

University of Om El Bouaghi  
Faculty of earth sciences and  
architecture

### Département of Architecture

Organizes on the 29<sup>th</sup> November 2023 a scientific day  
entitled

## Parametric BIM modelling, and Smart Building technology

Under the supervision of the university Rector:

**Pr. DIBI Zohir**

Head of the scientific day:

**Doctor : NAIDJA Amina**

### Preamble :

The smart building can be recognized as an adaptation of the energy consumption of buildings to the precise requirements of those who inhabit them. BIM can play a major role in the inception, execution, construction, and maintenance of these smart buildings. BIM (Building Information Modeling) is a methodology that allows architects to generate numerical design simulations to manage all the information associated with an architectural project. The parametric Building information modeling can be considered as well as parametric design strategy that permits the analysis of multiple scenarios to support the decisions during the design stage. The information in the Parametric BIM modelling is linked via algorithms in a digital parametric structured model so that when a change is made, components are updated automatically in line with specified parameters. This process can be used to describe and automatically develop several design deviations. Currently, parametric methods are used in various applications such as bionic construction, lightweight construction, modular construction, and infrastructure construction.

## Purposes of the scientific day

Over this study day, we attempt to highlight the main concepts related to parametric design modelling, BIM and Smart buildings technology.

Over this study day, we will also try to shed light on the following points:

- Relationship between BIM and architecture quality.
- Sustainable management, sustainable buildings, and sustainable cities.
- Automation in construction.

### Field of research

This study day suggests addressing several questions through the following statements:

- Building information modeling for parametric design and construction
- Energy Modeling to Cool and Heat the Building Naturally
- Design and analysis of complex structures
- Methods for Layout, conception and development
- Domotics and energy efficiency.

## Reading comitte

Dr. Naidja Amina	President	University of Oum El Bouaghi
Pr.Addad Mohamed Cherif	Member	University of Oum El Bouaghi
Pr.Mazouz Said	Member	University of Oum El Bouaghi
Pr. Bourbia Fatiha	Member	University of Constantine 3
Pr.Bousmaha Ahmed	Member	University of Oum El Bouaghi
Pr. Louafi Samira	Member	University of Constantine 3
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Dr. Baadeche Mounira	Member	University of Oum El Bouaghi
Dr. Ben mechiche Meriem	Member	University of Constantine3
Dr. Tebani Habiba	Member	University of Annaba
Dr. Mansouri Ahmed	Member	University of Batna

## Organizing comitte

Dr. Naidja Amina	President	University of Oum El Bouaghi
Dr. Farid Dallel	Member	University of Oum El Bouaghi
Dr.Kedissa chahra zed	Member	University of Oum El Bouaghi
Dr. Benhelilou Karima	Member	University of Oum El Bouaghi
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Archi Art Staff	Member	University of Oum El Bouaghi

### Submission condition

- The title of communication character times new roman, in capital letters, bold, size 14.
- A summary of 500 words and 05 keywords at least.
- Bibliographic reference in APA mode.
- Each communication should not exceed 15 minutes.

**Language of communication / Arabic / English / French.**

**Communications should be sent to following adress**

**Email :** parametric.bim@univ-oeb.dz

### Important dates

Deadline for receipt of communications: November 19th, 2023.

Notification of acceptance: November 25th, 2023.

The scientific day will take place at the Bloc I University  
OEB conference room

For more information contact 0669412221