



## History, Geography and Archeology

**Esmail Hemati Azandaryani**

**Rank:** 1st Winner in the Young Section

**Degree:** PhD

**Research Title:** Investigation and Analysis of Handmade Troglodytic Underground Architectural Complex at Arzanfood in Hamadan

**Kind of Research Work:** Doctoral Dissertation



### About Researcher

Esmail Hemati Azandaryani was born in 1986 in Malayer city, Hamadan. After passing the elementary, middle and high school levels, he entered Bu-Ali Sina University of Hamadan in the field of archeology in 2006 and graduated in 2010. Then in 2011 he entered Tarbiat Modares University-Tehran in the master's degree in archeology. In 2013, he defended his dissertation entitled "Analytical underground troglodytic architecture Hamadan: Case Study the troglodytic architectural complex of Samen, near Malayer" and graduated from this university. Esmail Hemati entered Bu Ali Sina University in Hamadan in 2013 for a PhD in Archeology with a focus on historical period and in 2018, he defended her dissertation entitled "Investigation and Analysis of Handmade Troglodytic Underground Architectural Complex at Arzanfood in Hamadan". At present, Dr. Esamil Hemati Azandaryani is a Faculty member of the Department of Archeology, Faculty of Art and Architecture, Bu Ali Sina University, Hamadan. His honors include winning the Academic Talent Awards of the Iran National Elite Foundation in 2015 and 2016, being selected as the Researcher of the Year by the Cultural Heritage Organization in the field of Archeology in 2017, and being selected as an exemplary student of Bu Ali Sina University in 2016 and 2017. In 2014, 2015, 2016 and 2017, he was honored as a selected researcher in the doctoral student course at Bu Ali Sina University. He has also written books and numerous articles in prestigious national and international journals, which due to their scientific expertise, most of the articles are related to the historical period of Iran.

Since 2009, Dr. Hemati has been involved in most important archeological projects in Hamedan, including Tepe Ecbatana, Giyan Tepe in Nahavand, Gourab Tepe of Malayer, handmade Troglodytic architecture of Samen in Malayer, handmade Troglodytic architecture of Arzanfood, Qaleh Juq of Famenin, Baba kamal Tepe of Tuyserkan, Anuch/Anuj of Malayer, etc. He has done field activities and written several articles about the mentioned works.

One of the most important field projects under his supervision is the "discovery and identification of the newly discovered Haji Khan temple from the Median period", which is very important in the study of the history of ancient Iranian architecture and archeology and civilization of the Median period.

### Abstract



The handmade troglodytic underground architectural complex at Arzanfood in Hamadan is a unique type of this kind of architecture that was discovered by accident in 2010 as a result of mineral exploration activity. This area is located 30 km South East of Hamadan (provincial capital) and is situated 2 kilometers south of a village with the same name. The author has collected and analyzed information using field research, laboratory studies, library research as well as comparative studies. These results identify more than 70 hand-made underground spaces including rooms and halls with variable depth from 3 to 7 meters. Other results of the research include the time periods of using the complex of Arzanfood in the Parthian, Sassanid and then in the Middle and Late Islamic centuries. In addition, the underground spaces are connected to the surface via stairs-like entries in the schistose bedrock. This set covers all the spaces are arched, it works well in most areas, this collection strikes a sharp object (possibly pick) clearly observed. It also sets the foundation lamp oil lighting spaces that were in the wall spaces. In some places the walls of adjacent platforms (made from stone-ground or wall stile), water channels and sources are visible. The architectural concept of sites similar to handmade troglodytic architecture complex of Arzanfood are Samen of Malayer, Anuch/Anuj of Malayer, Kamari of Malayer in Hamadan, Varjavi of Maraghe, Hile Var of Azerbaijan and Nushabad of Kashan. According to the researches done for all the spaces of Arzanfood complex, it is not possible to provide the same use, but according to the available evidence, most of the spaces of the complex have been used as refuge in different periods and it seems that they are part of the activity complex. Work related to workshop production has been done and in some spaces of the complex has been used as a residence (possibly temporarily). It should be noted that the proposed applications are based on archaeological findings and may be confirmed or corrected in the future.

