

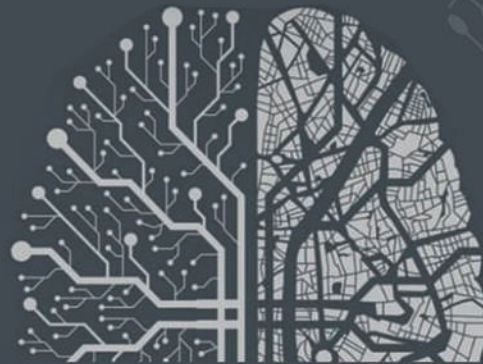
# Kalinga Kanvas

The Timeless Legacy of  
Excellence and Splendour

HOSTED & CURATED BY



THE INDIAN INSTITUTE OF ARCHITECTS  
ODISHA CHAPTER



**Ai** ARCHITECTURE  
INTELLIGENCE  
*Where design meets digital wisdom*

**DESIGN**  
CARNIVAL & **2025**  
BUILD EXPO

## KEY HIGHLIGHTS

- 600+ Delegates • Representation of Statewide Design Schools • Design Charratters • Plenary Sessions
- Representatives from Industry Partners • Felicitations • 3 Days of Networking and Knowledge Sharing
- Street Carvinal • Enchanting Kalinga Exclusive - Band Perfomance by Architects • Cultural Night with Gala Dinner

14th - 16th Nov., 2025, Bhubaneswar, Odisha



Event Partner



**Samudyam**  
Projects Pvt. Ltd.

ମନୋଜ ଆହୁଜା, ଭା.ପ୍ର.ସେ.

ମୁଖ୍ୟ ଶାସନ ସଚିବ, ଓଡ଼ିଶା

**MANOJ AHUJA, IAS**

CHIEF SECRETARY, ODISHA



ଦୂରଭାଷ: ୦୬୭୪-୨୫୩୪୩୦୦ / ୨୫୩୬୭୦୦ (O)

Tel. : 0674-2534300 / 2536700 (O)

ଫ୍ୟାକ୍ସ : ୦୬୭୪-୨୫୩୬୭୦୦

Fax : 0674-2536660

ଇ-ମେଲ / E-mail : csori@nic.in

ପତ୍ର ସଂଖ୍ୟା / Letter No.:

--	--	--	--

ତାରିଖ / Date: 11 11 2021



### MESSAGE

It gives me great pleasure to extend my warm greetings to the entire architectural fraternity on the successful publication and continued excellence of “*Kalinga Kanvas*”. This e-magazine has consistently served as a meaningful platform for dialogue, reflection, and the exchange of ideas among practitioners who shape the built environment of our State.

I commend the magazine for showcasing diverse voices, innovative projects, and insightful discussions that mirror the growing dynamism of our architectural community.

The perspectives shared within its pages inspire a collective pursuit of excellence-encouraging design that is sustainable, inclusive, contextually responsive, and forward-looking.

  
(Manoj Ahuja)

THE **editorial** Team



Prof. Dr. Bharati Mahapatra  
Chief Editor, Kalinga Kanvas



Dr. Prof. Deepashree Choudhury  
Editor, Kalinga Kanvas



Ar. Smaranika Satapathy  
Co - Editor,  
Kalinga Kanvas



Ar. Shiva Prasad Rath  
Co - Editor,  
Kalinga Kanvas

# TABLE OF CONTENTS

1. A word from the IIA President
2. A word from the Council of Architecture President
3. CHAIRPERSON'S MESSAGE
4. CHIEF EDITOR'S MESSAGE
5. FORWARD

## 6. THE SCOLARS CHOICE

### **City Focus : Nairobi - The Green City in the Sun**

Dr. Deepashree Choudhury

*Professor and Head, Department of Design,  
Budha Group of Institutions, Karnal, Haryana, India*

### **Rethinking Architectural Education and Practice in the Era of Specialization**

Debasis Das

*Assistant Professor, Sri Sri University*

## 7. FINE LINES

Ar. Sudipta Chakraborty

## 8. I WALK I LOOK I SEE I STOP I PHOTOGRAPH

Ar. Samghamitra Rath

## 9. ARCHITECT'S WORK

### **TRAUMA CARE FACILITY**

Ar. Tara Prasad Dhal

### **DESIGNING BEYOND WALLS**

Ar. Debendra Kumar Parida

SPACE ARCH

## 10. BRUSHES & STROKES

Ar. Debashreeta Debabami

Event Partner

A decorative banner with a thin black line and several colorful triangular flags in red, green, and blue, curving downwards from the right side of the text.

**URBAN**  
**LIVIN**

**DOORS | WINDOWS | FACADE | ROOF**

## A word from the IIA President



This timely initiative of the e-Magazine KALINGA KANVAS, is truly commendable as it aligns with the current need to adopt sustainable and eco-friendly practices by going digital. The e-magazine not only supports the “Go Green” movement but also ensures a wider and more effective reach to all members across regions. The current theme of Architecture Intelligence contributes precision and efficiency, while the human mind brings creativity and critical thinking. The integration of these two dimensions creates a powerful synergy - one that enhances both the design process and its outcomes. With technological support, the design cycle becomes shorter, accuracy and consistency improve, and valuable resources are conserved, leading to more sustainable and optimized results.

My best wishes to the entire Odisha Chapter team for this thoughtful endeavor and for the continued success of KALINGA KANVAS.

Warm Regards  
Ar. Vilas Avachat,  
President, IIA.



## A word from the Council of Architecture President

Over the past decades, we have witnessed successive waves of transformation - beginning with the computer revolution, followed by the information technology revolution, and now the emergence of artificial intelligence. Each of these shifts has profoundly influenced the way systems function and interact, and the ongoing AI revolution is poised to redefine them even further. While technological advancement remains a critical dimension of contemporary development, it must be accompanied by a heightened sense of responsibility toward addressing global concerns such as climate change and sustainability.

Integrating these three imperatives - technological advancement, environmental responsibility, and heritage consciousness - into the modern architectural learning framework is both necessary and timely. Architecture, in essence, serves as a mirror of civilization, capturing its values, aspirations, and transformations in the e-Magazine KALINGA KANVAS.

Warm Regards  
Ar. Prof. Abhay V Purohit,  
President, (COA),  
Council of Architecture

## CHAIRPERSON'S MESSAGE



Ar. Swopnadutta Mohanty  
Chairperson,  
The IIA Odisha Chapter

As we stand at the confluence of creativity, technology, and responsibility, Design Carnival 2025 becomes a celebration of how architecture continues to evolve as both an art and an intelligent discipline. The theme "Architecture Intelligence" underlines the synergy between human insight and technological innovation - a dialogue that redefines how we design, build, and inhabit our spaces.

Architecture today is no longer confined to the drawing board; it extends to the realms of data, sustainability, material science, and digital fabrication. This issue of Kalinga Kanvas captures that dynamic shift - highlighting voices from academia, industry, and practice that are collectively shaping a more resilient and responsive built environment.

The Design Carnival - our annual state event has always been envisioned as a bridge - connecting thought and action, designers and industry, institutions and communities. Through panels, exhibitions, and the vibrant Street Carnival, it celebrates design as a social catalyst and an instrument of change.

As Chairperson of IIA Odisha Chapter, I take pride in witnessing our fraternity's collective energy translate into meaningful dialogue and innovation. My heartfelt gratitude to all contributors, partners, and young minds who have infused this journey with enthusiasm and purpose.

Let this edition of Kalinga Kanvas serve as both reflection and inspiration - a testament to the intelligence that defines architecture and the imagination that drives it forward.

Ar. Swopnadutta Mohanty  
Chairperson,  
The IIA Odisha Chapter

## CHIEF EDITOR'S MESSAGE



Prof. Dr. Bharati Mahapatra  
Chief Editor, Kalinga Canvas

We stand at a crossroads where design converges with digital wisdom. The question before us is both urgent and inspiring: is digitalization overwhelming creative intelligence, or is it enhancing creativity by making it more precise and efficient through the power of artificial intelligence?

As automation begins to prove its immense potential within the construction industry, and as disruptive technologies contribute in significant shift in the way we live and work, traditional sectors are witnessing a profound transformation. In this evolving landscape, the Indian Institute of Architects, Odisha Chapter once again gathers to reflect, exchange ideas, and explore this timely theme: "Architecture Intelligence: Where Design Meets Digital Wisdom".

The construction industry, a cornerstone of the global economy, accounts for nearly 9%-15% of GDP in most countries, with the building sector consuming 30-40% of total global energy. These figures emphasize the urgency to rethink design and construction processes and adopt deep technologies that offer transformative solutions to complex challenges.

This edition of Kalinga Canvas spotlights the intersection of digital technology and creative decision-making in architecture. While the cover story captures the evolving role of digital tools in shaping design intelligence, this issue remains true to its essence; celebrating architectural brilliance, and the subtle beauty and timeless harmony between the natural and built environments.

Prof. Dr. Bharati Mahapatra  
Chief Editor, Kalinga Canvas



Dr. Prof. Deepashree Choudhury  
Editor, Kalinga Canvas

Each edition of Kalinga Canvas feels like turning another page in a growing story; a story of ideas, people, and places that inspire us to think, create, and belong. What began as a modest platform to express architectural thought has, over time, evolved into a shared canvas, one where art meets intellect, and creativity meets conscience and this issue marks a quiet yet meaningful milestone in that journey. The theme of Architecture Intelligence invites us to look beyond the tools and technologies shaping our profession and focus instead on the thoughtful human choices behind them. As we transition deeper into the digital age, Kalinga Canvas too has embraced change, choosing sustainability through a digital format, and inclusivity through a wider reach.

What I find most fulfilling about Kalinga Canvas is how it continues to grow through collective energy, each contributor lending their own shade, each article a reflection of sincerity and insight. The academic voices, professional works, and student expressions presented here are not just documentation; they are conversations; living testimonies of how architecture continues to question, adapt, and respond.

This issue, with its city focus on Nairobi - The Green City in the Sun, and its mix of scholarly and creative works, echoes our belief that design is as much about resilience as it is about imagination. Among the visual entries, "The valley sending its voice downstream" by Ar. Sanghamitra Rath stands out as a poetic dialogue between landscape and silence, reminding us that architecture often begins where words end. Equally inspiring, in the Architectural Projects section, the Trauma Care Facility at Panikoili, Jajpur by Ar. Tara Prasad Dhal exemplifies

how architecture can serve humanity where urgency meets empathy and medical efficiency translates into spatial healing.

As editor, I see Kalinga Canvas as a bridge, connecting institutions, ideas, and individuals. It stands today as a celebration of learning, collaboration, and the enduring human spirit that defines architecture.

My heartfelt gratitude to all contributors, chief editor, co-editors, and readers who keep this endeavour alive with their enthusiasm and trust. May every issue remind us that architecture, at its best, is a dialogue between intelligence and intuition, between people and the world they shape.

Warm regards,

Dr. Prof. Deepashree Choudhury

Editor, Kalinga Canvas

---



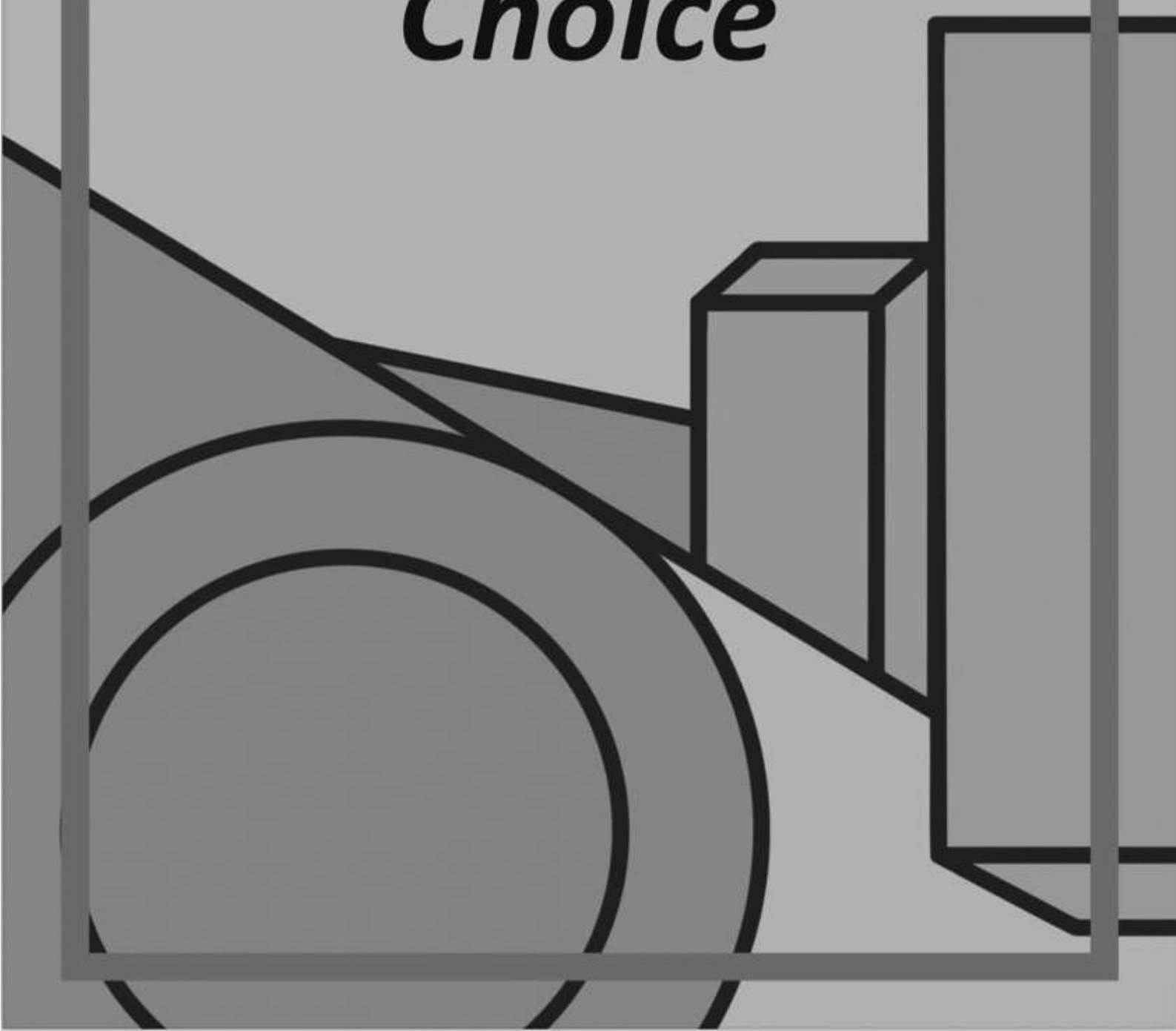
**GANPATI<sup>®</sup>**  
**-HOMEZ-**



 **GENERAL**

**A I R   C O N D I T I O N E R S**

***The  
Scholar's  
Choice***



# City Focus : Nairobi - The Green City in the Sun

Dr. Deepashree Choudhury

*Professor and Head, Department of Design, Budha Group of Institutions,  
Karnal, Haryana, India*

*Email: ar.deepachoudhury@gmail.com*

“A city that works precisely because it doesn’t insist on perfection.”

## Introduction

Nairobi, the capital of Kenya, fondly called the “Green City in the Sun,” stands as the major financial and economic hub of East Africa. A city of vibrant contrasts, it gracefully blends magnificent colonial remnants with indigenous culture, modern urbanism, and traditional values. Its Central Business District (CBD) hosts several significant national and international organizations, reflecting its importance as a centre of global and regional exchange. Uniquely, Nairobi is the only capital city in the world that houses a national park within its boundaries; the Nairobi National Park where lions, giraffes, and rhinos roam against the backdrop of a modern skyline. The city’s name originates from the Maasai phrase “Enkare Nyirobi,” meaning “place of cool waters,” capturing the essence of its natural abundance and serene landscapes.



*Figure 1: Nairobi, Kenya: The green city in the sun*

## Layers of History

Founded in 1898 by colonial authorities in British East Africa as a rail depot on the Uganda–Kenya Railway, Nairobi's growth was shaped by its strategic location, high elevation, temperate climate, and reliable water supply. Within less than a decade, it replaced Mombasa as the capital of Kenya in 1907. After independence in 1963, Nairobi became the capital of the Republic of Kenya and a hub for the coffee, tea, and sisal industries. Over time, successive governments transformed it into dynamic metropolitan centre; a melting pot of cultures, opportunities, and aspirations. Today, Nairobi represents a living dialogue between past and present, where colonial-era architecture coexists with sleek modern towers, and the rhythm of traditional markets blends with the pulse of global commerce - making it a true African city of the future.



*Figure 2: Street Clock, Kenyatta Avenue: A silent witness to Nairobi's evolving time*

## Spatial Extremes

The planned CBD, with its gleaming glass towers and colonial-era buildings, wide streets, and familiar precincts such as the Kenyatta International Convention Centre, stands in striking contrast to the dense downtown zones and sprawling informal settlements. Moving outward, the city stretches into leafy suburbs like Karen, Lavington, and Westlands, marked by order, green spaces, and planned layouts. Between these lie the informal settlements of

Kibera, Mathare, and Mukuru, which together house much of the city's working population. Walking along the busy Koinange Street in the city's Central Business District, one comes across Jeevanjee Gardens, a two-hectare park created in 1906, reflecting Nairobi's rich history and lively sense of community. Within the CBD, several historical buildings have evolved into everyday landmarks; the Nairobi City Market, Jamia Mosque, Holy Family Basilica Clock Tower, and McMillan Memorial Library stand proudly amidst the bustle. Along Kenyatta Avenue, colonial-era legacies such as the Supreme Court and Parliament Buildings coexist with modern landmarks like the legendary Sarovar Stanley Hotel and the Kenyatta International Convention Centre (KICC), a venue for major international events. Each structure narrates a fragment of the city's evolving story, where architecture weaves together memory, identity, and aspiration.



*Figure 3: City Market: Cultural and architectural continuity in the heart of the city*



*Figure 5: Kenyatta Avenue: Location for the seats of power*

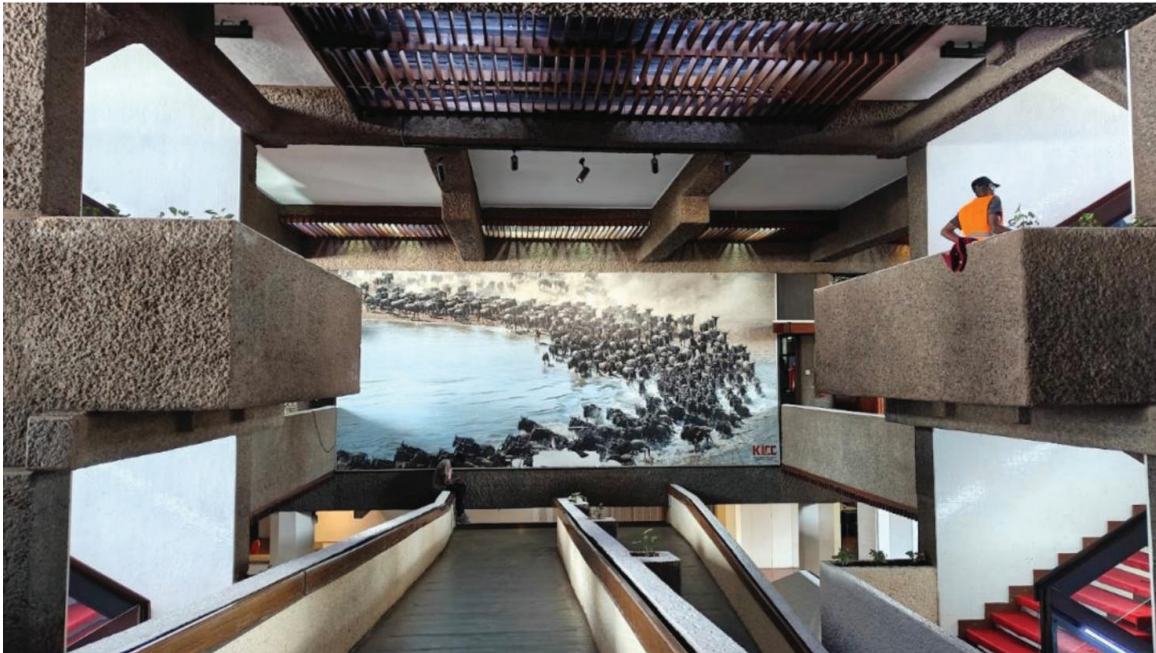


*Figure 6: Jamia Mosque: People's place in the heart of city*



*Figure 4: Kenyatta Avenue: A civic corridor where colonial legacy meets modern day urban landscape*

*“What may appear chaotic from a planner’s map becomes coherent through the lived experiences of its people.”*



*Figure 7: Kenyatta International Convention Centre (KICC):  
An international venue for events*

## Vibrant Street Culture

The city’s streets hum with colour and sound, dotted by electric buses and animated by the rhythm of matatus, the graffiti-covered minibuses that are much more than transport. Matatu culture transforms everyday travel into an art form; each bus, pulsing with music and murals, becomes a moving canvas of expression and identity. It’s Nairobi’s way of turning mobility into performance, commerce into culture. And then there are the street clocks, silent sentinels of time that no longer measure punctuality but continuity, quietly marking the transformation of the city around them.



*Figure 8: Matatus: Moving murals that turn everyday  
travel into urban performance*

## The Intertwined Academic Life

At the city's heart lies the University of Nairobi, its green campus a place where education and civic life flow together. Here, classrooms open into streets, and knowledge merges with lived experience, reminding visitors that in Nairobi, learning and life are inseparable parts of the same urban rhythm.

## A Small Observation

Amid Nairobi's vibrant motion, one small but striking detail caught my eye. Public smoking is banned, and designated smoking zones are clearly marked and what's more, the rule is followed. For a city so full of improvisation and spontaneity, this quiet display of civic discipline felt symbolic, a reflection of shared respect for space. It was a reminder that governance isn't only seen in institutions or infrastructure; sometimes it resides in the smallest everyday courtesies, in the ways people shape the city together. It was, in its own way, a quiet revelation, that order can coexist with vitality.

## An Unexpected Connection

While walking through the streets of Nairobi, I stumbled upon something oddly familiar ; a manhole cover made in India. It was a quiet but powerful reminder of how deeply global our cities have become, how networks of trade, technology, and manufacture weave invisible threads between continents. In that small circle of cast iron, half-buried in a Nairobi street, I saw a reflection of interconnected urban destinies where design, production, and daily life transcend borders, and where even the most ordinary object becomes a symbol of shared development.



*Figure 9: A manhole cover spotted outside KICC: Made in India*

## Juxtaposition : Nairobi as a Living Collage

This juxtaposition of planned and unplanned, formal and informal, wealth and struggle, and order and improvisation make Nairobi a living laboratory of spatial inequality and resilience. Seen from above, it might look fragmented, yet on the ground, these fragments merge into a coherent whole. Nairobi thrives because it does not demand perfection; it celebrates its contradictions. The city's energy lies in its everyday interfaces' street vendors, matatu stops, and informal edges where design, economy, and life blend naturally. A resilient city, Nairobi layers infrastructure with culture, making transport, institutions, and art coexist as civic frameworks. It reminds urban designers that fragmentation is not failure; it's texture. Coexistence, not control, defines resilience here.

### The Essence of Collage Urbanism

Nairobi embodies the spirit of collage urbanism; cities as evolving tapestries, layered with contradictions yet bound by resilience. It values juxtaposition over homogeneity and coexistence over conformity.

This means:

- Designing with plurality, not uniformity
- Allowing overlaps between formal and informal economies
- Recognizing that vibrancy comes from diversity, not control

Cities like Nairobi show that resilience emerges not from perfection but from adaptability; from the ability of many systems, aesthetics, and identities to share the same space. The future of urban design lies in working within complexity, not against it.

A truly resilient city isn't one that looks perfect; it's one that accommodates difference gracefully.

*"From above, it may seem chaotic ; at ground level, it reveals coherence ; a living collage."*

Figure 1: Nairobi, Kenya: The green city in the sun .....	1
Figure 2 : Street Clock, Kenyatta Avenue: A silent witness to Nairobi's evolving time.....	2
Figure 3 : City Market: Cultural and architectural continuity in the heart of the city.....	2
Figure 4 : Kenyatta Avenue: A civic corridor where colonial legacy meets modern day urbanscape.....	3
Figure 5:Kenyatta Avenue: Location for the seats of power.....	3
Figure 6:Jamia Mosque: People's place in the heart of city.....	3
Figure 7:Kenyatta International Convention Centre (KICC): An international venue for events.....	4
Figure 8:Matatus: Moving murals that turn everyday travel into urban performance.....	4
Figure 9: A manhole cover spotted outside KICC: made in India.....	5

# Rethinking Architectural Education and Practice in the Era of Specialization

Debasis Das  
Assistant Professor, Sri Sri University  
debasis.d@srisriuniversity.edu.in

In the education sector of our country, the viability of architecture as a professional program has always been put to the test, more prominently during the admission cycle each year in recent times. Compared to the standalone architectural institutes, the scrutiny is perhaps more evident in educational institutes offering diverse professional programs across multiple faculties or departments where the commercial performance of each program in terms of admissions is compared with that of others, an undesirable outcome of the market driven education policies.

Architecture has never been a popular career choice, owing to the apparent issues associated with the profession such as the long duration of education, lower pay compared to other professionals at the entry level and a demanding work culture. There is an evident lack of awareness in the general public about the true scope of architecture as a profession beyond these apparent issues. Though the industry and academia collectively need to confront these marring issues, there is also an urgent need to project the profession of architecture more convincingly to the probable candidates. Candidates, seemingly passionate about architecture and/or design due to prior exposure to the profession, usually through acquaintances in the field of construction including architects, are typically those who opt for this program. Candidates oblivious to the true scope of an architect's work are less likely to choose this profession. With architecture being a vast field of study encompassing subjects ranging from science to the humanities, the traditional perspective in our society about the architect's role as an orchestrator of multiple specialized disciplines involved in the construction of the built environment has been somewhat misunderstood. This has belittled the perception of the profession in the public domain, reducing it to something insignificant compared to the more defined and compartmentalized roles offered in the highly specialized professional programs promoted by educational institutes today. Architecture, the profession of holism, finds itself at a crossroads in the era of specialization.

---

The etymology of the word "Architecture" leads us to its Greek origin that breaks down it to two words - "arkhi" meaning "chief" and "tekton" meaning "builder", put together to mean "chief builder". This word eventually evolved into "architectus" in Latin and then "architecture" in French, which then was borrowed by the English in the 16<sup>th</sup> century AD to describe "the art of building." Based on this foundational understanding of this term, the profession of architecture, since its inception, has always been reflective of this overarching role of the architects in contrast to the more specialized areas of structural design, building services, interior design, landscape design, etc. From the mythological figure of Vishwakarma to the Renaissance polymaths like Leonardo Da Vinci and Michelangelo, the practice of architecture has always been interdisciplinary. The representatives of this professions were perceived to be "master builders" who would know about everything, more or less, associated with the built environment. They would engage with fellow professionals whenever there would be the requirement of specific knowledge about a particular aspect of the building process. It is during Industrialization that we witness the compartmentalization of the building process. Engineers specialized in building structure, contractors specialized in project management, and so on. Gradually, regulations defined the boundaries of these professions associated with the act of building construction.

There has been tremendous technological advancement in the field of building construction, both, holistically and individually in various building systems such as structural, environmental and digital, transforming them into specialized fields of study. The emergence of newer professions in the construction industry such as the BIM coordinators, Sustainability Consultants, Digital Programmers, Project Managers, etc. highlight the demand for such specialized professions. Apart from architecture as a field of study, other fields such as Computer Science, Environmental Studies, Management Studies, etc. are eventually catering to this demand. Though the advent of such specialized professions indicate the improvement in precision and efficiency due to rapidly developing technological innovations in each of these fields of study, they also undermine the all-inclusive vision, the hallmark of architectural profession, pertinent to the building construction process. This scenario, though paradoxical, should not be construed as a conflict between the holistic nature of architecture and objective focus of such specialized professions. Unfortunately though, much of the diminishing in the viability of architecture as a career choice, today, is caused by the misinterpretation of architecture as a profession resisting specialization.

Mitigating this problem, calls for action from both - the academia and the industry.

utmost integrity. The design of public projects and public places is crucial here, where the spatial outcome should embody this holistic essence of architecture. The general public needs to experience the exuberance of artfully designed spaces that induces noticeable shift in perception. The architects also need to become integrators of knowledge from each of these specialized professions, embarking a role of leadership in the contemporary practice but also have to be careful enough not to monopolize it. The academia also needs to evolve accordingly. The educational institutes need to promote the interdisciplinary nature of architecture by developing a curriculum and learning experience based on collaboration with resource persons from these specialized professions rather than architects taking upon themselves to disseminate this discourse. The most significant aspect of the architecture programs promoted by educational institutes that needs to evolve is perhaps the clarity of functioning that fresh graduates receive upon completion of these programs. They should be able to discern between the roles of a holistic coordinator and a specialized operator. Based on the industry demands many would orient themselves to a more specialized approach and the ones choosing not to specialize would focus on quintessential aspect of the profession i.e. to become a coordinator of multiple specialized fields in order to achieve a holistic design output. More importantly, the design of the architectural programs need to respond to this. The programs need to be redesigned adapting to the specializations. Candidates should be made aware while choosing such a program about the dual nature of the profession and project it as an advantage rather than a limitation, where they are empowered to make a decisive manifestation of their aspirations in the field of architecture.

The profession of architecture needs to evolve, not to fit in but to be more inclusive. It has to diversify to keep its core essence intact. This process of looking within and restructuring is essential to grow. Architecture as a profession is much more rooted in the society than the specialized professions can ever be, and much of it is imbibed by this holistic approach. After all, an architect is a "Jack of all trades" but in the era of specialization needs to "master one" – whether as the specialized operator or the holistic integrator.

**Fenesta**   
**Better by Design**

 **Sit**  
*transforming workspaces*



**SHYAM STEEL<sup>®</sup>**

**flexi STRONG TMT REBAR**



**ECONOMY ♦ EXCELLENCE ♦ ETHICS**

# ***Fine Lines***



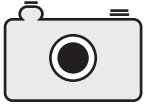


Sketches by Ar. Sudipta chakraborty

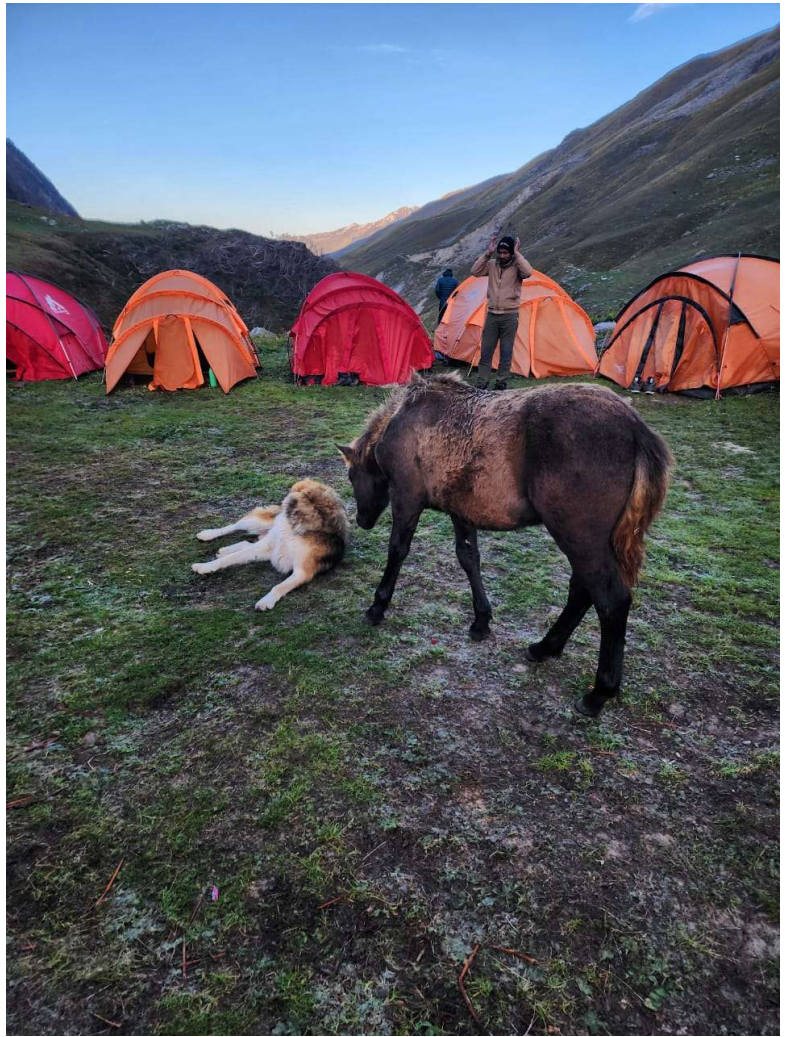
***I Walk  
I Look  
I See  
I Stop  
I Photograph***

*- Leon Levinstein*

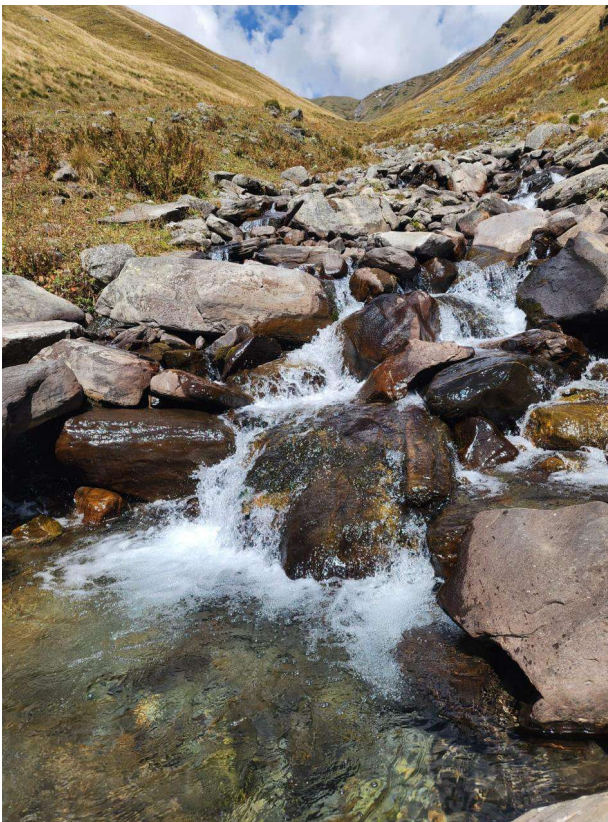




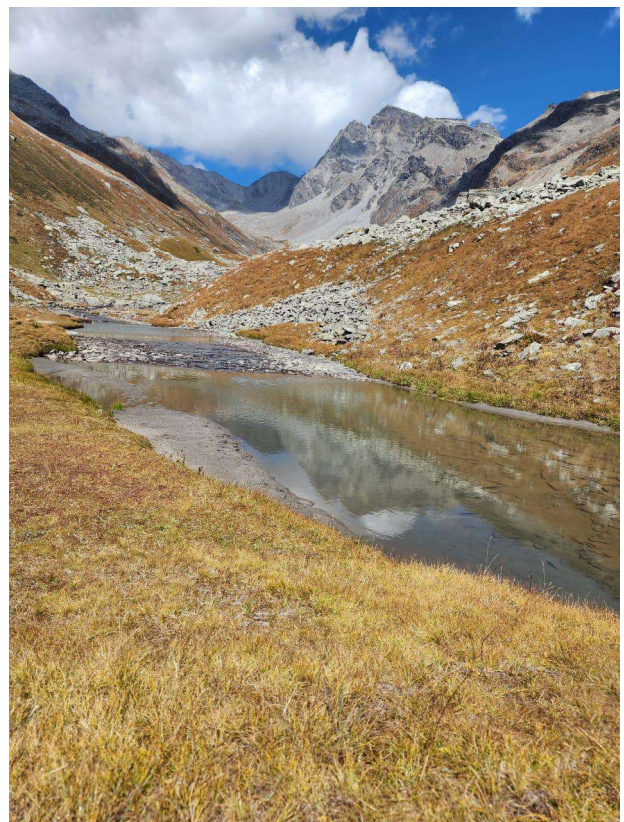
Photographs contributed by  
Ar. Sanghamitra Rath



■ Dawn breaks over Litham, where  
silence has its own sound.



■ The valley sending its  
voice downstream..



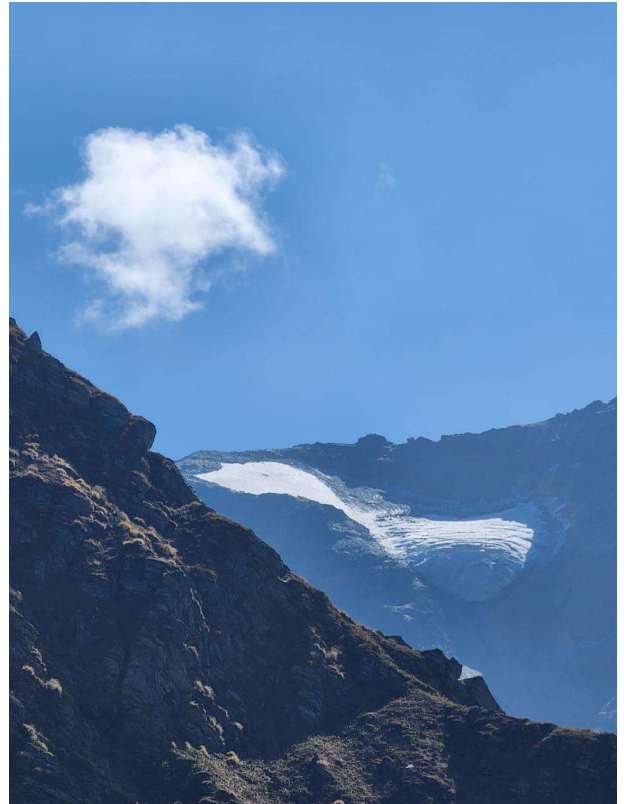
■ The calm beneath the gaints,



■ The Mountains don't end and the horizons multiply.



■ A quiet moment between the feather, the water and the stones.



■ The peak rises; the clouds stay-a quiet understanding in motion.



**Greenlam**  
LAMINATES

**CLADS**  
EXTERIOR GRADE COMPACT LAMINATES

**Sturdo**  
RESTROOM CUBICLES & LOCKERS



**Smart Node**  
Simplify Your Smart Living

***Featherlite***<sup>®</sup>  
**by PGL Furnitures**

A stylized illustration of an architect working at a drafting table. The architect is shown in profile, wearing a dark t-shirt and pants, sitting on a white stool. He is using a pen to draw on a large sheet of paper on the table. The table is supported by a black tripod stand. The background is a light gray color with several geometric symbols: a corner bracket in the top left, a crosshair in the top right, a crosshair in the middle left, and a compass in the bottom right. The entire scene is enclosed in a thick gray border.

# *Architect's Work*





Ar. Tara Prasad Dhal  
( Vishwakarma Awardee-2025)  
Dated 13.09.2025

### Short Professional Profile

Ar.Tara Prasad Dhal is the founder and Managing Director of his architectural consulting firm "THE DESIGN GROUP" which was established in 1991 at Bhubaneswar after he graduated in Architecture from C.E.T ( OUTR ), Bhubaneswar in the same year. Presently he works in Odisha and Chhattisgarh for various building projects.

### Professional achievements.

- A. 2008: Became accredited expert of ECBC by BEE, Ministry of Power.
- B. 2009: Designed 1<sup>st</sup> Net Plus (Net Positive energy public building) in Country Office Building of Chhattisgarh Electricity Regulatory Commission, Raipur which has got India Tech Award in 2012 at New Delhi, HUDCO award in 2012 at New Delhi, Construction Week India Award in 2013 at Mumbai. The design and construction details of CSERC included in academic curriculum of IIT Madras in 2015
- C. 2011: Contributed for drafting Orissa Energy Conservation Building Code .
- D. 2012: Drafted 1<sup>st</sup> edition of Chhattisgarh Energy Conservation Building Code.
- E. 2015: Received HUDCO award at New Delhi for zero water discharge housing complex; Rajiv Awas Yojana housing at Rangmatia, Bhubaneswar.
- F. 2015: LIFE TIME ACHIEVEMENT AWARD for out standing contribution in the field of energy conservation and sustainable buildings by Encon Mining at Bhubaneswar .

- G. 2016-2018: became member of State Planning Commission( STF-Urban & Infra), Chhattisgarh state.
- H. 24.10.2024: National Award on Architecture and Interior Design Excellence Award for Energy Conservation Projects by Beginup Research Intelligence Pvt Ltd at Bangalore.
- I. 23.11.2024: National Prestige Awards 2024 for Specialised Health care Architecture of Cancer Care Hospital at DHH, Bargarh by KITE Craft Productions LLP
- J. 12.12.2024: South Asia Pacific Health Care Awards for planning and Design of Cancer Care Hospital, Bargarh and Trauma Care Hospital, Panikoili by Brand Business Promotions and Research at IIC, New Delhi.
- K. 20.12.2024: Received Sate level Ultra Tech Award at Bhubaneswar for design of Cancer Hospital, Bargarh.
- L. Dated 19.01.2025: Received International Global Architects and Builders Awards at Dubai for design of CSERC, Raipur, Cancer care Hospital Bargarh, Krishi Sikhya Sadan, OUAT, Bhubaneswar.
- M. Dated 26.01.2025: Received Global Sustainable Health care Architecture Award 2025 for sustainable Health Care Infra practices by HYPEDGE MEDIA Group at Chennai.
- N. 2025- Featured in National journals like The India Today, The Business Today, and The Prime Square.
- O. Dated 21.03.2025: Received World Health Care Awards 2025 by Brand Council Ratings at India and Thai Chamber of Commerce, Bangkok for design of Post Graduate Hospital for Mother and Child at Jajpur, Odisha.
- P. Dated 05.04.2025: Received Global Excellence Awards by Federal Research and Recognition Council, Hyderabad for planning and design of Post Graduate Cancer Hospital at MKCG Medical College, Berhampur, Odisha.
- Q. Dated 11.04.2025: Received Viswakarma Awards-2025 at New Delhi by CIDC ( Niti Ayog), Govt of India.
- R. Dated 11.04.2025: Viswakarma Awards to Police Commissionerate, Bhubaneswar, Krishi Sikhya Sadan, OUAT, Bhubaneswar, Cancer Hospital, Bargarh, Odisha, Trauma Care Hospital, Panikoili, Jajpur, Odisha and office building of Chhattisgarh State Electricity Regulatory Commission ( CSERC), Raipur, Chhattisgarh.
- S. Dated 17.04.2025: Appointed as Vice Chairman of International Council of Consultants, New Delhi ( Under CIDC, Niti Ayog) for Odisha Center.

# TRAUMA CARE FACILITY

Panikoili, Jajpur, Odisha

*Ar. Tara Prasad Dhal*

THE DESIGN GROUP, Bhubaneswar

The Trauma Care Hospital in Panikhoili is envisioned as a dedicated facility designed to provide rapid, high-quality emergency care for trauma patients, enhancing the overall emergency medical infrastructure of the region. The hospital aims to deliver comprehensive trauma services, integrating cutting edge medical technology with patient-centred design to offer effective, timely and compassionate care.



PROJECT NAME :  
TRAUMA CARE FACILITY

LOCATION :  
PANIKOILI, JAJPUR,  
ODISH - 755043



## ARCHITECTURAL VISION

The Trauma Care Facility is a 238 bedded hospital, situated on National High Way 16 at Panikoili. The Trauma Care Hospital's design focuses on efficiency, accessibility and resilience, reflecting its critical role in emergency healthcare. The architecture combines functionality with a calming, supportive environment, using modern materials and design



principles that promote both rapid patient processing and a reassuring atmosphere for patients and their families. The site was about 7 meters below National Highway. one natural canal / drain is at one side of plot. The site was facing the treat of flood due to back water of Baitarani River. The hospital building is planned on front part of site with access around the building and to back side of, which is reserved for staff quarters and hostels. The Hospital building has been designed confirming to ODA rules and National Building Code 2026 and NDMA guidelines. 7.5-meter-wide paved road provided all-around the building with pedestrian pathway. Separate visitor parking & ambulatory parking has been provided. Landscape greenery is provided at front space. Power supply is made from provided transformer.

Backup power supply is provided from DG set. Water supply is provided from PHE supply and separate production well. Rain water drains are provided around the building. Dedicated UGR for fire protection system and domestic supply, STP, ETP etc are provided in service area. ELV system, HVAC (Chillers), Fire Protection system and Medical Gas facilities are



provided. Building with Site development works which includes Chiller plant room & Medical gas manifold room, Paved Road, RCC Drain, Boundary wall, Landscape etc. Common provision i.e. Staircase, Ramp, Patient toilet, PWD toilet, 4 nos of passengers Hospital Lifts, 1 nos of Dirty Lift (1000kg) etc are provided. The topography was very critical. To reduce expenditure, two levels were created.

## FACILITIES PROVIDED

Lower Ground Floor : Parking, Hospital Services like Laundry, Central Kitchen, Maintenance Office, Staff Canteen, Security etc.

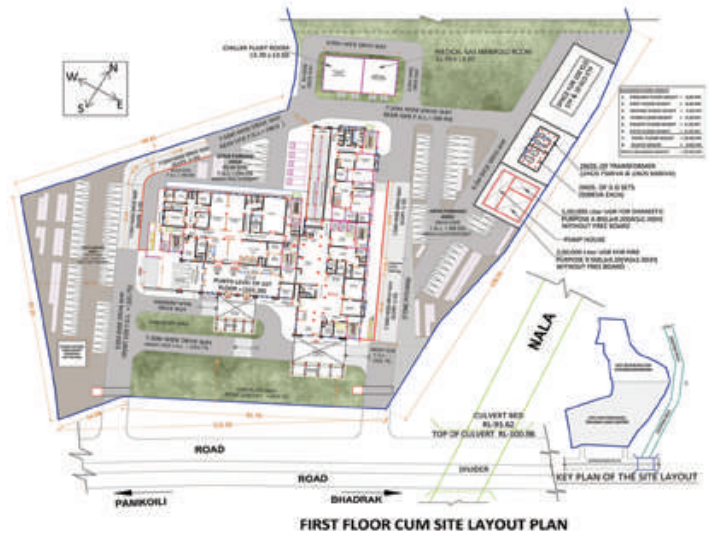
Upper Ground Floor : Trauma Patients Emergency Entry, Primary Treatment Area, Trauma ICU, Observation Rooms, Triage, Major Treatment, Radio Diagnostics like CT Scan, MRI, Burn Emergency, Isolation Emergency, Separate Entries for ambulatory, Non-ambulatory Patients etc.

2nd Floor : 4 nos Modular OTs, 16 Bedded Burn Ward, Isolation Rooms, Blood Store, Procedure Room, Mimi Lab etc.

3rd Floor : 34 Bedded ICUs., Physiotherapy Room, Blood Bank, Conference Hall etc.

4th Floor : 24 Bedded Male Ward, 24 Bedded Female Ward, Dept. of Radiology, Dept. of Pathology, , Dept. of Orthopaedics,, Dept. of Plastic Surgery, Dept. of Surgery, Dept. of Medicine etc.

5th Floor : 24 Bedded Male Ward & 24 Bedded Female Ward, 3 nos. Cabins, Treatment Room etc.



Basic Information about project :

Total beds : 238

Total Plot Area : 31,170.96 sqmt (7.70 Ac)

Lower Ground Floor = 3,832.50 sqm

Upper Ground Floor(First) Floor = 4,102.70 sqm

Second Floor = 3,074.10 sqm

Third Floor = 3,074.10 sqm

Fourth Floor = 3,074.10 sqm

Fifth Floor = 2,172.90 sqm

Total = 19,330.40 sqm

## MATERIALS

- Structure : RCC (M30) grade for Sub structure ( Single Under-reamed Bore compaction Pile) & Super structure.
- Brick Work : Fly ash brick work with cement mortar (1:6) in Sub structure & AAC brick work for super structure.
- Plaster : 12mm thick cement plaster with cement mortar (1:6), 16mm thick cement plaster with cement mortar (1:6) 6mm thick cement plaster with cement mortar(1:4)



- Internal Wall Finishes : Wall Putty with Acrylic Paint.
- External Wall Finishes : Weather seal coat, Texture Paint.
- Exterior Claddings : Glass Reinforced Concrete (G.R.C), Aluminium Sun Louvers etc.
- Flooring : Matt finished granite stone flooring at Staircase, Lobby, Corridor, Ward etc. Vitrified Germ-free flooring at sterile corridor, Blood Store, CSSD, Blood Bank etc. Kota stone flooring at store, Electrical Panel Room, Locker Room, Canteen, AHU etc. Double charge Matt finished Vitrified floor tile at Office, Duty Room, Cabin, Service Zone etc. Antiskid Ceramic tile flooring in Scrub-up, Washing Room, Toilet etc. Chequered tile flooring at Stilt Parking Area, Ramp, Ambulance Porch etc. Tactile flooring in all common Area i.e. Corridor, Ramp, Waiting Lobby etc. Conductive Seamless Flooring (2.0mm thick) for OT & ICU. Vinyl Sheet wall covering of 1.0mm thick) for OT & ICU.
- Window & Ventilator : Single & Double glazed UPVC framed windows in all rooms & UPVC framed Fixed ventilator with 4mm thick frosted glass panel in toilet area.
- Door : Pressed Galvanized steel 120 minutes of metal fire rated doors for fire lock zones, Flush door with WPC (Wood Plastic Composite) frame for duty room, Office, Cabin, Ward etc. Frameless toughened glass door at Entrance. Sealed glazed Hermetically door for OT, 2mm thick lead sheet door for X-ray, MRI, CT scan room etc.
- False ceiling : 8 mm thick Tufbloc magnesium oxide HDFR boards of Fire Class-1&P for all area (Except OT). Modular Monoblock ceiling for OT.
- Roof Insulation : 2.5cm thick grading concrete (1:2:2), Sika top seal 109 HI over roof slab.
- Expansion joint treatment : Sikadur combiflex with epoxy bonding agent.
- Railing : Stainless steel (Grade 304) railing.
- Structural Glazing : Single glazed Fixed glazing with part Top hung fabricated from roll formed sections made of pre-painted steel.



## SUSTAINABILITY AND EFFICIENCY

The hospital will incorporate environmentally responsible practices to ensure sustainability :

- **Energy Efficiency:** Use of energy-efficient systems, including LED lighting, to reduce operational costs and environmental impact.
- **Water Conservation:** Implementation of water-saving technologies and fixtures to support sustainable practices, Dual plumbing system by using treated water.
- **Green Building Materials:** Selection of eco- friendly materials and construction practices to promote a healthy and sustainable indoor environment.
- **Barrier-Free Access:** Features such as ramps, elevators, and accessible examination rooms to accommodate patients with mobility challenges and divinity (Champakalakshmi, 1996). The spatial dominance of temples-often located

## CONCLUSION

The Trauma Care Hospital in Panikoili is designed to provide exceptional emergency care with a focus on rapid response, advanced technology, and patient-centred comfort. Its architecture supports efficiency and accessibility while creating a supportive environment for patients and their families. The facility includes comprehensive trauma services, state-of-the-art surgical suites, and integrated diagnostic and support services. Emphasizing sustainability, the hospital incorporates centre significantly enhances regional emergency medical infrastructure, ensuring effective and compassionate care for trauma patients, which is largest trauma care hospital in Eastern India.



---

TRAUMA CARE HOSPITAL PANIKOHLI  
PROJECT COST: Rs 101.01 Cr  
TOTAL BUILTUP AREA: 17608.80 SQ.MT  
DATE OF COMMENCEMENT: 24/6/2021  
DATE OF COMPLETION: 23/06/2023  
CLIENT: C.E BUILDINGS, WORKS DEPARTMENT,  
GOVERNMENT OF ODISHA, BHUBANESWAR  
CONSULTANT: AR. TARA PRASAD DHAL (Principal Architect)  
EXECUTING AGENCY: M/S DIVINE CONSTRUCTION

AWARDS OWN  
VISHWAKARMA AWARDS - 2025  
SOUTH-AISA PACIFIC HEALTHCARE  
AWARDS 2024

# DESIGNING BEYOND WALLS

THE NEW FACE OF  
DATA  
INFRASTRUCTURE  
IN BHUBANESWAR

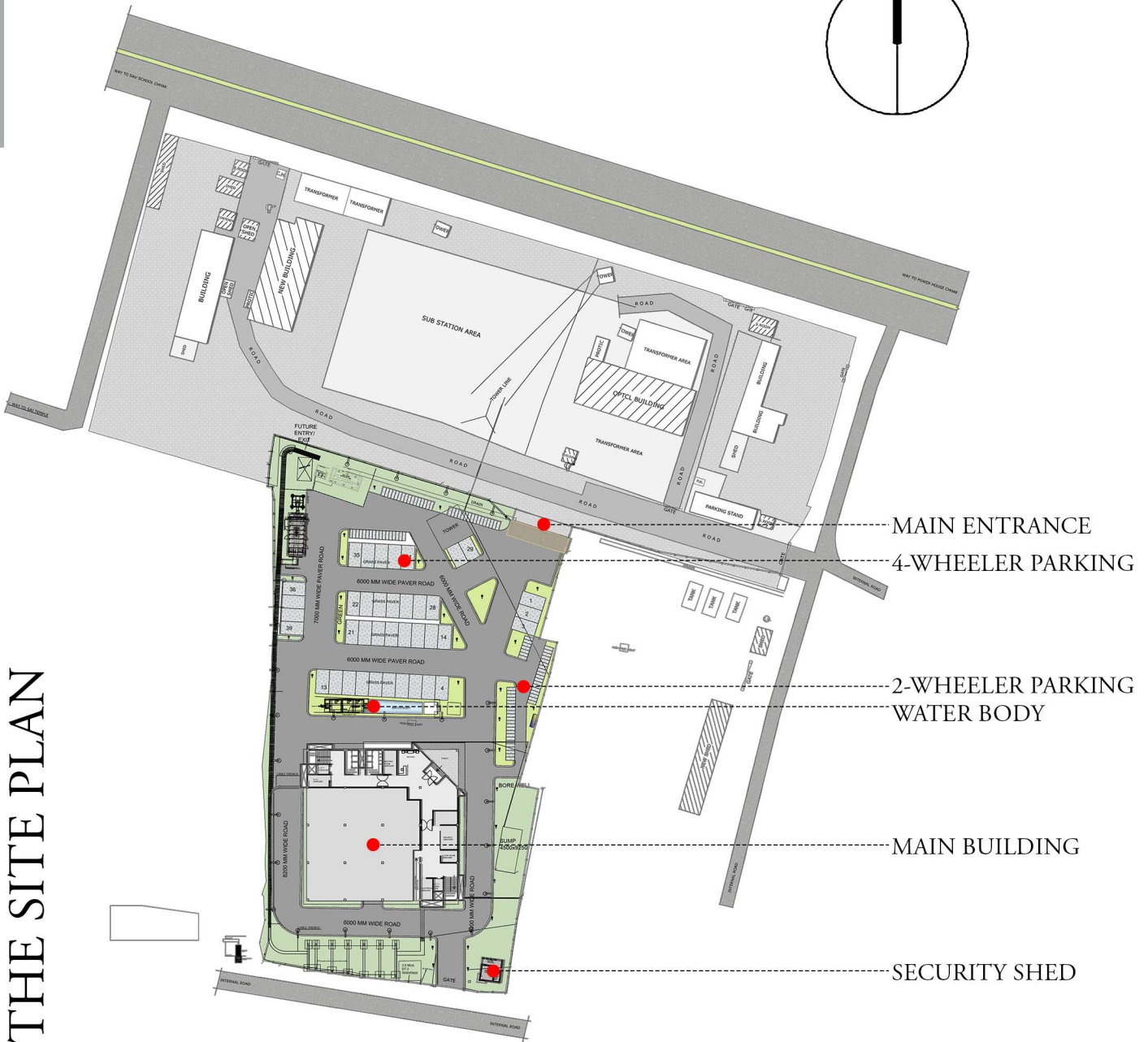
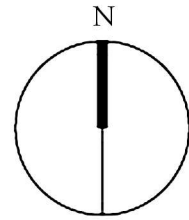


## DESIGNING THE DIGITAL CORE

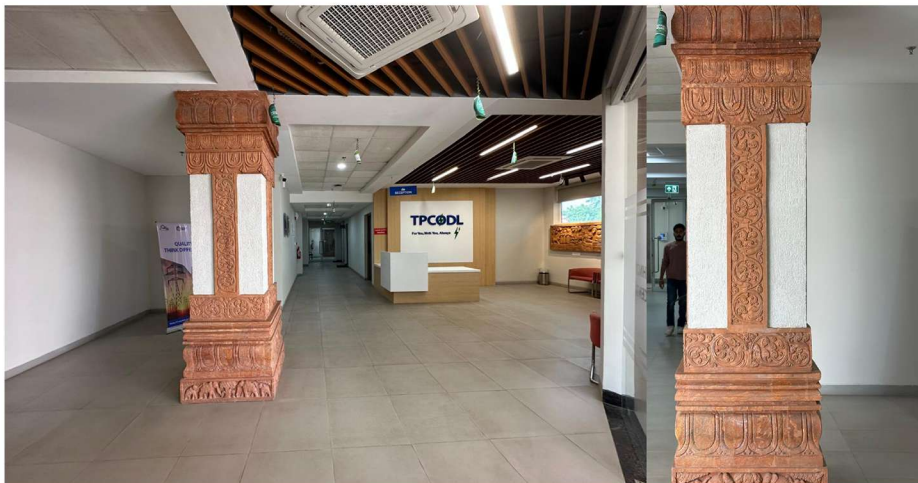
In a rapidly urbanizing India, where digital infrastructure underpins energy distribution and data intelligence, the TPCODL Technology Centre in Bhubaneswar emerges as a landmark project — one that transforms technical precision into architectural clarity. Conceived as a nerve centre for Tata Power Central Odisha Distribution Limited (TPCODL), the facility integrates monitoring, analytics, and operations within a robust and efficient architectural framework.

The design evolved from a deep understanding of the building's programmatic demands — from data server halls and control rooms to collaborative workspaces and operational areas. Efficiency and safety guided every spatial decision. The core zones housing high-performance server equipment were optimized for air circulation, controlled temperature gradients, and redundancy. Peripheral spaces accommodate flexible work environments that promote visibility, coordination, and a sense of openness — a deliberate contrast to the building's technical core.





THE SITE PLAN



A blend of old & new design features have been implemented here.

The architectural expression reflects this duality: an exterior of precision and restraint balanced by an interior of clarity and light. Material selection — concrete, aluminium, and high-performance glazing — reinforces the idea of permanence and technological agility.

**FACT FILE:**

Location: AG Square, Bhubaneswar  
 Project Area: 4,692 sqm  
 Project Cost : Rs. 40 Crore  
 Client: TATA Power





**1 Front Day View of TPCODL**  
A high consumption facility building with system integration



**2 Entrance Space**  
Play of color & embedded Technology made seamless.



**3 Front Night View of TPCODL**  
Efficient Lighting to Strategically reduce Energy Performance Index.

# A PHYSICAL & SYMBOLIC CORE FOR SMARTER- SUSTAINABLE ENERGY FUTURE

Executed within an ambitious *15-month timeline*, the project demanded meticulous coordination between design, engineering, and construction teams. Regular on-site reviews, weekly progress evaluations, and systematic drawing handovers ensured timely decisions and technical accuracy throughout the construction process. This structured workflow became the project's backbone, translating complex design parameters into built reality without compromising spatial quality.

As a high-consumption facility, the building integrates sustainable systems to minimize operational energy. Optimized HVAC layouts, efficient lighting, and water conservation strategies collectively reduce the building's Energy Performance Index. Passive design considerations — including orientation and thermal insulation — enhance environmental responsiveness, supporting the long-term performance of the data infrastructure.

The TPCODL Technology Centre exemplifies a new architectural typology where infrastructure and design converge. Beyond housing technology, it articulates a narrative of precision, resilience, and foresight — an architecture that quietly yet powerfully shapes the digital and energy landscape of Odisha. It stands as both a physical and symbolic core for a smarter, more sustainable energy future.

## A STRUCTURED WORK-FLOW IS THE PROJECT'S BACKBONE.



# POWER DISTRIBUTION TECHNOLOGY CENTRE



**SPACE ARCH** was founded by Ar. Debendra Kumar Parida in Bhubaneswar, Odisha in 1991. "Our design philosophy is centered around enriching lives through thoughtful and innovative design. We draw inspiration from ancestral wisdom, honoring timeless principles of harmony, balance, and a deep connection to nature." Since its Inception, Practice focuses on a variety of Projects - Academic Campuses, Sports Facilities, Public Housing, Judiciary Complexes & Hospitality Sector. Some of the important projects include - NIT Master Planning & Campus Development(Rourkela),NIST (Berhampur), Diamond Jubile Hall-VSSUT (Burla), Extension of State Guest House(BBSR), Upgradations of Kalinga Stadium Sports Facility, District Court Complex (Jajpur) & OMC Paikanagar Housing(BBSR), NINL Industrial Housing Development (Duburi)...









**birlanu**  
**AEROCON**



**K-LITE**

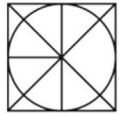
***VOLTAS***



**Windows**  
uPVC & Aluminium

**D'DECOR<sup>®</sup>**  
Live beautiful

**AUSTIN<sup>®</sup>**  
**PLYWOOD**



**Nexion**  
ITALIAN STYLE THAT INSPIRES



**LG**





**DESPL**

*Getting Involved to Resolve*



**GOLDEN WOODPECKER**

TURNKEY INTERIOR



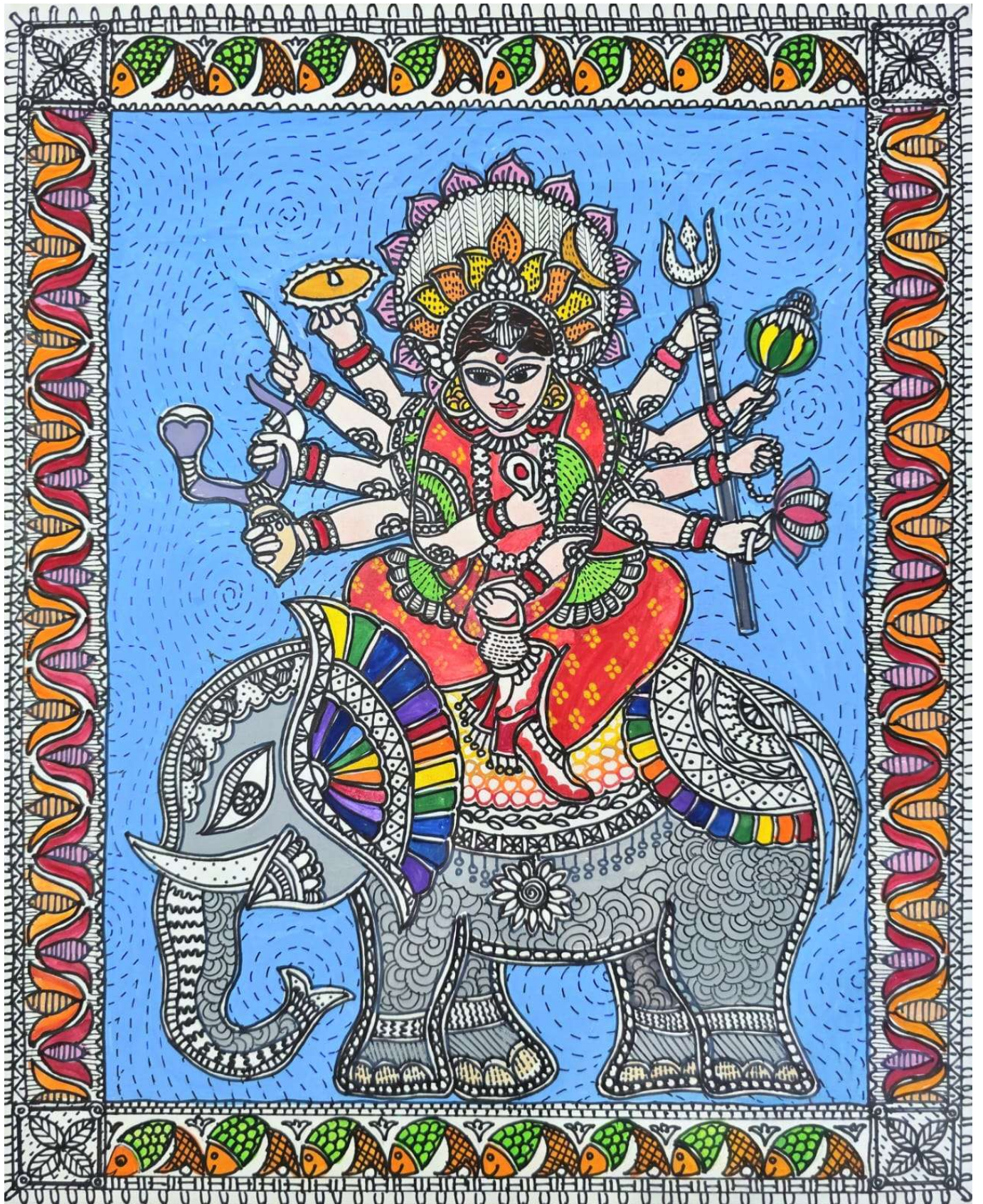
**CERAMIC WORLD**  
ARCHITECTURAL TILING SOLUTION





## *Brushes & Strokes*

*Grace in strength and divinity showing  
mother Goddess on her majestic steed. \**



*Madhubani at its best  
Ar. Debashreeta Debabarni*

