



# **CALL FOR CONTRIBUTIONS**

35<sup>th</sup> IASP World Conference on Science Parks and Areas of Innovation

Isfahan, Iran 2<sup>nd</sup> - 5<sup>th</sup> September 2018

#### Introduction:

Isfahan Science and Technology Town will host the 35<sup>th</sup> IASP Annual World Conference on Science Parks and Areas of Innovation in September 2018.

The conference will bring together experts from STPs (Science and Technology Parks) and other AOIs (Areas of Innovation), technology-based incubators, academia, the public sector and business to discuss and debate in depth the latest industry trends.

To serve their companies and communities, STPs and other AOIs often collaborate and coordinate activities with different institutions and organisations, such as chambers of commerce, development and funding agencies, industry associations, networks, venture capital, etc. All of these institutions are welcome to make contributions to this conference.

# Theme and Programme:

The programme will be divided into a variety of sessions, retaining both the traditional plenary and parallel sessions on specific topics, as well as more innovative formats to encourage a more dynamic knowledge exchange. The Steering Committee has already outlined 4 main topics that will be developed in a full programme after the paper review is completed. All conference sessions will be related to the overall theme for the 2018 IASP World Conference which has been set as:

# Towards sustainable cities and communities: Fostering innovation ecosystems

In September 2015, the UN adopted 17 Sustainable Development Goals (SDGs) to guide global action and investment for sustainable development over the next 15 years, one of which focuses on Sustainable Cities and Communities. Collaboration between different actors and exchange of knowledge between countries are crucial for successful implementation of the 2030 Agenda: as typical triple helix organisations, STPs and AOIs can play a central role in the process.

#### These are all the goals adopted by the UN:





































Sustainable Development refers to the appropriate management of financial, natural, basic and human resources to achieve the desired consumption pattern that will be possible through utilization of technical facilities and suitable structures to continuously and satisfactorily meet the needs of present and future generations. In other words, sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The increasing importance and protagonism of cities as innovation centres makes it necessary to ensure that the concept of Sustainable Development and everything around it is also applied to cities.

The SDGs are an important tool for tackling the problems resulting from urban development, and cities can play an important role in the implementation of SDGs.

After the third wave of globalisation that took place in the 20<sup>th</sup> century, comparative (and competitive) advantages of cities and countries currently rely on new forms of production based on knowledge and talent. Rather than typical factor endowments associated with lower costs, countries - and particularly cities - aim to attract highly qualified people from all over the world at the same time as enhancing their own fertile soil through education and the development of skills.

This is a good moment to underline the fact that science and technology parks are increasingly connected and intertwined with cities, and this entanglement is already happening at an increasing pace and using different formulas and mechanisms. It is indisputable that STPs are mainly an urban phenomenon, regardless of whether they are located in downtown areas or in urban peripheral areas, and even parks that may be located far from big cities are striving to add urban elements and ingredients to their model.

STPs can play a major role in supporting the orientation of their cities towards the knowledge economy or to emphasize that fact wherever it is already in place.

Again, all these new endeavours must inevitably keep in mind the central strategies of sustainable development.

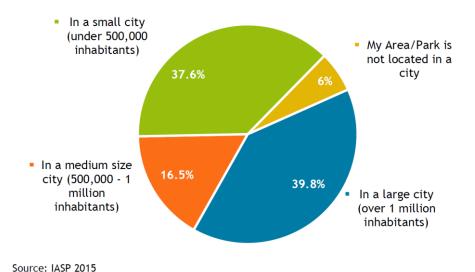
Over the past two decades, cities have been considered as the incubators for movements to improve resilience and sustainability. Cities are the testing ground for transformational new concepts such as the "sharing economy", which, through peer-to-peer sharing of access to goods and services, address urban challenges (such as density, transportation, and housing) in a manner that is re-shaping our living spaces and social fabric. Innovation and ambition will continue, and will have a direct benefit to sustainable development: cities all over the world are working to offer desirable conditions - such



as clean air, sustainable mass transit, expansive green spaces, and safe communities - that attract people.

The urban location of most STPs and AOIs is a key element of their identity. As the concept of 'areas of innovation' grows, and the lines gradually blur between residential and business areas, the links and collaborative efforts between STPs/AOIs and their cities are even more important. Depending on the size of the city, this may have an effect on joint ventures, activities and economic and business growth.

In the 2015 IASP survey, it was found that about 94% of STPs and AOIs were located inside cities and the success of these organisations can significantly affect the sustainable development of cities and communities.



The innovations and technological products developed by knowledge-based companies in STPs/AOIs can address major problems faced by cities such as environmental pollution, unemployment, traffic and noise pollution as well as help urban sustainable development.

The IASP 2018 World Conference in Isfahan with the theme of "Towards sustainable cities and communities: fostering innovation ecosystems" will explore the role of STPs and AOIs in the formation of the innovation ecosystem and the sustainable development of cities.

Among the 17 SDGs proposed by the UN, SDG 11 <u>"Make cities inclusive, safe, resilient and sustainable"</u>, is strongly related to the main theme of the conference. STPs and AOIs are powerful tools to support the efforts of their cities in implementing the Agenda 2030.

Paper authors are invited to submit proposals related to the themes on the following pages.



# **PLENARY SESSIONS**

#### PLENARY SESSION 1 - Cities, STPs and other areas of innovation: challenges and strategies



**Description of the session:** How can new age STPs and AOIs contribute to the development of sustainable cities? How are cities implementing their specific areas or districts of innovation? How can STPs (keeping in mind that STPs are one specific type of area of innovation) contribute to the development of the knowledge economy in their cities? How does being integrated/embedded in a city affect the concept of space and boundaries of STPs? In terms of sustainable development, what are the main challenges of developing urban areas of innovation?

In particular, environmental issues will pose greater and urgent challenges. What can STPs/AOIs and their companies do to tackle problems such as water scarcity and flooding, and to ensure access of large segments of the population to clean, cheap energy resources? All this leads to one central issue: how can STPs and AOIs contribute to the SDG 11 target, such as reducing the adverse per capita environmental impact of cities?

Other aspects that could be discussed in this session: Green Fields vs. Brown Fields, land management and regulation, incentives, and anchor institutions.

#### PLENARY SESSION 2 - New tools and functions for cities and areas of innovation











**Description of the session:** The continuous creation and development of new technologies often entails the emergence of new concepts and spaces where such technologies can be better developed, tested and applied: accordingly, things like Living Labs or FabLabs, and disruptive technologies such as 3D printing and virtual reality are gaining momentum. Artificial intelligence and Internet of Things for the solution of new city challenges, such as security, healthcare, logistics, transportation, education, and others. Exploring what the role of STPs and AOIs can be in pushing forward these new tools in collaboration with city governments is a very important topic for our industry. What impact will they have in the near future on cities; on the STP concept; on companies and industries and in the way they will organise their production and logistics; on consumers, clients and citizens? What can and should STPs and AOIs do vis-à-vis these new technologies, tools and mechanisms? What opportunities are there in them for STPs, AOIs and cities?

Various SDGs connected with these issues, particularly SDG 12, "Build sustainable infrastructure, promote inclusive and sustainable industrialization and foster innovation", can serve as valuable input for this theme.



# PLENARY SESSION 3 - Community challenges and social innovation





**Description of the session:** In this session we will discuss urban and social challenges that can be addressed by STPs and other areas of innovation. In addition to fostering the development of new technologies or adapting existing ones to address many of these challenges, STPs and AOIs often promote or support the involvement of citizens and civic associations in the solutions of city needs, promoting social innovation. This session will address the role of STPs and other AOIs in creating technologies and fostering communities with integrated policies towards sustainability, for instance contributing to the SDG 11 target of enhancing inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management.

## PLENARY SESSION 4 - Entrepreneurship for growth and sustainability in STPs and AOIs













**Description of the session:** As well as hosting mature and established companies, a major role of most STPs and AOIs is to encourage entrepreneurship, which is conducive to the creation of new knowledge- and technology-based companies. To this end we are familiar with tools such as business incubators, business accelerators or spin-off mechanisms. In this session, we want to deepen our knowledge and understanding of these types of mechanisms, especially linking them to the evergrowing connection and collaboration between STPs and cities.

What new trends or innovations are there in business incubation, acceleration and spin-off? What impact does the stronger interaction between STPs and cities have on them? How can UN SDGs trigger the creation of new companies that will develop technologies and solutions addressing the SDG targets?

The increasing complexity of business creation and development demands an accurate understanding of the different company typologies according to their stage of development: as well as the traditional classification of start-ups, SMEs and large companies, we must be aware of stages such as the scale-ups, pre-incubating projects, etcetera. What specific programmes and services should STPs and AOIs offer for the different stages of company development? What innovative financing mechanisms do these new startups require? Are the traditional startup funding methods still functioning? Are there sufficiently agile mechanisms in place for STPs and AOIs to support their innovative companies?

(Note: Scale-ups can be defined as "Relatively high-growth firms [...] that are the real generators of jobs, taxes and wealth. The importance of scale-ups and the rise of their terminology can be found in the <u>study</u> of the World Economic Forum which found that not all start-ups make it big, but the ones that do greatly impact society by means of new technology, services and increased employment.")



# PARALLEL SESSIONS

#### Parallel session 1 - Open Innovation and City Challenges

**Description of the session:** STPs are increasingly involved in stimulating Open Innovation processes, inviting their companies to participate in numerous events and organising such events themselves. In this session we want to understand how Open Innovation activities can provide solutions to the major challenges of cities today. We would like to deepen our knowledge on current and foreseeable city needs and challenges, as well as public procurement issues. What is the role of STPs and AOIs in these processes and activities?

# Parallel session 2 - Old infrastructure for the new economy

**Description of the session:** Recovering urban assets such as old downtown neighbourhoods, former military bases and infrastructure, old harbours and even out-of-use airports and other such facilities can be a fantastic opportunity for many cities in the world. In fact, there are numerous such examples, many of them within our own IASP network.

How can such facilities be reutilised as STPs, business incubators, business centres, areas of innovation, etcetera? What are the opportunities and challenges in doing so? What should the role of existing STPs be in the redefinition and reutilisation of such facilities? How can these reinforce the connection and alliance between cities and STPs? How can this reutilisation process help to introduce typical STP mechanisms and programmes into older cities' fabric?

#### Parallel session 3 - ICT for sustainable development: the role of STPs and other AOIs







**Description of the session:** In this session we would like to explore the function of ICT and Open or Big data in fostering social dynamics as one of the success factors for innovative, inclusive and sustainable cities. Trends like the Internet of Things and mobile applications designed to improve urban life can be an important platform for creating new businesses and for attracting talent.

More use and reuse of open data can make it possible to involve inhabitants and companies in the development of cities. It creates transparent cities, and opens up business opportunities for small and medium enterprises, for example to develop new services and tools for sustainable and easy living.

Here, for instance, SDGs 9 and 12 can provide further guidance on how to achieve sustainable solutions.

#### Parallel session 4 - The Productive City (Factory City)

**Description of the session:** many countries and cities have rediscovered the need to recover industrial activities. New industrialisation plans are being outlined everywhere and cities will be increasingly involved. Such plans can no longer be in the old industry model. Concepts such as smart industrialisation or industry 4.0 are gaining momentum; the strong emergence of technologies such as 3D printing (additive manufacturing), robotics, virtual reality, new materials and the like will certainly make a difference. FabLabs may well become the industrial campuses of the future. How



will all this affect STPs and cities? How can STPs and other AOIs benefit from these new technologies? What growth opportunities could they create for our STP industry?

#### Parallel session 5 - Global Alliances for Internationalisation



**Description of the session:** SDG number 17 specifically address the need for partnership to successfully reach these goals. Such partnership must happen between the different elements involved in all these processes, such as between the public and private sectors, but also between countries.

Global networks such as our own IASP certainly have a big role to play.

To play such a role, international networks must make sure that they have flexible structures. IASP, for example, is open to the creation of subnetworks to gather organisations that are particularly interested in specific sectors or technologies or, for that matter, in addressing some SDGs in particular. In this session we would like to know about successful international partnerships that we can learn from, as well as hearing suggestions to create or implement new types of collaborations that can enhance the growth of our network and its members, while at the same time contributing to the UN adopted SDGs. How can individual STPs benefit from the existence of this type of partnerships?

We can also review what kind of reforms traditional international structures might need to adjust to new challenges. Can these traditional international organisations and alliances still play a significant role? What are the prospects of new models of international platforms such as the Belt and Road Initiative and the European Horizon 2020 Programme?

# Parallel session 6 - Cities, STPs and other AOIs: attracting talent

**Description of the session:** Attracting talent but also managing and retaining it: this is an absolutely central element in today's knowledge based economy and has a special importance for our STP industry.

What features make cities attractive for human talent and innovative firms? How can STPs contribute to increasing a city's attractiveness? How can they benefit from their cities when it comes to talent attraction and management? In this session we would like to discuss these and other themes such as talent flow and circulation, brain drain, knowledge worker migrations, and what can STPs and AOIs do about them.

## Parallel session 7 - Companies addressing SDGs

**Description of the session:** This session will be a platform for resident companies in STPs and other AOIs to present their work and activities that address the challenges raised by the UN SDGs, at the same time as generating business and creating jobs.

STP and AOI managers can present successful cases on behalf of their resident companies or invite the companies themselves to join us in this session.



# TECHNICAL SPECIFICATIONS

Submission of abstracts (paper proposals) is open to everyone. Authors do not need to be members of IASP, and participation from a variety of organisations and sectors is welcomed.

Proposals to present contributions at this IASP World Conference in 2018 will undergo the review process below. Selections will be made according to the paper content and its ability to address the topics and themes of the sessions outlined above. The conference organisers will aim to include papers from the broadest possible range of expertise and perspectives.

#### Selection of Abstracts

Anyone interested in presenting a paper at the conference must first submit an 800-1200 word abstract to the Steering Committee Secretariat. Submissions should be made by 25<sup>th</sup> October 2017 through the online submission system which will be made available shortly at https://www.iasp.ws/My-Submissions.

All abstracts must be in English.

Abstracts will be evaluated by the Conference Steering Committee and review panel. The authors will be notified by 15<sup>th</sup> December 2017 as to whether or not their abstract has been selected for the next step in the paper selection process (full paper for review).

The authors whose abstracts have been selected will need to submit their complete papers no later than 26<sup>th</sup> March 2018. Only those authors whose abstracts are approved may submit a full paper for review.

#### Selection of Full Papers

Full papers will be evaluated by the Conference Steering Committee and review panel. The panel will select the final papers that best contribute to the theme and desired discussion at the conference based on the clarity and relevance of their argument. Authors will be notified by 5<sup>th</sup> June 2018 as to whether their full paper has been selected for inclusion in the conference programme.

Given the limited number of speaking opportunities at the conference, some of the full papers that are approved by the review panel may be included in the conference proceedings but may not be allotted time for an oral presentation at the conference.

# Important deadlines

Submission of abstracts	25th October 2017
Notification to authors	15th December 2017
Submission of full papers	26th March 2018
Notification to authors	5th June 2018
Conference dates	2nd - 5th September 2018

# **Steering Committee Secretariat**

For more information about the Call for Contributions process for the conference, please contact Ebba Lund or Francesca Antoniazzi at papers@iasp.ws.

#### Conference Secretariat

For more information about the conference and the city of Isfahan, please visit the conference website <a href="www.iasp2018isfahan.com">www.iasp2018isfahan.com</a> or email <a href="international.affairs@istt.ir">international.affairs@istt.ir</a>.

