Considerable Reduction in Sewage Pollutants of Urmia City from Modernist view of Biolac Process

**ABSTRACT:**

The Biolac filtration system is based on active multi-stage sludge refineries. This system is a kind of modern biological filtration system which removes the pollutants from wastewater. The results were compared with the standards of pollution control agencies in Iran. The results indicate that the effluent of such system can be discharged to surface waters.

**Keywords:** Biolac, EPA Standards, Pollutant, Urmia Wastewater


**ABSTRACT:**

An important problem with the analysis of corrosion of reinforcements used in concrete structures is the calculation of the initiation time. A probabilistic model was developed to calculate the corrosion initiation time. The results indicated that the corrosion initiation time is associated with at least 40% uncertainty.

**Keywords:** Reinforcement Corrosion, Corrosion Initiation Time, Probabilistic Model, Random Sampling


**ABSTRACT:**

There are a lot of complex problems involving a number of conflicting factors when planning a TBM drive in a squeezing rock mass. The advancement rate is affected by the advance rate. The results indicated that the advance rate increment as a mitigation measure to thrust reduction is decreased by increasing the advance rate.

**Keywords:** Beheshtabad tunnel, Creep, TBM, Thrust, 3D numerical simulation


**ABSTRACT:**

Today, there are many efforts to develop Islamic City's criteria and requisites that have been endeavored to generalize and standardize the criterion of Islamic City's criteria and requisites. This paper attempts to explain the concept and the criteria of Islamic City and their adherence to the standards and Islamic validated and documented principles derived from the Quran and traditions.

**Keywords:** Islamic City, Islamic Teachings, Theoretical Perspectives.
Seismic Behavior Assessment of The Historical Tomb of Sheikh Shahab-edin Ahary

ABSTRACT:
This study aims to investigate failure mechanism of historical tomb of Shahab-edin Ahary elements and determines areas of interest. Dynamic analyses have been performed on various models using ANSYS finite element analysis software. The results showed that the area of the tomb is critical in the event of an earthquake.

Keywords: Seismic Behavior, Historical Buildings, Dynamic Analysis, Sheikh Shahab-edin Ahary, Macro Modeling.


ABSTRACT:
Current study has analyzed the trend of population establishment in residential centers of Tehran metropolitan area. The results showed that the population has increased in the residential centers, and the role of urban and regional management and planning system is significant in this regard.

Keywords: Management and Planning System, Residential Centers, New Towns, Spatial Organization of Population, Metropolitan Area, Tehran.

Three Dimensional Simulation of Flow for Semi Cylindrical Weirs Using Fluent Software

ABSTRACT:
The weirs are one of the important and prevalent items to measure discharge in open channels and they are used in most of the water management systems. In this study, the 3D modeling of flow over a semi-cylindrical weir has been performed using Fluent software. The results showed that the software can simulate the flow accurately.

Keywords: Flow pattern, Semi Cylindrical Weir, 3D simulation, K-ε Turbulence Model, Volume of Fluid Model, Fluent software.


ABSTRACT:
Today there are many methods of financing in the world and every country selects its convenient financing methods. In this study, the AHP model has been used to prioritize the financing methods for dam and power plant projects. The results showed that the bank loan is the most important method, followed by the usance and BOT contracts.

Keywords: Finance, Financial resources, Financing of project, Project Financing Techniques, Analytical Hierarchy Process (AHP).
Estimating the Relationship between Chemical Water Quality Parameters and Flow Rate of Karun River in Wet and Dry Seasons

Original Article, D62

Karami O, Shokouhifar M, Boroomandnasab S.

J. Civil Eng. Urban.

ABSTRACT:
Hydro-Chemical Studies using regression tests would be efficient operational to save the time and cost, If the regression ... estimating the HCO3 values were appropriate but none of the regression models did not have satisfactory for pH and EC.

Keywords:
Adjusted R Square, Hydro chemical, Karun River, Residual, Regression pattern, t-Test

Assessment and Feasibility of Tourism Development in the Kanibarazan Wetland of Mahabad, Iran

Original Article, D63

Hossein pour M, Movahhed A., Rashidi Ebrahim hesari A, Shamaie A.

J. Civil Eng. Urban.

ABSTRACT:
Tourism has been approved as in powerful tool in development model, and its activities are known as invisible export and ... of job creating and making money, but also steps will be taken in order to create a tourism center with in the region.

Keywords:
KaniBarazan wetland, Tourism Development, Environment, SWOT, Mahabad.

The Evaluation of the Eco-tourism and Geo tourism in Maragheh, Iran: A SWOT Analysis

Original Article, D64

Tavallaei S, Solaymani M, Rashidi Ebrahim Hesari A, Hadjalizadeh J.

J. Civil Eng. Urban.

ABSTRACT:
The major objective of this study is to investigate the geo¬-tourism and ecotourism capabilities and limitations of ... strategies of the region must be developed in such a way to make the best use of the local possible opportunities.

Key words: Ecotourism, Geo Tourism, Maragheh, SWOT

A Seismic Microzonation Study with Geotechnical Aspects on the New Construction Sites in Ardabil, Iran

Original Article, D65

Hajjalizadeh J, Solaymani M, Rashidi Ebrahim Hesari A, Shamaie A.

J. Civil Eng. Urban.

ABSTRACT:

A Seismic Microzonation Study with Geotechnical Aspects on the New Construction Sites in Ardabil, Iran
ABSTRACT:
Due to development of constructions in Ardabil city in northwest of Iran and placement of it on the alluvium, seismic and...than 0.4 g. The dense granular alluviums and some with high stiffness experience the lowest PGA of about less than 0.3 g.

Key words: Hazard, Design Earthquake, Site Response, Microzonation

The Impact of Horizontal Drainage on Persistent Leakage of Non-Homogeneous Soil Dam Body

ABSTRACT:
The leaking water flow from the soil dam body lead to transport of its materials that this issue causes internal... the effect of length and thickness parameters of horizontal drainage for the discharge of the drainage water is reduced.

Keywords: Horizontal Drainage, Non-homogeneous Dam, Leakage Flow, Finite Element

Evaluation of Beauty Quality in Urban Landscape Based on the Concept of Time Dimension (Case Study: River Floodway of Zargandeh District, Tehran, Iran)

ABSTRACT:
Regarding the development of the cities and increasing human's interference in natural sources, evaluation of appearance... perspective and giving the perspectives the feeling of place and making relationship with beauty quality in city space.

Keywords: Aesthetics, Urban Landscape, Time Dimension, Movement, Pictorial Sequence, Evaluation Criteria

Design Principles of Deteriorated Textures (Case study: Farzan Deteriorated Texture, Birjand, Iran)

ABSTRACT:
The urban worn textures are the urban development potentials that turned into a threat to the whole city by... - analytical and qualitative, quantitative method. Finally, the proposed designs for the urban will be presented.

Key words: Deteriorated Texture, Design Principles, Public Spaces, Farzan Square

Architecture Building Sustainability Regarding Smart Materials

5 / 7
ABSTRACT:
In contrast with the arrival of machine and abundant industrial production that leads to reduction of energy resources, there will be some solutions in order to achieve the goals of constant architecture by using these materials. 

Keywords: Sustainable Architecture, Building Features, Smart materials.

Evaluating the Physical Functional Indicators Affecting Women’s Safety in Urban Spaces (Case study: Shahin Area 5th Region, Tehran)

ABSTRACT:
Safety of urban spaces has an important role in improving society welfare in all citizens, but among the urban spaces types, the safety of the urban spaces that female inhabit is the most important. The present study is to evaluate the physical functional indicators affecting women’s safety in urban spaces.

Keywords: Safety, Urban Spaces, Women

Effect of a High Resolution Finite Volume Scheme with Unstructured Voronoi Mesh for Dam Break Simulation

ABSTRACT:
In this paper, a high resolution finite volume method (FVM) is developed in order to discretize of multidimensional unstructured Voronoi mesh for solving the shallow water (SW) and shock problems, especially those having discontinuities.

Keywords: Dam break, finite volume method, high resolution Local Lax–Friedrich scheme, Voronoi Mesh.

A Survey on the Performance of Fuzzy-Neural Network at Predicting the Average Monthly Discharge of Catchment Basin Areas Having Snow Regimes

ABSTRACT:
Snow is one kind of precipitation that because of its delay in turning into runoff water is much more different from rainwater. In this study, the performance of Fuzzy-Neural Network (FNN) model is evaluated in predicting the average monthly discharge of Jajrud catchment basin areas having snow regimes.

Keywords: Average monthly discharge, Neural fuzzy network, Snow melting modeling, Jajrud catchment basin.
Examine the Effect Height on Changing Intermediate Flexural Frames Performance Level after Adding Outward-Oriented Vestibule Braces

Original Article, D73
Khaksefidi S., Ghalehnovi M., Rahdar H. A., Rezaee M.
J. Civil Eng. Urban.

ABSTRACT:
Considering the inability to design techniques based on force the predicted nonlinear behavior of members, arising from the facility to the structure of the columns, this study investigates the effect of adding outward-oriented vestibule braces to members. The performance of the structure is evaluated by the capacity spectrum method (CSM) in ATC-40 to obtain performance level. SAP2000 software was used for modeling and analysis.

Keywords: Flexural Frame, Nonlinear Behavior, Nonlinear Static, Outward-Oriented Brace