Volume: V

2024–2025

TERRA NIRMAN

Building Foundations, Shaping Futures

Biodiversity Conservation and Ecosystem Restoration

Department of civil engineering

Vision:

To impart quality education in Civil Engineering.

Mission:

M1: To provide an experiential teaching-learning environment and promote research culture.

M2: To establish a center of excellence by providing training of modern tools and emerging technologies.

M3: To instill social and ethical values among the students.

Program specific objectives (PSOs):

Our students will be able to

PSO1: Plan & design civil engineering structures using modern tools in compliance with Indian standard codes.

PSO2: Address & give engineering solutions for environmental challenges & sustainable development.

PSO3: Apply management tools & techniques to plan, execute and monitor civil engineering projects ensuring timely completion and cost effectiveness.

Program Educational Objectives: (PEOs):

Our graduates will be able to

PEO1: Apply integrated knowledge and skills to solve complex civil engineering problems.

PEO2: Pursue entrepreneurship and innovation in civil engineering while upholding professional integrity, social responsibility, and ethical values.

PEO3: Excel in professional careers exhibiting leadership qualities.

EDITORIAL TEAM

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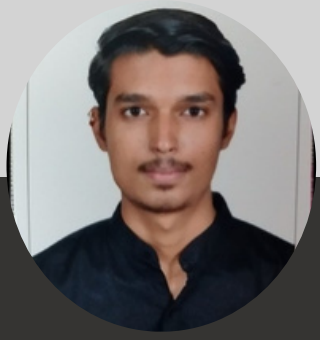
Editor-in-Chief

Prasanna Deore (SE)
Managing Editor

Gaurav G arde (SE)
Design Lead

Ajay Pillai(TE)
Design Co-Lead

Pooja Mane(TE)
Content Writer



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TERRA NIRMAN

Building Foundations, Shaping Futures

The Department of Civil Engineering proudly presents the inaugural edition of its annual magazine, Terra Nirman — a platform that reflects our department's unwavering commitment to sustainability, innovation, and academic excellence.

Rooted in the idea of "solid ground," Terra Nirman symbolizes the strong foundations on which we build not only structures, but also ideas, values, and futures. With the tagline "Building Foundations, Shaping Futures," this magazine encapsulates our collective journey toward responsible engineering and sustainable development.

This first volume offers an engaging glimpse into the vibrant life of our department — from academic milestones and student achievements to research innovations and community-driven initiatives. It highlights the creative spirit and technical prowess of our students and faculty through articles, technical reports, poems, illustrations, and reflections.

The magazine also documents our various activities throughout the academic year, including workshops, expert sessions, site visits, competitions, and social outreach programs. Each section of this edition demonstrates how our department continues to grow while staying grounded in its commitment to sustainability, knowledge-sharing, and industry relevance.

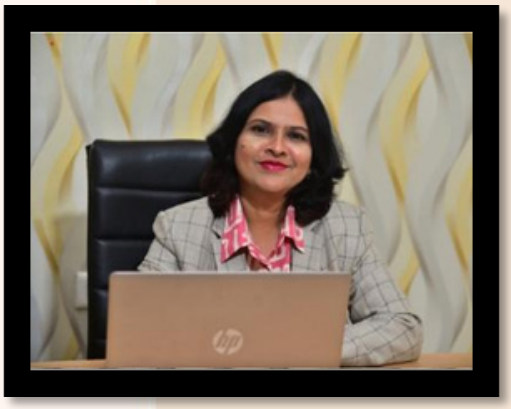
As you explore Terra Nirman, we invite you to walk through the efforts, aspirations, and accomplishments of our civil engineering community — a

community that is not just constructing the world around us, but also shaping a more resilient and responsible tomorrow.

Welcome to Terra Nirman — where learning takes root and legacies are built.

Happy Reading!

A Guiding Light: Message from our Vice President



At theoutset, I heartily congratulate the Department of Civil Engineering for initiating a new concept in the form of theme based departmental magazine. The introduction of this magazine is the result of your confidence, creativity, and innovation. The ADYPSOE has established itself as one of the leading self-financed institutes in Maharashtra. This has been primarily due to the large sign on the Teaching, Research & Administration. Speakers from industries, universities, research organizations, the corporate world, and thought leaders regularly visit ADYPSOE to interact with the students.

In an era where environmental responsibility is no longer a choice but a necessity, Terra Nirman stands as a powerful example of how engineering education can merge innovation with ecological consciousness. Through this project, we reaffirm our pledge to not only lay strong foundations in infrastructure, but also in values that shape a better, greener tomorrow. Let this be the beginning of many such endeavors where academic excellence meets real-world impact.

As we all know, digital media has come up in a big way. It has opened vast vistas of new possibilities. I am glad to note that the team has made use of this development and harnessed it in a big way in the form of this magazine. I am particularly glad to know that this communication will establish a trend of acquaintance with our stakeholders who are doing wonders across the world and raising the flag of ADYPSOE higher and higher, for which ADYPSOE owes a lot to them. I invite all of you to come to join us in the initiative. I once again congratulate the Department & Editorial Team and hope this will prove to be a milestone in the digital journey of ADYPSOE as well as the Department of Civil Engineering.

Dr. Kamaljeet Kaur,
Executive Vice President- Ajeenkya D Y Patil Group

Pursuing Excellence: A Vision from our Principal

Ajeenkya D Y Patil School of Engineering (ADYPSOE) has established state-of-the-art infrastructure with well-equipped laboratories and an enriched library, enabling students to explore the latest trends in Engineering and Technology.

We believe life is not merely a set of instructions, but a series of experiences and learning opportunities. At ADYPSOE, we strive to instill the right attitude and passion for engineering through dedicated faculty mentorship — going far beyond books and classrooms.Our campus is not just a formal place of education; it is a vibrant environment for personal growth. Students are encouraged to participate in cultural events, communication and personality development sessions, sports, entrepreneurship programs, and various extracurricular activities, ensuring their all-round development.

From the very beginning, we aim to nurture versatility in our students. In line with this vision, this Newsletter presents the diverse events and achievements of the Department of Civil Engineering, reflecting the dedication of our students and faculty alike. I extend my best wishes to the editorial team and congratulate our students and faculty for beginning this academic year with such energy, creativity, and excellence.

Dr. F B Sayyad,
Principal, Ajeenkya D Y Patil School of Engineering

A vision for Innovation and Growth: Thoughts from Our HOD

It is a privilege to present Terra Nirman — a symbol of strong foundations where engineering excellence, innovation, and sustainability unite to shape a resilient future.

In today's dynamic world, the responsibility of civil engineers goes beyond constructing buildings and infrastructure. We are entrusted with the vital task of creating spaces that coexist with nature while meeting the demands of modern society. Terra Nirman reflects this vision, representing our commitment to designing structures that are robust, enduring, and environmentally responsible.

As we move toward a future focused on sustainability and resilience, it is essential to integrate eco-conscious practices into every project — from energy-efficient designs and sustainable materials to climate-adaptive infrastructure. Each decision we make today shapes the world of tomorrow.

This magazine serves as a bridge between engineering knowledge and environmental stewardship, reminding us that true innovation leaves a positive, lasting impact. As future engineers, let us be custodians of this "firm ground," ensuring our contributions strengthen both our communities and our planet.I congratulate all contributors, editorial members, and faculty mentors whose efforts have brought Terra Nirman to life, inspiring creativity, vision, and dedication in every page.

Lt. Col. Sanjay Karodpati (Retd.)

Head, Department of Civil Engineering ADYSOE

From Editors Desk: Shaping Stories,Defining Perspective

In today's evolving world, the responsibility of civil engineers extends far beyond constructing buildings and infrastructure. We are entrusted with the profound task of designing spaces that blend harmoniously with nature while addressing the needs of modern society. Terra Nirman embodies this vision, reflecting the spirit of creating structures and systems that are robust, enduring, and environmentally responsible.

As we move toward a future centered on sustainability and resilience, our students are encouraged to integrate innovative and eco-conscious practices into every project they undertake. From developing energy-efficient buildings and utilizing sustainable materials to designing infrastructure adaptable to a changing climate — every decision we make today has the power to shape the world of tomorrow.

Terra Nirman symbolizes the vital link between engineering knowledge and environmental stewardship. It serves as a reminder that true innovation is thoughtful and leaves a positive legacy for both the environment and future generations.

As future engineers, let us commit to being the custodians of this "firm ground," ensuring that our contributions strengthen not just our communities, but the planet we call home.

Dr. Aakanksha Ingle
Editor-in-Chief

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ABOUT THE DEPARTMENT

An affectionate welcome to the Civil Engineering discipline.

The Department of Civil Engineering strives for excellence in teaching and learning along with professional development.

The department has state-of-art laboratories which are NABL accredited with 150 tests. Ours is the first private engineering college in Maharashtra for getting NABL accreditation. The department with its experienced faculties offer practice based education with latest techniques thereby preparing our students for a successful and rewarding career.

The department maintains its strong links with the construction industry by engaging in consultancy activities.

The students here are encouraged to engage extra-curricular and co-curricular activities which are essential for personality development, nurturing of team spirit and development of organizational skills.

The field of Civil Engineering is very broad, covering many areas such as planning, design and construction of buildings, highways and bridges, irrigation schemes, water supply and sewerage schemes, powerhouses and transmission systems, tunnels and underground structures, etc. It is our aim to provide you with the necessary education to face these challenges with confidence

Theme about the Magazine

Terra Nirman — a platform that reflects our unwavering commitment to sustainability, innovation, and academic excellence.
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Welcome to Terra Nirman — where learning takes root and legacies are built.

Building a Sustainable Future: Join the Corps of Engineers

Lt. Col. Sanjay Karodpati (Retd)

Are you acivil engineering student looking for a career that makes a difference?

Do you want to serve the nation and build a better, more sustainable future for India? Then join the Indian Army's Corps of Engineers!

As a member of the Corps of Engineers, you'll work on projects that not only support our nation's growth but also prioritize environmental sustainability. You'll design and build infrastructure that minimizes environmental impact, such as:

- Renewable Energy projects, like solar and wind power Eco-friendly
- water management Systems
- Disaster-resilient construction

Quick replacement bridges in difficult terrain

You'll also be part of initiatives that promote environmental conservation, such as:

Afforestation and reforestation efforts
Wildlife conservation and habitat preservation
Sustainable waste management and reduction

As a soldier in the Corps of Engineers, you'll learn combat engineering skills, like building and breaching obstacles, and clearing mines. You'll work on infrastructure development, building roads and bridges that support our military while minimizing environmental harm.

The Corps of Engineers has a proud history of achievement. In India, they've built the Atal Tunnel, the highest altitude tunnel in the world, using environmentally responsible construction practices.

By joining the Corps of Engineers, you'll get:

A sense of purpose and fulfillment
Opportunities for professional growth and development
Job security and stability
A chance to serve the nation and make a real difference
The opportunity to contribute to a more sustainable future
So why wait? Join the Corps of Engineers today and start building a better, more sustainable future for India!

Green Sena Bhavan

**Take the firststeptowards a careerthatmatters.JointheCorps of Engineers. **

The Fading Allure of Civil Engineering: A Victim of Technological Advancements?

Dr. Rajesh C. Katdare

In recent years, there has been a noticeable decline in the popularity of civil engineering among students and young professionals. This trend is particularly puzzling, given the crucial role that civil engineers play in designing and developing the infrastructure that u

nderpins modern society. So, what's behind this decline? Is it a case of civil engineering losing its charm to more glamorous fields like computer science, electronics, and telecommunications (E&TC), artificial intelligence (AI), and data structures?

The Rise of the Digital Age The advent of the digital age has undoubtedly transformed the way we live,
work, and interact. The explosive growth of technologies like AI, machine learning, and data analytics has created a surge in demand for professionals with expertise in these areas. As a result, fields like computer science, E&TC, and AI have become incredibly attractive to young students and professionals, who are drawn to the promise of high-paying jobs, exciting career prospects, and the opportunity to work on cutting-edge projects.

Does civil Engineering have Perception Problem?

Meanwhile, civil engineering, a discipline that was once revered for its noble pursuit of building and creating, seems to be losing its luster. But is this decline

a reflection of the field itself, or is it a perception problem? Civil engineering is, after all, a field that requires a deep understanding of mathematics, physics, and materials science, as well as strong problem-solving skills and attention to detail.

The Unsung Heroes of Civil Engineering

Despite the many advances in technology, civil engineers remain the unsung heroes of modern society. They design and build the roads, bridges, airports, and buildings that we use every day. They develop sustainable solutions to pressing environmental challenges, such as climate change, water scarcity, and waste management. And they work tirelessly behind the scenes to ensure that our communities are safe, resilient, and thriving.

Reclaiming the Charm of Civil Engineering

So, how can we reclaim the charm of civil engineering and make it more appealing to the next generation of engineers? Here are a few suggestions:

1. Highlight the impact: Civil engineers have the power to transform communities and improve people's lives. We need to do a better job of showcasing the positive impact of civil engineering projects. The Post office building recently constructed using 3 D printing technology was not highlighted to the extent it should have. This fact underscores the humble nature of civil engineers, who often shy away from the spotlight, yet tirelessly work towards a higher purpose - building a better world for society, driven by a deep sense of duty and service.

2. Emphasize the creativity: Civil engineering is not just about math and science; it's also about creativity and problem-solving. We need to encourage students to think outside the box and develop innovative solutions to complex challenges.

3. Foster collaboration: Civil engineering is a team sport. We need to encourage collaboration between engineers, architects, contractors, and other stakeholders to develop more effective and sustainable solutions.

4. Celebrate the heroes: We need to celebrate the achievements of civil engineers and recognize their contributions to society. This will help to raise the profile of the profession and inspire the next generation of engineers.

Conclusion Civil engineering is a vital profession that has the power to transform communities and improve people's lives. While it may not have the same level of glamour as some of the newer, more digital fields, it is a discipline that requires creativity, problem-solving skills, and a deep commitment to making a positive impact. By highlighting the impact, emphasizing the creativity, fostering collaboration, and celebrating the heroes of civil engineering, we can reclaim the charm of this noble profession and inspire the next generation of engineers to join its ranks. May the contributions of civil engineers endure forever, shaping the foundations of our civilization for generations to come.

Rising from the Depths: Environmental Shifts and the Leviathan Mystery of Deep-Sea Creatures Surfacing.

Prof. Uzma Shaikh

Earth's surface is predominantly covered by water, accounting for approximately 71% of its area. The vast majority of this water—about 96.5%—resides in the oceans. The remaining 3.5% comprises freshwater sources, including icecaps, glaciers, groundwater, rivers, lakes, and atmospheric moisture.

Deep-sea creatures (In 96.5% ocean water) are typically adapted to extreme conditions such as high pressure, low temperatures, and darkness. However, in recent years, an increasing number of these deep-sea species have been observed at or near the surface. Scientists believe several environmental factors contribute to this unusual phenomenon:

1. Climate Change & Ocean Warming – Rising ocean temperatures disrupt deep-sea ecosystems, forcing creatures to move to cooler or more oxygen-rich waters.
2. Underwater Volcanic Activity or Earthquakes – Seismic events can disturb deep-sea habitats, displacing marine life.
3. Pollution & Hypoxia – Reduced oxygen levels in deeper waters push species to the surface in search of better conditions.

4. Food Scarcity – Changes in ocean currents or overfishing may deplete their usual food sources, making surface waters more appealing.
5. Magnetic & Environmental Shifts – Changes in the Earth's magnetic field or oceanic chemistry can alter animal behavior.

Impact on Human Being The emergence of deep-sea creatures at the surface can have various effects on humans. Some species, such as deep-sea jellyfish or certain toxic fish, may pose threats to fisheries and coastal communities. The appearance of deep-sea creatures can also indicate underlying environmental problems, serving as an early warning system for climate change, ocean acidification, or pollution. Additionally, scientific interest in these creatures can lead to medical and technological advancements, as many deep-sea organisms produce unique compounds with pharmaceutical potential.

However, the disruption of marine ecosystems can negatively affect seafood industries and coastal economies dependent on stable oceanic conditions. Is It Safe for Deep-Sea Creatures? For most deep-sea creatures, reaching the surface is not safe. These species are highly specialized for extreme pressure, darkness, and cold temperatures. When they come to the surface, they often experience stress, organ failure, or death due to rapid pressure changes (barotrauma), increased exposure to predators, and unsuitable environmental conditions. Some creatures, like deep-sea fish, suffer from their swim bladders expanding uncontrollably, while others cannot handle the oxygen-rich waters at the surface. Thus, their emergence is usually a sign of distress and not a natural adaptation.

What Can Be Done to Prevent This?

To minimize the factors driving deep-sea creatures to the surface, several actions can be taken:

- Combat Climate Change: Reducing carbon emissions through renewable energy, energy efficiency, and sustainable practices can help stabilize ocean temperatures and prevent habitat disruptions

- Regulate Pollution: Strengthening regulations on plastic waste, chemical runoff, and oil spills can prevent contamination of deep-sea ecosystems.

- Protect Marine Habitats: Expanding marine protected areas and regulating deep-sea mining and industrial activities can safeguard deep-sea biodiversity.
- Sustainable Fishing Practices: Implementing quotas and restrictions on deep-sea fishing can help maintain food chains and prevent resource depletion.
- Monitor and Research: Investing in oceanographic studies and deep-sea monitoring technology can help scientists understand environmental changes and take timely action to prevent harm to marine life.

[Sources: Ocean census, National Geography, conservation International, Discovery]

Green Technology Patenting Trends

Prof. Vishwajeet Kadlag

Globally green patents are granted for inventions related to renewable energy (solar, wind, geothermal), waste management technologies, and energy- efficient processes, contributing to the country's environmental goals.

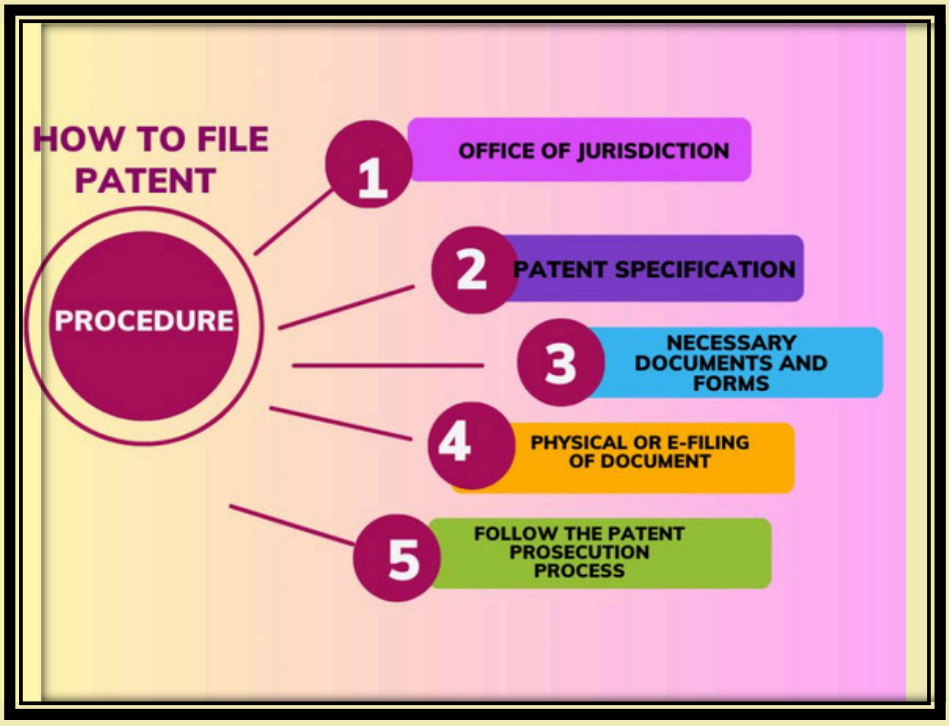
The Evolution of Green Patents in India

As per an article published by The Times of India, every second patent granted in India between 2016 and 2021 is related to green technology.

Total 91,500 patents were granted between 2016 and 2017 and 2021 and 2022. In total, 61,186 patents for green technologies were granted. In that, 90% of these are for waste management and alternative energy generation technologies, 63% linked to waste management and more than 26% related to alternative energy production, it also covers energy conservation, transportation technologies, nuclear power generation, agriculture and forestry, and others.

The Importance of Green Patents

Green patents are essential not only for fostering environmental sustainability but also for promoting economic growth and



technological advancement. By granting exclusive rights to inventors, green patents incentivize research and development in the environmental technology sector. Technologies such as solar and wind power has not only reduced dependency on fossil fuels but also contributed to job creation and local economic development. The adoption of renewable energy technologies, pollution control systems, and waste management solutions can significantly reduce carbon emissions, conserve natural resources, and mitigate the impact of climate change.

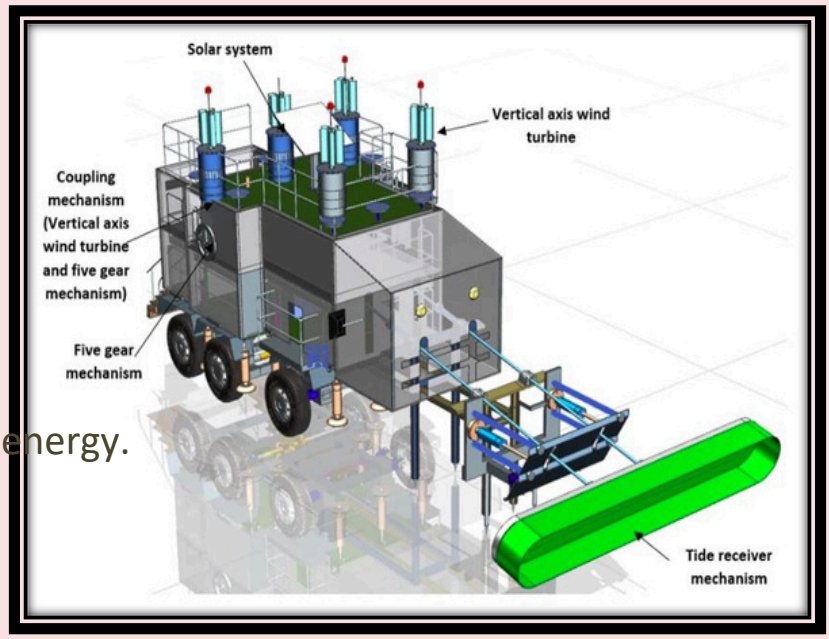
World Intellectual Property Organization has developed an IPC Green Inventory which facilitates easy searching of global patent information relating to green technology, and a platform called the WIPO GREEN that connects eco-friendly technology solutions to the global innovation ecosystem, facilitating exchange and matchmaking through its online database.

Circle Shaped Wind Turbine-

Circle-shaped wind turbine designed for residential use. Its compact size (1.5 meters in diameter) and lightweight construction make it suitable for installation on rooftops or small gardens. The turbine's spiral rotor design allows it to capture wind from any direction, ensuring efficiency even in unpredictable weather conditions. Operating at a noise level of under 45 decibels, it is virtually silent and can be installed in urban environments without disturbing the peace.

Depending on location and wind conditions, it can generate between 2500 and 3000 kWh of electricity annually, providing a steady power supply to households. Unlike solar panels, which depend on sunlight, the turbine can generate electricity day or night, regardless of weather conditions, offering a consistent and reliable energy source. This makes it a versatile and reliable source of energy, ensuring power generation even during rainy or cloudy days.

- IIT Madras Researchers patent 'Combined Power Generation Technology' that can generate Electricity from both Tidal & Wind sources



IIT Madras have indeed patented a Combined Power Generation Technology That harnesses both tidal and wind energy.

This innovative system involves a mobile platform equipped with mechanisms to capture tidal energy and wind energy simultaneously. The system is designed to be deployed in coastal regions, where both wind and tidal forces are abundant, making it a sustainable and renewable energy solution.

The mobile platform is equipped with wind turbines for generating electricity from the wind and tidal energy converters for generating power from the movement of water. This dual energy generation system can provide a more consistent and reliable energy supply.

- Biodegradable LED Bulbs

The housing and components of the LED bulbs would be designed using biodegradable plastics or natural materials, reducing the environmental impact when disposed of.

LED bulbs are highly energy-efficient, converting a greater portion of electricity into light rather than heat as compared with conventional bulbs, it can save 80-90% energy. Conventional bulbs are inefficient because They produce a lot of heat (about 90% of the energy is wasted as heat). LEDs have an extremely long lifespan, typically lasting 15,000 to 50,000 hours, conventional bulbs relatively had short lifespan usually around 1,000 hours.

LED bulbs are available in a range of color temperatures, from warm white (2700K) to cool white (5000K) conventional bulbs emit a warm yellow light (around 2700K). LEDs are resistant to shock, vibrations, and extreme temperatures. This makes them ideal for use in challenging environments while conventional bulbs are fragile and prone to breakage due to their glass filaments, making them more vulnerable to physical damage.

- Graviky Labs, a Bangalore-based startup, captures carbon from vehicle emissions and covert into useful products-

Graviky Labs is an innovative startup based in Bangalore, India, that focuses on transforming carbon emissions into valuable, useful products, with the aim and reducing air pollution contributing to sustainability efforts. The company is well-known for its unique approach to capturing carbon emissions, particularly from vehicles, and converting them into products such as ink.

AIR-INK is one of Graviky Labs' most notable innovations. It involves capturing carbon emissions from vehicles by using device called "Kaalink" from vehicle exhaust (which includes carbon dioxide and soot particles), and converting them into a high-quality ink that can be used in printing and writing applications.

The captured carbon particles are processed into ink through a proprietary process that purifies the carbon, turning it into a usable pigment for various applications like printing, art, advertising, and packaging. Graviky Labs' approach contributes directly to reducing atmospheric carbon levels by capturing the carbon emitted by vehicles, which is one of the largest contributors to urban air pollution. This system helps to mitigate black carbon emissions, which are harmful pollutants responsible for climate change, by converting them into a useful product.

Courtesy

Intepat

Patentlawyermagazine

Lexology

Times of India

eduadvice.in

swachhindia.co

Conclusion-

Green patents are fostering environmental sustainability along with promoting economic growth and technological advancement. Commercialization of these green technologies creates new industries and jobs, offering significant economic opportunities in the green sector.

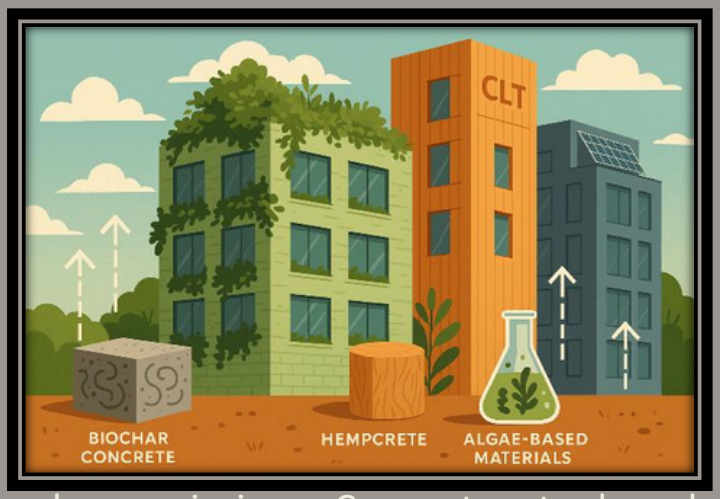
IP agencies globally are endorsing innovations that tackle climate change, with some establishing special provisions and creating platforms that bring together like-minded innovators. The adoption of renewable energy technologies, pollution control systems and waste management solutions can significantly reduce carbon emissions, conserve natural resources, and mitigate the impact of climate change.

Green patents save environment, accelerate economic growth, creates new inventions and aligned industries along with jobs.

Can Buildings Become Climate Solutions?

Riya (SE student)

What if the buildings around us weren't part of the climate crisis—but part of the solution? Imagine homes, offices, and skyscrapers that absorb carbon like trees, helping reverse climate change. That's the vision of carbon-negative construction, a revolutionary shift in how we build. Instead of just reducing emissions, these structures actively remove carbon from the atmosphere—making them more than just shelters, but climate warriors in their own right.

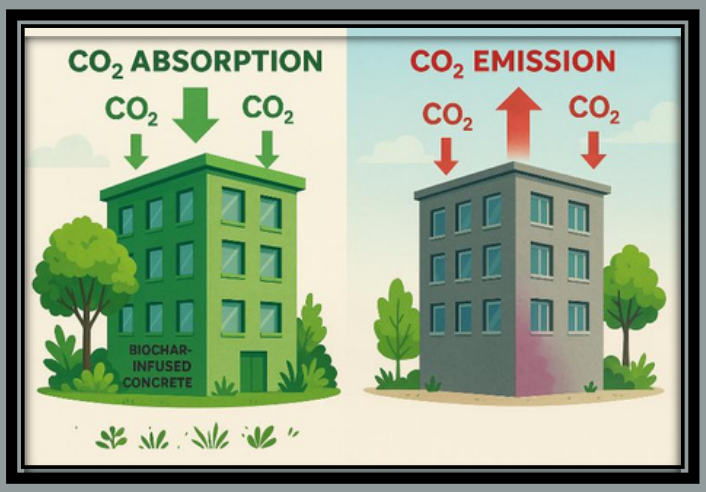


Why it matters?

The construction industry is one of the biggest polluters on the planet, responsible for nearly 40% of global carbon emissions. Concrete, steel, and glass—our go-to materials—emit massive amounts of CO_2. But what if our buildings captured more carbon than they produced? That's exactly what carbon-negative construction aims to do by integrating materials and technologies that store more carbon than they release, effectively turning buildings into long-term carbon sinks.

The secret behind these climate-friendly buildings lies in innovative materials and cutting-edge technologies. Bio char concrete is similar to traditional concrete but infused with carbon-absorbing bio char, making it both durable and environmentally beneficial. Hemp Crete, a plant-based alternative, is not only lightweight and breathable but also continues to absorb CO_2 from the air as it hardens. Cross-laminated timber (CLT) takes sustainable wood construction to the next level—strong, renewable, and naturally storing carbon for decades. Scientists are also exploring algae-based materials, using algae to create bio-cement that actively absorbs carbon from the air while offering a sustainable alternative to traditional building materials.

Real-world applications of carbon-negative construction are already proving their viability. The Bio mason Brick uses bacteria to grow cement-like structures,
eliminating the need for carbon-intensive kilns while actively absorbing CO_2 during formation. Similarly, The Carbon-Positive House in Australia integrates hemp Crete, solar energy, and recycled materials,
with hemp
Crete continuously
sequestering carbon over time.



In the UK, The Cork House demonstrates a biodegradable, carbon-storing construction model using a sustainably harvested cork. These projects showcase how bio-based materials and innovative fabrication techniques can transform buildings into long-term carbon sinks, paving the way for scalable carbon-negative architecture.

These innovations are reshaping construction, proving that buildings can do more than just stand tall—they can actively heal the planet.

Happenings in the Department:

On 11th Dec 2024, 54 Second-Year Civil Engineering students, accompanied by two faculty members, visited MERI Nasik for a practical field trip focused on Fluid Mechanics

A step towards encouraging innovative projects and multidisciplinary research to solve civil engineering problems Civil Engineering Department has got approval for Ph.D. Research Centre from SPPU, Pune

MOU (Memorandum of Understanding) handover ceremony between ADYPSOE and PCERF (Pune Construction Engineering Research Foundation).

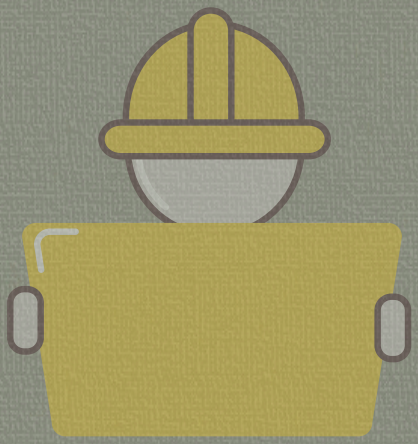
IGS Student Chapter of Civil Engineering Department from Ajeenkya DY Patil school of engineering organized a Guest Lecture on 8th Oct 2024. It is led by Prof. Shraddha Khandare and was executed in association with Indian Geotechnical society (IGS), Pune

Industrial visit for Fourth-Year Engineering (BE) students on 15/10/2024. This visit was designed to give students hands-on exposure to real-world applications of Hot mix plant

Competition was organized on “Line Plan Battle” under the subject ‘Building Technology and Architecture Planning’

Consultancy Activities

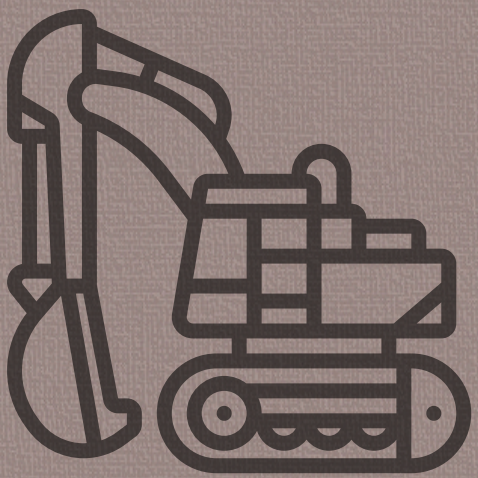
Tests on Concrete, Cement, Steel, Aggregate.



Consultancy services to Army institutions

On site supervision under consultancy services.

NDT Consultancy Services



पुस्तकाचे नाव: मनात ववश्वास

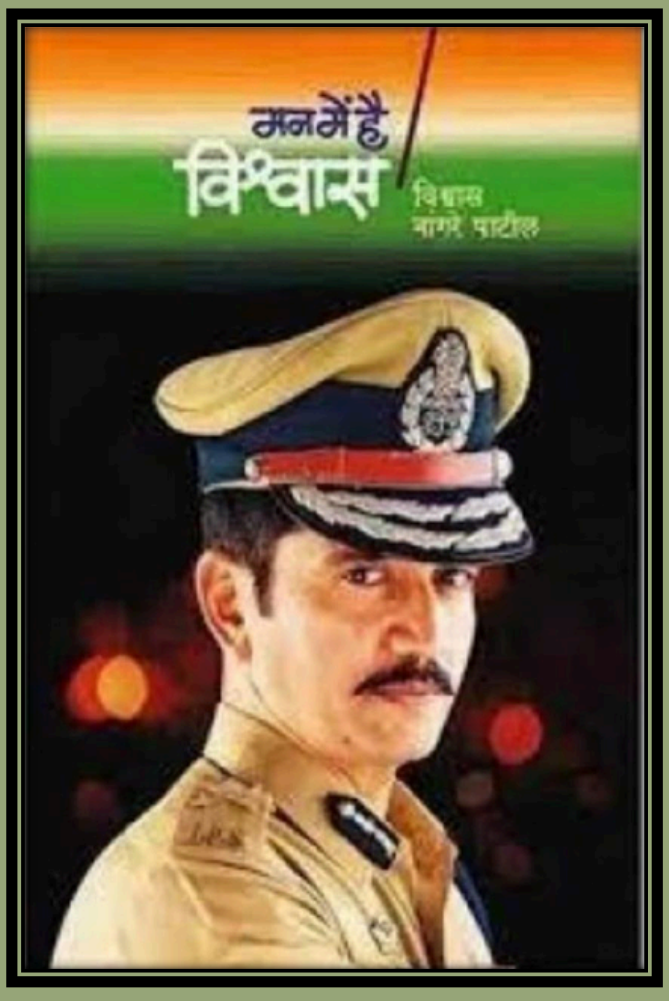
लेखक: IPS ववश्वास नाांगरे पाटील

By Mrunal Shirsat (TE Student)

साराांश / पुनरावलोकन:

'मनात ववश्वास' हे IPS ववश्वास नाांगरे पाटील याांचे आत्मकथन असून एका खेड्यातील साध्या गरीब कुटुांबातून आलेल्या मुलाने कठीण पररश्रम आवण अटळ विद्द याांच्या रिवर भारतीय पोवलस सेवेतील एक महत्त्वाचे स्थान कसे वमळवले, याचे पे्रेरणादायी दशशन यात घडते.

पुस्तकात त्याांच्या बालपणातील गमतीदार आठवणी, खडतर सामावजक आवण आवथशक पररस्थस्थती, अभ्यासावरील एकाग्रता, आवण UPSC परीक्षेच्या तयारीचा प्रवास अत्यांत ओघवत्या भाषेत माांडलेला आहे. शारीररक, मानवसक आवण भाववनक सांघषश कसा पार करावा, हे उदाहरण त्याांच्या विनातून स्पष्ट होते.
त्याांनी घेतलेल्या वनणशयाांमागे कुटुांबाचे मागशदशशन, वशक्षकाांची वशकवण, आवण समिातील सकारात्मक व्यक्तीचाां मोठा वाटा आहे. अपयशाला घाबरायचां नाही, तर त्यातून वशकून पुन्हा उठायचां—हा मूलमांत्र हे पुस्तक देतां.
त्याांचा प्रवास अिेच्या तरुणाांना स्वप्न पाहण्यासाठी आवण ती सत्यात उतरवण्यासाठी आवश्यक ती उमेद, वशस्त, आवण पे्रेरणा देतो.
ति हॉटेलवरील २६/११ च्या अवतरेक्याांववरोधातील त्याांची धाडसी भूवमका, आवण त्या प्रसांगाचे भाववनक वणशन वाचकाच्या मनात घर करून राहतां.
हे पुस्तक वाचून वाचकाला फक्त पे्रेरणा नाही, तर विनाकडे बघण्याचा सकारात्मक दृवष्टकोन वमळतो. प्रत्येक पानावर आत्मववश्वास, कृवतशीलता आवण देशसेवेचे बळ दडलेले आहे.



अंतरिक्ष में भारत की उड़ान
(चंद्रयान-3 को समर्पित)

धरती से उठी एक आशा,
ज्ञान-विज्ञान की नई परिभाषा।
चांद के रस्ते पर भारत चला,
विश्व ने देखा, सपना फला।

न कोई डर था, न कोई ग़म,
बस था विश्वास और श्रम।
जब चंद्रयान ने चाँद को छुआ,
गर्व से हर दिल ऊँचा हुआ।

दक्षिण ध्रुव तक जिसने पहुंच बनाई,
विज्ञान की दीप जलाई।
ISRO ने फिर इतिहास रचा,
हर कोने में भारत बोला – "हम भी कुछ कम नहीं!"

युवाओं के मन में जगी है आग,
STEM के पथ पर बढ़ा है भाग।
सपनों को अब पंख मिले हैं,
ज्ञान के नभ में रंग खिले हैं।

गगनयान अब अगला निशान,
भारत का होगा अंतरिक्ष में स्थान।
चांद, मंगल, तारों का जहां,
अब भारत बोले – "मैं भी वहां!"

-By, Sachinkumar Mehta

The People's King

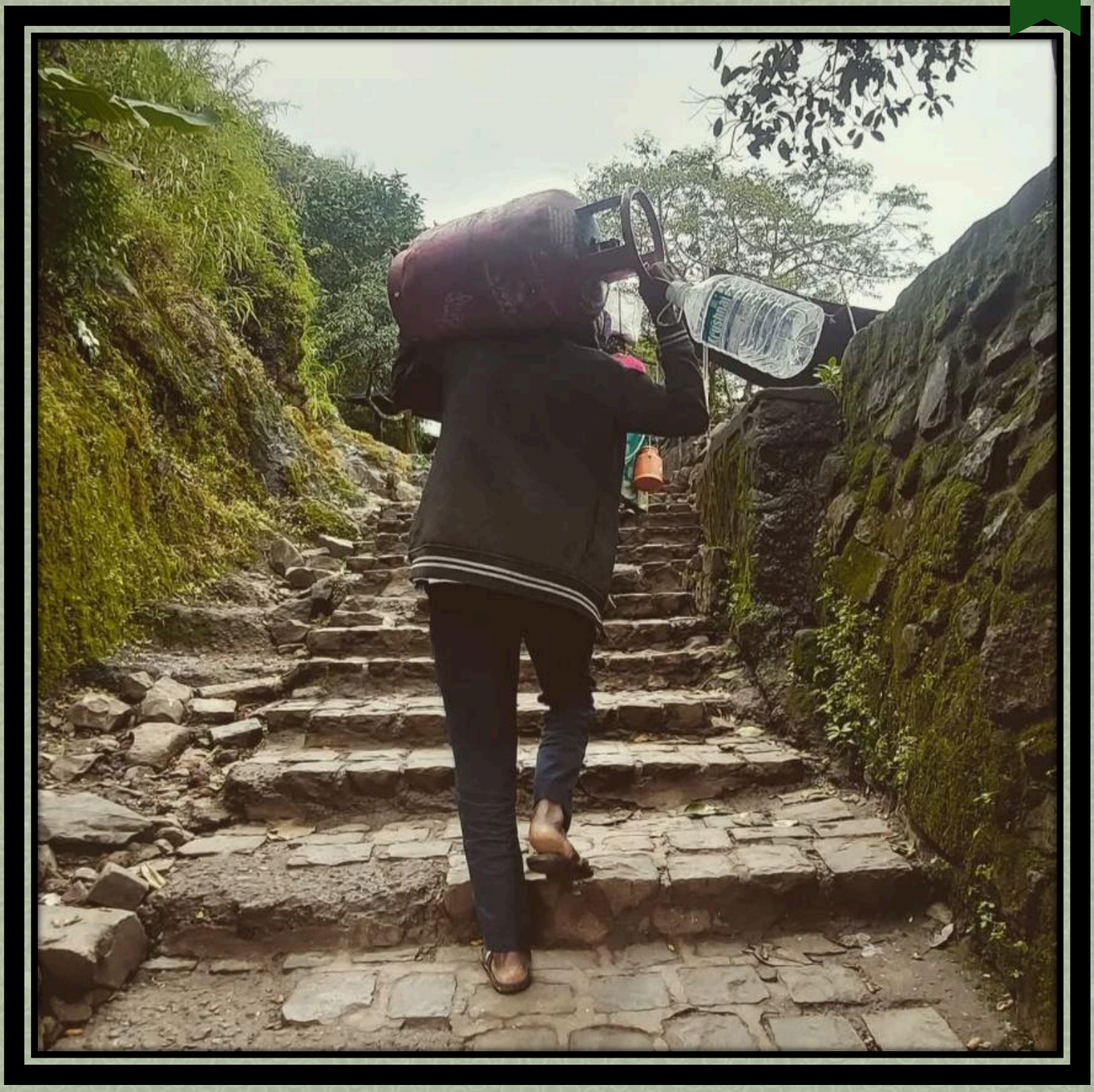
Rangoli drawn by Sahil Taur TE A

Lost in the rhythm of the rain — a graceful stroll under the umbrella

By Prof. Ashwini Waghule

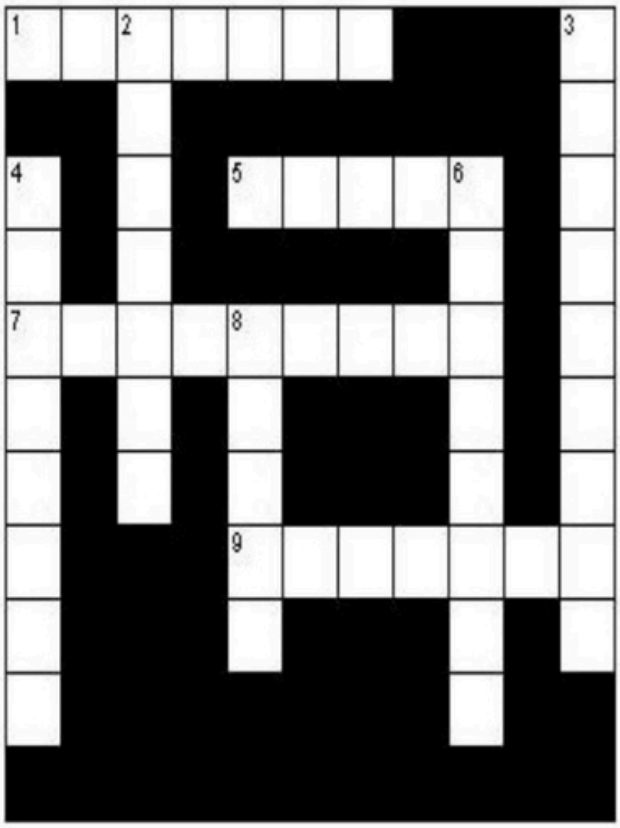
Photographs

Captured by Dr. Aakanksha Ingle (Sculpted by time, this natural bridge in Andaman showcases nature’s artistry shaped by waves and wind.)



Captured by Atharva Kashid (A gentle reminder that every life holds its own quiet strength, even in the face of unseen struggles.)

CROSSWORDS



Clues - School

Across
1 After high school
5 Sports boss
7 Pupil meeting place
9 Earned reward

Down
2 Where stories are found
3 School boss
4 Can't wait til this
6 Worst thing about school
8 You must do this to achieve