







# Pune Knowledge Cluster (PKC) & Center for Science Education and Communication (CSEC)

# **Present**Hands-on STEM Teacher Training Workshop

Organized By	Pune Knowledge Cluster (PKC) in collaboration with the Center for Science Education and Communication (CSEC), Savitribai Phule Pune University (SPPU)		
Date	Start Date: 22nd September 2022 End Date: 23rd September 2022		
Location	This is a hands-on training workshop and it will be conducted at the Center for Science Education and Communication (Formerly: Science Park), SPPU, Pune		
Course Duration	2 Days		
Course Description	This workshop is majorly focused on hands-on training and conceptual understanding of the difficult topics from the syllabus along with introduction to digital pedagogy.		
For whom	Teachers teaching 6 <sup>th</sup> to 9 <sup>th</sup> grades		
Potential Gains	<ul> <li>Train teachers to use hands-on science toys in regular teaching for making the teaching-learning process effective and at the same time enjoyable.</li> <li>Train teachers to use the latest STEM-based pedagogical techniques/digital pedagogy and use technology to teach effectively. These teachers will then become facilitators who provoke learners to think and scaffold the learning process, also train them to teach climate change and sustainability</li> <li>Develop project-based learning to impart skills relevant to Indian contexts.</li> <li>To enhance the use of science activities in all areas of STEM such as physical and chemical sciences, environmental science, mathematics and computer science, and life sciences.</li> <li>Introduction to Digital Pedagogy</li> </ul>		

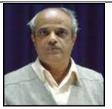
Number of participants	40
Trainers	<ul> <li>Prof. D. G. Kanhere</li> <li>Prof R.L Deopurkar</li> <li>Dr. Harshada Babrekar</li> <li>Ms. Jasmine Duggal</li> <li>Mrs. Aboli Avhad</li> <li>Mr. Ashish Thorave</li> </ul>
Registration Fees	<ul> <li>Ms. Pragati Kadam</li> <li>The registration is free and open to all. However, it is on first-cum-first serve basis.</li> </ul>

Schedule for the workshop "Teacher Training Workshop"			
Day & Date	Торіс	Speaker	
Thursday, 22nd September		Prof. Ajith Kembhavi, Principal Investigator, PKC &	
	Inaugural Remarks and Pre-Workshop Test	Prof. Dilip Kanhere, Founder Co- ordinator, CSEC	
	Session 1: Life Sciences: Systems (Batch 1)	Mr.Ashish & Ms.Aboli	
	Physics: Heat (Batch 2)	Dr.Harshada Babrekar	
	Session 2: IoT (Internet of Things) (Batch 1)	Prof. Kanhere	
2022	Visit to CSEC Museum (Batch 2)	CSEC Team	
	Session 3: Visit to CSEC Museum (Batch 1)	CSEC Team	
	IoT (Internet of Things) (Batch 2)	Prof. Kanhere	
	Session 4: Physics: Sound (Batch 1)	Ms. Jasmine Duggal	
	Life Sciences: Genetics (Batch 2)	Ms.Aboli & Ms.Pragati	
	Session 5: Lecture and Discussion	Prof. R.L. Deopurkar	
Friday, 23rd September 2022	Session 1: Physics: Heat (Batch 1)	Dr.Harshada Babrekar	
	Life Sciences: Systems (Batch 2)	Mr.Ashish & Ms.Aboli	
	Session 2: Life Sciences: Genetics (Batch 1)	Ms.Aboli & Ms.Pragati	
	Physics: Sound (Batch 2)	Ms. Jasmine Duggal	
	Session 3: Introduction to Teach with Tech Program & Digital Pedagogy	PKC Team	
	Session 4: Post-Workshop Test	PKC & CSEC Team	
	Session 4: Final Discussion, Closing Remarks	PKC & CSEC Team	
	Distribution of Participation Certificates		

## **About the trainers**



**Professor D. G. Kanhere**: Physicist, researcher, Distinguished Professor and Co-ordinator of Centre for Science Education and Communication (Formerly known as Science Park), Savitribai Phule Pune University. He is Ph.D. in Physics from IIT Kanpur. He has received Meghnad Saha Award for Theoretical Sciences, UGC, Fellow of the Indian Academy of Sciences, Bangalore, he was Senior Associate, Abdus Salam International Centre for Theoretical Physics, Italy (1998–2005), Associate Member, Abdus Salam International Centre for Theoretical Physics, Italy (1990–97) and also received Career Award by UGC. He has even set up various departments at Pune University.



**Professor R. L. Deopurkar**: Microbiologist, researcher, former head and now Emeritus professor at Department of Microbiology. He is popular teacher in the field of science. He has keen interest in science popularisation.



**Dr. Harshada Babrekar**: Principal Science Communicator. Ph.D. in Physics. She has more than 8 years of research and14 years of teaching experience at UG and PG level. She is recipient of best research paper and presentation awards, fellowship from DRDO, CSIR and scholarship from Lila Poonawalla Foundation. Associated with Lila Poonawalla Foundation for 22 years. Member of Indian Woman Scientist Association and Indian Physics Association. Written various articles for children for explaining the concepts in science in easy way and has also won the prizes. She has even worked as editor for various magazines and newsletters.



**Ms**. **Jasmine Duggal**: M.Sc. in Physics from Department of Physics, Pune University. She has more than 8 years of work experience in the field of science outreach programs and also in science demonstration videos, science toy making.



**Mr**. **Ashish Thorve**: Zoologist, M.Sc. He has experience in the field of molecular biology. He has expertise in the development of new models and activities.



**Ms.Aboli Avhad**: M.Sc. Botany. She has more than 14 years of experience in teaching and research field. She has conducted many educational programs, workshops and seminars in various schools. Also worked on a project of biodiversity with Pune Municipal Corporation. She has also worked as Taxonomist and was working as Senior Project Fellow at CSIR-URDIP



**Ms. Pragati Kadam**: She has completed M.Sc. Microbiology from Department of Microbiology, Savitribai Phule Pune University. She has worked with NGO called SPARC's initiative i.e. "Shiku Anande," which was implemented in 14 districts across Maharashtra. The project was launched to compensate for the educational loss of students due to Covid-19 outbreak.

### About the organizers



The Pune Knowledge Cluster (PKC) has been established by the Office of the Principal Scientific Adviser to the Government of India. The aim is to bring together academia, R&D institutions and the industry of Pune and its surrounding areas, to address the challenging problems of the region through innovative means, using scientific knowledge and engaging highly skilled human resources. Furthermore, PKC aims to foster capacity building and promote skills development and entrepreneurship among the students and professionals of the city. All relevant organizations and experts will be partners and consulted to identify sustainable solutions to the problems of the city and improve its liveability and prosperity.

While the PKC is administered by the Inter-University Centre for Astronomy and Astrophysics (IUCAA), it is a project of and for the whole city. In the initial phase, PKC would focus on air, water, health, and sustainable mobility.

For more information, visit: : <a href="https://www.pkc.org.in/">https://www.pkc.org.in/</a>

### **Partner organization**



**Center for Science and Communication** (formerly known as Science Park) is an outreach activity established by Savitribai Phule Pune University (SPPU) in mid-September 2014.

At present, CSEC is located at the Department of Environmental Science. The park houses more than 500 kits, interactive exhibits, demonstration experiments, and innovative do-it-yourself laboratories in all branches of science. The park is conceived so that young minds can explore ideas, put them in action and learn principles of science by experimentation.

For more information, visit: <a href="http://sciencepark.unipune.ac.in/">http://sciencepark.unipune.ac.in/</a>