

## **Minutes of Meeting**

### **Webinar: Science Technology & Innovation - Sub-National Perspective**

**Speaker: Dr. Jatinder K. Arora, Executive Director, Punjab state Council for Science & Technology, Chandigarh**

**Date: 9<sup>th</sup> December, 2020**

A webinar on the theme of “Science Technology & Innovation - Sub-National Perspective” was organized by the center in collaboration with Chandigarh Region Innovation and Knowledge Cluster (CRIKC) on 9<sup>th</sup> December, 2020 from 3:30 pm onwards. Resource person of the program was Dr. Jatinder Kaur Arora (Executive Director, Punjab State Council for Science & Technology, Chandigarh).

Following members hosted the webinar and more than 70 participants attended it:

1. Prof. Rajkumar, Vice Chancellor, Panjab University, Chandigarh
2. Prof. Nirmala, Chongtham, Coordinator
3. Prof. Manmohan Gupta, Co-Coordinator
4. Prof. S K Mehta, Department of Chemistry
5. Dr. Mansimran Khokhar, Sr. Scientist ‘D’
6. Ms. Mamta Bhardwaj, Sr. Scientist ‘C’
7. Dr. R. Ridhi, Sr. Scientist ‘C’
8. Ms. Sukriti, Scientific Officer
9. Dr. Santosh, Scientific Officer
10. Dr. Radhika Trikha, Senior Policy Fellow
11. Dr. Sheeraz Ahmad Alaie, Postdoctoral fellow

The session was started by Dr. Mansimran in which she welcomed all the attendees and presented webinar highlights. Prof. Nirmala welcomed the worthy Vice Chancellor, resource person and all the attendees for sparing their valuable time for making their contributions for this webinar. Prof. Raj Kumar presented the Keynote address and mentioned that the collaboration of the webinar with CRIKC has made it more vibrant and scientifically applicable. He briefly gave an overview of the objectives of DST-CPR and highlighted the mandatory need of

technology & innovation in today's pandemic scenario. The elaboration about the joint steps taken by the center in promoting Science Technology Innovation Policy (STIP), 2020 in the past and in future aspects were also touched upon. He also asked Prof. Manmohan Gupta to inculcate his conceptual ideas into the center and guide the CPR team accordingly.

Dr. Mansimran on behalf of the center thanked VC sir for his best wishes and requested Dr. Gupta to share his valuable ideas. Prof. Gupta congratulated the team for making a nice initiative to promote STIP-2020 through this webinar with CRICK collaboration. He highlighted the objectives of CRIKC with the main objective of science policies amendments and promoting Industrial-Academia partnership and making recommendations for Science Policy planning. For instance, he mentioned about the academic wealth of our Punjab in biomedical sciences like IISER-Mohali, IIT-Ropar, GMCH-Chandigarh and PGIMER-Chandigarh. It should be well utilized and collaborated so as to contribute significantly and successfully in the global market of our country. He appreciated the CPR team in establishing well infrastructure for successfully making recommendations for the policies. He also proposed to take inputs from CRIKC to integrate the works to make better policy recommendations. He also suggested encouraging good quality research by including research scientists in this domain. This is vital to provide good inputs to the stakeholders and industrialists. This is because management people require concrete suggestions and valuable proposals. Prof. Gupta took the responsibility to take charge of document drafting for the same.

Dr. Mansimran introduced the worthy speaker, Dr. Jatinder Kaur Arora (Executive Director of Punjab State Council for Science & Technology, Chandigarh) highlighting the initiatives she had taken up in Punjab. The Govt. of Punjab has also given her the responsibility of championing research and innovation across sectors and domains as Chief Executive Officer of Punjab Research & Innovation Council recently set up by the State Govt. Further, she is also the Member Secretary of Punjab Biodiversity Board.

Dr. Arora briefly discussed the following points during her presentation.

- i. Sub-National Prosperity in Science and Technology (S&T)
- ii. Integration mechanism of Global Mission at National or International level
- iii. Various sustainable development goals.

- iv. Different climate actions and Global warming scenario in 2030 and 10<sup>th</sup> ranking of India among contributing to climate change.
- v. Eight INDCs and impact of technology on it in the last 3 years.
- vi. State Action plan on climate change: She mentioned about Rs. 300 crores investment done by Punjab (funded by private agencies) on climate change and initiatives required at sub national level.
- vii. She gave reference of an Indian Punjabi author (Prof. Sumitra Dutta) of Global Innovation Index-2020 report to highlight the significant and impactful role of Indian brains for motivating the entire world for innovation.
- viii. She demonstrated evidence based pictures on Public R&D investment in which she showed the percentage figures of investment done by the public domain (with 11 % in agriculture and 61 % in Defence).
- ix. In terms of start-ups in policy research centers, India has jumped towards 17<sup>th</sup> position in 2019 from 37<sup>th</sup> position in 2018.
- x. Punjab is not included in top 11 ranks in innovative reports of India. But the highest number of PhD enrollments in India (861) by Chandigarh gives a ray of hope to utilize scientific brains for empowering innovation policies.
- xi. Well established science and technology infrastructure of IISER Mohali in IIT Ropar.
- xii. Dr. Arora also mentioned the first ever TISC center established by WIPO in the council to facilitate research in patent searching and filing.
- xiii. It was also mentioned that PIC of the PSCST has established 15 IP centers in the education institution in Punjab and supports them in every possible way to enhance the IPR ecosystem in the state of Punjab.

#### **Areas to be strengthened in Punjab**

- 1. Creation of knowledge intensive environments.**
- 2. Employing technically qualified people.**
- 3. Enhancing investment of Industry in R&D**
- 4. Emphasis on patents, trademarks, and Geographical indicators (GIs)**

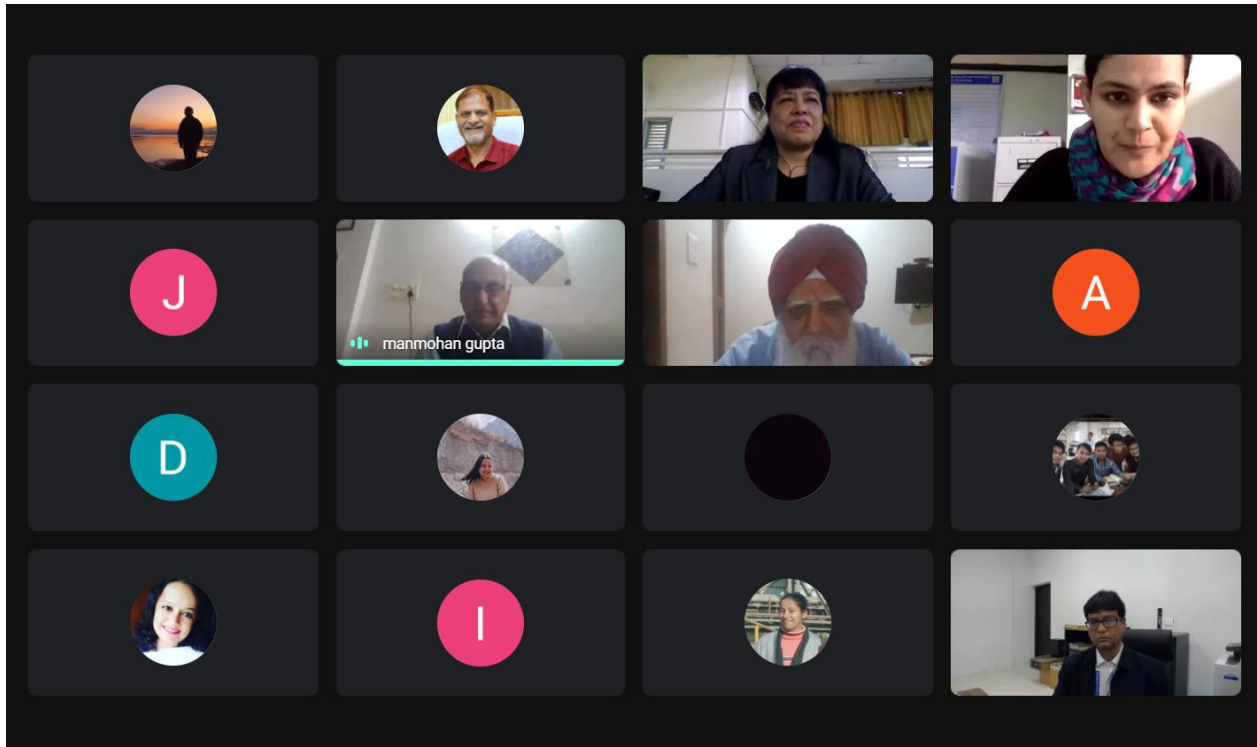
are required.

5. **More efforts on synergizing the ecosystem in Punjab.**
6. **Interface of MITs and opportunities for collaborative arrangement should be given more preference.**


**Initiatives taken till date to remove these bottlenecks are:**

1. **Synergizing institution network of engineering colleges in Punjab and Punjab industries.**
2. **Connecting innovation clusters in Mohali, Ropar, Chandigarh and all areas of Punjab. Example: GNDU, LPU, Sant Longowal linking with Industrial institutes and are doing well in the secondary agriculture sector.**
3. **Establishment of Technology innovation support center, PICs of DST Govt. of India and Vigyan center.**
4. **Promoting grass root innovations which includes various indicators like:**
  - (a) **Number of NGOs working at grass root level.**
  - (b) **Number of centers established in rural areas (in which the Punjab Government has achieved great success by establishing two successfully running centers).**
  - (c) **Setting up seed funds to initiate startups.**
  - (d) **PCT applications, scientific publications, requisite vision to promote STI across states.**

The talk was concluded by the speaker and followed by Questions/Answer sessions by the attendees and Ms. Mamta. After completion of the Question/Answer session, Prof. Nirmala thanked the speaker, Vice Chancellor, Prof. Gupta and attendees and gave concluding remarks. She mentioned that in Panjab University, a lot of good quality research is being conducted but it is not commercialized. Filing a patent becomes a cumbersome job due to lack of interaction between the IPR cells and PICs with the inventor. She gave an example of Germany, where huge centers of skill development are available and which are lacking in India and need to be inculcated. Dr. Radhika delivered the vote of thanks to Dr. J.K. Arora, Prof. Gupta, Vice Chancellor, all participants for sparing their valuable time for making significant contributions for this webinar.



Jatinder Kaur Arora is presenting



## Science Technology & Innovation- Sub National Perspective

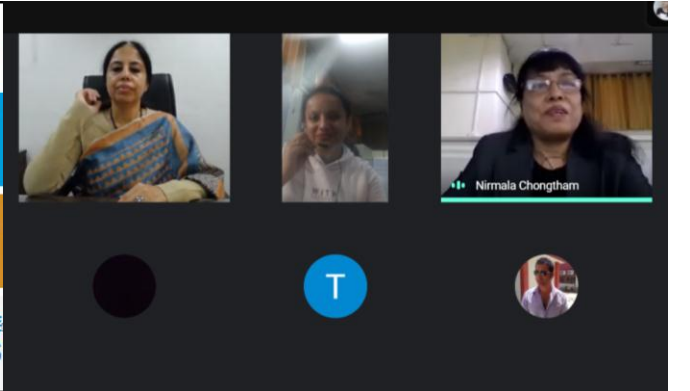
**Dr Jatinder Kaur Arora**  
 Executive Director, Punjab State Council for Science & Technology cum  
 Chief Executive Officer, Punjab Research & Innovation cum  
 Member Secretary, Punjab Research & Innovation Board

**SUSTAINABLE DEVELOPMENT GOALS**



1 NO POVERTY  
 2 ZERO HUNGER  
 3 GOOD HEALTH AND WELL-BEING  
 4 QUALITY EDUCATION  
 5 GENDER EQUALITY  
 6 CLEAN WATER AND SANITATION  
 7 AFFORDABLE AND CLEAN ENERGY  
 8 DECENT WORK AND ECONOMIC GROWTH  
 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE  
 10 REDUCED INEQUALITIES  
 11 SUSTAINABLE CITIES AND COMMUNITIES  
 12 RESPONSIBLE CONSUMPTION AND PRODUCTION  
 13 CLIMATE ACTION  
 14 LIFE BELOW WATER  
 15 LIFE ON LAND  
 16 PEACE, JUSTICE AND STRONG INSTITUTIONS  
 17 PARTNERSHIPS FOR THE GOALS

**SUSTAINABLE DEVELOPMENT GOALS**



# MISSION INNOVATE PUNJAB

Innovation led Economic Growth for new Punjab



- ENHANCE COMPETITIVENESS
- BOOST GROWTH
- CREATE QUALITY EMPLOYMENT
- ACHIEVE SUSTAINABLE DEVELOPMENT GOALS

## PROMOTING GRASS ROOT INNOVATIONS



Set up Rural Innovation & Application Center

Planning to launch a platform to support Rural Innovation based Start ups



## SYNERZING START-UP ECOSYSTEM - PUNJAB



 500+ START-UPS	 15+ INCUBATORS & ACCELERATORS	 START-UP POLICY
 80+ ATAL TINKERING LABS	 25+ MHRDs INNOVATION CELLS	 IPR FACILITATION THROUGH TISC & PIC

- Set up Skill Vigyan Center
- Punjab Government sets up Rs 150 Cr Punjab Innovation Fund for Start ups

