ningxia Science and Technology Museum

Email: chaos0206@126.com

Phone: +86-0951-5085112