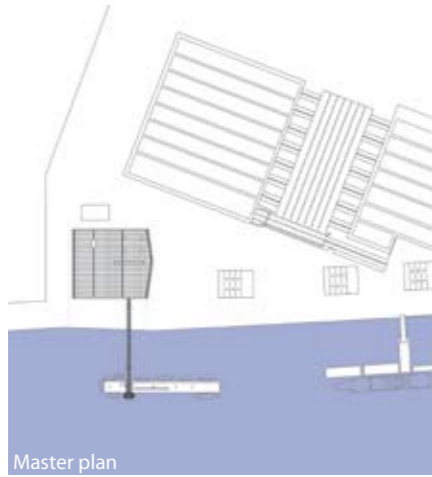


05.1.1 Built Pedagogy



Master plan



Photovoltaic panels on the south facade



South facade and the winds tower

ARCHITECTURE_appearance and performance **Eric-Tabarly sailing museum _ Lorient, France**

Dedicated to the sail, the Eric Tabarly museum symbolizes the revival of Lorient submarine base. Contrasting with the massive concrete bunkers, this steel vessel, dressed in iridescent aluminium, seem to float over the dock, anchored to the winds tower. The glazed façade of the ground floor gives to see reception activities, whereas the 1st floor is made up of exhibition spaces dedicated to the sailing race. The exhibition level is connected to the marine infrastructures and winds tower by a metallic footbridge. Conceived in an environmental spirit, the building consists of a very insulating hull, 150 m of photovoltaic panels on the south facade, and a sea water pump.

Client: CAP LORIENT
Completion: 2007
Cost: 12.7 M euros / AUD \$23.5 M
Area : 6700 sqm

URBAN DESIGN_activating and connecting **The French Pavilion _ Shanghai Pudong district**

The French Pavilion carries a positive image of the city and its relationship to man. It foresees a universe where man made and natural constructions are intertwined. The Pavilion appears under a Cartesian shape of a quadrangle, embraced by a thin mineral grid network suspended on a reflecting pool. Lying in the heart of this display case, a formal French garden is placed vertically to create a wholly unexpected planted theatrical setting. The exhibition's way is organised as a gently sloping ramp that circles down around the garden. The Pavilion has for federative theme the "Sensual City"; a place where the 6 senses exalt -taste, smell, touch, hearing, sight and balance/movement. Exceeding the traditional opposition between heritage and modernity, this art of living the city invites to confident attitude in relation to the 21st century: message that will give an unforgettable image of France during the World Expo 2010.

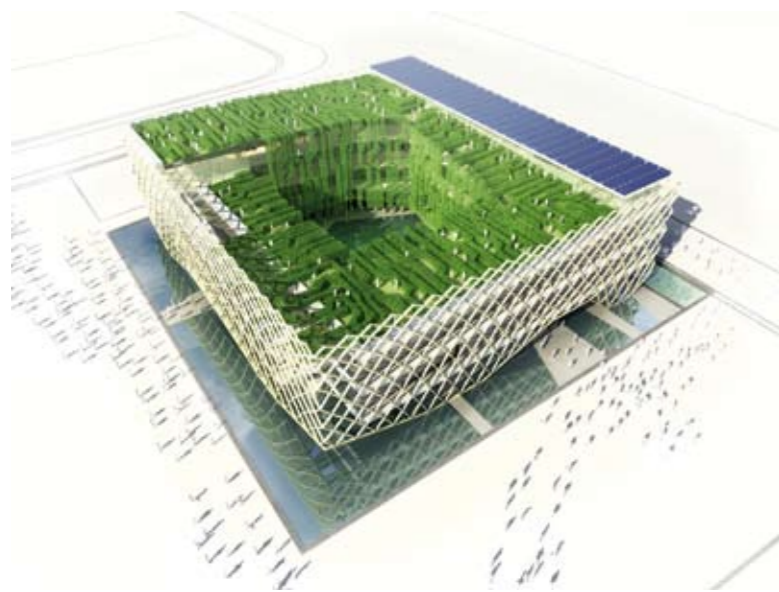
Client: COFRES
On going project, completion April 2010
Cost: 2 5000 000 Rmb / AUD \$5.1 M
Area : 7000 sqm
Number of visitors expected: 100 M



The vertical french garden reflecting in the pool



The green roof



Hypergreen integrated in the urban chinese landscape



The exterior «grid skin» in Ductal ©

The interior garden

ADVANCED CONSTRUCTION_structural and servicing techniques **Hypergreen ©**

Hypergreen is a mixed-use tall building concept designed, that is ecologically responsible, and integrated within the landscape and in contact with the city.

The Hypergreen building has above all been structurally conceived to meet sustainable development criteria: its shape, façades and components have all been designed and positioned to capitalize on the building's orientation, unlike existing buildings that are indifferent to climatic context. The Hypergreen building also makes use of the best construction techniques to promote savings, safety and recycling.

The structure itself is thus a key factor in the application of sustainable development principles to the tower building. With the exterior "grid skin" façade serving as a kind of sunshade and providing support for the photovoltaic panels and wind turbines, the building's outward appearance makes a strong statement about the ecological awareness underlying the Hypergreen concept.

Client: LAFARGE
Research project
Area : 99 000 sqm
Height: 250 m / 60 floors

LANDSCAPE_natural and built **Piper & Charles Heidsieck Champagnes Headquarters_Reims, France**

Lying parallel with Allée du Vignoble and rising up from the countryside, the building transforms the site and becomes its federating beacon.

The building opens out towards the south, overlooking the landscaped pool and the main entrance to the site. Floating above the hard-surfaced esplanade, a spectacular minimalist canopy opens out to draw in visitors.

Lying in the heart of the building, patio gardens are incorporated between the various programme elements, providing a sense of serenity emphasised by the important role played by nature and the environment.

By privileging the way in which the building is used and the vital role played by its landscaping, the new head office refutes changing fashions while also being clearly representative of its era. Its purpose is to be a generous and useful monument.

Client: Piper & Charles Heidsieck
Completed project, completion 06.2008
Cost: 5 M euros / AUD \$9.2 M
Area: 2 000 sqm



View from the office



View of the entrance



View of the East facade

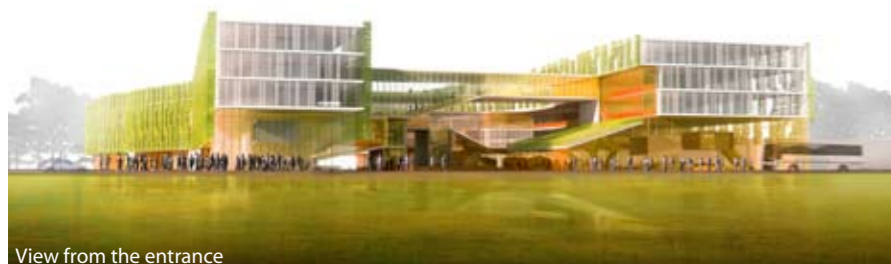
05.1.2 The Academic Environment



View from the playing field, where the building is widely open



Master plan



View from the entrance

University of Northampton - Avenue Campus - Northampton, United Kingdom

At the heart of our work is the relationship between architecture and its environment and the implantation of a building in the surrounding landscape.

For the new Avenue Campus project, we suggest a landscape built with vegetation bands, made out of the classified trees on site and vegetation patches. This landscape building which links the race course and the playing fields, stretches the landscape and reinterprets the traditional campus in a contemporary fashion...

The project combines the efficiency and the flexibility of a grid to a new type of working area, where environment, nature and new communication technologies, play a major role.

Campus Avenue is an open and accessible area, at the same ground level as the crossroads. The "landscape building" opened on «St George avenue» offers a new and visible entrance, which invites visitors and inhabitants to come and join campus life.

The ground acts as a "green carpet" opened towards the landscape. The ground is punctuated by wide footbridges hauled-up on inhabited supports. The shape of these supports respond to the context by extolling the perspectives and view points. The ground floor is a surprising place, full of life and widely opened on the surrounding sights. Slightly tilted, the forecourt, facing St George's avenue, drives people towards campus life: restaurant / bar, auditorium, library, art galleries ...

Thus, the campus is made of two elements: The first one is open toward the main street, very dynamic and friendly, and could work both in daytime and night time.

The second, at the north, is quieter and contemplative, hanging above ground level.

The first floor is free, punctuated by buildings, opened from one end to the other. It allows great flexibility and many possibilities for future development.

Client: University of Northampton
 Competition: 2009
 Cost: 77 M euros/AUD \$142.7 M
 Area : 38 000 sqm



View from the entrance



Zoom of the entrance



View of the gymnasium and the library



Playground garden



Ground floor

Yuxiu School Shanghai, China

Introduced by the municipality of Qingpu, the project is close to sustainable development. The environmental preoccupations guided the conception of this establishment, as well as the site development as the architecture building. Inspired by the traditional «French style gardens», the geometrical landscape organization, blend buildings and gardens in the biggest rigour.

When we take the walk fitted out along the canal, we perceive arranged buildings and big gardens. Since these walk we also perceive the library and its surprising facade.

The landscape is structured by standing banks: on East side they unify the whole «garden of the knowledge» in a rather introvert set; on the West side they supervise the playing field in big landscaping bleachers.

Since the street, buildings appear as put on the garden and their gables seem lower than the reality. They allow to shelter school playgrounds against prevailing wind.

Client: Shanghai Qingpu district Housing development
 Completed in Sept. 2007
 Area: 25 000m²
 Number of pupils: 2500
 Cost: 30 M Rmb /AUD \$ 6.2 M

05.1.3 The Design Studio



View of the main facade



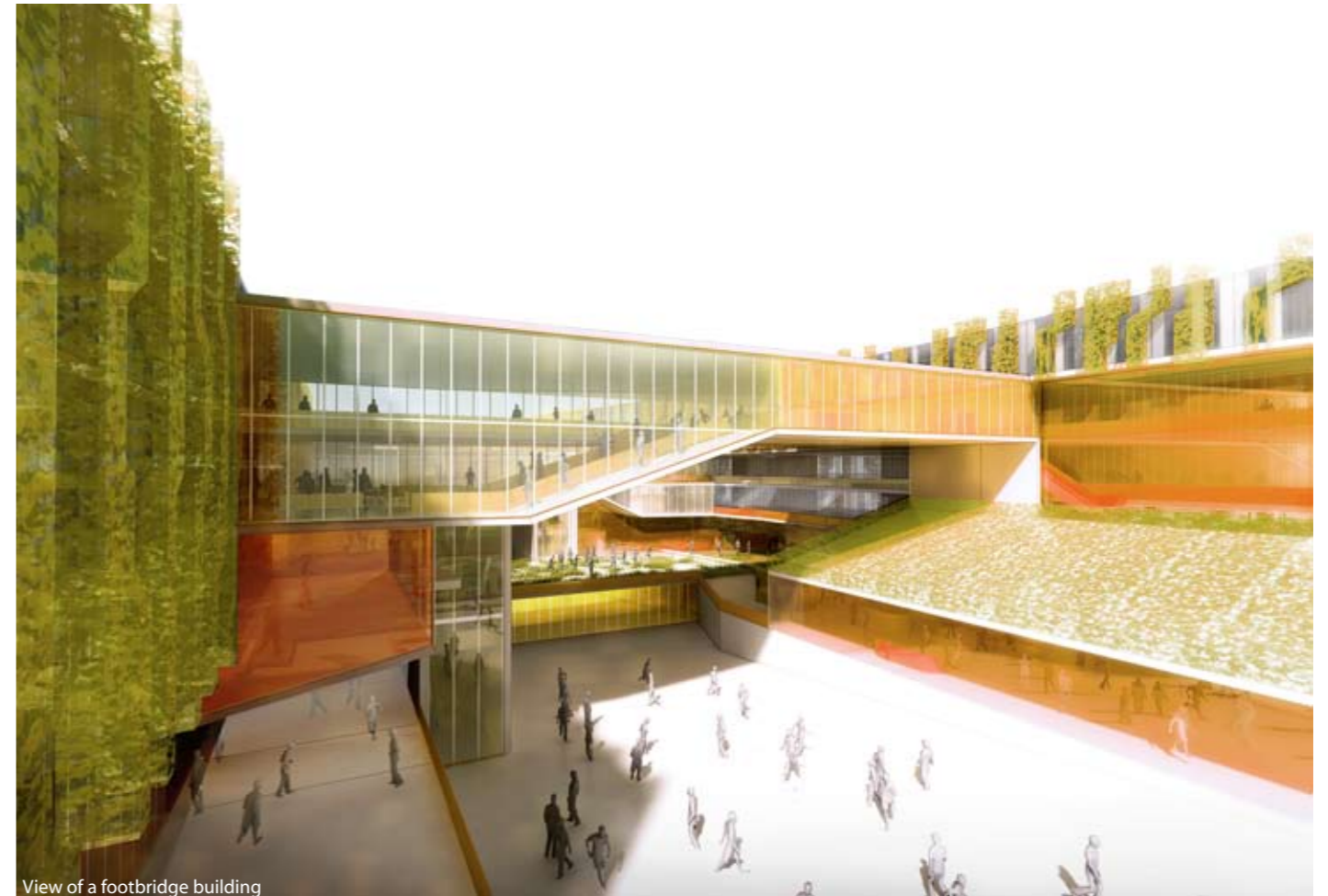
View of the main Hall

Qingpu Youth Center_Qingpu, China

Located in a dynamic district of Qingpu, The Youth Center combined concert hall, exhibition and classrooms. These programs come out of a big center hall which facing to a landscaped and accessible garden. Overhung by circulations in mezzanine, the hall is an alive and very full of life place; an unifier for The Qingpu Youth Center.

On one side, the building shelters small spaces such as the classrooms which come to animate the outside facade. On the other side, big abstract and sculptural volumes covered by an even material come to shelter the hall, concert hall and exhibition. By its strong architecture, the new Youth Center, put in a garden, take part in the structuring of the city center and becomes a landmark for the district.

Client: Qingpu District
 Completion: 2011
 Cost: 52.5 rmb / AUD \$10.8 M
 Area : 17 280 sqm



View of a footbridge building

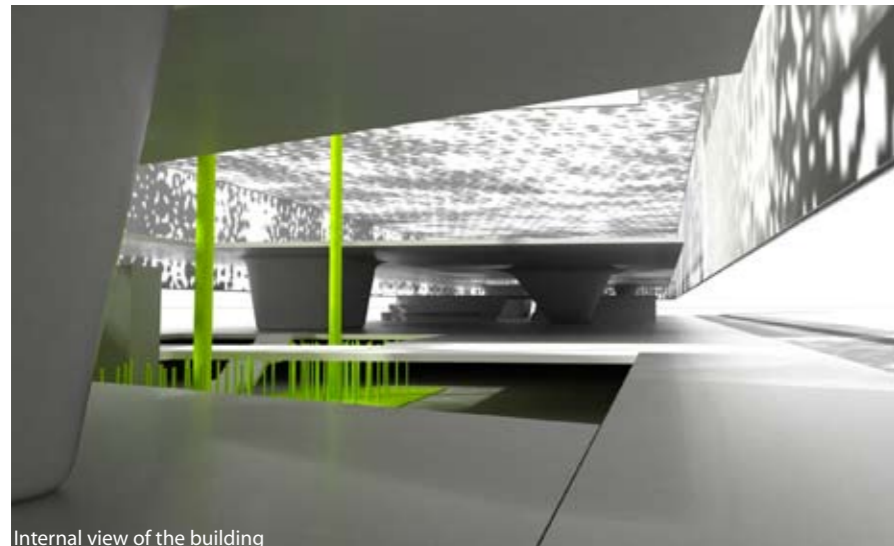


Reaserch «Coeur de Campus» _ France

In 2004, in partnership with EDF, Jacques Ferrier presented a new model for office buildings called Concept Office©. The project, which is just as much architectural as it is scientific, presents the office building of tomorrow in harmony with the urban environment. Concept Office© incorporates innovative building technologies that are adapted to new working methods, while insuring that energy use is minimized and efficiency maximized.

In 2005, Jacques Ferrier supported by the group LAFARGE, imagines the first ecological skyscraper, Hypergreen, conceived with ultrahigh performance concrete Ductal® which quickly sees itself very mediatized in France and abroad.

Today, we begin an ambitious reflection project concerning the University of Future. Our research has for objective to re-revitalize existing campus, and to create competitiveness poles by integrating high technologies, while taking into account the university life evolutions and the questions of the energy and the uraban planning.



Internal view of the building

University of Northampton - Avenue Campus _ Northampton, United Kingdom

The world of the education is going to change as its limits will fade and integrate new types of spaces: we want to invent an architecture that will accompany and enrich these changes.

The horizontals and three-dimensional connections are essential elements for the "sharing" aspect of the project. They represent the "new campus generation" where everything is connected and where collective life is at the heart of the system. Life is continuous, zoning free.

Efficient and flexible, the "footbridges buildings" are articulated around living spaces, such as: cafe, library, galleries, workshop ...

These new spaces are both active and contemplative. They are active, when they are connected to each other or to activity areas. They become contemplative, when students catch glimpses trough windows in the circulation area of courses and activities, developing their curiosity and interest for one another.

"Footbridge Buildings" and their support, offer hallways and circulation areas proportioned for the amount of users and visitors going through them daily.

In order to limit the carbon-footprint of the building industry, we shall privilege passive devices for the improvement of the comfort and atmosphere.

05.1.4 The Living Building



View from the river



Details of the facade

Photovoltaic panels



View from the highway



Green roof

Offices «LES REFLETS DU DRAC»_Grenoble, France

The development of the Bouchayer-Viallet district aims at an optimal urban and environmental quality. The principles of High Environmental Quality were taken into account at the level of the building conception and its future urban insertion.

The choices of facades conception, processes of construction and materials aim at generating a big energy efficiency in conformance with the dynamic thermal quality of the building. The management of water, the acoustic comfort and the reduction of pollution construction site are also taken into account within the framework of an initiative HEQ®. To insure an urban quality insertion, the building «The Drac's Reflections» was split up in various volumes. An alternation of heights offers beautiful openings on mountain massifs and a sweet entrance to the city since the ring road.

These taken parts of conception reached in the creation of an original building which illustrates a new tertiary culture pleading for sweet, alive and permeable architecture, without break with its environment.

Completed in spring, 2009, the building "The Drac's Reflections" is innovative, economic, functional and comfortable at once.

It is the first buildings with low consumption of this size in France, it respects all the constraints imposed by the standard HEQ®, besides numerous assets in terms of energy savings and quality of life: A vegetable roof which isolates the building and improves its thermal slowness, a doubles stream ventilation which renews and leaks out the air, an optimized natural lighting ...

A balance sheet of energy consumption 15 % lower than the reference level:

C réf RT 2000 projet <Créf RT2000-15 %

Primary energy consumption for the heating and the refreshment of offices lower than 50 kWh / m²/year:

"heating + refreshment" Consumption < 50 kWh / m²/year

A natural illumination of areas favouring the limitation of the usage of lights:

"Lighting" Consumption < 25 kWh / m²/year

Areas Thermal inertia: Internal Areas with low thermal inertia to restrict needs in warmth.

Inside insulation

Client: Urbiparc
Completion: 2009
Cost: 15.3 M euros / AUD \$28.3 M
Area : 11 750 sqm

ZAC Claude Bernard_Paris, France



View from the ring road



View from boulevard Macdonald

Located between the boulevard Macdonald and the ring road, orientated North / South and positioned in the middle of the property group, plan answers its environment in a binary way.

On the North side, along the ring road, the building gets creased to assert its central position. The concerning slick North facade answers to the acoustic requirements and the constraints linked to the nearness of the ring road. To the south, the building decomposes to answer the geometry enlivened by the buildings of neighbouring accommodation. The lattice, constituted by micro-perforated metallic blades horizontally implemented and in variable incline, is fixed to the building thanks to the service pass way.

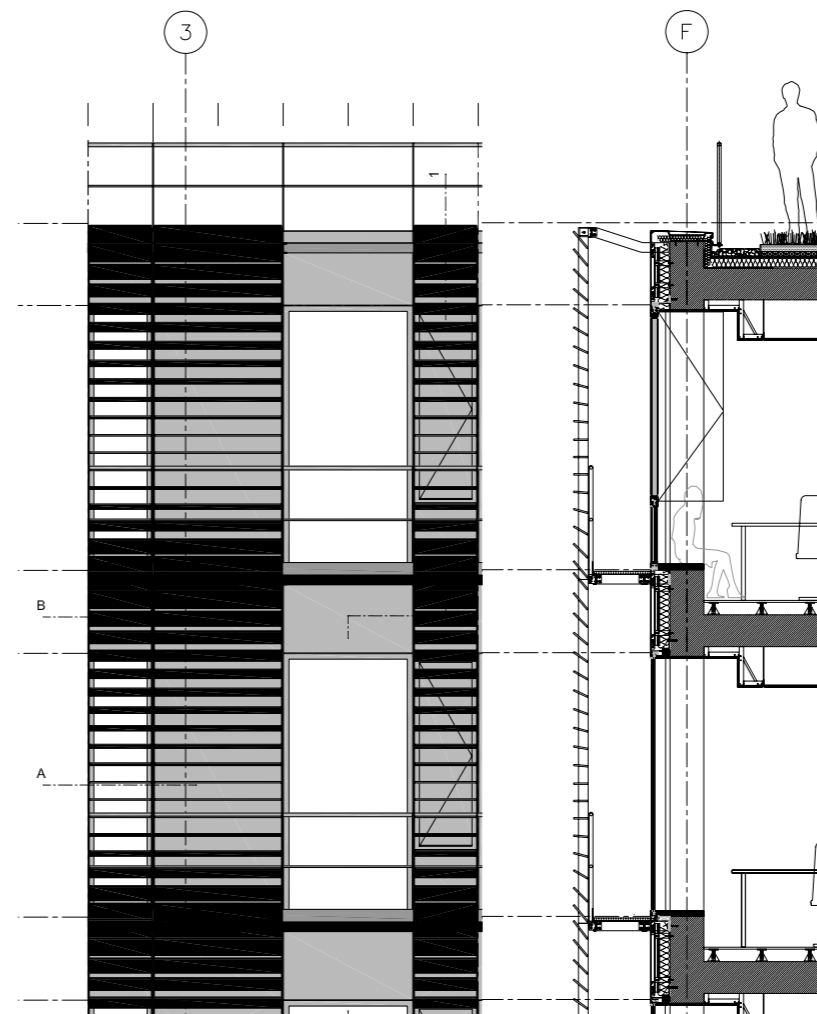
The natural lighting of the offices is controlled by the lattice: the orientations of the blades stop the sunbeam during summer and reflect a natural diffuse light far end in the office while letting spin look towards the outside.

The operators get involved to obtain the CSTB certification "NF office building _ High Environmental Quality approach" which imposes an ambitious HEQ approach totalling 4 very competitive targets and 5 competitive target.

The major environmental characteristics of plan are the following:

- Reduced energy consumption: performance RT 2005 - 25 %.
 - Coverage of 25 % of the energy needs by renewable energy sources.
 - Connection in the local network of warmth CPCU, supplied by deep geothermal power.
 - Installation of photovoltaic panels in roofing to produce the electricity representing more than 400 m² allowing to produce 100 000 kwh / year.
 - Installation of thermal solar panels in roofing to produce some health hot water.
 - Installation of efficient solar protection inserted into the facades, to guaranteeing a very good visual comfort.
 - Limitation of nuisances linked to the nearness of the Ring road: very competitive acoustical protection on the North facade and limitation of re-entrant angles to avoid resonance; air supply south side only.
 - Ice stocking to reduce the consumption of the refresh air/ air-conditioning.
 - Use healthy materials (carpet eco-label, environmental painting NF...).
 - Natural management of pluvial waters by the creation of permeable green.
- Everywhere, the objectives of high environmental quality were taken into account to have a permanent building, an easy service and comfortable areas.

Client: IVG Développement _City of Paris
Completion: winning project in 2007/ May 2009
Cost: 15 M euros / AUD \$27.7 M
Area : 12 000 sqm



Drawing details of the facade

05.1.5 Capability and Process

Jaques Ferrier Architectures

A state-certified DPLG architect, Jacques Ferrier graduated from the prestigious engineering school Ecole Centrale de Paris in 1981 before obtaining a degree in architecture from UPA 8 in 1985. He founded his own architecture agency in Paris in 1990, registered since then in the French Architects Association with the national number 034902).

His works include the design of public facilities, research centres, cultural buildings, offices and urban development projects. All these works reflect the agency's fundamental philosophical approach: to create an architecture for a sustainable society.

JFA has a significant design expertise in educational centres and in project management, in France as well in China.

Currently our office is working on the Jiao Tong Polytechnic School for the Shanghai district Housing Development, in partnership with HAISUM Design Institute. Our responsibilities cover architectural consultancy, conception and architectural supervision.

In 2007, we completed the Qingpu's Yuxiu School for the city of Shanghai.

In France, JFA is remodelling the prestigious public institution, the Collège de France, a higher educational and research establishment in Paris. JFA also completed other Educational Centres such as the Louis-Jouvet College in Gamaches in 2002, the Lille University -buildings and library- in 2001.

JFA has been invited to participate in several prestigious competitions in China and Middle East such as the Changsha New Railway Station and Mall, the Science Museum in Shanghai, or the Courthouse Complex in Kuwait.

In March 2008, JFA was selected to build the French pavilion for the World Expo in Shanghai which will be open to the public from May 1st to September 2010.

The team

The team proposed for this competition was composed in the basis of a large experience of team work as well of international project and construction management expertise of each team member. It includes:

JFA – architect (www.jacques-ferrier.com),

RFR – engineering (www.rfr.fr),

TER – landscape (www.agenceter.com)

Professor Klaus Daniels – sustainable design, (www.hl-technik.de)

In order to manage successfully the project and the construction, we propose a classical work sharing organization between a foreigner architect responsible for the conception stages and a local architect which develops the design from administrative and technical viewpoint.

A JFA French project manager will also settle in Melbourne during the project period as well during the construction assuring a permanent dialogue between the client and each team member.

By experience we always adopt a process based on the direct discussion with the client assuring the good development of the project and fulfilling the users' expectations.

Airbus Delivery Centre _Toulouse, France

The Airbus Delivery Centre in Toulouse is the building that concludes the chain of production of the A380 Airbus airplane. The site resembles a small airport used to test the aircrafts by different airplane companies before their final delivery.

This project is first and foremost a device for the setting of the star plane of Airbus, the A 380. The main space of the building is a panoramic gallery with a 180 ° angle view on the plane. It is an original space, which the glass curved façade seems to enfold the airplane. From this showroom guests, press representatives and officials have a spectacular view on the plane.

The roof plays a particularly important part in the indoor comfort of the building. It serves as a thermal shield in the summer and encloses solar panels and hides the technical equipment.

The offices are compiled in one unit, around planted patios, which bring them coolness and natural light.

The parking is a shadowed garden, surrounded by trees. It is an oasis in a technical landscape.

Client: Airbus France

Completion: end 2006

Cost: 30 M euros / AUS \$55 M

Area : 18 500 sqm

The clients

COFRES SAS

76 rue de Reuilly
75012 PARIS

M. Vauthier : +33 (0)1 55 07 43 20

AIRBUS FRANCE

316 Route de Bayonne
31060 Toulouse Cedex 03

M. Penavayre : +33 (0)5 34 36 16 07

COMMUNAUTE D'AGGLOMERATION

DU PAYS DE LORIENT

2 boulevard Général Leclerc
56325 Lorient

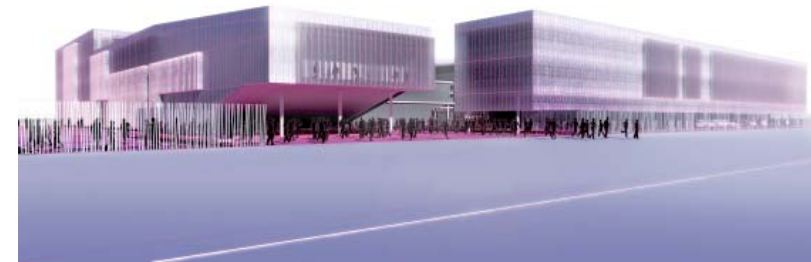
Mme Lebec : +33 (0)2 97 02 29 54

CHAMPAGNES P & C HEIDSIECK

51 bld Henri Vasnier
51100 Reims

M. Moreau : +33 (0)3 26 84 43 00

Jiao Tong Polytechnic School _Shanghai Jiading District



The building for the Jiao tong Polytechnic School, in Shanghai Jiading district, was conceived as a mirror of the scientific activity developed by its students. The different volumes are the direct result of the inside programme: simple and functional. The main entrance is signaled by the auditorium with its sculpted volume. The façades are animated by a serigraphy motif based on the binary numeral system.

The elevation of the ground floor allows a reading of the building a light entity and reinforces the communication between the school and its environment. This organization allows a very fluid circulation as well a good incorporation of the parking areas.

The different interior gardens bring the nature quietness providing a perfect environment for the group discussions, the self meditation or simply for some rest.

Client: Shanghai Jiading district Housing Development

Ongoing project, completion sept.2009

Area : 20 000 sqm

Cost: 35 M Rmb / AUS \$7.2 M

Number of students: 1 800



Courthouse _Rouen, France

The new Courthouse of Rouen is both an efficient building and a remarkable public equipment.

The master plan of the new building was designed as a direct response to the site, allowing a greater protection against the south-east wind - that also brings the noise of the urban road - as well as a reduction of the windowed area on the south-west façade.

The reception areas and the hall courts are located on the ground floor designed as the base of the entire building, easily accessed by the public. This fluid space is punctuated by interior gardens that offer a natural lighting throughout the main hall.

The users' offices are located in the upper floors, in two vertical volumes rising from the building's base. They are designed with the aim of optimising the passive systems (solar protection, high inertia of the exterior isolation, natural aeration during summer and mi-season time).

Energy saving figures:

Power consumption: 50kWh/m² per year

5% of total energy consumption are provided by photovoltaic panels.

Client: Ministry of Justice

Ongoing project, completion 2010

Cost: 31.6 M euros / AUS \$57.8 M

Area: 16 000 sqm

05.1.6 Merit

Prizes and Awards

Jacques Ferrier has received numerous awards and nominations for his work during the almost twenty years of activity as architect:

2008 Nomination for the Grand Prix National de l'Architecture

2007 Nomination for the Equerre d'Argent prize
French Sailing Museum

2007 "Best Conceptual Project" award for Hypergreen, BEX Awards

2006 Nomination for the Grand Prix National de l'Architecture

2004 Nomination for the "Best of Europe – the Balance" AIT Award
Oullins inter-regional laboratory and office building in Paris

2004 Nomination for the Grand Prix National de l'Architecture

2003 City of Bordeaux Architectural Prize
Tram system workshop and sheds, Bordeaux

2003 Nomination for the Equerre d'Argent prize
Tram system workshop and sheds, Bordeaux

2001 Nomination for the Equerre d'Argent prize
University library and administration offices, Lille

2000 First Solar Architecture Prize
Total Energy head offices, La Tour-de-Salvagny

1999 Nomination for the Equerre d'Argent prize
Total Energie head offices, La Tour-de-Salvagny

1999 Honourable Mention, AMO Prize
SAGEP water treatment plant, Joinville-le-Pont

1993 Moniteur Prize for First Work
Material Sciences Research Centre for the Ecole des Mines de Paris, Evry

In 2005 Jacques Ferrier was named Chevalier of the Ordre des «Arts et Lettres».

He is currently member of the Administration Council of the Building Energy Foundation, created in 2005 for promoting European sustainable development research projects.

Since 1993, Jacques Ferrier has combined his activity as architect with teaching in a few Architectural Schools in France.

From 1996 to 2007 he taught as a professor at the Architecture School of Brittany (EAB) and from 1993 to 1996 he taught as associated professor at the Architecture School of Saint-Etienne.

He regularly gives conferences in France and abroad and has published a large number of books and articles on architecture.

Publications

The work of Jacques Ferrier has been widely published in France and Europe as well as in North and South America and Asia. His architecture is known and appreciated in many different countries including Italy, Spain, Germany, China, South Korea, USA and Brazil.



Country: China
Date: 2005
Project: Yuxiu School



Country: Netherlands
Date: 2006
Project: HyperGreen Tower



Country: Germany
Date: 2006
Project: Courthouse of Rouen



Country: USA
Date: 2006
Project: HyperGreen Tower



Country: South Korea
Date: 2007
Project: Airbus Delivery Centre/Eric Tabarly Sailing Museum



Country: France
Date: 2008
Project: Eric Tabarly Sailing Museum



Country: South Korea
Date: 2008
Project: Piper & Charles Heidsieck Champagnes Headquarters



Country: Netherlands
Date: 2009
Project: Piper & Charles Heidsieck Champagnes Headquarters



Country: China
Date: 2009
Project: French Pavillion Expo2010