

## Comparison between Ancient Water Purification in Iran and New Methods

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### Abstract:

**Background and Purpose:** The water purification is a subset of public health that is important for the people health. The first water purification unit is reported in the “Antillen islands”, while the Iranian Scientists have done about several thousand years ago.

The first and oldest water purification unit in the world was located in “Chogha Zanbil” which is Iranian scientists have made this. Iranian scientists were using physical laws and materials, including asphalt, brick and inclined surfaces, which are currently used in the world, purified water of Karkheh River.

Roman Ghirshman, a French archaeologist, discovered the water purification unit in Chogha Zanbil. This unit with a layer of gravel, sand and coal was filtered water. This method is very similar to that currently used for separation. This method is used for separation in zeolite membranes. In this article, the separation mechanism in Chogha zanbil water purification unit was described, and compared with the separation mechanism in zeolite membranes.

**Keywords:** Public Health, Zeolite, Separation, Membrane.

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