

## عنوان مقاله:

A Method for Estimating Porosity of Asmari rock Types using X-ray CT Technology

## محل انتشار:

دومین کنفرانس دوسالانه بین المللی نفت، گاز و پتروشیمی (سال: 1397)

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## خلاصه مقاله:

X-ray Computed tomography is frequently used in non destructive 3D imaging and analysis techniques for the investigation of internal structure of large variety of objects, including geomaterials. An accurate knowledge of porosity & matrix structure provides petroleum engineer with a tool for efficiently managing the production process of a field. Furthermore, it is one of the most important pieces of information for the desing & management of enhance oil recovery (EOR) and storage operations. In this study, we illustrate a method to calculate and bulid 3D model of Carbonate (Asmari) rock matrix using high resolution Dental CT scanner. Average porosity & porosity distribution is both calculated using Digital Image processing (DIP) & conventional laboratory measurments (Heliuem porosimeter).

Results depicted that average porosity obtained with both methods are quite equal

## کلمات کلیدی:

Porosity, Digital Image processing, X-ray Computer Tomography

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1041193>

