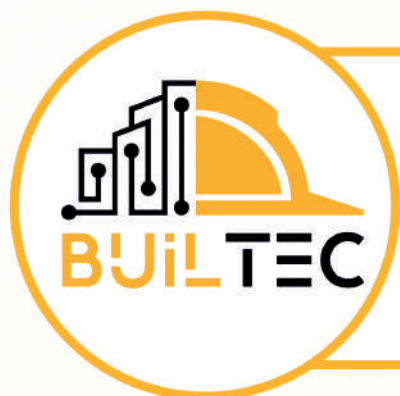


3^{ème}
édition



INTERNATIONAL EXHIBITION OF **MODERN**
CONSTRUCTIONS AND NEW TECHNOLOGIES

SUMMARY REPORT



From the 20th to the 23rd of February, 2023
Cultural Complex of Ahmed Bey (Zenith)
Constantine, Algeria



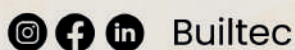
Partenaire media:



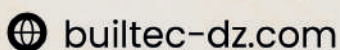
Partenaire:



Organize by
MediaSmart



Builtec



builtec-dz.com



0557 60 54 59 - 0550 25 05 61

01

Presentation report

- Introduction
- Technical data sheet
- Interest in the exhibition
- Objective of the exhibition
- Partners
- Business sectors
- List of participants

02

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- Workshops
- National Architecture Exhibition
- Conferences
- National City Day
- Local Technological Solutions for Modern Construction
- BUILTEC BIM Day
- The City of Tomorrow

03

3-moments of great significance (highlights) of buildtec 2023

- Visit by Mr. Wali (governor) of Constantine
- Highlights of BUILTEC 2023
- BUILTEC Gallery
- GALA Dinner

04

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SOMMAIRE

Introduction



The BUILTEC exhibition is a major event held in the city of Constantine-East of Algeria- that displays innovation and the use of modern technologies. The visitors have the opportunity to explore modern constructions, particularly those related to technology and its practical applications, as well as to interact with professionals and experts in the field and discover the latest technological advances. With over 60 exhibitors, the exhibition offers an unprecedented variety of innovative ideas applicable to almost all industrial and commercial sectors.

This event provides a platform for collaboration between professionals of the industry, enabling so the sharing of ideas and knowledge, and bring subsequently and rapidly innovation to market. As a place rich in useful information about the latest trends and digital innovations, the International New Technologies Exhibition is where many promising innovations can embodied, thanks to the collaborative work carried out by people of interest. BUILTEC is an essential investment for all businesses and individuals who are striving to stay competitive in a constantly changing market. It offers the visitors a safe and welcoming environment to explore the exciting world of technological innovations. With a variety of suppliers displaying their latest inventions, the visitors have the unique opportunity to see and try many innovations that would significantly improve their daily lives by allowing them to work efficiently, reduce time spent on certain tasks, and make it easier to access the information needed to take important decisions. In short, BUILTEC is an unmissable event for all those who want to discover new ways to use technology and stay up-to-date on the technological advances that is shaping our future every day.

Technical sheet



- Event type:

International

- Periodicity

annual

- edition:

3rd edition

- Title of the event :

International Exhibition of Modern
Constructions and New Technologies

- Location of the event

Cultural Complex of Ahmed Bey
(Zenith),Constantine

- Event date

February 20 to 23, 2023

- Organizer

Media Smart Communication & webmarketing -
<https://mediasmart.dz>

- Slogan

Build the future

For exhibitors

BUILTEC is a great opportunity for companies in the construction field, new technologies and renewable energy sectors. It allows understanding how the construction industry is progressing and adapting in the age of technology. It also exhibitions the importance of knowing how to use software such as Auto-desk in modern construction and architecture.

01. To prospect

The BUILTEC exhibition is a professional event that offers a number of advantages for businesses. It is an excellent way to prospect for potential customers by meeting as many people as possible in just four days. Studies in France have shown that for every euro invested in exhibition, French companies generated 35 euros in revenue.

02. To inquire

The BUILTEC exhibition is a professional event that offers a number of advantages for businesses. It is an excellent way to prospect for potential customers by meeting as many people as possible in just four days. Studies in France have shown that for every euro invested in exhibition, French companies generated 35 euros in revenue.

03. To present

It is also an excellent place to displaying new products and services by interacting directly with potential customers. Businesses can answer questions and explain their offerings in detail. However, it is advisable to be creative in order to stand out and attract the attention of prospects and customers.

04. To Observe

The BUILTEC exhibition also offers the opportunity to businesses to get feedback from the market by meeting competitors and understanding market trends, and improve accordingly the quality of their products. The BUILTEC exhibition is also a way to meet key market players and forge partnerships to conquer new markets. It is a great opportunity to develop professional network.

FOR VISITORS

The BUILTEC exhibition is an event for construction professionals that aims at helping them to find solutions and face the challenges of building. It is going to be held in one location for a period of four days and going to bring together over 100 exhibitors and 5,000 visitors.

01. to optimize

Participants can also optimize their business by scheduling B-to-B meetings in advance. In addition, the exhibition offers an opportunity for young people to find a job or a business idea in the field of construction, which is increasingly in need of new resources.

02. To Inquire

Visitors can learn about the latest trends in the industry through a rich program of conferences animated by experts and specialists. The topics covered are very practical and aim at providing concrete solutions to businesses' concerns.

03. To Develop

Participants can also develop their professional network by meeting with industry professionals and forging new partnerships to conquer new markets. Finally, the BUILTEC exhibition offers personalized advice to visitors by enabling them to meet and interact directly with professionals.

04. To Discover

The visitors may discover all the possibilities offered by the smart building, in terms of energy performance, comfort, and security, as well as network-based multi-functional and multi-generational building designs.

Show objectives

The BUILTEC trade exhibition is also an opportunity to build a customer database by collecting contact information of interested visitors. Companies can also obtain new orders by presenting their products in an attractive way and offering special discounts. BUILTEC presents all the phases of construction, from planning to operation, facilitating therefore the integration of different disciplines.



01. Discover

Innovative technologies at the service of the construction industry.

02. Communicate

With the relevant stakeholders according to their fields of activity



03. Increase

Participants' visibility and positioning in relation to markets

04. Swap

On the challenges facing different sectors

05. Improve

the businesses brand image and awareness



06. Establish

Strategic partnerships between stakeholders

07. promote

Construction with new technologies

Partners



OUR MEDIA PARTNERS



MEDIA PARTNERS



Les secteurs d'activités

01

BUILDING MATERIALS

- producers of Construction materials;
- Engineering offices;
- Equipment manufacturers for cement plants, brickyards, ceramics, plasters and lime, etc.

HOUSING AND CONSTRUCTION

- structural work
- various construction materials
- Prefabricated and prestressed materials
- Formwork and scaffolding equipment
- Second works
- Wall and floor coverings and accessories
- Painting, glassware and decoration
- Wooden, metal, aluminum and PVC joinery
- Locksmith and hardware
- Building electricity
- Solar systems
- Heating, air conditioning and plumbing
- New technologies and home automation
- Elevators, lifts and integrated systems.
- aux de construction

02

03

STREETS AND UTILITIES

- Water treatment
- Sewerage networks
- Public lighting

CONSTRUCTION EQUIPMENT AND TOOLS

- machinery and equipment for quarries and construction sites
- Concrete transport trucks
- Utility vehicles
- Individual and collective tools
- Concrete transport trucks
- Utility vehicles
- Individual and collective tools

04

Les secteurs d'activités

05

SECURITY EQUIPMENT

- Firefighting equipment
- Various personal and collective protection equipment

SERVICES

- Real estate developer
- Environmental protection
- Testing and inspection laboratory
- ISO certification
- Professional project managers
- Engineering and architecture firms
- Universities and Grandes Écoles
- Information and communication technologies (ICT)
- Computer science
- Banks, insurance companies and public institutions

06



LIST OF PARTICIPANTS



SARL NECHMA AGGLOS

Precast concrete products for sanitation

SARL 2BM PROM

Real estate promotion



EL ZAHRA PROMO

Real estate promotion

CAMELEON COLOR

Manufacturing of paints and special products

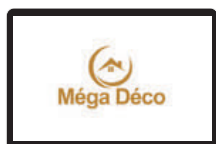


FORSEN ESHAM COMPANY

Building Materials

EURL DOMO DZ

Home automation and smart home solutions



EURL MEGA DECO

BUILDING MATERIALS & FACADES

SARL LGMB FAÇADE

BUILDING MATERIALS & FACADES



SILEX PRODUCTS

MANUFACTURE OF MORTARS AND SPECIAL PRODUCTS

SARL 3 ELEC

ELEVATORS – ESCALATORS & MOVING WALKWAYS



EURL MAMI CUISINE

Equipped kitchens

LIST OF PARTICIPANTS



SARL ALGERIE SERVICE ASCENSEUR

Installation, repair, and renovation of elevators

EURL AZZIZI MOBIL HOUSE INDUSTRY

SAHARAN CABINS



SARL GAMMA GYM CENTER

Real estate promotion

SPA SOCIÉTÉ DES CEMENTS HAMA

PRODUCTION AND MARKETING OF CEMENT



EURL SERVICE FORAGE ET TOURNAGE (SFT)

Hydraulic cylinders, mechanical parts

SARL SABA GLASS

glass and stainless steel

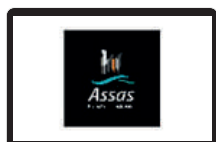


SARL ASCENSEUR TRADING

INSTALLATION, REPAIR AND RENOVATION OF ELEVATORS

SARL RAHMANI REVÊTEMENT ET DALLE

PRODUCTION DE CARRELAGE ET REVÊTEMENTS



SARL ASSAS

Real estate promotion

SARL HARIZ PROMO

Real estate promotion



IVA DESIGN ET AMENAGEMENT

interior design

LIST OF PARTICIPANTS



GENERATION TECH
association

SOCIETE GENERALE ALGERIE
bank



UNIVERSITÉ ABDELHAMID MEHRI CONSTANTINE 2
university

A.N.V.R.E.D.E.T

L'AGENCE NATIONALE DE VALORISATION DES RÉSULTATS
DE LA RECHERCHE ET DU DÉVELOPPEMENT TECHNOLO-
GIQUE



UNIVERSITÉ DE CONSTANTINE 3- SALAH BOUBNIDE
university

GROUPE D'ETUDES ET ENGINEERING
ARCHITECTURE ET URBANISME



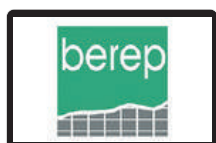
**ORDRE DES ARCHITECTES CONSEIL LOCAL
DE CONSTANTINE**

**AGENCE NATIONALE POUR LA PROMOTION ET
LA RATIONALISATION DE L'UTILISATION DE
L'ENERGIE**



B.E.H.A ALGER
Architecture and Urban Planning

B.E.R.E.G
Architecture and Urban Planning



B.E.R.E.P
Architecture and Urban Planning

LIST OF PARTICIPANTS



ENRIO OUEST

Architecture and Urban Planning

B.E.E.T BATNA

Architecture and Urban Planning



SARL GAMMA GYM CENTER

Real estate promotion

B.E.T.P BECHAR

Architecture and Urban Planning



S.E.T.A.M MEDEA

Architecture and Urban Planning

B.E.M MILA

Architecture and Urban Planning



BERM M'SILA

Architecture and Urban Planning

SARL RAHMANI REVÊTEMENT ET DALLE

Tile and coating production

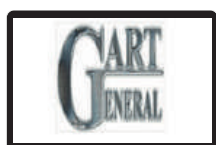


S.A.T.O O.E.B

Architecture and Urban Planning

MHT TELEMEN

Architecture and Urban Planning



GART ANNABA

Architecture and Urban Planning

LIST OF PARTICIPANTS



ÉCOLE POLYTECHNIQUE D'ARCHITECTURE ET D'URBANISME
Higher education institution

OFFICE DE PROMOTION ET DE GESTION IMMOBILIÈRE
Real estate promotion



ENTREPRISE NATIONALE DES MATÉRIELS DE TRAVAUX PUBLICS
CIVIL ENGINEERING EQUIPMENT

TENDERS-DZ
Bids



FBEB
Manufacturing Single-Layer Granite Tiles

SARL BUSINESS LEADS ALGERIA
Organizational Consulting



GROUPEMENT ALGERIEN DES ACTEURS DU NUMERIQUE
Architecture and Urban Planning

MEDIA SMART
COMMUNICATION, WEBMARKETING & EVENTS



NOBILTA HOME
Modern Furniture and Kitchen Manufacturer

MAXOFIX
CONSTRUCTION MATERIALS



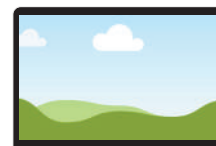
PALAIS DES PORTES
carpentry

LIST OF PARTICIPANTS



AGENCE NATIONALE DE L'AMÉLIORATION ET DU DÉVELOPPEMENT DU LOGEMENT

DIRECTION DE LOGEMENT DE LA WILAYA DE CONSTANTINE



DIRECTION DE L'URBANISME DE L'ARCHITECTURE ET DE LA CONSTRUCTION DE CONSTANTINE

HERITAGE, CITY & ARCHITECTURE
organization



COUCOU MEUBLE
furniture

BANQUE NATIONALE D'ALGÉRIE
bank



ALALTA AUTOMATISME
Blinds and Curtains Store

PROFESSIONAL MEETINGS

the Presentation



The BUILTEC exhibition is also BUILTEC Professional Meetings. The professional meetings on the sidelines of the BUILTEC exhibition are an excellent opportunity for professionals to familiarize themselves with the latest trends, products and technologies. Participants will have the chance to participate in practical workshops that will allow them to gain specific knowledge on the subject. In addition, they will benefit from networking and sharing ideas and feedbacks. Finally, this opportunity is an excellent way to develop one's career, thanks to new contacts created during the event. There is no doubt that participating at the technical days on the sidelines would be very advantageous.

- Conferences
- Workshop: on the use of new technologies in the service of modern construction.
- Partnership with the National Agency for Valorization of Research Results and Technological Development (ANVREDET)
- Exhibition of arts and architecture draft in partnership with the Architecture, City and Heritage Foundation,
- Interactive workshops organized by exhibitors..
- Guided tours around the main monuments in the city of Constantine, in partnership with Tourism and Culture Directorates, Constantine.

PROFESSIONAL MEETINGS

WORKSHOP: LOCAL TECHNOLOGICAL SOLUTIONS FOR MODERN CONSTRUCTION

Reverse engineering is now an undeniable process. It opens the door to unprecedented technological innovations, particularly through the use of 3D measuring equipment and reverse engineering software in construction and housing sectors.

In its efforts to promote the use of reverse engineering through its program focusing on innovation and the development of local content, the National Agency for Valorization of Research Results and Technological Development (ANVREDET), in collaboration with Media Smart COM Agency, organizes the third thematic workshop on:

This workshop aims at consolidating technical and commercial exchanges

between national actors towards the transfer of technologies in housing and

construction. These technologies identified by ANVREDET (interface organization) to strengthen the flow of reverse engineering work will become even more efficient and sophisticated as operators seek to increase their products efficiency, develop new solutions, and improve their production processes and results. Five presentations on the potential to developing new local technologies are scheduled by five partner establishments of ANVREDET, namely:

- National Agency for Promotion and Rationalization of Energy Use
- Polytechnic School of Architecture and Urban Planning
- National Center for Integrated Building Studies and Research (CNERIB)
- Environmental Research Center (CRE)
- Engineering Study Group (GEE)



PROFESSIONAL MEETINGS

المعرض الوطني للفنون و العمارة

National exhibition of architecture

PROFESSIONNELLES

This national exhibition, which brings together architects from all over the country, offers an opportunity for sharing experiences between professionals in the field. It presents projects and achievements in architecture and urban planning, works of art as well as photographs. As a collective platform for exploration, knowledge and research, it aims to explore mutations, cultural, and social practices.

This exhibition invites public and professionals to discover the exhibited works, which present the different phases of designing, from order to realization. Each architect presents his experimental and innovative research, and exposes his personal vision of architecture.

The exhibition tells a story that crystalizes ideas into a complex and a clear story, and explores as well the relationships between the architects, the other professionals in the field and the environment. Beyond buildings, shapes, materials and structures, it highlights the ability of architecture to change our vision of the world. It offers a brain journey through a slow and a careful conversion of ideas into material form, and seeks to shed lights on the architecture involvement in a changing world.

Given the importance of constructing our living environment, this exhibition aims to be a great meeting place, a crossroads to ideas and a place for sharing the know-how of architects.



CONFERENCES

Program

Monday the 20 th of February 2023

National City Day

10 h 00 – 10 h 20

Sustainable Building, Environment and Urban Microclimate
PR. RAFIK BELARBI Canadian University Dubai – Université
Sherbrooke

10 h 20 – 10 h 30

Debate

10 h 30 – 10 h 50

The impact of solar heat and UV radiation on residential
and office buildings
Dr SEIF KHIATI Canadian University – Dubaï

10 h 50 – 11 h 00

Debate

11 h 00 – 11 h 20

Urban planning and planning instruments
M. Miloud BENZERDA – ARCHITECTE
National Order of Architects (CNOA)

11 h 20 – 11 h 30

Debate

11 h 30 – 11 h 50

Executive Decree 22-55 and the conditions for regularizing build-
ings.
M. Zakaria BENMAKHLOUF – Architecte
Local Council of the Order of Architects of Constantine

11 h 50 – 12 h 00

Debate and closing of the day

CONFERENCES

Program

Tuesday the 21 st of February 2023

Local technological solutions for modern construction

10 h 00 – 10 h 20

Olive pomace insulation

Mr Lotfi DERRADJI – Melle Majda MOUAICI

National Center for Integrated Building Studies and Research

10 h 20 – 10 h 40

Composite Insulating Material based on Plaster and Ampélodes-mos Mauritanicus

Pr Boualem DJEBRI – Dr Fatma ARHAB

Polytechnic School of Architecture and Urbanism (EPAU)

10 h 40 – 11 h 00

Debate

11 h 00 – 11 h 20

Building energy efficiency

Mr Tahar MOUSSAOUI – Architecte

National Agency for the Promotion and Rationalization of Energy Use (APRUE)

11 h 20 – 11 h 40

Le BIM l'approche du reverse Engineering à travers le scan to BIM

Mr Azzedine DERBAH – Mr Rabah DELILI

Group of Studies and Engineering GEE

11 h 40 – 12 h 00

Debate

12 h 00 – 12 h 20

Straw: A natural fiber for good acoustic correction

Dr Dalal FARID – Amel BENZAOU

Larbi Ben M'hidi University – Oum El Bouaghi

12 h 20 – 12 h 40

IPV Facades: When Buildings Produce Energy

Dr Amel Ferial BOUDJABI

Larbi Ben M'hidi University – Oum El Bouaghi

12h 40 – 13 h 00

Debate and closing of the day

CONFERENCES

Program

Wednesday the 23 rd of February
The city of tomorrow

10 h 00 – 10 h 20

Building on isolated bases: The Algerian experience

M. Abderrazak MESSAAD – Architect

National Federation for the Protection of the Environment

10 h 20 – 10 h 30

Debate

10 h 30 – 10 h 50

Natural lighting in buildings: challenges and technical solutions

Dr SARAH BENHARKAT – Architect

Teacher – Faculty of Architecture and Urban Planning of
Constantine

10 h 50 – 11 h 00

Debate

11 h 00 – 11 h 20

Towards a shared vision of the city of tomorrow – case of Constantine

Dr Naouel Hanane BOUDJABI – Architect

Lecturer – Institute of Urban Techniques Management (IGTU) – Constan-
tine 3 University

10 h 20 – 10 h 30

Debate

11 h 30 – 11 h 50

Towards an inclusive city

M. Faycal SAAD – Architect

M. Abdelkrim LENEGUER – Architect

Foundation for Architecture, City and Heritage

11 h 50 – 12 h 00

Debate and closing of the day

Les conférences

Lundi 20 février 2023

La journée nationale de la ville



CONFERENCES

SUSTAINABLE BUILDING, ENVIRONMENT AND URBAN MICROCLIMATE

SUMMARY

The building sector in Europe is crucial for green growth, but it is responsible for more than 40% of final energy consumption and nearly 28% of greenhouse gas emissions in France. It is also one of the largest producers of waste, generated during the construction and demolition phases. Government action plans, such as the Grenelle Environment Forum or COP 21 and 22, have therefore made the building sector one of the priority areas in France. Prioritizing the reduction of the environmental impact of buildings is also job-creating. To achieve this, it is necessary to reduce energy consumption related to the operation of buildings, to use materials with a lower impact (or eco-materials) and to better valorise construction waste. Regulatory requirements, such as RE2020, which has been in force since January 2022, encourage the use of bio-sourced and geo-sourced materials. However, the use of materials with a low environmental impact is hampered by the lack of databases on their intrinsic properties and by the lack of knowledge of their behavior over time. The presentation will focus on the different levers that can be used during construction and rehabilitation operations to ensure optimal energy and environmental performance of buildings and to reduce urban heat islands.

**Pr Rafik BELARBI Canadian
University Dubai Université
Sherbrooke**

Pr. Rafik BELARBI is a Senior Professor of Civil Engineering and was the Head of the Civil Department at La Rochelle University from 2007 to 2019. He is the Editor of Advances of Civil Engineering. His research interests cover a wide range of topics, including multi-physics and multi-scale approaches for sustainable building materials, energy and environment applications, and durability. He is an expert in the microstructural, thermal, physical, and hydric characterization of porous building materials, as well as heat and mass transfers with applications in energy efficiency in buildings and indoor environments, and durability of constructions.



CONFERENCES

THE IMPACT OF SOLAR HEAT AND UV RADIATION ON RESIDENTIAL AND OFFICE BUILDINGS

SUMMARY

The presentation provides an overview of the impact of solar heat and UV radiation through glass curtain walls in residential and office buildings. In the United States and Europe, several studies have led to the adoption of innovative and sustainable policies and practices that have led to the development of new materials that minimize the negative impacts of solar radiation. In Dubai, as the first city in the Gulf, it is experiencing an unprecedented construction boom. An important part of these buildings are housing and offices. The study confirms the importance of glass technology in reducing solar heat gain and UV damage. This will result in healthier homes and offices, reduced energy consumption, and reduced environmental impacts. By adopting the standards defined by similar studies, the cities of Algeria, especially those in the south of the country, will be at the forefront of sustainable urban development, joining the cities of New York, San Francisco, Washington, D.C., Seattle, London, and Amsterdam.

Dr Seif KHIATI Canadian University – Dubai

Dr. Seif Khiati is an associate professor of architecture. He holds a PhD in urban planning and an MA in architecture from the University of Washington in the United States. He has taught and conducted research in the United States, Canada, and the United Arab Emirates. His research interests include the history of architecture, sustainability, technology in buildings, urban form, and computer multimedia in architecture. He is currently the chair of the Department of Architecture at the Canadian University of Dubai (CUD).



Les conférences

Mardi 21 février 2023

Les solutions technologiques locales au profit d'une construction moderne



CONFERENCES

THE IMPACT OF SOLAR HEAT AND UV RADIATION ON RESIDENTIAL AND OFFICE BUILDINGS

SUMMARY

The energy transition policy in Algeria aims to support economic development while reducing dependence on fossil fuels and improving the country's energy security. The government has launched projects to develop multiple energy sources, as well as initiatives to encourage the development of energy efficiency in buildings.

Algeria is characterized by a significant olive oil activity, the production of olive oil generates a small particle waste called olive pomace, often not recycled in large quantities.

This work consists in investing this wealth in the field of building through the development of a thermal insulation material based on olive pomace in order to study its thermal and mechanical characteristics as well as its influence on the thermal behavior of buildings and the reduction of heating and air conditioning consumption. We want to show, through our work, that the building sector, «the most polluting sector», can become today the ecological lung in terms of waste valorization and thermal performance.

Dr Lotfi DERRADJI
Melle Majda MOUAICI
C.N.E.R.I.B



Dr. DERRADJI Lotfi, PhD in Mechanical Engineering, Energy Option, University of Blida. Permanent researcher at the rank of Director of Research at the National Center for Integrated Studies and Research in Building (CNERIB). President of the Center's Scientific Council and Head of the Building Thermal Team, Building Physics and Environment Division at CNERIB. Laureate of the first prize of the Council of Arab Ministers of the Environment, Cairo, 2016. Laureate of the «National Green Innovation Competition» organized by the National Waste Agency (AND) and the United Nations Development Programme in Algeria (UNDP) (2022).

CONFERENCES

COMPOSITE INSULATING MATERIAL BASED ON PLASTER AND AMPÉLODESMOS MAURITANICUS

SUMMARY

The objective is to design samples in the form of plates of a composite material based on plaster (matrix) and vegetable fibers (Diss) for the improvement of thermal conductivity at low cost. This material must follow a strict protocol in its design, namely the optimization of fiber dosage and the change in its behavior from rigid to ductile.»

«The objective of this sustainable product is to improve comfort and thermal insulation in various structures, and in particular old buildings, at low cost.»

«This is a composite material based on crushed paper (matrix), in the form of plates reinforced with vegetable fibers (Diss) to make a thermally insulating material at low cost. Similarly, this composite must follow a strict protocol in its design, namely the optimization of fiber dosage, the change in its behavior from rigid to ductile and the preservation of the environment

Pr Boualem DJEBRI
Dr Fatma ARHAB
E.P.A.U



Dr. Lotfi DERRADJI is a Doctor of Mechanical Engineering in the field of Energy at the University of Blida. He is a permanent researcher with the rank of Research Director at the National Center for Integrated Building Study and Research (CNERIB). He is the President of the Center's Scientific Council and the Head of the Building Thermal Team in the Building Physics and Environment Division at CNERIB. He is a laureate of the first prize of the Arab Ministers of Environment Council, Cairo, 2016. He is also a laureate of the «National Green Innovation Competition» organized by the National Waste Agency (AND) and the United Nations Development Programme in Algeria (UNDP) (2022).in Algeria (UNDP) (2022).

CONFERENCES

ENERGY EFFICIENCY IN BUILDINGS: MARKET DEVELOPMENT AND PILOT PROJECTS

SUMMERY

Mr Tahar MOUSSAOUI
Architect
A.P.R.U.E



Dr. Lotfi DERRADJI is a Doctor of Mechanical Engineering in the field of Energy at the University of Blida. He is a permanent researcher with the rank of Research Director at the National Center for Integrated Building Study and Research (CNERIB). He is the President of the Center's Scientific Council and the Head of the Building Thermal Team in the Building Physics and Environment Division at CNERIB. He is a laureate of the first prize of the Arab Ministers of Environment Council, Cairo, 2016. He is also a laureate of the «National Green Innovation Competition» organized by the National Waste Agency (AND) and the United Nations Development Programme in Algeria (UNDP) (2022).

CONFERENCES

BIM: REVERSE ENGINEERING THROUGH SCAN TO BIM

SUMMARY

Building Information Modeling (BIM) has significantly transformed the AEC (Architecture, Engineering, Construction) industry, and its global adoption has been judged high due to the immense benefits.

The reverse engineering approach through scan-to-BIM has become an integral part of the BIM process (of an existing asset or building) from data acquired from the survey with advanced techniques and technologies, such as 3D laser scanning and high-definition photogrammetry, which gives rise to the digital reconstruction of an asset to cover one or more use cases.

This technique allows to quickly and precisely digitize the information of an existing building to integrate it into a BIM model, thus facilitating the planning, design, construction and maintenance of the asset.

Scan-to-BIM is particularly useful for renovation or rehabilitation projects of existing buildings, as it allows to document the current state of the asset with precision, thus avoiding errors and inaccuracies that can occur during manual measurements.

Mr. Rabah DELLILI
Architect
BIM Manager
B.E.R.E.G

- General Research and Engineering Studies Office
- Project Architect
- Project Technical Management Director
- BIM Manager
- ACP Revit Certified
- BIM Coordinators Community Member
- Smart Ieran BIM- Educational partner



CONFERENCES

STRAW: A NATURAL FIBER FOR GOOD ACOUSTIC CORRECTION

SUMMARY

Traditionally, the absorbing material used in buildings for acoustic solutions contained toxic mineral wool or difficult-to-recycle materials.

From the late 1990s and the early 21st century, we have gradually seen the benefits of using natural materials, which become a valid option for acoustic treatment; in particular natural fibers, which have received increasing attention due to their good acoustic and thermal insulation properties, the absence of harmful effects on health and the availability in large quantities.

In this context, our research studies the acoustic characteristics of straw. The experimental results of this research have shown that this material is an excellent absorbing material. The large availability of straw in Algeria and its acoustic performances, especially the sound absorption coefficients higher than 0.80 constantly higher than 630 Hz, allow us to adopt this fiber as the main material in acoustic correction.

Dr. Farid Dalal Larbi
Benmhidi University Oum el
Bouaghi

Teacher – Larbi BENMHIDI University – Oum el BOUAGHI



CONFERENCES

BIPV FACADES: WHEN THE BUILDING PRODUCES ENERGY

SUMMARY

The intervention describes the situation of the building sector in Algeria, which consumes a large amount of energy, most of which comes from fossil fuels, and also contributes to greenhouse gas emissions. To address environmental and socio-economic challenges, Algeria is seeking to increase the use of renewable energy and improve energy efficiency in buildings. The study mentioned in the communication proposes an innovative solution to exploit the potential of solar energy and save energy in buildings. This solution is based on the use of ventilated BIPV (building-integrated photovoltaic) facades that produce electricity from solar energy and are coupled with passive cooling systems. The ventilated cavities allow the circulation of hot air, which is cooled by the photovoltaic panels. This allows to maintain a high electrical efficiency for the solar cells and to provide fresh air for an indirect cooling system.

Dr Amel Ferial BOUDJABI,
Larbi BENMHIDI University,
Oum el BOUAGHI

Lecturer, University of Oum El Bouaghi, Energy and Environment
Laboratory, University of Oum El Bouaghi



Les conférences

Mercredi 22 février 2023
Le BUILTEC BIM Day



CONFERENCES

BIM & THE DIGITIZATION OF CONSTRUCTION INDUSTRY

BIM & the Digitization of Construction industry

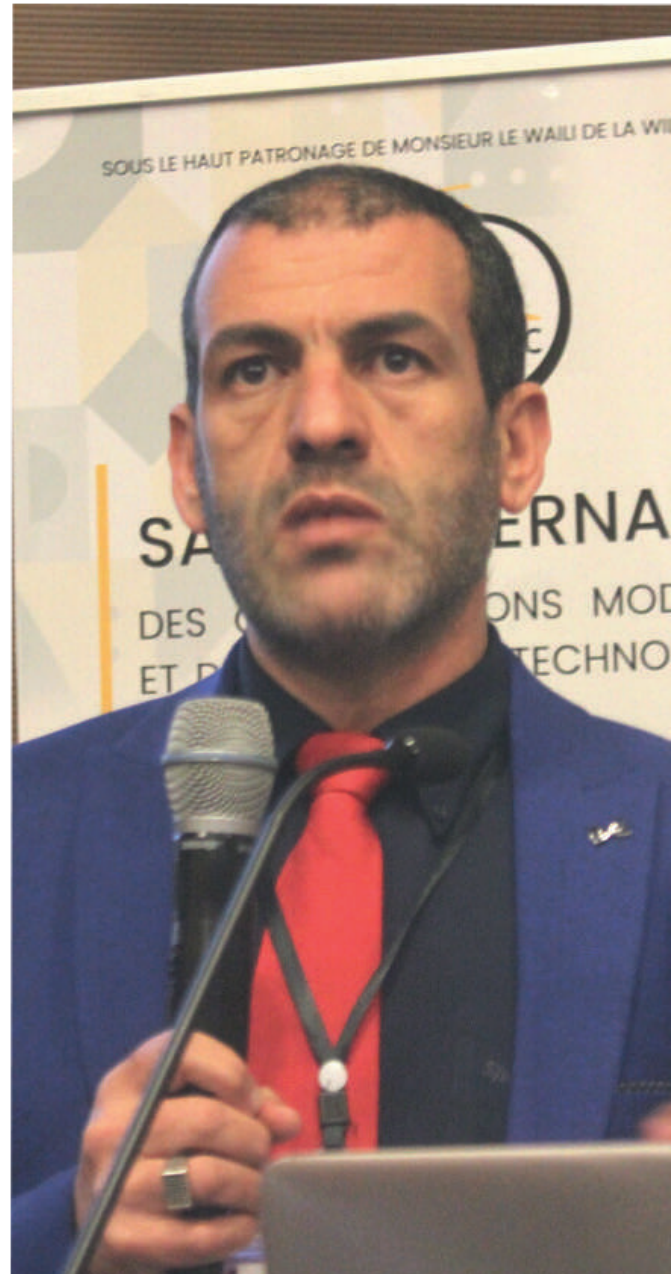
The construction industry is known for delivering projects that are over budget, behind schedule, and leave much to be desired in terms of operability once completed. Much of this reputation stems from the fact that the industry has been slow to adopt digital technologies compared to other industries, with one of the main problems being the lack of a common framework for storing and transmitting growing and complex amounts of information to a large number of stakeholders.

Complete modeling covers geometry, spatial relationships, light analysis, geographic information, and the quantities and properties of building components. The entire life cycle of a building can be represented by information modeling, including the construction and operation processes of an installation. This modeling method facilitates many tasks such as extracting and classifying quantities and specifications of materials used. It can also be used partially for each person in the work team, such as distributing site, building, and interior furnishing coordination tasks to different people and working individually in the same central model. Systems, stages, and groups can be displayed in proportion to the scale of a single installation or an entire group of installations.

In addition to the above, information modeling can also help to improve safety on construction sites by providing a 3D view of the site and identifying potential hazards. It can also help to improve communication between different stakeholders by providing a single source of truth for information about the project.

Overall, information modeling is a powerful tool that can help to improve the efficiency, effectiveness, and safety of the construction industry.

Dr. Djamel DILMI
– Architect – Urban Planner
– Lecturer – Researcher
University of BLIDA



Dr. Djamel Dilmi is an assistant professor at Saad Dahlab University. He holds a PhD in Built Environment from IIUM Malaysia. He has taught at various universities in Malaysia, Saudi Arabia, and Bahrain, and has experience teaching various architecture and design courses. He is also active in academic and social communities, and has served as a consultant and researcher for the Islamic Arts Museum Malaysia. Recently, he founded a center for vocational training and digital development in Medea called Benyantech.

CONFERENCES

FROM BIM TO SMART CITY: CHALLENGES AND PERSPECTIVES

SUMMARY

- Low construction productivity
- The challenge of project budget estimation, often unrealistic and approximate
- Built asset management performed, especially in large infrastructure projects.
- The Algerian construction industry has been mainly based on government action since the country's independence.
- The creation of a large number of economic construction stakeholders has marked the history of independent Algeria.
- However, the stakeholders created even with their variety can hardly overcome the challenges of the construction industry, such as:
- These aspects of the construction industry are not specific to the Algerian construction environment, many countries are also facing these challenges.

Mr. Reda KHELIFATI
– Architect –
Digital Development
Director – at AMENHYD spa



- Architect in charge of studies
- Project manager in charge of implementation
- Central director in charge of construction supervision
- Deputy CEO in charge of asset management
- Master in global BIM management for infrastructure projects at the Zigurat Institute in Barcelona
- Digital development director in charge of leading the BIM deployment process
- at AMENHYD spa.

CONFERENCES

3D DOCUMENTATION DESIGN REVIEW DIGITAL TWIN BIM EN EXPLOITATION MAINTENANCE: BIM FOR OPERATIONS AND MAINTENANCE

SUMMARY

Nous vivons dans un monde de plus en plus numérisé, le secteur de l'AEC n'échappe pas à cette tendance, nous traiterons de la numérisation : comment ?, Pourquoi ?, Et dans quel contexte ? Pour élargir le débat vers l'industrie 4.0 et le bâtiment comme une plateforme de services pour l'utilisateur-occupant. Dans le contexte de l'industrie 4.0, la numérisation est une tendance incontournable qui permet de transformer les bâtiments en plateformes de services pour les utilisateurs-occupants. Les bâtiments intelligents et connectés offrent une multitude de services tels que la surveillance de la qualité de l'air, la sécurité, l'optimisation de l'éclairage et de la température, ainsi que la gestion de l'énergie. Pour que la numérisation soit efficace, elle doit être accompagnée d'une formation adéquate pour les professionnels du secteur et d'un changement de mentalité pour adopter une approche plus collaborative et axée sur les données. La numérisation est donc une tendance qui transforme profondément le secteur de l'AEC et qui est amenée à se développer davantage dans le futur.



Mr. Kamel KADRI
Architect –
Technical Director – IPFIG In-
novations Technologiques

Kamel KADRI graduated from EPAU in 1991. He has always been convinced of the need to integrate new technologies in the field of AEC. He has worked in this field as a consultant, trainer and teacher at the University of Marne La Vallée. Since 2015, he has been an expert in 3D documentation, Scan to BIM, BIM and BIM GEM. He has participated and coordinated several projects in Algeria, France and Africa. His latest project is the scanning of the oil refinery in Port Gentil, Gabon (model under construction, delivery scheduled for June 2023).

CONFERENCES

SUMMARY

The digitization of architectural heritage, and recent technological innovations in photogrammetry and digital photography, allow us to design, at a reasonable cost, a program for the realization of 3D digital models of large objects and monumental sites. The execution of these models is led by multidisciplinary teams of architects, urban planners, geomaticians, archaeologists, historians, illustrators and computer scientists to develop sustainable and exploitable knowledge models. Each model will become a real management tool for professionals and will allow the implementation of new interfaces for accessing information and presenting heritage.

However, 3D heritage modeling techniques provide us with several answers to concerns, such as:

- Conservation, by the capture of digital fingerprints whose transcription constitutes a document whose exploitation provides a geometric model intended to represent the morphology of the object surveyed, when the measurement is accompanied by a photographic survey.
 - The dissemination of knowledge, by making it possible to access and visualize the models on the Internet, which allows a large audience to discover the heritage in a new way.
 - The enhancement of heritage, by allowing the creation of virtual tours or 3D animations, which can be used for educational or entertainment purposes.
 - The study of heritage, by providing a means of analyzing the structure and evolution of objects and sites.
- In conclusion, 3D heritage modeling techniques offer a wide range of potential applications that can contribute to the conservation, dissemination, enhancement and study of heritage.

Dr. Ali RAHMANE –
Architect
–Lecturer
– Researcher
–University of Sétif 01



Dr Ali RAHMANE is the Head of the Department of Architecture at the Institute of Architecture and Earth Sciences, Ferhat Abbas University Setif 1. He is a Professor of Architecture and a researcher at the IAST. He is a member of the LHE HABITAT ET ENVIRONNEMENT laboratory and the Scientific Council and the Board of Directors of the IAST. He is an international expert in project management and supervision. He is a consultant to several socio-economic partners.

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CONFERENCES

NATURAL LIGHTING IN BUILDINGS: CHALLENGES AND TECHNICAL SOLUTIONS

SUMMARY

80% of the information we receive from the outside world comes through our vision and mobilizes almost half of the active part of our brain. The perception of this information depends essentially on the quantity and quality of light available in our environment. In this respect, all studies agree that natural light should be widely favored inside buildings, whether residential or tertiary. Natural lighting is therefore a very important physical parameter in a building, given the many advantages it offers.

This presentation will first address the different challenges related to the use of natural light in buildings, and then expose the parameters to be taken into account to ensure a comfortable and efficient luminous environment in terms of energy consumption. Finally, we will present different technical solutions resulting from technological progress that are likely to optimize its use.

Dr Sarah BENHARKAT
– Architect–Lecturer
– Researcher–
University of Constantine

Graduated from Mentouri University of Constantine in 2003.

Dr. Sarah Benharkat is an architect, professor at the Faculty of Architecture and Urban Planning of Constantine, and researcher at the Laboratory of Bioclimatic Architecture and Environment (Since 2003).

She holds a PhD in Science in Bioclimatic Architecture and Environment in 2017. Her research interests include: Indoor environmental quality of buildings, lighting, energy efficiency, and numerical simulation.



CONFERENCES

TOWARDS A SHARED VISION OF THE CITY OF TOMORROW: THE CASE OF CONSTANTINE

SUMMARY

The communication emphasizes that the city is facing profound transformations and that the old models are running out while the new models struggle to globalize the multiple phenomena of contemporary society. Therefore, it is imperative to carry out studies of anticipation, scenario planning and foresight to sketch the future of the city.

It then presents a case study on the city of Constantine (Algeria), which focuses on the urban form as a fundamental factor in the dynamic process of morphogenesis. The study consists of building an experimental device based on the Delphi foresight method, which questions criteria related to the urban form of Constantine.

The experimental device made it possible to identify three major trends for the future of Constantine, but the opinions of experts largely leaned towards the third way, which reconciles tradition and modernity, permanences and mutations. This trend sketches a face of a Constantine of tomorrow, strong in its past, facing the future and innovation, open to change, while preserving its heritage as a catalyst for its future. The final result is a trend book that offers a shared and plausible vision of the future of Constantine based on the urban form.



**Dr Naouel Hanane BOUDJABI-
Lecturer –
Researcher–
I.G.T.U – University of Constan-
tine**

BOUDJABI Naouel Hanane is a Doctor of Science in Urban Planning from the Faculty of Architecture and Urban Planning (FAU) of Constantine 3 University in 2022. She obtained her Master of Science degree in Architecture with a specialization in Urban Planning in 2005. From 2005 to 2012, she taught at Larbi Ben M'hidi University in Oum El Bouaghi. Since 2012, she has been teaching Urban Planning and Urban Project at the IGTU of Constantine 3 University. She is also a member of the Architecture, Urban Environment and Energy Efficiency Research Laboratory (LA3E at the FAU – UC3).

CONFERENCES

Vers une ville Inclusive



**Mr. F. SAAD –
Mr. A. LENEGUER
Architect H.C.A Foundation**

Fayçal SAAD, graduated from the Institute of Architecture in Sétif in 1992. He worked in public administration and participated in the reconstruction effort following the 2003 earthquake. Founding member of the Architecture, City and Heritage Foundation. Conferences SYNTHESIS REPORT – MARCH 2023
Builttec 2023

Abdelkrim LENEGUER, graduated from the Institute of Architecture in Sétif in 1995. He is a licensed architect since 1999. Founding member of the Architecture, City and Heritage Foundation.

KEY MOMENTS OF THE BUILTEC

SHOW OPENING OF THE SHOW BY THE WALI

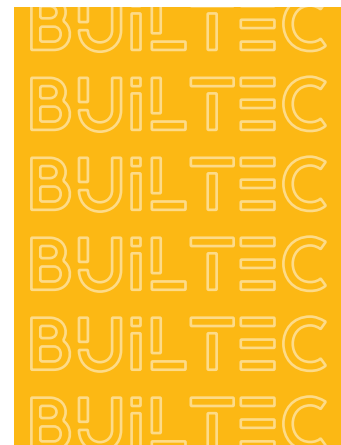


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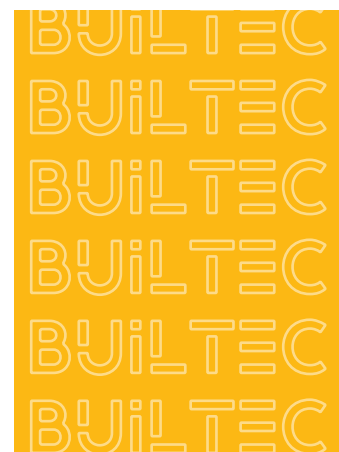
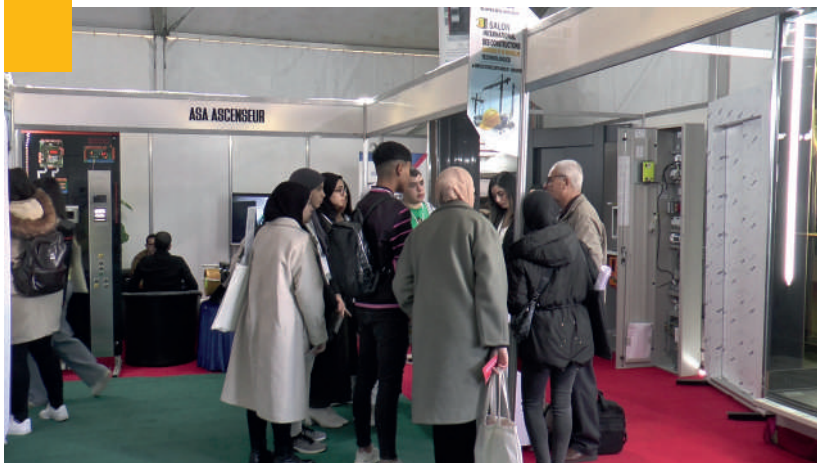
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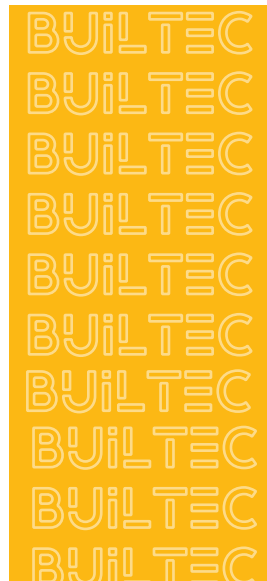
BUILTEC GALLERY



BUILTEC GALLERY



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GALA DINNER



GALA DINNER



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PRESS RELEASE AND VIDEO

Links to articles and TV shows aired before during and after the show

BEFORE THE SHOW

















	This morning, Tuesday, February 14, 2023	
	Builttec 2023 on Canal Algérie	
	Constantine over 80 exhibitors at the 3rd edition	
	The International Salon of Modern Buildings and New Technologies in Constantine is expected to have more than 80 Algerian and foreign exhibitors	
	Architect Abdelkrim Lanqir announced the details of the International Salon of Modern Buildings, which will be held this month	
	The International Salon of Modern Buildings and New Technologies will start on February 23 in Constantine.	

	CONSTANTINE: OVER 80 EXHIBITORS EXPECTED AT THE 3RD EDITION OF BUILTEC	
International	CONSTANTINE: OVER 80 EXHIBITORS EXPECTED AT THE 3RD EDITION OF BUILTEC	
	3rd edition of BUILTEC in Constantine: Over 80 national and foreign exhibitors	
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	3rd edition of BUILTEC in Constantine: Over 80 national and foreign exhibitors are expected	
	CONSTANTINE: OVER 80 EXHIBITORS EXPECTED AT THE 3RD EDITION OF BUILTEC	
	Constantine will host the 3rd edition of the BUILTEC International Salon of Smart Architecture in the coming days	
	The International Salon of Modern Buildings and New Technologies in Constantine is expected to have more than 80 Algerian and foreign exhibitors	

 <p>الاولى الاقتصادية</p>	<p>3e EDITION DE BUILTEC A CONSTANTIN</p>	
 <p>المستثمر www.Almustathmir.dz</p>	<p>Exclusive interview with the exhibition representative Mr. Abdul Karim Ianker</p>	
 <p>JEEL DZ MAGAZINE INTERNET MAGAZINE</p>	<p>Constantine hosts the 3rd edition of the International Construction and Modern Technologies Exhibition</p>	
 <p>EL MOUDJAHID LA REVUE DES HOMMES ET DES IDEES DE L'ALGERIE</p>	<p>The 3rd edition of BUILTEC in Constantine is expected to attract over 80 national and foreign exhibitors.</p>	
 <p>PRESSBEE Trusted Source مصادر موثوقة</p>	<p>The International Salon of Modern Buildings and New Technologies in Constantine is expected to have more than 80 Algerian and foreign exhibitors</p>	
 <p>DZAIR SCOOP</p>	<p>CONSTANTINE PLUS DE 80 EXPOSANTS A LA 3EME EDITION BUILTEC</p>	

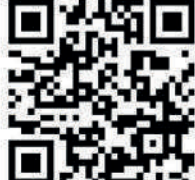



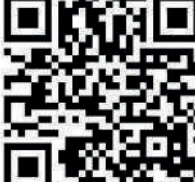

WHILE THE SHOW IS RUNNING

	<p>The International Salon of Modern Structures and Technology, Biultec, will start on February 20 2023</p>	
	<p>Constantine: Nearly 40 exhibitors at the 3rd Builtec International Fair</p>	
	<p>40 exhibitors at the International Salon of Modern Buildings and New Technologies in Constantine</p>	
	<p>More than 80 exhibitors in the 3rd edition of Builtec in Algeria, Constantine</p>	
	<p>Constantine: Over 80 exhibitors at the 3rd edition of Builtec, page 6</p>	
	<p>International Fair of Modern Constructions and New Technologies Builtec</p>	
	<p>Constantine: Nearly 40 exhibitors at the 3rd Builtec International</p>	

	A young Algerian innovator in the construction sector is making a difference in the field and reducing the impact of import bills	
	The 3rd edition of the International Salon of Modern Buildings and New Technologies in Constantine has impressed visitors.	
	Big things in Algeria: Futuristic houses in Constantine	
	The 3rd edition of Builtec, an international trade show for the national construction industry	
	The 3rd edition of Builtec, an international trade show for the national construction industry	
	Algeria's futuristic homes in Constantine	
	The third edition of the International Salon of Modern Construction and New Technologies kicked off	
	Constantine: Nearly 40 exhibitors at the 3rd Builtec International	

 <p>Le Chiffre d'Affaires Le Quotidien économique en ligne</p>	<p>In Constantine, nearly 40 exhibitors at the 3rd Builttec International Fair</p>	
	<p>Elchaab newspaper is exploring the pavilions of the International Smart Building Salon. Digital building designs and models make the event</p>	
	<p>International Exhibition of Modern Constructions and New Technologies</p>	
	<p>Constantine: Nearly 40 exhibitors at the 3rd Builttec International</p>	
		
	<p>Habitat encourages the use of bio-sourced materials in insulation and energy generation (speakers)</p>	
	<p>A tour of the pavilions of the International Smart Building Show</p>	
	<p>Encourage the use of bio-based materials in insulation and energy generation</p>	

AFTER THE SHOW

	<p>The third news channel hosted Mr. Mohamed Seif Eddine Salehi, organizer of the International Salon of Modern Structures and New Technologies, and Mrs. Radhia Ben Jelloul, responsible for communication at the salon.»</p>	
	<p>An exclusive interview with Mr. Mohamed Seif Eddine Salehi with the organizer of the International Salon of Modern Buildings buildtec</p>	
	<p>Builttec Salon: The Reality and Perspectives of Developing and Modernizing the Construction Sector in Algeria</p>	
	<p>Elmoustatmir newspaper will present a summary and the results of the third edition of the international fair</p>	

L'étude en question inclut une simulation numérique et une étude d'optimisation pour déterminer les meilleures configurations possibles pour les façades BIPV, a expliqué la communicante, notant que l'objectif est de trouver une solution qui optimise à la fois la production d'énergie solaire et l'efficacité énergétique du bâtiment, tout en améliorant son esthétique

02

Les nouveautés technologiques présentées :

"La cité intelligente et le mortier de restauration des sites archéologiques, principales innovations exposées au Salon BUILTEC"

Le projet de la cité intelligente et le mortier de restauration des sites archéologiques ont constitué les principales innovations de l'exposition du salon international des constructions modernes et des nouvelles technologies (Builtec), qui ont suscité l'engouement des visiteurs de la troisième édition de cette manifestation, tenue au complexe culturel Ahmed Bey de Constantine.

La cité intelligente, un projet née d'une idée innovante initiée par des élèves âgés entre 9 et 11 ans issus de l'association "Jil Technologie" de Constantine et qui consiste à digitaliser le mode de vie de ses habitants avec la télégestion les systèmes de distribution de l'énergie solaire et ceux de l'évacuation et de l'épuration des eaux pluviales et usées.

Ce projet, exposé au salon Builtec en présence des autorités locales et des entreprises de réalisation, permet d'exploiter les eaux usées de cette cité dans l'irrigation et les besoins industriels à travers un réseau souterrain qui redirige les quantités d'eaux amassées vers une station de traitement, outre l'automatisation du système de distribution d'énergie solaire afin d'atteindre une autonomie en la disponibilité d'électricité.

D'autre part, le mortier de restauration des sites historiques et archéologiques ainsi que les vieux bâtis sont des produits 100 % algérien fabriqués par la société Silex en vue de restituer et sauvegarder le patrimoine architectural des différentes régions du pays, entre autres ceux de la wilaya de Constantine, a fait savoir le représentant de cette entreprise.

Ce mortier est un élément de restitution composé de sable, de ciments spéciaux, de fibres et d'additifs, construit dans le but de remettre en état et protéger les ouvrages en béton et en matériaux rigides et à rendre homogènes les rebouchages mais aussi à renforcer la résistance de l'ouvrage abîmé.

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Parmi les autres produits exposés figurent les produits technologiques "smart home" et ceux de gestion à distance des installations, en sus des matériaux novateurs mis au service des constructions modernes et la promotion du devenir du secteur du Bâtiment.

03

Le salon a constitué l'occasion pour l'implication des étudiants et élèves dans le monde de l'invention et de l'innovation

"L'invention et l'innovation sont des éléments clés de la croissance économique et du développement social. "

Les étudiants et les élèves ont un rôle important à jouer dans ce domaine, car ils représentent la prochaine génération de leaders, d'entrepreneurs et d'innovateurs.

Dans cette dissertation, nous allons examiner l'implication des étudiants et des élèves dans le monde de l'invention et de l'innovation. Tout d'abord, il est important de comprendre ce que signifient les termes "invention" et "innovation". L'invention est le processus de création d'une nouvelle idée ou d'un nouveau produit qui n'a jamais existé auparavant.

L'innovation, quant à elle, est le processus de développement et d'amélioration des idées ou des produits existants pour répondre aux besoins changeants du marché. Les étudiants et les élèves peuvent jouer un rôle important dans l'invention en apportant un regard neuf sur les problèmes existants. Ils ont souvent une perspective différente sur les choses que les professionnels expérimentés, ce qui peut conduire à des idées novatrices. Les étudiants peuvent également être plus disposés à prendre des risques en matière d'innovation, car ils n'ont pas encore été conditionnés par les contraintes du monde professionnel. En outre, les étudiants peuvent être impliqués dans la recherche et le développement (R&D) pour aider à créer de nouvelles technologies ou améliorer celles qui existent déjà. Les universités sont souvent des centres importants pour la R&D, offrant aux étudiants la possibilité de travailler avec des chercheurs et des professionnels de l'industrie pour développer de nouvelles technologies. Les étudiants peuvent également être impliqués dans l'innovation en créant des start-ups et des entreprises.

Les universités offrent souvent des programmes d'entrepreneuriat qui aident les étudiants à développer leurs compétences en matière de création d'entreprise et à trouver des financements pour leurs idées.

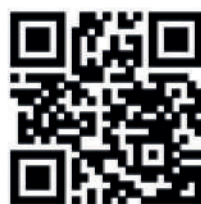
Les étudiants peuvent également participer à des concours d'entrepreneuriat, qui leur permettent de présenter leurs idées à un public plus large et de gagner des prix en argent pour financer leur entreprise.

En conclusion, les étudiants et les élèves ont un rôle important à jouer dans le mode de l'invention et de l'innovation. Ils apportent une perspective nouvelle sur les problèmes existants, sont disposés à prendre des risques et ont accès aux ressources nécessaires pour créer de nouvelles technologies et entreprises. Il est donc important que les établissements d'enseignement encouragent l'esprit d'entreprise chez leurs étudiants en offrant des programmes d'entrepreneuriat, en encourageant la recherche et le développement, ainsi qu'en favorisant la collaboration entre les étudiants et les professionnels du secteur privé.

04

Célébration de la journée nationale de la ville

Dans le cadre de ce salon les étudiants du département d'architecture de l'université de Sétif ont bénéficié d'une sortie pour visiter les monuments historiques de la wilaya de Constantine, organisée par " la fondation architecture, ville et patrimoine " et l'entreprise Mediasmart.



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