

EXPERIMENTS IN SPACE

Nicholas Piramal Research Centre

Design skillfully
articulates utilitarian
elements and spaces into
aesthetic statements as
is seen in the facade of
the Research Centre

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Photographs & Drawings: Dinesh Mehta, Courtesy the architect

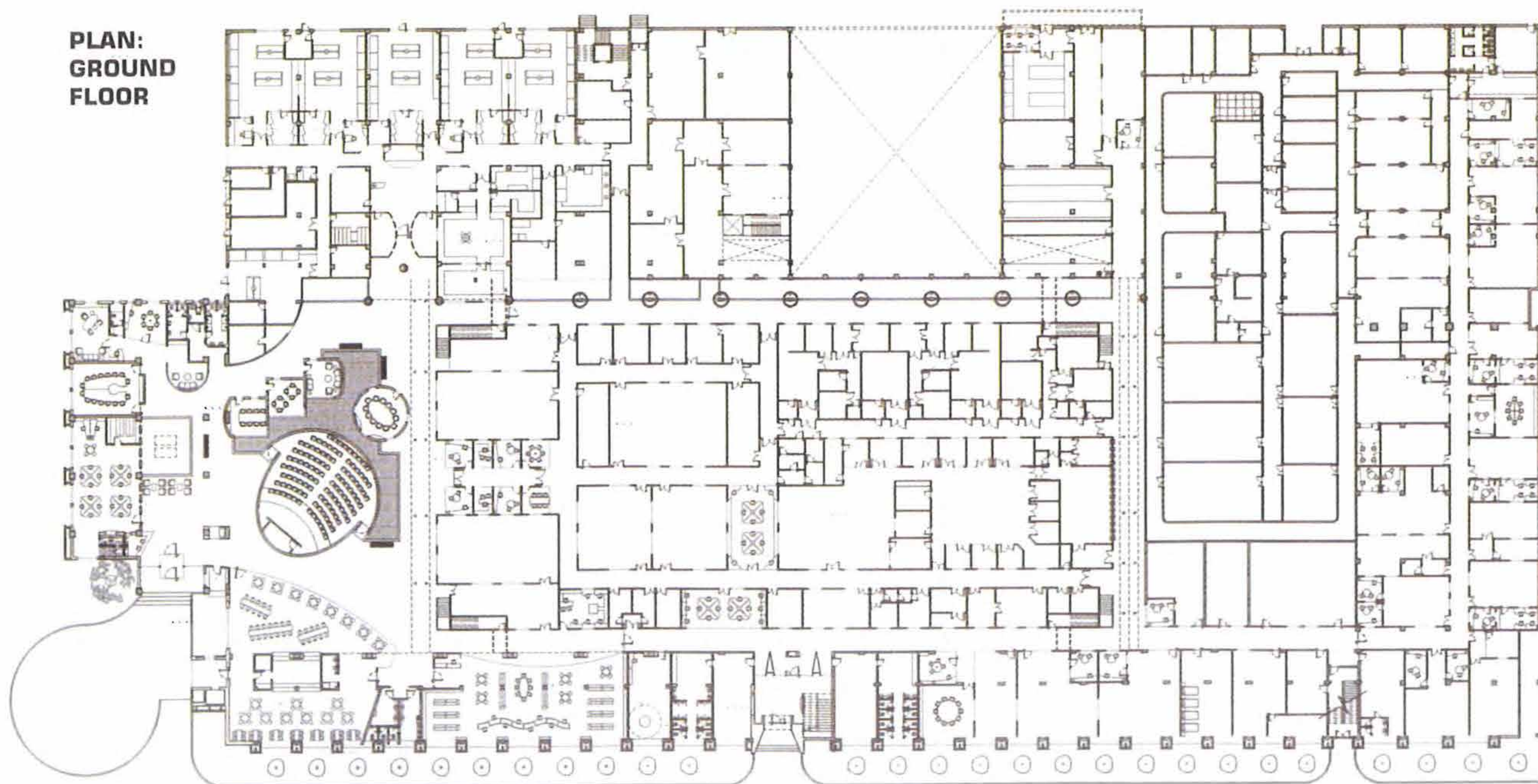
Architect Nitin Killawala skillfully translates a sprawling expanse into an architectural statement for the Nicholas Piramal Research Centre. The architect displays his prowess in design by seeking not just a balance between aesthetic pleasure and utilitarian efficiency, but setting into action a unique interplay between the two.

Architecture is basically a container of something.¹ A container that is largely defined by the very 'something' it holds - within and without activity, inhabitants and memory. The built surround emerges as a function of these - largely associating itself and oft breaking free. No wonder thus that questions of building typology have both wracked and inspired the architect since the dawn of conscious place making, with each era presenting its own drivers of ideas and influences of exclusivity. What must a type of 'container' look like? What does a particular language convey when employed on the exterior faces of a building? Concerns and contradictions have, whilst sensitising the built surround, set it ablaze with multiplicity, with an array of viewpoints being adopted, translated and expressed by designers the world over. As we set foot into the new millennium, newer forces and ideas sculpt the built environment. Corporate sensitivity is the name of the game. Driven by brand imagery as much as by an increased awareness of agendas of workspace related productivity, the movement has seen many a corporate giant actively engage in creating and providing for aesthetically pleasing, sensitive and effective workspaces. It is with such a brief that sought aesthetics and the physical surround to balance utility with imagery that architect Nitin Killawala was presented with by pharmaceutical giant Nicholas Piramal for their new Research Centre. What added to the challenge however was the complexity of the various functions housed within the facility as well as the enormity of detail and servicing the project necessitated - parameters that hence largely guided the resultant design. The scale of the project itself demanded its very own share of attention with the facility set to be designed in an existing old and dilapidated structure spread across an area of 1,20,000 square feet at plinth level and 80,000 square feet above. While, in the architect's opinion, a G+2 structure would have been ideal for the given requirements, the large spread of the facility delimited a large part of the facility to the ground level itself, thus posing a challenge in its own right. However, as the architect himself conveys, "the approach to design concentrated on the positive components of the project rather than the setbacks" and these were exploited to emerge as the key drivers of the design. A tangy orange façade (orange being the signature colour of the client), set against the simplicity of white and the serenity of its green surround, greets the visitors at the



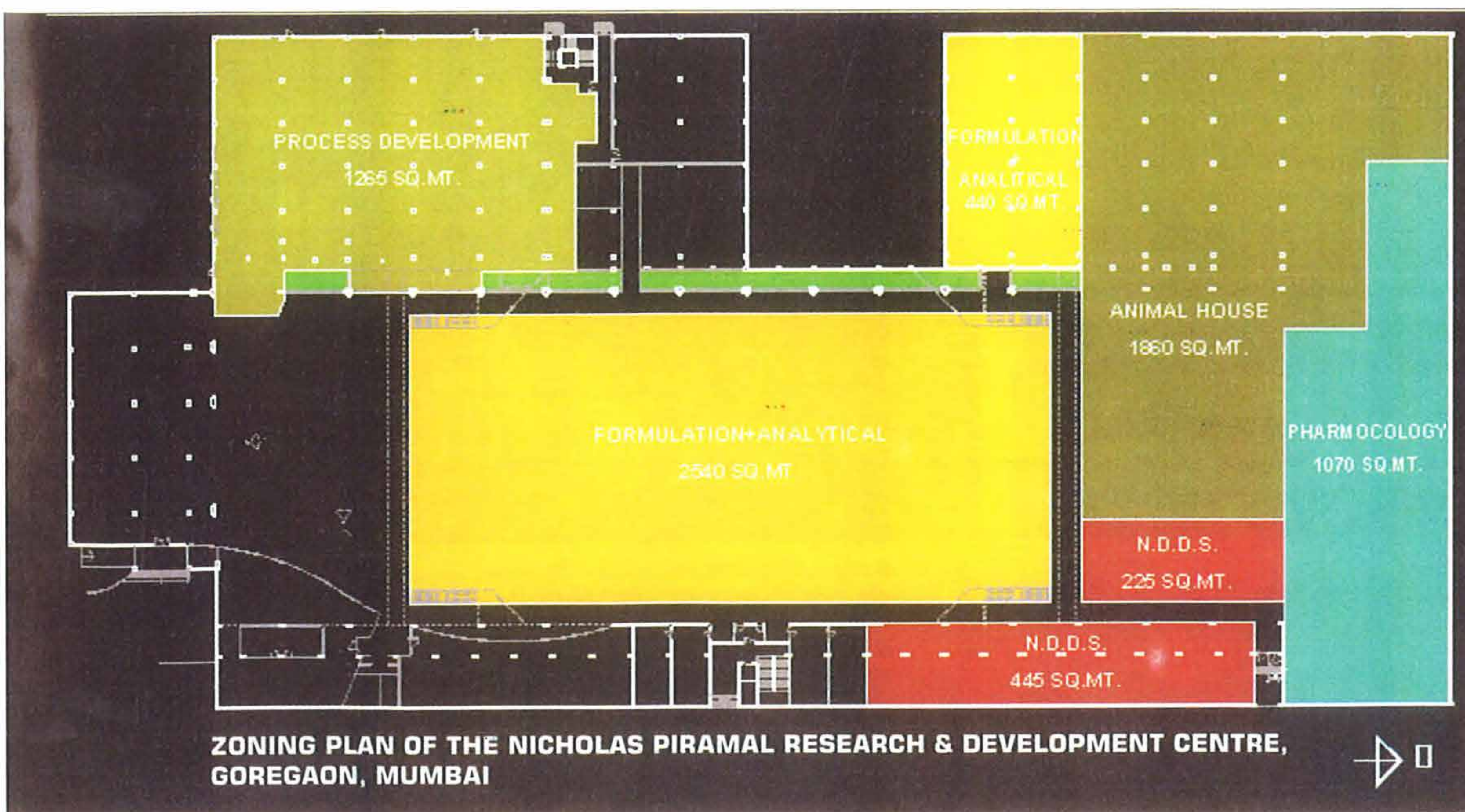
1. Yoshio Taniguchi, Japanese architect

**PLAN:
GROUND
FLOOR**





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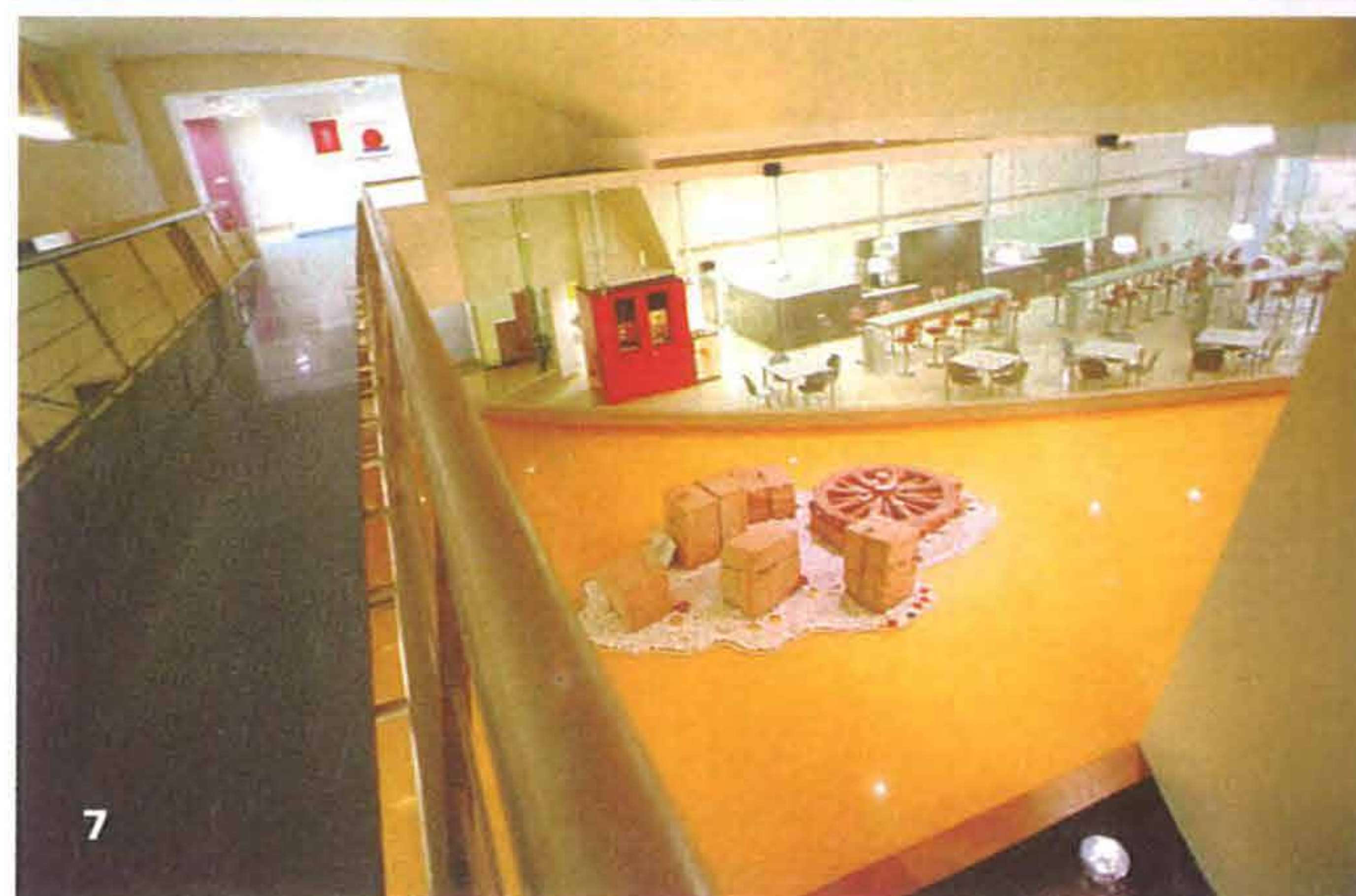


2. Keeping the vast expanse of the facility in mind, the main entry is shifted to the south east corner of the building, allowing for controlled infiltration of the public into the facility as well as an ease of circulation.
3. The architect employs tensile structures which whilst being in aesthetic harmony with the facade, create subtle statements of style.
4. A series of tensile elements hovers above the front facade, setting it into motion.
5. The formal language of the facility is simple yet bold, reflective of both the activities as well as the corporate body it houses.

Nicholas Piramal Research centre in Goregaon in motion by a series of tensile structures that hover above it, the façade playfully yet boldly communicates the progressive stance as well as the simplicity and logic of the functions and corporate identity it houses. Providing for both research as well as corporate space, the design sought to bring together the sheen of corporate imagery with the sterility of the laboratories under a single roof. Broadly outlines, the facility accommodates Process development, Formulation and Analytical, and Pharmacology laboratories, and Animal House as well as a New Drug Discovery section besides corporate offices and spaces, employee amenities as well as service areas. Further, the existing structure contained a column free space of an astounding 70,000 square feet area, a component that was exploited by the architect in his design by extending it into a double height volume- adding not only to the experience and quality of the space but also allowing for to filter light into the deep interiors of the facility. Of course it also enabled a high degree of transparency within the remote sections of the facility allowing for to bind the rather large expanse into a single facility.

The design process commenced with a zoning of the lab areas and the non-lab areas. With the requirements of each laboratory being specific and unique, these largely determined the location of each within the overall master plan. The organic chemistry laboratories for instance involved research and processing of volatile chemicals with rather toxic fumes. The lab was thus pushed to a corner of the facility with swift and ample ventilation. The Formulation and Analytical laboratories necessitated absolute artificial regulation of the environment with no natural light or ventilation filtering in. Enclosed within a dead wall, the lab was placed in the core of the facility. The entrance lobby and semi public spaces of the facility were pushed to the front corner of the building to limit visitor infiltration into the facility and its functional areas. In accordance with the spatial layout within the visitor entry was pushed to one side of the structure whilst the existing, centrally located entrance in the façade was maintained for the employees who were well versed with their movement through the facility. The interiors of the research centre are largely driven by the function they house. The architect extends this into rather literal translations with each zone being colour coded and bound by a particular type and colour of flooring. The Jaisalmer Yellow tiled flooring in the circulation areas for instance directs and unites whilst the blue of the Pharmacology Lab establishes its exclusivity and identity in the larger context of the facility.

Upon entering the facility one is immersed into a space that starkly contrasts with the simplicity of the exterior. Rich and polished, the entrance lobby is flanked by semi public areas such as the auditorium, cafeteria, library and the meeting rooms. While the cafeteria is demarcated by a transparent glass wall that allows for the activity within to connect and enthuse the lobby with life; the walls of seminar hall act as a rather unique canvas to Japanese artist Eriko Horiki specially commissioned for the project. With this and a number of other sculptures by Dr. Piramal, the lobby brings together sensitive crafting of space with artistic creativity. What results thus is a pronounced emphasis on the aesthetic qualities of the space. A water body set in black stone adds to the feel of the space translating into a work of art, courtesy the apt lighting and water mists that help it break away from being a static element in the space.



6. View of the entrance from the Visitor's Lobby. The interiors of the facility are in stark contrast with the simple and bare palette of the exterior's, all at once immersing the visitor into the experience that unfolds thereafter.

7. View of the Visitor's Lobby from the bridge extends into the canteen area. The activities here spillover into surrounding spaces, thus enthusing the lobby with activity and life.

8. A water body set in black adds a touch of freshness, dynamism and corporate sheen to the space.

9. Elements collide and overlap in the generous volumes of the facility to create an experience that excites.



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10. Sculptures by Gatnayak emerge as elements within space largely in sync with the prevalent colour palette, adding as well as complimenting the design.
11. View of the cafeteria space which is defined in the generous volume of the lobby by a glass wall. The canteen adopts a vocabulary of its own, realised in colours and materials that create an interplay of design elements and vocabulary with its surround.
12. Interior view of the Seminar Hall.



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The laboratory spaces on the other hand however are defined by clean cut lines, minimal design interventions and driven by the complexities and requirements of the functions housed. 'Safety' is the key word. The visual transparency that extends through the facility at a macro level is also filters into the planning of each laboratory in particular. This enables a high degree of security and safety allowing for the employees to keep a watch on activities in the neighbouring laboratories. Further, the laboratories are not just colour coded, but also designed in sync with the number of employees working, with densities greatly varying among the different labs. The existing structure was blessed with a service floor and this has been extensively used by the architect in his design for the centre. The architect infact considers this to be one of the most positive components of the design brief, one that was extensively explored and implemented in his design.

While the laboratories are highly utility intensive, the amenities and corporate offices provide the much-needed flexibility in design, allowing for creating pockets of space that adopt a warm colour and material palette. It is here that the architect experiments providing an austere yet welcome contrast to the starkness of the laboratories. These areas are located mostly on the perimeter of the facility so as to extensively avail of natural light and ventilation. The library is located on the ground floor



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23,25. The facility is sheer kinaesthetic delight with bridges, elements of design, arteries of circulation and movement overlapping, colliding and interacting through the design.

24. The sensitive play of colour, material and spatial planning is aided by skillful lighting. The filtering of natural light into the heart of the vast facility is in fact one of the main achievements of the design.

26. The colour and material palette is deeper and warmer in the corporate spaces in comparison with the rest of the facility.

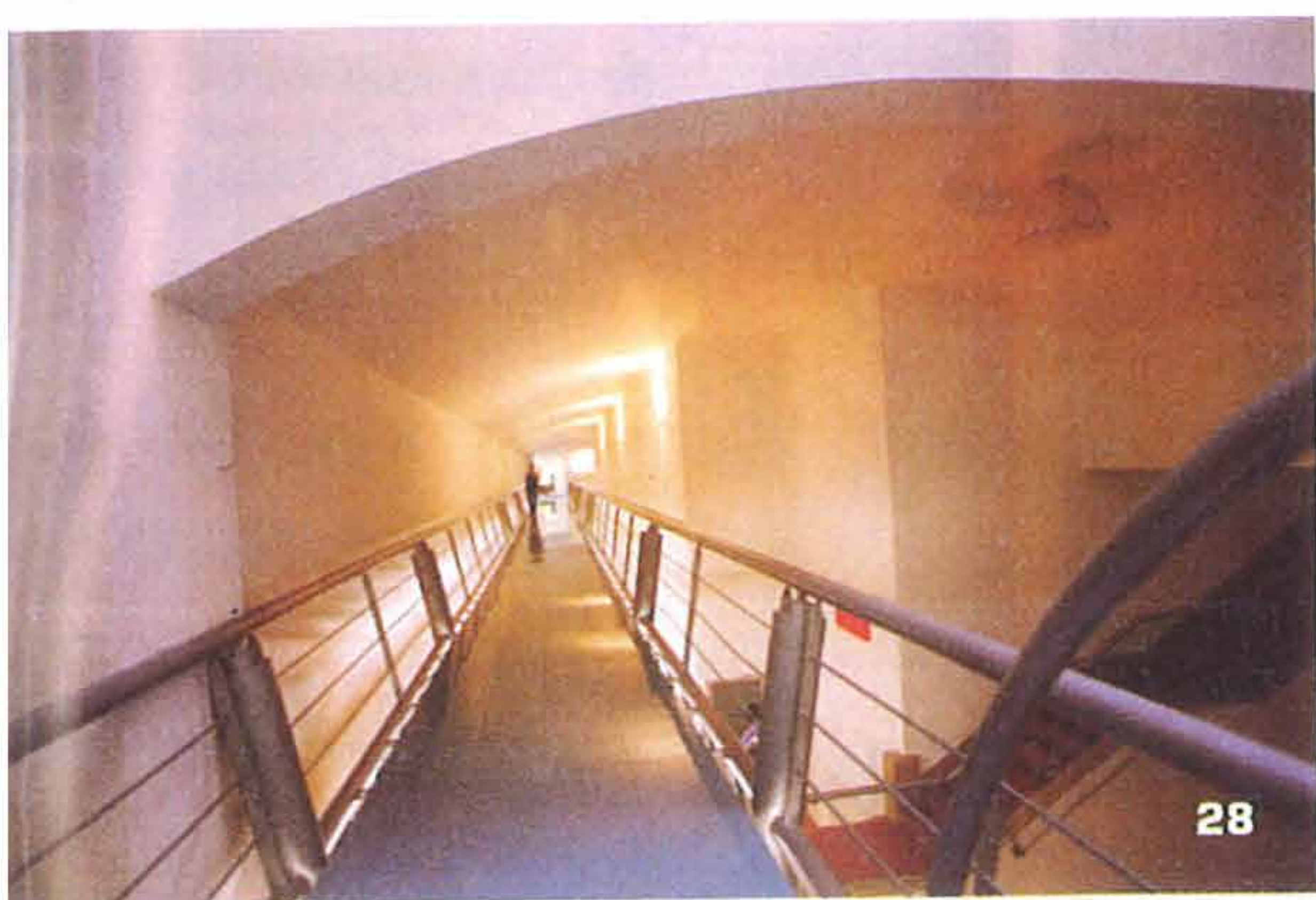
near the entrance lobby and caters to the employees of the R & D Centre. The regulator's offices are pushed up to the first floor with those on the ground floor being largely semi public in nature. It is here that the brief does not demand a high degree of environmental regulation and fenestrations are much larger and flexible than in the other spaces throughout the building. In the offices for example, with due consideration for climatic surround, the entire wall is opened up right up to the beam level, and converted into a semi transparent opening that provides a welcome connect with the surround. The extensive greenery in the natural surround in fact enables a greater degree of flexibility in the articulation of the openings.

The heart of the design however lies in the circulation and it is here that the architect displays his true prowess. Not only does spatial layout enable an ease of circulation, but also the spaces are designed so as to work around the challenges the brief posed. A sensitive articulation of space complimented by material exploration, apt lighting and a high degree of connectivity with the surrounding spaces translates these into zones of high activity and exchange within the facility, emerging thus as the arteries of the facility. It is this interplay with the spaces flanking it that is the highlight of the design. The dead





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27. Light, volume and material come together in the circulation spaces where the architect displays his true prowess. The main artery above for example is flanked by a dead wall which the architect skillfully employs to reflect ample natural light, filtering in from the skylights cut above along it.

28. In sections where natural light is limited, the architect employs controlled and aesthetically modulated artificial lighting to add to the feel of the space.

29. The play of light sets each space apart. Beyond modulating artificial and natural light the architect creates an interesting play of reflection through polished wall and floor surfaces.

wall of the utility room for instance is translated into a flat backdrop to a small linear garden created within the heart of the facility. Reflecting off natural light filtering in from the skylights cut out along it, the circulation artery here transcends its functional purpose allow for adequate natural lighting in the core areas of the building. The double height adds further to the quality of space here. Bridges further exploit the double heighted spaces to connect the labs and offices on the first floor to enable an ease of movement through the facility given its large expanse. The circulation spaces take on a whole new meaning when filtering into the various zones where they are colour coded and both direct and inform the employee. With the large expanse of the facility adding a twist to the design, the architect explores this parameter of the facility when addressing considerations of future expansion. Large chunks of space on the perimeter have been reserved for this, allowing also to knit the existing facility closer together. What results thus is a facility that offers much to explore. The architect breaks away from the monotony that dogs laboratory spaces and associated research centres to create an impactful and highly effective vocabulary for the Pharmaceutical R & D Centre. Typology stands redefined. While the functions it



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houses may seem delimited in character, the architect creates rich, warm spaces that not only balance their austerity but also bind the various zones into a single functional whole. Aesthetics filter into the naked spaces of the laboratories through visual linkages across the facility. Aided by ample, and rather skilful, lighting, the facility humanises in scale, offering thus not a vast expanse that inhibits but an architectural experience that allures.

30,33. Connectivity between the corporate spaces and the lobby area help create a strong corporate imagery that is reflected throughout the facility.

31. The corporate spaces and offices are the sections of the facility where the brief does not demand a high degree of environmental regulation and thus offer greater flexibility to the designer.

32. With a flexibility in the brief, fenestrations are explored and experimented with creating interesting lighting and spaces in the offices.

FACTFILE

Client
Design Team:
Nicholas Team

Consultants
Structural
Utilities
Landscape
Prime Contractors
Civil
Electrical
HVAC
Painting
Lab Furniture
General Interiors
Loose Furniture

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I.P. Vora, H.N. Desai, Nahid Patel, Uresh Antani, Arvind
Lalit, Appasaheb

Sritec Consultants Pvt. Ltd., I.H. Shah & Associates
Pipecon Consultants India Pvt Ltd.
Amod Shevde, Prabhugaonkar

Civil Décor Ashutosh Const Co.
Ramkrishna Electricals
Voltas Ltd.
Chhowala & Sons
Kewaunee Labway India, Gordhandas Desai Pvt. Ltd.
Diresh Malaviya, Indian Arts
Amber Seating Systems Pvt. Ltd.