Multi-layered

A media facade becomes a communicative work of art at Merck Serono in Geneva, Switzerland.

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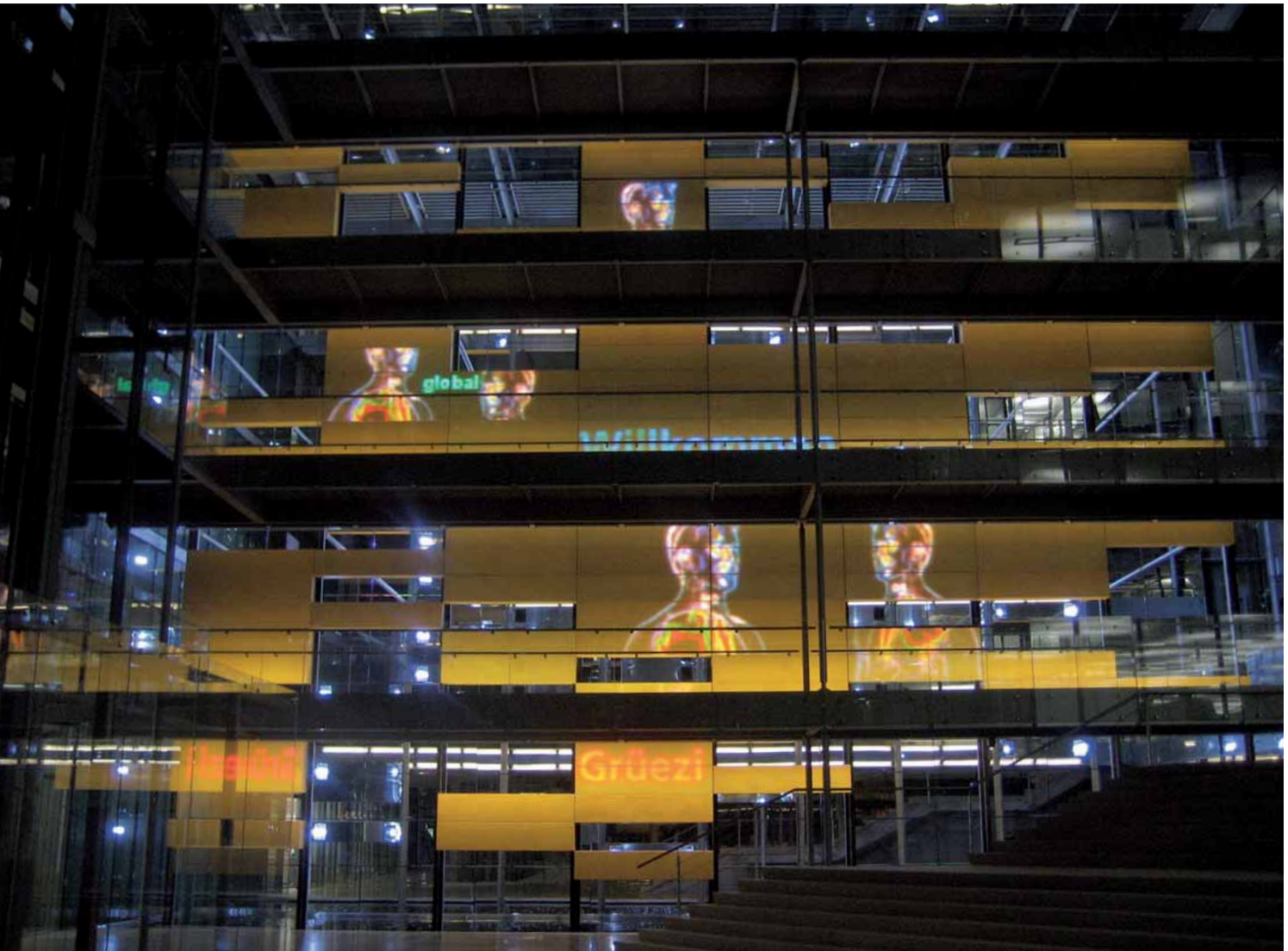
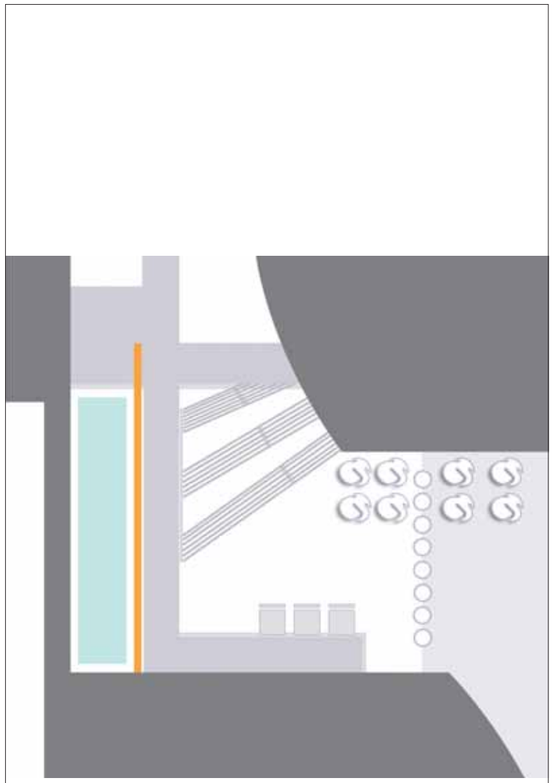
Photos: ag4

Thirty years ago, schools offered subjects such as biology, chemistry, metalwork or woodwork for pupils who were more practically inclined. In this day and age, those subjects can be combined in the broadest sense. Knowledge is complex and layered. Take biotechnology, for example, which refers to any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use. There are numerous industries listed on the stock exchange involved in this kind of activity and business, and international competition is great. Merck Serono from Switzerland is one of leaders in the field, and their recently refurbished administration building documents the multi-layered complexity of their branch of industry in a media façade installed in their main entrance area ...





Ground plan of entrance area with the media facade marked in yellow.

Merck Serono have been a leader in the field of biotechnology worldwide for more than 100 years. When it came to designing the extension to the group headquarters in Geneva, the company wanted its identity to be felt on entering the building. The expectations of a company dedicated to research and development in the field of pharmaceuticals and new medical therapies were high. The client was looking for a complex solution, which catered not only for employees involved in management and research, but also as a communicative meeting place, or quite simply a nice place to be in. The architectural brief, which addressed a combination of historical buildings dating back to the 1950s with some modern sections, together with theme-related requirements, was challenging. The response was to create a layered media installation in the foyer, which represents a vivid image of the concern's identity.

Early 2007 saw the completion of an ensemble comprising three transparent new buildings incorporating several existing historic and more or less opaque buildings. Thus Geneva received a new complex block of houses, a network of open, roofed and closed spaces that all lead to the main foyer or forum. Together with the project team comprising lighting designers (L-Plan, Berlin), media designers (ag4 media facade GmbH, Cologne), an artist (Mic Enneper, Cologne) and others, the architects have created a prestigious building for an innovative and internationally renowned company. The connective foyer and the media wall in particular communicate the vision of the company inside and out.

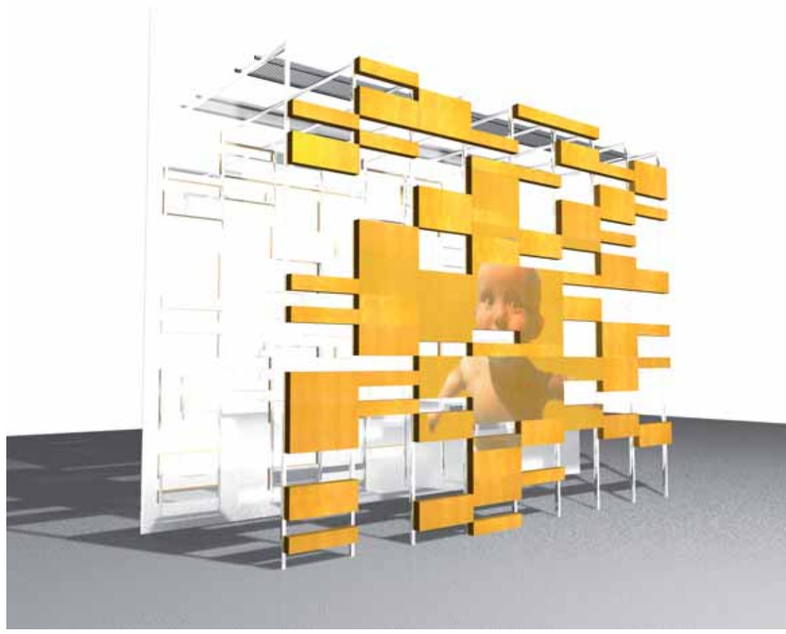
The lighting design for the entire block supports the both intricate and uniform impression of the overall ensemble. The diverse and outwardly contrasting facades on the respective sections of the building are drawn together by the lighting design to create one complex. The deliberate floodlighting of the historic facades blends optically with the modern glazed facades that radiate light out of the building.

Linking elements such as the galleries, the bridges and in part the staircases are illuminated to underline their clarity of design and architectural significance. Continuous rows of T5 battens facilitate way-finding and render circulation zones clearly visible.

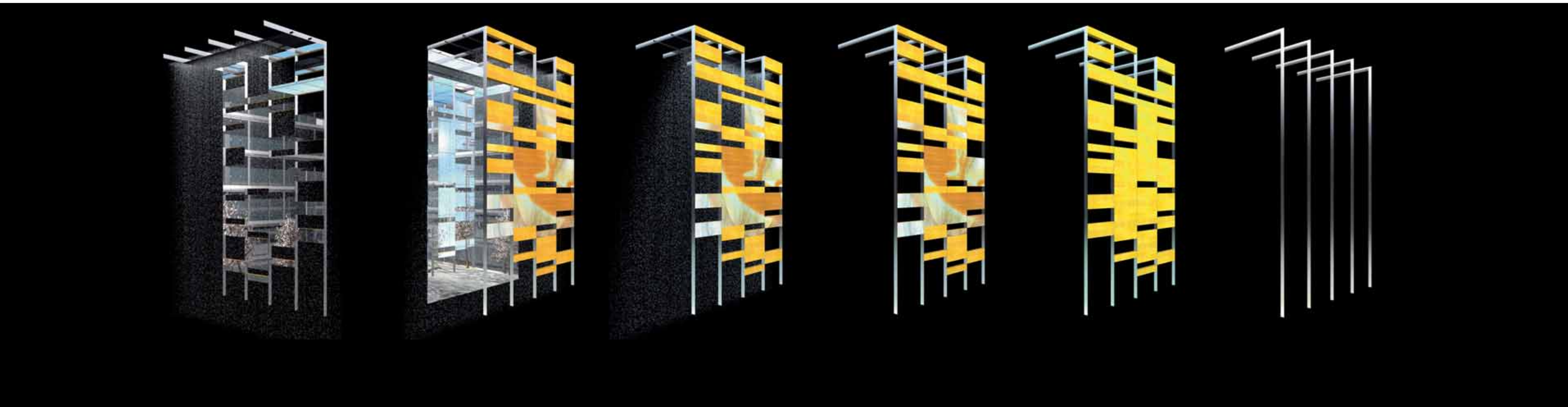
The intelligent use of daylight and the user-friendly lighting control for the electric lighting make the building

a high-tech, energy-efficient project. The strict energy requirements were an integral part of the contract and presented the lighting designers with a further challenge. The team from lighting design practice L-Plan were required to present economic efficiency calculations for all areas, and the use of incandescent lamps had to be justified separately.

The structure of the foyer building, referred to by Jahn as "Main Street", is glazed on three sides and communicates openness. Persons arriving at the building gain an unhindered view inside through the extensive glazed facade. The glazed roof can be opened lengthwise 60 metres, allowing a view up into the sky. Architecturally and technically, this leaves a lasting impression on the visitor. The long side of "Main Street" is bordered by an existing wall, which originally was supposed to be designed as a water wall. Murphy/Jahn Architects, who often collaborate closely with light artist Yann Kersalé on such details, opted this time to cooperate with the Cologne-based design studio ag4 media facade GmbH. ag4 came up with the concept of creating a media wall including water, which convinced both the architect and the client. The projections on the multi-layered wall can be seen way before you enter the building. The complexity of the media wall construction reflects the complexity of biotechnology, a science derived from several different sciences and disciplines. In the daytime, the information transmitted by light is perceived as a series of dynamic lighting effects. At night it becomes a projection of the differen-



Four translucent glazed galleries divide the wall horizontally. Set in front of this wall are 138 vertically aligned blocks of yellow beeswax, each measuring 250 by 50 by 30 centimetres. These form the first visual layer for the viewer. The natural, organic and manually formed material looks warm to the touch and presents an interesting contrast to the surrounding glass surfaces.



tiated information it carries without the installation losing its quality as a work of art integrated within the architecture.

The theme of corporate representation via media is split into layers in many different ways in this building. In spite of its artistic nature, the practically 400 square metre wall, which stretches over five storeys, is an integral part of the architecture as well as an interpretation of the corporate message in electronic media with a high communicative value to the outside world.

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The projections and displays over the wall are realised technically using a software tool developed by ag4 especially for media installations of this kind. The software is called "Interactive Media Pool Platform", IMPP for short, and comprises a complex process that enables the combination of content input with displays over several different layers. Static and dynamic images, combined with text modules, can be run up and down or across each other, as required. Following the initial programming, the media display elements re-combine anew on a permanent basis. Content can be expanded or adjusted by the user at any time. This is actively supported by ag4 by means of a manual they provide and also in the form of regular seminars for the staff on site. The problem known to all designers of offering the user the opportunity to co-design a project, which is often not taken advantage of for fear of the technology, does not arise in this case. In fact, the user has already made a few enthusiastic modifications since the installation was put into operation.

The software described above is also used to control the rain wall, which makes for the next layer behind the fragmented wax wall. A series of ultra-fine jets of water provide light or heavy rainfall, depending on the programming. It is impressive to see what playful design has evolved using natural and almost archaic elements together with state-of-the-art technology. What you see and what you understand do not necessarily go hand in hand, but it arouses curiosity, which is largely what fascinates the onlooker.

Behind the water wall is the fourth and last layer, which consists of a mirror wall, which together with the mirrored rear side of the wax modules generates the impression of endless space.

The lighting of the individual layers supports the contrasting impressions they produce, which in turn is what pulls it all together to create a whole. The rain wall is illuminated by 100 neutral white metal halide lamps mounted in the ceiling behind the wax wall. The LEDs in the wax modules attain a pleasant warm colour, much like candlelight, thanks to the properties of the material. This difference in colour lends the wall a strong character of its own in the otherwise relatively colourless surrounding architecture.

Although the media installation is complex in design, the overall impression is interesting and not over the top. The large number of superimposed and layered images and views fascinates without being too demanding on the viewer. The contrasts of archaic material and high-tech design generate positive tension, and the initial overall impression is that the media wall is a highly aesthetic solution!

As far as the architecture, the lighting design and the media façade are concerned, the image the highly progressive biotechnology company wanted to promote to the outside world has been accomplished in a striking, even awe-inspiring way. The choice of architect, who strikes the right note with his clear formal language, the choice of the lighting designers, who support the building with the same formal approach, enabling users and visitors to orient themselves easily, and the choice of the media designers, who came up with great, innovative ideas and realised the concept with nothing less than technical and design brilliance, has proven to be very successful. The sophisticated technology used in the buildings reflects the spirit of Merck Serono.

The building has met with warm approval from users and visitors alike. The austere quality of the architecture has given way to the human element. The building is a stage for the people who work and visit there, creating a setting and providing adequate facilities. In spite of the high, extensive spaces and impressive spatial geometry of the buildings, the human scale is never lost. A room is still a room, designed to meet the functional requirements determined by the users, and remains comprehensible as such throughout the entire building complex.

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Architect: Murphy/Jahn, Chicago/USA
Media facade: ag4 media facade GmbH, Cologne/D
Artist: Mic Enneper, Cologne/D
Lighting design: L-Plan, Berlin/D