



## Floating Buildings

UTEC University Campus

“悬浮”的校园

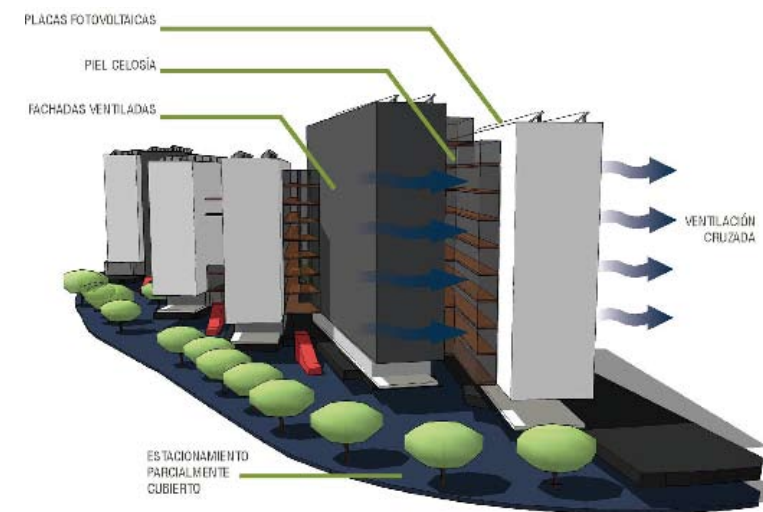
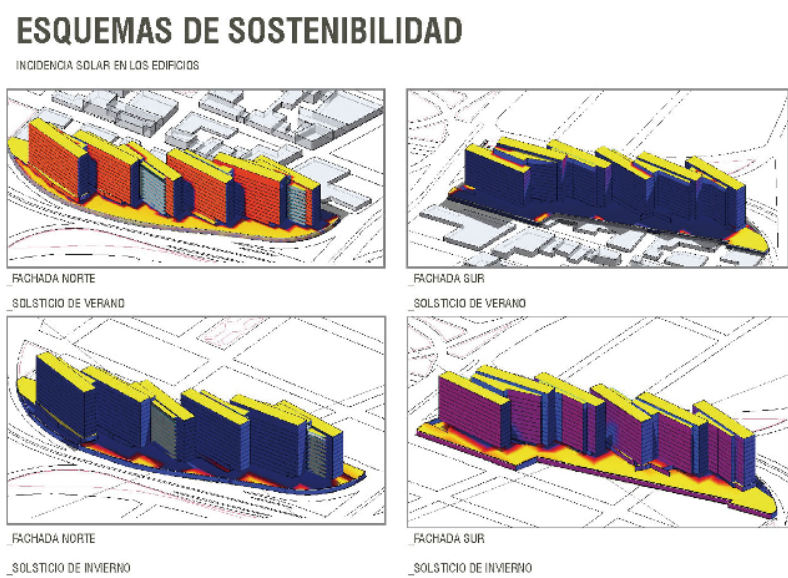
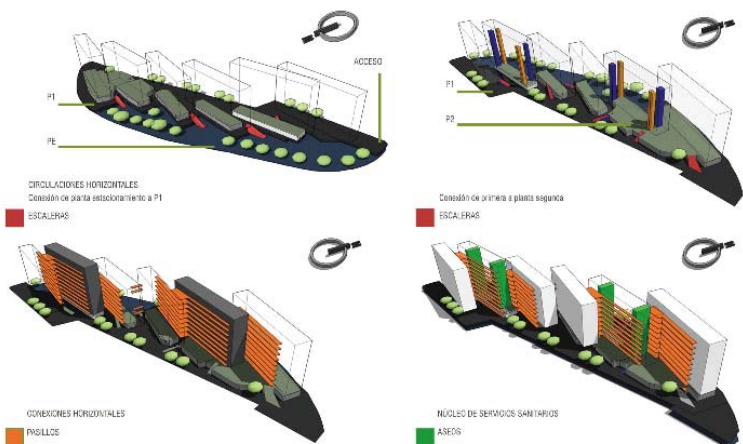
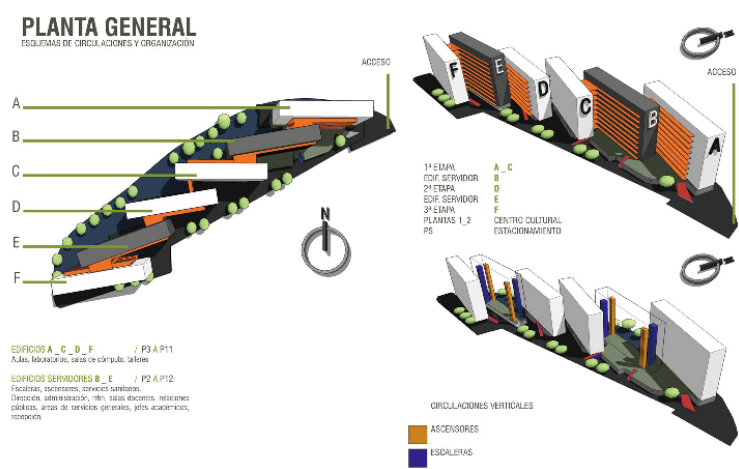
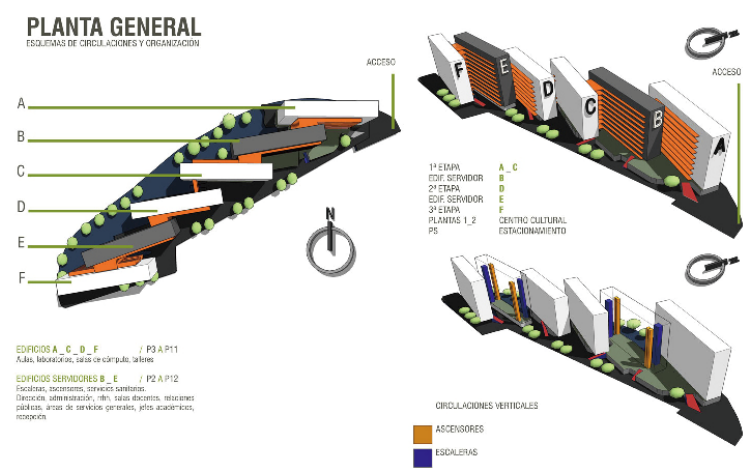
秘鲁UTEC 大学

项目地点：秘鲁利马  
总建筑面积：51 330 平方米  
建筑设计：XTe a+d建筑事务所  
设计时间：2011年  
采编：张雅林  
Location: Lima, Perú  
Gross Area: 51,330 m<sup>2</sup>  
Architectural Design: XTe a+d  
Design Year: 2011  
Contributing Coordinator: Yalin Zhang

UTEC 大学所在的地块相对较小，位于利马海岸线上历史街区的边缘，附近有两条繁忙的城市高速公路。由于该地块的特殊性，项目设计充分考虑到与历史、与城市环境和记忆，以及与天空的联系，打造出造型壮观、功能多样化、具有国际化水准的学院。

In a relatively small plot for the purpose intended, on the edge of a historic district on the coast of Lima, next to two heavily traveled highways of metropolitan scale, there is this collection of classrooms, workshops, laboratories, cultural center, administrative center, graduate school, parking space and service areas, shaping a new University Campus. Because of the location, the project takes full consideration of the relationships with history, with urban environment and memory and with the sky so as to create a magnificent, multifunctional and international standard institution.





UTEC 大学校园是一个功能明确的建筑综合体。新校园内拥有教室、工作室、实验室、文化中心、行政中心、研究生学院、停车场和服务区等。为解决各空间之间功能交织的关系，设计提供一种相互合作的关系，从而打造国际化的学院水准。设计将为此个秘鲁最重要的私人科技教育组织提供独特的身份认证，还将前卫与可持续这两个概念融入三个阶段的设计发展过程之中，实现学院最大限度的扩建及发展。

由于该校园所处的位置比较特殊，其大小、机构性质和建筑形象变得至关重要。因此，设计提出了一个解决方案，该方案有三个明晰的特点：

一是与历史的联系：该地块与前西班牙的建筑有着悠久的历史渊源，同时还参考了它的版图。因此，设计通过对地块自然条件的利用、对分布不均的土地的管理及操纵建立了建筑的根基，其目的是在建筑群内形成间隔和空间层次，用来举办各种活动。该地的建筑还将用作举办大学文化活动，使进出校园方便快捷而不需要牺牲其它学术机构的职能。在这里，地域与历史相结合的关系被放在了首要的位置。

二是与城市环境和记忆的关系：该地与各种各样的建筑有着不可磨灭的密切关系，它们如同一面简单的城墙，或位于校园两侧密集而又分部不规则的中低矮房屋，使得该校园成为夹在两处边缘之间的岛屿，不仅出入不方便，而且将一直保持一成不变。因此，考虑到项目的高密集性，设计师建议在文化中心建立一个绿色屋顶的新的“校内公园”来美

化校园环境，用作校园内休息、会面、放松和散心的地点。学校的文化中心、位于城市心脏地带的受到当地人认可的传统的“校内公园”及其校园本身相辅相成，完美地规划在一起，其宁静的环境是学生们放松的理想场所。

三是与天空的联系：6栋连续的建筑楼悬浮在公园的上方，并有组织地以3栋楼为一组形成两个建筑群，整体看起来无比的壮观。事实上，该处是2栋三楼层体的建筑，不仅提供遮荫，还拥有条理清晰的视轴和构图，而且还是尖端技术高科技机构的领头人。建筑物、等候区与休息区由桥梁互联、上升，直至被由底部延伸而上的景观阻碍，形成规则的视觉边界。复杂的区间完善了建筑内的3所机构，每所机构各占一栋建筑楼，位于中间的建筑楼（有楼梯、电梯、厕所和办公室）是为其他2栋楼服务的。这2栋楼里分布着教室、实验室和工作室。整个建筑的下方还有一个地下停车空间，里面停放着各种类型的车辆。

It is explicitly demanded a complex that, in addition to solving the functional interrelationships, offers an appropriate corporate image to the institution of national and international prominence which will host and give identity to: the most important private organization in the country engaged in higher technological education, being "avant-garde" and "sustainability" two of the essential concepts to be considered in a 3-phase development process to reach

its maximum expansion.

Because of its location, its magnitude and its institutional character, the image of the complex becomes of vital importance. Thus, the proposal is resolved in accordance with a clearly defined identity through 3 main qualities:

1. The relationship with history: The ancient relationship of the pre-Hispanic architecture and the territory is the reference that has been taken. Thus, the foundation of the complex is resolved through its telluric nature, the management of an uneven plot, and the "manipulation" of the land, in order to generate the gaps and spatial sequences that will house the various activities. Architecture made in the soil itself and that will provide space for the University Cultural Center, facilitating its access and without compromising the other functions of the academic institution. In this case, the relationship with history is synthesized, in the first place, as the relationship with the ground.

2. The relationship with the urban environment and memory: The inevitable closeness to a wide variety of buildings that act as a simple city wall, and the dense and irregular network of low- and medium-height housing that flank our plot, make it a real island between both edges. An island of difficult access that continues to be a permanent visual reference is due to its location. Therefore, considering also the high density established by the program, we propose the use of a green roof on the cultural center, thereby forming a new

"University Park", raised to improve its perspectives and as a place for resting, encountering, relaxing and distracting inside the complex. Complement and ideal get-together place between the cultural center and the university itself, linked also as a concept to the locally recognized and traditional "University Park" in the heart of the city, place originally associated with tranquility: an ideal place for relaxation of the students.

3. The relationship with the sky: A series of 6 buildings "floating" above the park, clearly organized into 2 groups of 3, is the powerful image of the whole. In fact, it is 2 buildings of 3 bodies each. They provide shade, organize the visual axes and perspectives, and mostly assume the leading role of what will be the state-of-the-art and high-technology institutional identity. The buildings, interconnected by a system of bridges, as well as waiting and seating areas, rise until cutting with their shapes the perspectives from the foundation, setting visual boundaries in an organized basis. The complexity of the functions described completes its internal organization in the 3 bodies of each building, where the central body always operates as a server (stairs, lifts, toilets and offices) for the other two bodies, which essentially house the classrooms, laboratories and workshops. The whole is completed with an underground parking space for vehicles of all types.



## A Building in City, A City in Building

Dalian International Conference Center

城市中的建筑 建筑中的城市

大连国际会议中心

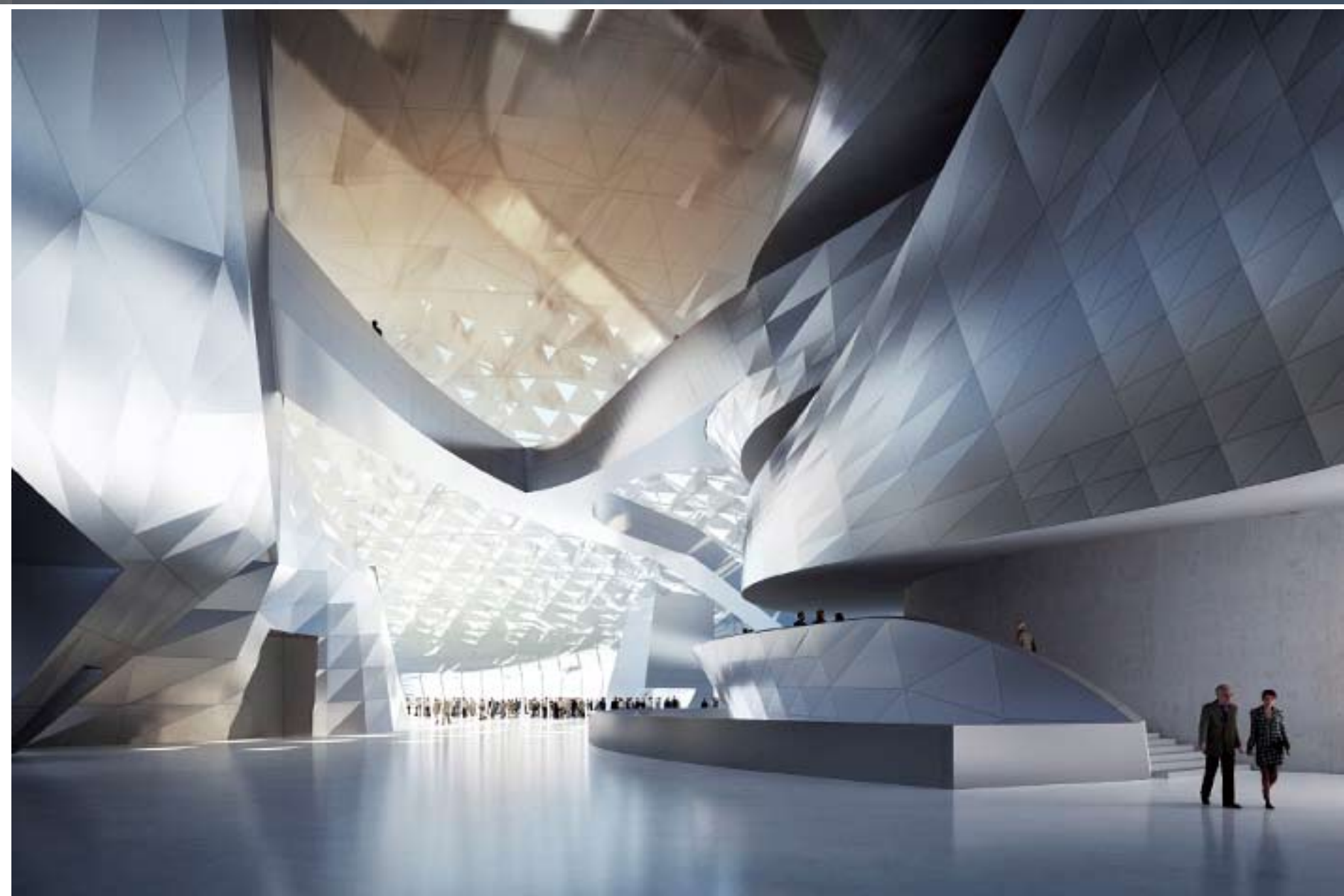
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建筑设计：Coop Himmelb(l)au  
当地合作设计：大连市建筑设计研究院有限公司，大连UD工作室  
客户：大连市人民政府  
摄影：Markus Pillhofer  
采编：张雅林  
Location: Dalian, China  
Architectural Design: Coop Himmelb(l)au  
Local Partner: Dalian Institute of Architecture Design and Research Co. Ltd. / UD Studio, Dalian  
Client: Dalian Municipal People's Government, P.R. China  
Photographer: Markus Pillhofer  
Contributing Coordinator: Yalin Zhang

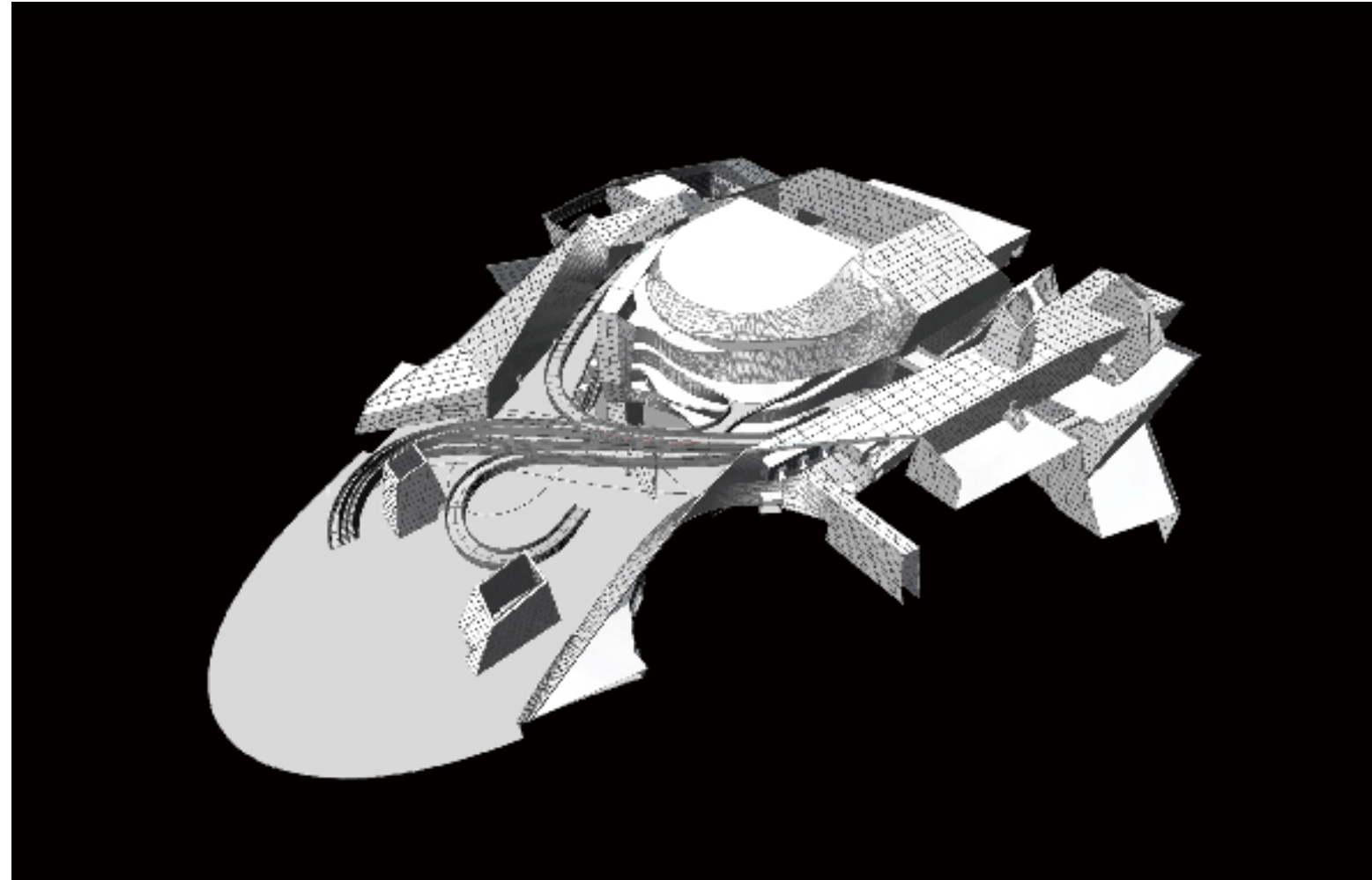
美丽的海滨城市大连正经历着商业型城市的转型期，这个全新的建筑将反映这座城市现代化的未来图景，并成为这一地区的新地标。

Dalian is an important seaport, industrial, trade, and tourism center, located in the southernmost part of the Liaodong Peninsula in the Chinese Liaoning Province. The city is currently undergoing a wave of transformation on coastal brownfield and reclaimed land which will entirely change the city's face within the next decade. The task for the design of the center is to create an instantly recognizable landmark of the above mentioned urban development in Dalian.

项目位于未来城市主轴线的末端，未来将会成为聚焦国际社会视线的精神文化场所。因而项目选址与其地块前方两大城市轴线的方向一致。紧邻部分与渗入外立面的会议空

间进一步分化，悬挑而出，从而创造出一个多层面的建筑体量。覆盖剧院和会议空间的锥形屋顶屏幕能够控制采光，确保氛围多样化，并为参观者提供好的空间方位。





项目不仅展示大连未来的前景，而且彰显其作为重要港口、贸易、工业和旅游城市的传统。项目设计将现代会议中心的合理结构组织与传统亚洲建筑的漂浮空间、以及海洋力量产生的柔和空间进行了结合。

项目由漂浮空间和轻柔表皮组成。表演空间和会议空间位于入口大厅上方15米的位置；大剧院则位于整个项目的中心，能容纳1900人，并与可容纳2500人的灵活会议大厅相对；而小会议空间则像珍珠一样围绕在大剧场四周。底层的商店、展览区等公共空间向上与会议中心相连，提供便捷路线和赏心悦目的视线轴线。而且，主礼堂像传统的影院和歌剧院一样配备有后台空间。所有的会议室和流通区域都有直接的自然采光。海边的主入口与未来的区域发展相呼应，形成了与未来游艇码头的连接。

该项目运用“广场”和“街道”元素来建立建筑中的城市结构，这种设计方式创造了很多缝隙空间，促进了人们之间的交流。建筑的外表皮轻柔动感，塑造了像贝壳一样的形态。整个表皮结构在三维方向上扭曲、挤压，微妙的转换了立面的整体形态，就好像在模仿大海的涌动。

方案以可持续发展的环保理念为主要设计思想，建筑中加入了大量节能系统，最大限度的节约能源。其中使用了海水淡化技术，并将夏季的热能用于室内制冷，用热泵实现冬季建筑内部的保温。

Situated at the terminal point of the future extension of the main city axis, the center will be anchored as its focal point in the mental landscape of the international community. The footprint of the building on the site is therefore arranged in accordance with the orientation of the two major urban axis which merge in front of the building. The close surroundings are further differentiated with the conference spaces that penetrate the facades, cantilevering and thereby

creating a spatially multifaceted building volume. The various theaters and conference spaces are covered by a cone-shaped roof screen, whose controlled daylight input assures good spatial orientation for the visitors and atmospheric variety.

The building has both to reflect the promising modern future of Dalian and its tradition as an important port, trade, industry and tourism city. It will combine and merge the rational structure and organization of its modern conference center typology with the floating spaces of traditional Asian architecture as well as with a design reminiscent of the soft surfaces generated by the forces of the sea.

The building consists of floating spaces and soft surfaces. The actual performance and conference spaces are situated at +15 m above the entrance hall. The grand theater, with a capacity of 1,600 seats and a stage tower, directly opposite of a flexible conference hall for 2,500 seats, is positioned at the core in the center of the building. The smaller conference spaces are arranged like pearls around this core. Public spaces such as shopping and exhibition areas are connected upstream to the conference center, providing short connections and dramatic sight axis within the building. Additionally the main auditorium is equipped with backstage areas like in traditional theaters and opera houses. All conference rooms and the circulation areas have direct daylight. The main entrance from the sea side corresponds already to the future developments like the connection to the future cruise terminal.

Through this open and fluid arrangement the theater and conference spaces on the main level establish a kind of urban structure with “squares” and “street spaces”, which facilitates on the one hand user orientation within the building by identifiable “addresses”, and on the other hand provides also the required informal meeting places, chill-out and catering zones in between the halls, with view on the outside – an ideal atmosphere for modern conference utilization.

One of the major tasks of sustainable architecture is the minimization of energy consumption. A fundamental contribution is to avoid considerable fluctuations in demands during the course of the day. Therefore, it is essential to integrate the natural resources of the environment, such as using the thermal energy of seawater with heat pumps for cooling in summer and heating in winter.

