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Soggetti	Civil engineering Buildings - Repair and reconstruction Buildings - Maintenance Construction industry - Management Buildings - Design and construction Statics Building materials Civil Engineering Building Repair and Maintenance Construction Management Building Construction and Design Mechanical Statics and Structures Building Materials
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Nota di contenuto	Impact of rotational components of earthquake on the seismic response of steel buildings with rc shear walls -- Influence of stone quarry dust on the performance of reinforced concrete structure -- Advancements in nano-engineered cementitious composites thru enhanced properties & economies -- Study on the elastomeric behavior

of bridge bearing pad -- Comparative study of oblique columns and conventional columns in the seismic assessment of high rise buildings -- An experimental and modeling investigation on the effect of recycled aggregate concrete in m20 grade concrete -- Qualitative risk analysis in high rise building projects -- Strength characteristics of mortar containing incinerated biomedical waste ash -- Ensemble learning based approach for corrosion in structural concrete -- Abrasion resistance of ultra high performance concrete -- The effects of recycled brick aggregate on the durability and elastic properties of the structural grade concrete a review -- Strength and durability properties of rammed earth walls a comprehensive review -- Taguchi analysis on cathodically protected steel in simulated concrete pore solution -- Parametric effects of processed and treated aggregates on the strength and durability of green concrete via response surface methodology -- A comprehensive review on using electronic waste as a construction material -- Analysis of diagrid building with different angles integrated with steel shear wall subjected to seismic forces -- Study on structural behavior of modified hollow core precast concrete slab -- Efficient optimization of trapezoidally corrugated web plate girders using genetic algorithms -- Shrinkage behaviour of concrete with fly ash ggbfs silica fume and metakaolin -- Assessment of concrete performance using recycled coarse aggregates from demolition and construction waste -- Effect of treated wastewater on properties of binary cement mortar -- Performance evaluation of hybrid framed structures with and without friction dampers -- Effect of wastewater on concrete curing and mixing -- Study on strength and durability characteristics of recycled aggregate used in different grades of concrete -- Behavior of prefabricated concrete structures subjected to earthquakes -- Performance of shahabad stone waste powder in hybrid fiber reinforced cement mortar -- Effect of treated recycled aggregates on properties of ternary blended high strength self compacting concrete -- Influence of metakaolin and alccofine on the fresh hardened and durability properties of blended concrete a comprehensive review -- Design proposal for typical offshore platforms based on fluid seabed structure interaction analysis.

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## Sommario/riassunto

This national convention on engineering topics will explore the dynamic shifts and emerging trends that are reshaping civil engineering, emphasizing their vital role in developing safer, more efficient, and sustainable infrastructure. Our focus will span several transformative innovations, beginning with the integration of 3D printing and robotics in construction. These technologies are revolutionizing the field by enhancing productivity, slashing labor costs, and improving safety through automated processes and the ability to produce complex structures. The convention will also highlight the increasing importance of resilience in our infrastructure, a response to the more frequent natural disasters driven by climate change. Today's civil engineers integrate considerations of these changes in their designs to construct buildings and structures that withstand and adapt to these evolving conditions. Sustainability remains a crucial theme, driven by the urgent need for environmental conservation and the realities of climate change. Our discussions will delve into green engineering practices, such as the use of eco-friendly materials, waste minimization, and the design of energy-efficient buildings. Innovations like Geopolymer technology offer rapid strength gain and reduced water use, presenting a sustainable alternative to traditional concrete. Similarly, Bacterial Concrete represents a breakthrough in enhancing the durability and reducing the maintenance costs of concrete structures while lowering carbon emissions. The convention will also examine the

role of advanced technologies like Cartography, remotesensing, and GIS applications, which are transforming our understanding and representation of the world,pushing the boundaries of traditional cartography into new digital frontiers. Additionally, modular constructionwill be discussed as a key contributor to efficiency, waste reduction, and quality in building processes,especially in its potential to address the critical needs for affordable housing and sustainable urban development. Furthermore, the financial benefits of retrofiting, which reduces energy consumption and offerssignificant cost savings, will be explored, showcasing its attractiveness and positive return on investmentover time. This convention is not just an event, but a call to action for civil engineering professionals toembrace these innovations, stay informed of cutting-edge developments, and play a pivotal role in crafting asafer, more efficient, and sustainable built environment. Join us as we leverage these trends to propel theindustry forward, ensuring our built environment can meet the demands of tomorrow.

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