## Jigyasa-2019 Activities

S.No.	Programme Name	No. of Days	No. of Students	No. of Teachers	Unique Features (if any)
1.	Visit of Class 10-12th Students of GMSSS Sec- 8B, CHD and GMHS Sec-31, CSIR-CSIO (13 Jan, 2019)	01	80	04	Study Trip of X and XII Class Students at CSIR-CSIO
2.	Visit of GMHS Sec-49D, CHD, Students at CSIR-CSIO (25 Jan, 2019)	01	27	03	Educational Trip in CSIR-CSIO for the Inculcation of Scientific Temperament
3.	Hands-on Session on Physics in 6 KV's (03-05 April, 2019)	03	490	16	<ul> <li>Dr. N.S. Aulakh- Noise pollution and E-M Radiation Pollution</li> <li>Dr. Sandeep Singhai- Intellectual Property Rights</li> <li>Mr. Deepak Sharma- IT and Innovation</li> <li>Dr. Pooja D. Sharma- Learning Science by Doing Science</li> <li>Dr. Manoj Kumar Bhuyan- Light in Action</li> </ul>
4.	Visit to JNV, Sec- 25 CHD (18 April, 2019)	01	60	20	Dr. Pooja D. Sharma delivered a talk about Experimentation in Science and Motivated Students to choose Science as a Career Option.

5.	Hands-on Session on Physics in 4 KV's, Jalandhar (23 April, 2019)	01	110	08	Dr. Rouble - Fundamentals of Light and Its Applications in our Daily Life Dr. Shashi Poddar- Significance of Motors and Robots in Engineering Future Dr. Baljit Singh - Connecting Science to Society-Success Story of CSIR-CSIO Mr. Sambhav Kumar- Basic Understanding of Research- Doing is Learning
6.	Visit to GMSS, Sec-33D, CHD (24 April, 2019)	01	60	02	Mr. Surjit Kaman Delivered a Talk on Laser and Its Application in Gas Sensing
7.	Science Summer Camp "Science for Society" in CSIR-CSIO, CHD (29 April- 02 May, 2019)	04	52	05	52 Students from KV's (Outside Chandigarh region) worked in CSIR-CSIO labs for Science Summer Camp with 14 Scientist Mentors. A group of Four Students was Allocated to each Scientist where they completed their Mini Project in 4 days and learned under Science for Society Theme
8.	Workshop on Physics and Chemistry Experimentation in CSIR-CSIO, CHD (03 May, 2019)	01	70	22	Prof. Manmohan Singh Marwah Delivered a Hands-on Lecture in Physics Experimentation and A General Science Quiz is Organized by Dr. N.S. Aulakh
9.	Guest Lecture on JIGYASA CSIR-CSIO Initiative for School Students and Faculty	01	-	300	A Guest Lecture was Delivered at the Indian Education Award event held at Delhi, wherein more than 300 teachers from different Private and Government Schools from

	(04 May, 2019)				different part of the country participated. They were made aware of the Initiative being taken by CSIR-CSIO under JIGYASA program for Science Promotion in Schools.
10.	National Technology Day (11 May, 2019)	01	400	15	28 Students Participated in the Poster Making Competition (Human and Technology) and a Knowledgeable Guest Lecture by Prof. Ajay K. Sood
11.	Math/Science Exhibition GMHS, Sec-49D, CHD (14 May, 2019)	01	200	10	40 students of class 7-10 Demonstrated Mini Project and Illustration on basic concepts in Maths and Physics. Dr. Neerja Mittal Delivered a Lecture on "Maths Connectivity with Society"
12.	Visit of Students of KV-Chandimandir (25 June, 2019)	01	56	03	56 Students of KV-Chandimandir visited CSIR-CSIO & ISTC Labs, Chandigarh
13.	Workshop on Physics & Chemistry for Teachers (02 July & 04 July, 2019)	02	-	90	90 Teachers of KV Punjab region attended the Workshop in which Scientists Practically Demonstrated the Theoretical Concepts of Physics & Chemistry in Labs so that they can use such demonstrations to students
14.	Visit of KV Students and Poster Making Competition (19 July, 2019)	01	110	08	110 Students of KV Ambala and KV Panchkula visited CSIR-CSIO Labs and also take part in Poster-Making Competition on "Jan Shakti for Jal Shakti" theme.

15.	Popular Science Lecture at GMSSS, Sec-46, CHD (19 July, 2019)	01	30	02	A Science Lecture is delivered on the topics of Polymerization and Conduction in Polymers by PhD Scholars Ms. Palwinder Kaur and Ms. Noopur Saxena
16.	State Level Teacher Orientation Workshop for 27th National Children's Science Congress (NCSC)-2019 (26 July, 2019)	01	00	180	CSIR-CSIO organizes Teachers orientation program collaboration with the Environment Society of India, Chandigarh. More than 180 teachers from private and government schools of Chandigarh participated in this workshop. Dr. Lalit Sharma explained about the NCSC Program and Its Importance in Popularizing science
17.	Hands-on Session at KV, Sec-47, CHD (27 July, 2019)	01	35	02	Under CSIR-CSIO, JIGYASA Program, a New Campaign 100 Lecture Series started for Schools of Chandigarh. The Second Lecture in this series is delivered by IEEE student branch PhD Scholars Ms. Naini Garg, Ms. Prachi Arora and Mr. Vemuri SRS Praveen of CSIR-CSIO. 35 students of 11th class attended this lecture. The topic of this lecture was Demonstration of some Optics Phenomena using OSA Optics Kits. Students learned about various things on Optics and used the OSA Optics Kit to observe Optical Phenomena. Students were also motivated to take science as a career and also they were told about the opportunities in Science.
18.	Motivational and Science Communication Lecture in KV-4, Ambala (27 July, 2019)				Mr. Sambhav Kumar visited KV-4 Ambala and gave a lecture on the Importance of Science and How it is a best way to serve our society by giving examples of how CSIO's

					innovation changing the face of society.
19.	Hands-on Session in Jalandhar, Cluster of Kendriya Vidyalaya (01-02 Aug, 2019)	02	80	10	Under CSIR-CSIO, JIGYASA science promotion initiative, CSIR-CSIO Scientist visited schools outside Chandigarh region in Adampur, Suranussi and Sarai Khas. The main objective of the JIGYASA program is to Inculcate Scientific temperament in young minds and Motivate them to choose Science as a possible Career option. The lecture cum Hands on Sessions were taken up in 4 Kendriya Vidyalayas in Jalandhar cluster of Kendriya Vidyalaya covering KV 1 and KV 2 Adampur, KV Suranassi, and KV Saraikhas. The team of Scientist and Project staff visited these schools and gave lectures on the topics of IoT Based Sensing Scheme for Environment Monitoring and IoT Based Home Automation. This science Promotion Drive Under CSIR-CSIO, JIGYASA program covered approximately 180 students and 10 teachers from different KVS in Jalandhar city.
20.	Hands-on Session at AKS, Chunni Kala (02 Aug, 2019)	01	00	30	A Hands-on Session is delivered at AKS, Chunni Kala on the topic of "Electrochemistry" and "Carbon" by PhD scholar Mr. Rishabh Jain and Ms. Anupma Thakur.
21.	Student Visit to CSIR-CSIO and Popular Science Lecture (09 Aug, 2019)	01	100	10	100 Students of KV Pinjore and Saraswati Sr. Sec. School Jind, Haryana visited CSIR-CSIO. Students visited in Labs discipline of Biomedical, Optics, Chemical Science, Photonics and Sensors. CSIO scientist Mr. Suman Tiwary gave an interesting Lecture on the

					Topic of Computational Science for Societal Application. Students get to know about Various Sensors and their uses.
22.	Hands-on Session at GSSS, Sec-45A, CHD (09 Aug, 2019)	01	35	05	Under CSIR-CSIO, JIGYASA Program, a New Campaign 100 Lecture Series started for Schools of Chandigarh. The fourth lecture of the series is delivered by PhD scholar Ms. Pooja Singh and Ms. Prachi Rajput visited GSSS-45A and delivered a Hands-on Lecture in which they Demonstrated few Chemistry Experiments. It was a Fun Session and Students were very happy to know the Science Behind the Experiments
23.	Hands-on Session at GMHS, Sec-49D, CHD (13 Aug, 2019)	01	55	06	Under CSIR-CSIO, JIGYASA Program, a New Campaign 100 Lecture Series started for Schools of Chandigarh. The fifth lecture of the series is delivered in GMSH-49 D. The lecture was on the topic of "The Beauty and Importance of Science". Mr. Sahib and Mr. Sachin Demonstrated various Chemistry Experiments and Explained the Chemistry Behind the Experiments. The students were very Fascinated Seeing all the Magic of Chemistry Live and also participated in Questioning Session.
24.	Hands-on Session in Patiala, Cluster of Kendriya Vidyalaya (19-20 Aug, 2019)	02	250	15	Under CSIR-JIGYASA science promotion initiative, CSIR-CSIO Scientist visited schools outside Chandigarh region in Baddowal and Halwara.The team of Scientist and Project staff visited schools and gave lectures on the topic of Basic

					Electromagnetism and Soft Robotics.
25.	Student Visit to CSIR-CSIO and Popular Science Lecture (20 Aug, 2019)	01	180	15	Under CSIR-JIGYASA Program, 180 students from KV No.2 Ambala, KV No.2 Chandimandir and GGSSS Narwana visited CSIR-CSIO. An exclusive hands on Session on Chemistry was taken by Mr. Sachin and Mr. Sahib Singh. They performed several experiments related to Polymers, Solid ice, Piranha Chemical, etc. Students were also taken to various Labs and Interacted with the concerned Scientists of Biomedical, Optics, Chemical Science, Photonics, and Sensors Areas.
26.	Hands-on Session at GMSSS, Sec-32, CHD (22 Aug, 2019)	01	55	04	
27.	Hands-on Session in Patiala, Cluster of Kendriya Vidyalaya (25 Aug, 2019)	01	170	06	Under CSIR-JIGYASA science promotion initiative, CSIR-CSIO scientist visited schools outside Chandigarh region in KV 1 and KV 2 Patiala. The team of Scientist and Project staff visited schools and gave lectures on the topics of Basic Electromagnetism and Soft Robotics.
28.	Hands-on Session at GHS, Hallomajra, CHD (27 Aug, 2019)	01	150	06	IEEE student branch PhD Scholars Ms. Anupma Thakur of CSIR-CSIO at GHS Hallomajra. 150 students of class 10 and 6 teachers attended this lecture. The topic of this lecture was Carbon Footprints for Sustainability.

					The students learned about Hydrocarbons, Soap and Detergent, Properties of Saturated and Unsaturated Hydrocarbons and Applications of Graphene and Carbon Nanotubes.
29.	Hands-on Session in Hussainpur, Cluster of Kendriya Vidyalaya (03-04 Sept, 2019)	02	330	12	The lecture cum hands on Sessions were taken up in 4 Kendriya Vidyalayas in Hussainpur, Cluster of Kendriya Vidyalaya covering KV 1 and KV 3 Amritsar, KV Bhikhiwind and KV Amarkot. The team of Scientist and Project staff visited these schools and gave lectures on the topics of Nanotechnology, Raman Effect and Sensor Development and Its Applications.
30.	Hands-on and Lecture Session at KV, Sec-47, CHD (21 Sept, 2019)	01	30	01	<ul> <li>Mr. Manish Kalra and Ms. Prachi Arora delivered a lecture on "Basic of Python (Including hands-on)" at KV 47, CHD.</li> <li>30 students of class 12th was presented during the lecture.</li> </ul>
31.	Hands-on Session in Bathinda, Cluster of Kendriya Vidyalaya (25-26 Sept, 2019	02	280	20	Mr. Naveen Sharma, Scientist (CSIR-CSIO), Mr. Md. Asadullah, Project Asstt and Mr. Sambhav Kumar, Project Asstt visited school outside Chandigarh region in Bathinda cluster. Approximately 280 students and 20 teachers from KV SLIET Longowal, KV Ubhawal and KV Barnala attended a lecture on the topic of "Technology~crime" and "IOT based Home Automation"
32.	Hands-on Session in Hussainpur, Cluster of Kendriya Vidyalaya	01	220	11	Dr. Avishek Saha, Scientist (CSIR-CSIO) and Mr. Saurav Pandey, Scientist (CSIR-CSIO) visited school outside Chandigarh

	(26 Sept, 2019)				region in Hussainpur cluster. Approximately 220 students and 11 teachers from KV Kapurthala, KV 1 Hussainpur and KV 2 Hussainpur attended a lecture on the topic of "Spectroscopy and Nanotechnology" and "Sensor Devices and Development"
33.	CSIR- Foundation Day (26th Sep, 2019)	01	700	30	Open Day for Students and came from various schools, colleges and universities. Approximately 700 Students and 30 teachers from different schools and colleges visited CSIR-CSIO all labs and technologies were on display.
34.	Hands-on and Lecture Session at Stepping Stones Sr. Sec. School, Sec-37D,CHD (04 Oct, 2019)	01	130	08	Mr. DS Parihar delivered a Lecture on "Semiconductor and Diode(Including hands-on)" at Stepping Stones Sr. Sec. School, Sec-37D, Chandigarh. 130 students of class 9th-10th was presented during the lecture.
35.	Hands-on and Lecture Session at St. Anne's convent School, Sec-32C, CHD (04 Oct, 2019)	01	90	02	Mr. Javed Ahmad and Mr. DS Parihar delivered a lecture on "Semiconductor and Diode (Including hands-on)" at St. Anne's convent School, Sec-32C, Chandigarh. 90 students of class 11th-12th was presented during the lecture.
36.	Hands-on and Lecture Session at Government High School A Smart School, Sec-50B, CHD	01	50	02	Mr. VSRS Parveen, Ms. Naini Garg and Ms. Prachi Arora delivered a lecture on "Design for 360-Degree 3D Light-field Camera and Display(Including hands-on)" at Government High School A Smart

	(19 Oct, 2019)				School, Sec - 50B, Chandigarh. 50 students of 11th-12th was presented during the lecture.
37.	Hands-on and Lecture session at Government Model Sr. Sec. School (01 Nov, 2019)	01	70	8	Mr. Gourav Sharma delivered a lecture on "Chemical bonding(Including hands-on)" at Government Model Sr. Sec. School, Sec - 22A, Chandigarh. 70 students of 11th-12th was presented during the lecture.
38.	One day Workshop on Learning Science with Fun at CSIR-CSIO (04 Nov, 2019)	01	300	20	Mr. Sachin Sharma and Ms. Sakshi Khurana represented number of science Experiments Red Cabbage measuring pH, Sodium Polyacrylate, Reverse Illusion of Arrows, Acetone and Thermacol, Food adulteration, Concept of Air Bag, Bleaching action on coke using bleaching liquid etc. These experiments presented in front of 300 students and 20 teachers who had come from different region and state.
39.	"Vigyan Prastuti Final Competition" at CSIR-CSIO (04 Nov, 2019	01	30	04	30 students participated in the Vigyan Prastuti competition and represented their presentation in front of the judges Dr. H. K. Sardana, Dr. Pooja D. Sharma and Ms. Rouble.