



## **6th ADVANCED ARCHITECTURE CONTEST**

### **COMPETITION RULES**

**Organized by**

**Institute for Advanced Architecture of Catalonia & FabLab Barcelona**

### **1. THE PRODUCTIVE CITY**

#### *Introduction*

The Institute for Advanced Architecture of Catalonia and FabLab Barcelona are pleased to announce the 6th Advanced Architecture Contest, on the theme of *PRODUCTIVE CITY*.

The aim of the competition is to promote discussion and research through which to generate insights and visions, ideas and proposals that help us envisage what the city and the habitat of the 21st century will be like.

The competition is open to architects, engineers, planners and designers who want to contribute to progress in making the world more habitable by developing a proposal capable of responding to emerging challenges in areas such as ecology, information technology, architecture, and productive cities.

The prize (Total value: 60.000, 00 EUR) will be distributed at the discretion of the Juries following the bases scheme. The competition jury, which is composed of architects, professionals in a wide range of fields and directors of some of the world's foremost architecture schools, is looking for outstanding proposals at any scale, for any city in the world on Smart Cities, Eco neighborhoods, Self-sufficient buildings, Intelligent homes, Urban Farming or any other proposal that analyzes the phenomena of the *Productive City*.

The Registration is FREE, and the competition entries should be submitted digitally in PDF files via the Internet.

## **IaaC**

The Institute for Advanced Architecture of Catalonia – IAAC is an international centre for Education, Fabrication and Research dedicated to the development of architecture capable of meeting the worldwide challenges in constructing 21st century habitability.

Based in the 22@ district of Barcelona, one of the world's capitals of architecture and urbanism, not to mention the European Capital for Innovation (2014), IAAC is a platform for the exchange of knowledge with researchers, faculty and students from over 60 countries around the world.

The Institute uses cutting-edge technologies to design and produce prototypes of self-sufficient habitats and works closely with other nodes of knowledge in various cities around the world, as well as participating in the Fab Lab network, effectively furthering our understanding of different realities and acting globally.

## **FabLab Barcelona**

Fab Lab Barcelona is part of the Institute for Advanced Architecture of Catalonia, where it supports different educational and research programs related with the multiple scales of the human habitat. It is also the headquarters of the global coordination of the Fab Academy program in collaboration with the Fab Foundation and the MIT's Center for Bits and Atoms; the Fab Academy is a distributed platform of education and research in which each Fab Lab operates as a classroom and the planet as the campus of the largest University in construction in the world, where students learn about the principles, applications and implications of digital manufacturing technology.

## **Fab City**

Making productive cities is not only a challenge, but a necessity, in order to sustain life on earth. Today's urban centers are the largest producers of waste on the planet. In order to support city life, tons of goods have to travel thousands of miles and shipping containers feed our cities; at the same time millions of kilowatts travel through high tension lines over forests or underwater cables in order to satisfy the energy needs of city life. Millions of acres are used to produce tons of food supplies to keep supermarkets stocked. At the same time, our cities are losing the dynamic hubs of knowledge around "how things are made," as cities become primarily consumers rather than producers with all the social consequences that follow from this reality. Yet cities are the pinnacle creation of humankind the principle means of supporting life on earth in the future...just as long as they are allowed to continue evolving under the same commitment to innovation guaranteed since the industrial revolution.

The Fab City challenge aims to construct the first race for cities to become selfsufficient by 2054. The first city to become selfsufficient will lead the future of urban

development in order to keep environmental balance on the planet and will fundamentally rebuild the social structures that make cities work and serve residents.

## **2. THEME**

<http://www.iaac.net/>

<http://www.fablabbcn.org/>

<http://www.fabcity.cc/>

<http://www.theinternetofthings.eu/>

[http://www.urbiotica.com/home\\_e.html](http://www.urbiotica.com/home_e.html)

<http://www.smart-cities.eu/>

<http://www.smart-buildings.com/>

<http://www.zeri.org/ZERI/Home.html>

<http://www.ecosmartbuilding.com/>

<http://www.arduino.cc/>

<http://www.impure.com/>

<http://smartgeometry.org/>

<http://opensourceecology.org/>

<http://www.libelium.com/>

<http://www.citylab.com/>

<http://www.fablabbcn.org/>

<http://newsoffice.mit.edu/>

<http://www.isocarp2015.org/>

<https://smartcitizen.me/>

<https://blog.adafruit.com/>

<http://futureeverything.org/>

<http://www.urbanfarmonline.com/>

<http://cityobservatory.org/>

<http://www.rebuildbydesign.org/>

<http://www.foodurbanism.org/>

### **3. RULES AND PRIZES**

#### *Criteria of Eligibility and Restrictions*

##### **Eligibility**

The competition is opened to students and professionals.

There is no age limit; the projects may be carried out individually or in groups, with no restriction on the number of members of the team.

##### **Restrictions**

*The following will not be eligible to take part in the competition:*

Any individual or organization related to the promoting organization, such as members of the advisory committee or sponsored researchers, and anyone professionally associated with the promoter;

Members of the Competition Jury and organizing Staff, or any person to whom a member of the jury acts as director, supervisor or adviser;

Any person directly or indirectly involved in the summary of the Competition.

##### **Free Registration**

No fee or other payment will be required of those entering the competition.

Please [REGISTER HERE](#)

##### **Awards**

The three teams leaders will receive cash prizes, and a one-year grant to take the Master in Advanced Architecture at IAAC and research in greater depth the manufacture of self-sufficient architecture and a HP printer.

All of the projects selected will be featured in a special book produced in conjunction with the Actar-Birkhauser publishing house like in the four previous editions.

**1st Prize:** 3,000 € + Master in Advanced Architecture (value 17.400,00 €) + Designjet T520 (value 1.500 €)

**2nd Prize:** 2,000 € + Master in Advanced Architecture (value 17.400,00 €) + Designjet T120 (value 700 €)

**3rd Prize:** 1,000 € + Master in Advanced Architecture (value 17.400,00 €) + Designjet T120 (value 700 €)

### **People's Choice Award**

In parallel to the 6th Advanced Architecture Contest, the Institute for advanced architecture of Catalonia (laaC) and FabLab Barcelona are also running the international People's Choice Award.

Submissions will be displayed online to be viewed and voted on by the public. The most popular image will win a free entrance to the Anual FabLab Conference taking place in Shenzhen China this year.

### **Exhibition and Book**

The selected projects will go on show in a major exhibition, due to open in Barcelona in June/July 2017.

The best projects will also be featured in a book to be published ACTAR publishing house like in the four previous editions:

SELF-SUFFICIENT HOUSING

SELF-FAB HOUSE

SELF-SUFFICIENT CITY

CITY SENSE

SELF-SUFFICIENT HABITAT

## **4. Topic: PRODUCTIVE CITY**

The programme challenges the participants to design any project directly related to productive cities- buildings, sensors, devices, urban planning, means of transportation, urban farming, fablabs, energy systems, etc-

The participants will be free to decide on the size and location of the Project, which must be clearly detailed and justified.

Any time projection short (10 years), medium (50 years) or long-term within the duration of the 21st century is allowed.

## **5. SUBMISSION**

### *Documents and Graphic Materials Required*

Write a brief description (max 200 words) that outlines key concepts around proposals or changes for existing buildings and/or cities.

Graphic description: Site plans, floor plans, elevations, sections, perspective drawings, photographs of physical or digital models and axonometric drawings at any scale and descriptive texts explaining the project are allowed. The descriptive texts must be in English.

Format: The proposals should be presented on three (3) DIN A-3 panels and comply with the following format:

Each panel will be presented in PDF format. The size of each file must not exceed 1MB.

The same panels will also be presented in a JPG 1280px by 960px format. The size of each file will not have to exceed 500 KB.

Video (optionary): You have the option to submit a 1 minute (maximum) video to explain in, a few words, the key concepts of your proposal. Please use English subtitles even if you are speaking English. (It is not mandatory to speak in the video, you may also use text, images, animation etc). Place your ID code at the bottom right of the video. You will find this ID code by logging into your account. To submit the video: First upload the video to YouTube, then login in to your competition profile page and paste the YouTube link to the video section of the submission.

No physical materials will be accepted. All the proposals must without exception be in digital form and uploaded one by one in the following website:

[advancedarchitecturecontest.org](http://advancedarchitecturecontest.org)

## **6. LANGUAGE**

The proposals must without exception be drafted in English.

## **7. DEADLINE**

It is allowed to upload your panels and edit them until January 18th 2016; 5:00 pm (GMT) at the competition web site.

## **8. CALENDAR**

### **Launch date of the competition**

Consultations on the Web site regarding the calendar, theme and regulations.

**Monday July 6th 2015**

### **Closing date for registration**

**Monday January 18th 2016**

### **Enquiries**

All the grouped replies to these will be posted on the Web site before **December 11th 2015**

### **Submission of Projects**

Projects will be accepted up until **Monday January 18th 2016**

The reception of submitted projects will close on **Tuesday January 19th 2016**

### **Selection**

Selection of projects by the Jury: **February March 2016**

### **Results**

Announcement of results: **Saturday 19th March 2016**

### **Book Release**

**April 2017**

### **International Exhibition**

June/July 2017

## 9. JURY

Alberto Diaspro, Director of the Department of Nanophysics at Istituto Italiano di Tecnologia, advanced materials.

Ali Basbous, Founder and Director of BAD, Built by Associative Data.

Alfredo Brillembourg, Urban-Think Tank & ETH-Zurich.

Andrew Watts, Newtecnic, façade system design.

Areti Markopoulou, Architect. IaaC R&D Director.

Carlos Gomez, Interaction Designer, IaaC faculty on Design with Nature Masters.

Dave Pigram, Design Director at supermanoeuvre, Sydney [UTS].

Elizabeth Diller, Diller Scofidio + Renfro.

Enric Ruiz Geli, Principal Cloud9 Architects (Spain).

Farshid Moussavi, Farshid Moussavi Architecture.

Giovanna Carnevali, Fundación Mies Van der Rohe.

Izaskun Chinchilla, ETSAM, Madrid Spain.

Jan Knippers, Founder of Knippers Helbig Advanced Engineering.

Jelle Feringa, CTO at Odico formwork robotics, co-founder of EZCT Architecture & Design Research, open source developer.

Javier Peña Galiano, Chemical Engineer. IaaC faculty on Self-sufficient Buildings Masters.

Jose Luis de Vicente, Journalist, digital culture, arts & technology.

Kengo Kuma, Kengo Kuma and Associates.

Lucas Cappelli, Architect. Director of the Advanced Architecture Contest.

Mireia Luzárraga, Head Architect of elBulliFoundation in Cloud9.

Mitchell Joachim, TERREFORM ONE, NYU.

Oscar Tomico, Designing Quality in Interaction Research Group, TU/e.

Rodrigo Rubio, Architect IaaC Faculty, IAAC. Spain.

Rodolphe el-Khoury, Dean at University of Miami.

Silvia Brandi, Architect. IaaC Academic Coordinator.

Tomas Diez, Director FabLab Barcelona.

Willy Muller, Architect. Intelligent Cities Research Studio Professor, IaaC.

Xiangning Li, Professor in history, theory and criticism at Tongji University College of Architecture and Urban Planning.

Yael Reisner, Architect. Yael Reisner Studio + madmdesign.



## Members:

**Miquel Adria**, Architect. Spain.  
**Benyam Ali**, Director Department of Architecture. Adis Abeba University. Ethiopia.  
**Stan Allen**, Director Princeton University School of Architecture.  
**Manolo Borja**, Curator. Director of MACBA, Spain.  
**Antony Brey**, Urbiotica. Spain.  
**Peter Cook**, Architect. Founder member of Archigram.  
**João Coser**, Mayor of Vitória, ES, Brasil.  
**Jose Luis Echevarria**, La Salle Architecture School, Barcelona Spain.  
**Luis Falcon**, LOAD Office architecture, Spain.  
**Julio Gaeta**, Director EL ARQA. Uruguay.  
**Manuel Gausa**, Architect. Spain.  
**Neil Gershenfeld**, Director of the Center for Bits and Atoms. MIT. USA.  
**Vicente Guallart**, Architect. Chief Architect Barcelona City.  
**Alejandro Gutiérrez**, Member of OVE ARUP, Chile.  
**Jordi Hereu**, Mayor of Barcelona.  
**Yung Ho Chang**, Head of the Department of Architecture, MIT.  
**José Miguel Iribas**, Sociologist, Spain.  
**Ignacio Jimenez de la Iglesia**, Economist, Director of Urban Land Institute.  
**Young Joon Kim**, YO2 ARCHITECTS. Seoul, Korea.  
**Pankaj Joshi**, Director Urbanism Design Research Institute. Mumbai, India.  
**Haakon Karlstein**, Jr. President Fab Foundation. Norway  
**Sheila Kennedy**, Kennedy & Viloich. Boston. USA.  
**Behrokh Khoshnevis**, Director of the Center for Rapid Automated Fabrication Technologies USA.  
**Branko Kolarevic**, Associate Professor of Architecture, University of Calgary. Serbia.  
**Jaime Lerner**, former mayor of Curitiba and former president of the IUA.  
**Duncan Lewis**, Architect. France.  
**J.M. Lin**, THE OBSERVER DESIGN GROUP (Taipei). Taiwan.  
**Josep Lluís Mateo**, MAP ARQUITECTOS. Spain.  
**Greg Lynn**, Institute of Architecture di Angewandte.  
**Marta Male-Aleman**, Architect. (Spain)  
**Valentina Matvienko**, Governor of Saint Petersburg, Russia.  
**Felipe Pich - Aguilera**, Architect. Spain.  
**Ramon Prat**, Publisher, Director of ACTAR.  
**Francois Roche**, Architect. France.  
**Salvador Rueda**, Ecologist, Director of Barcelona Ecología.  
**Michael Schlaich**, engineer. Germany.  
**Snøhetta**, (Oslo, Norway).  
**Bob Somol**, Director of the School of Architecture at the Univ. Illinois Chicago. USA.  
**Brett Steele**, Director, Architectural Association School of Architecture. UK.  
**Dietmar Steiner**, Architect. Director of Architektur Zentrum. Vienna, Austria.  
**Ben van Berkel**, Director of Stedelijk School Frankfurt am Main. Netherlands.

**Jacob van Rijs**, Architect MVRDV. Rotterdam , Nederland.  
**Turlif Vilbrandt**, Director of Technology, Digital Materialization Group. Norway.  
**Bostjan Vuga**, Sadar - Vuga Arhitekti. Slovenia.  
**Kim Young Joon**, Architect. Korea.  
**Aaron Betsky**, Architect. (Cincinnati, USA)  
**Lucy Bullivant**, Architectural Curator. UK  
**Hernan Diaz Alonzo**, SCI-Arc Graduate Programs (Los Angeles, USA)  
**Nuria diaz**, Director Valldaura. (SPAIN)  
**Angel Gijon**, Architect. Spain.  
**Juan Herreros**, Architect. School of Architecture Madrid (Spain)  
**Daniel Ibañez**, Architect, Iaac Faculty IAAC  
**J.M. Lin**, Architect. The Observer Design Group. (Taipei, Taiwan).  
**Mohammad Majidi**, Boisar Architects, Tehran  
**Josep Mias**, MIAS Architectes. (Spain)  
**Eric Owen Moss Director**, SCI-Arc; Eric Owen Moss Architects (Los Angeles, USA)  
**Michel Rojkind**, Architect. Principal Rojkind Architects (Mexico)  
**Artur Serra**, Anthropologist, Coordinator of Internet 2 Catalonia  
**Nader Tehrani**, Director School of Architecture MIT (Boston, USA)

## 10. Q & A

Registered participants may submit questions, by e-mail only, to the address:  
**[contact@advancedarchitecturecontest.org](mailto:contact@advancedarchitecturecontest.org)**

Each question may be submitted once.

The deadline for questions is 4th December 2015.

The promoter will continuously post the replies to all questions received on the competition Web site up until 11th December 2015.

The replies to the participant's questions will be considered additions to or revisions of the regulations of the competition.

## **CONTACT**

### **Advanced Architecture Contest**

Pujades 102 baixos, Poble Nou 08005 Barcelona, Spain.

Fax 93 300 43 33

**contact@advancedarchitecturecontest.org**

**<http://www.advancedarchitecturecontest.org/>**

### **Director**

Lucas Cappelli

### **Coordinator**

Josefina Petrini

### **Contents:**

IaaC and FabLab Faculty

### **Communication Events:**

Jorge Ledesma

Mateo Lima Valente

### **Web Design**

Glazione Rocha

### **Web Developer**

Emilio Degiovanni

**Organized by**

Institute for Advanced Architecture of Catalonia

**<http://www.iaac.net/>**

FabLab Barcelona

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