Synchrotron-light for Experimental Science and Applications in the Middle East
SESAME location in Allan, Jordan
**Members**
Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestine, Turkey.

**Observers**
Brazil, Canada, China, the European Union, France, Germany, Greece, Italy, Japan, Kuwait, Portugal, Russian Federation, Spain, Sweden, Switzerland, the United Kingdom, the United States of America.
Pakistan-Harappa

- 4th-2nd millennium BCE
- Bronze age fortified city, which was a major urban center of the Indus civilization
- the same size bricks and standardized weights as were used in other Indus cities were found
- city was well planned with wide streets, public and private wells, drains, bathing platforms and reservoirs
- material culture and human remains indicate continual interaction with both west and east
United Arab Emirates-Hili

- Bronze~Iron age (3000-600 BCE)
- circular stone tomb (reconstructed Hili Grand Tomb: left) 2000 BCE
- one of the oldest examples of the sophisticated aflaj irrigation system (dates back to the Iron Age)
- UNESCO World Heritage (2011)
Iran-Persepolis

• Gate of Nations (left image)
• southwestern Iran
• Founded by Darius I in 518 BCE
• capital of the Achaemenid Empire
• the kings created an impressive palace complex inspired by Mesopotamian models
• UNESCO World Heritage (1979)
Iraq-Babylon

- dates back to 3rd millennium BCE
- capital of Neo-Babylonian Empire (626-539 BCE)
- the remains (outer and inner city walls, gates, palaces and temples) are a unique testimony to one of the most influential empires of the ancient Mesopotamia
- Babylon functioned as a model, parable and symbol of ancient power for over two thousand years
- inspires artistic, popular and religious culture on global scale (e.g. “Hanging Gardens”, “Tower of Babel”)
- UNESCO World Heritage (2019)
Saudi Arabia-Qasr al Farid

- 1st century BC-1st century AD
- located in the archaeological site of Madâin Sâlih
- the site is located on a trade route between Arabian Peninsula, the Mediterranean world and Asia
- meaning ‘Lonely Castle’
- carved into sandstone
- made by the Nabataean
- UNESCO World Heritage (2008)
Jordan-Petra

- rock-cut capital city of the Nabataeans
- 4th century BCE-7th century AD (Byzantine)
- important crossroads between Arabia, Egypt and Syria-Phoenicia
- fusion of Hellenistic architectural facades with traditional Nabataean rock-cut temple/tombs
- ancient Eastern tradition blend with Hellenistic architecture
- UNESCO World Heritage (1985)
Palestine-Jericho

• lowest (258m below sea level) and one of the oldest town in history
• founded in Natufian period (10-8th millennium BCE)
• earliest urban fortifications known in the world (8th millennium BCE), surrounded by a stone wall supported by a massive round tower (with internal staircase)
• the Neolithic population developed a complex society where house construction, crafts and mythological and social conception of burial and religion were practiced
• indicates early development of a sophisticated social and political system
Israel-Nahal Me’arot

- situated on the western slopes of the Mount Carmel range
- includes several cave sites
- cultural deposits representing at least 500,000 years of human evolution (from the Lower Paleolithic)
- the site demonstrates the unique existence of both, Neanderthals and Early Anatomically Modern Humans with the same Middle Paleolithic cultural framework, the Mousterian
- the long cultural sequence represents the transition from hunter-gathering lifestyle to agriculture and animal husbandry
- the caves are a key site of chrono-stratigraphic framework for human evolution in general, and the prehistory of the Levant in particular
- UNESCO World Heritage (2012)
Lebanon-Byblos

- Costal site located on a cliff of sandstone, 40km North of Beirut
- one of the oldest Phoenician cities
- continuously inhabited since Neolithic period (c.6000 BCE), making it one of the oldest continuously inhabited cities in the world
- since the Bronze age, Byblos provides one of the primary examples of urban organization in the Mediterranean world
- the origin of the contemporary alphabet was discovered in Byblos
Syria-Ugarit (Ras Shamra)

- ancient port city in Northern Syria
- c. 6000-1190 BCE (Neolithic~Bronze age)
- the city flourished in the 2\(^{nd}\) millennium BCE
- active trading with Egypt, the Hittites, Cyprus, the Aegean, Syria and coastal regions in the Levant
- Ugaritic alphabet: one of the oldest alphabet (written in cuneiform)
Turkey-Çatalhöyük

- two mounds situated on the Southern Anatolian Plateau
- Neolithic-Chalcolithic settlement
- eastern mound: 7400-6200 BCE (Neolithic)
  - wall paintings, reliefs, sculptures and other symbolic and artistic features are found
  - testify the evolution of social organization and cultural practices as humans adapted sedentary life
- western mound: 6200-5200 BCE (Chalcolithic)
- the site provides important evidence of the transition from settled villages to urban agglomeration
- UNESCO World Heritage (2012)
Egypt-Great Pyramid of Giza

- also known as the Pyramid of Khufu
- build in 4th dynasty (c. 2580-2560 BCE)
- the present height is 137 meters
- the only surviving wonder of the ancient world
- its architectural design remains unparalleled. Scientists and archaeologists continue to conduct research on how it was constructed
- UNESCO World Heritage (1979)
Algeria-Tassili n' Ajjer

- national park in the Sahara desert
- prehistoric cave art (paintings and engravings) from 10,000 BCE to the first centuries AD
- more than 15,000 paintings and engravings are found
- depicts climate changes, animal migrations and evolution of human life
- UNESCO World Heritage (1982)
Tunisia-Kerkouane

- the only example of a Phoenicio-Punic city to have survived
- the city was not rebuilt by the Romans like the other places (e.g. Carthage, Tyre and Byblos)
- city was occupied around 6th-3rd century BCE
- probably abandoned during the First Punic War (c. 250 BCE)
- gives information on town planning, architecture, lifestyle, socio-economic life, as well as some religious and funerary practice of Punic society
- contributes towards improved knowledge of Phoenician-Punic sites in the Mediterranean
- UNESCO World Heritage (1985)
Morocco-Ksar of Ait-Ben-Haddou

- pre-Saharan habitat
- group of clay brick buildings surrounded by high defensive walls
- 17th century~present
- extraordinary ensemble of buildings offering a complete panorama of pre-Saharan earthen construction techniques
- World Heritage List (1987)