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## ANNUAL REPORT OF THE PROGRAMMES UNDERTAKEN BY THE TEACHERS - 2018-2019

During the session 2018-19, four teachers, Dr. Kulbhushan Rana, Dr. Harkanwal Singh, Ms. Monika Singla and Ms. Rachna attended workshop on 'DBT star College Scheme Grant Proposal' at Doaba College, Jalandhar. This workshop aimed at how to apply for the Star College scheme of DBT, Ministry of science and technology, GOI. The terms and conditions for DBT support were discussed that would strengthen and upgrade skills of faculty and the students. All the four teachers were provided with financial support to attend this workshop. The college organised one day lecture for teaching and non-teaching staff.

Four non-teaching employees a six day workshop on "MS Excel Software" was conducted in which the employees were provided the training about the intense formulas to be used in speeding up the work on MS Excel. One more six day training programme was conducted on "Modern Accounting Practices" to enhance the efficiency of the non-teaching faculty by using double entry system and GAAP. Besides, one week short-term training programme on "Waste Management Practices for Environmental Sustainability" was attended by Dr Vandana Kukreja. In this training program, demonstration of waste management, vermi composing and its practical demonstration was given by the experts.

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## **ANNUAL REPORT OF THE PROGRAMMES UNDERTAKEN BY THE TEACHERS – 2019-20**

During the session 2019-20, Dr Rajesh Gupta along with Prof. Gaurav Singla attended national seminar on “Revised Accreditation Framework” in which the participants were provided the information regarding the revised framework of NAAC. Dr Rajesh Gupta and Dr Manish Kumar attended MHRD MESC sponsored workshop named “Manthan”.

“Capacity Building workshop for NAAC Accreditation of Colleges” was attended by Dr Rajesh Gupta as well as by Prof. Gaurav Singla. The purpose of the workshop was to enlighten the teachers with various parameters regarding NAAC accreditation and policy. Prof. Savita Sood and Dr Kulbhushan Rana attended the workshop on “Chemical Lab Safety-Concerns and Practises”. In this workshop, the participants got the knowledge of the safety measures in using various hazardous chemicals when students make use of them in labs.

All these teachers were provided financial support by the institution to attend the seminar and the workshop. To promote quality in education and broaden the horizons for learning, the institute organised “Faculty Lecture Series on Contemporary Issues”.

In the first lecture of the series, Dr Rama Sharma presented a motivational talk on “The Teacher as a Professional”. In this talk 43 members from the teaching staff were present and the focus of the talk was how to use new techniques of teaching that will enhance their professional skills.

A one-day workshop on “UGC Guidelines on Career Advancement Scheme” was organised in the college. Dr Rajesh Gupta deliberated in detail the guidelines for promotion of teachers in the colleges - CAS- 2018 as per UGC regulations- 2018

A two-day workshop was organised on the topic “Formulation of Program, Objectives, Program Specific Objectives and Course Objectives” Dr Tapan Kumar Sahu, the resource person on the first day began the session with a wider discussion on current Teaching-Learning outcomes. The participants were also guided and helped to frame the PSOs and POs of the various college courses and programmes. On the second day, Prof. Gaurav Singla explained how teachers can plan their lectures keeping COs in mind.

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## **ANNUAL REPORT OF THE PROGRAMMES UNDERTAKEN BY THE TEACHERS – 2020-21**

Three faculty members, Ms Amandeep Kaur, Ms Nirupma and Mr Amardeep Singh attended FDP on “Moodle learning Management System” from August 1, 2020 to August 5, 2020 in which the participants had an effective learning on LMS.

Dr Rajesh Gupta, Dr Vandana Kukreja and Mr. Gaurav Singla attended a workshop on “Design, Development, Delivery of e-Content and Online Assessment” in which training was provided to participants regarding how to design, develop and deliver e-content for efficient teaching.

Computer Department of the college organised a webinar on “MS- Excel and Word” in which the resource person described the various functions and features of MS-Excel and discussed various shortcuts and formulas for sorting and filtering data. Total 331 students and 41 faculty members attended the event.

IQAC in association with the Department of Computer Science organised a hands-on-training workshop on “Campus Management Software” from 17th of March 2021 to 29th of March 2021. 25 teaching and 04 non-teaching staff members attended the workshop. The participants were given the training about different course structures and subjects in the Master Disc of the software. They also learnt about generating student based and university-based reports from the data available in different courses. The second session of this workshop was held from 30<sup>th</sup> March 2021 to 1st of April 2021 in which 18 teaching and 09 non-teaching staff members were provided the training regarding uploading and downloading the data available on the software in different formats in the scenario of Covid-19 Pandemic. An online workshop on “Assessment of Online Examination” was conducted by the Department of Computer Applications on

21<sup>st</sup> of May 2021, in which the faculty members were provided the hands-on-training to use Free Conference Call App for taking online classes and the another app “Microsoft Edge” for evaluating the answer sheets. Around 43 faculty members attended this online program.

Dr Tarspal Kaur attended “44th Faculty Induction Program” from 10th of August 2020 to 8th of September 2020 conducted by HRDC Punjabi University Patiala. Various prospects of teaching and learning like learning thinking skills, national and international funding agencies in the field of research, digital technology, research methodology, water and waste management etc. were discussed in this program.

Dr Baltej Singh, Dr Kulbhusan Rana and Mr Satpal Singh, Miss Priyanka Bhagla and Mr. Rachpaul Lamba attended FDP on “Online Teaching, Learning Practices, Challenges and Solutions” at SGTB Khalsa College, Sri Anandpur Sahib, Punjab from July 7, 2020 to July 12, 2020. The focus of this FDP was on imparting training to the teachers to handle various challenges faced by them during Covid-19 Pandemic. Many new skills about MOOCs and online teaching and pedagogical aspects of online teaching learning practises were explained to the participants.

Mr Satpal Singh from Department of English attended FDP on “Language and literature- A Pragmatism” from 20th of July 2020 to 26th of July 2020. He also attended FDP on “Literacy Criticism” from 30th of July 2020 to 5th of August 2020, workshop on “Intricacies of NAAC Assessment for Better Scoring” from 27th of July 2020 to 31st of July 2020, workshop on “Language Translation Skills” from 8<sup>th</sup> of August to 12th of August 2020, workshop on “Gender-based Violence and Prevention of Sexual Harassment at Workplace” from 13th of

August 2020 to 14th of August 2020, workshop on “Changing Faces of Human Rights” from 16th of October 2022 to 20th of October 2020

Ms Inderpreet Kaur participated in a workshop on “Language Translation Skills” from 8<sup>th</sup> august to 12<sup>th</sup> august 2020 and FIP from 2nd of March 2021 to 29th of March 2021.

Ms. Rajni Gupta attended workshop on “Introduction to IPR and Patent Protection” on 5th of April 2020. She along with Miss Savita Sood attended workshop on “MS-Word and PowerPoint, Exclusive for Beginners” from 3rd of August to 14th of August 2020 and workshop on “Frontiers in Material Sciences” from 9<sup>th</sup> of October to 10th of October 2020.

Dr Vandana Kukreja participated in FDP on “Fostering Global Competencies among the Faculty during COVID-19” from 6<sup>th</sup> of July 2020 to 10th of July 2020 in which various platforms for online teaching like Zoom, FCC, Google Meet etc. were discussed

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## **ANNUAL REPORT OF THE PROGRAMMES UNDERTAKEN BY THE TEACHERS – 2021-22**

Dr. Manish Kumar from Department of Botany attended a workshop on “Advancing Green Educational Campuses- A Regional Experience Sharing” from 9.12.2021 to 11.12.2022 in which the thrust was laid on how to provide green cover to the campus by planting saplings and using three R’s formula.

Dr Rama Sharma, Dr Rajesh Gupta and Mr Gaurav Singla attended “Capacity Building Workshop Regarding NAAC” on 23 February 2022.

Dr Kulbhushan Rana along with Ms Navneet Kaur attended “Science Week Festival- Sarvatre Gyan Pujiyate” from 22.02.2022 to 28.02.2022 based on enriching participants’ knowledge through various competitions.

Dr Rajesh Gupta participated in Capacity Building Programme on “NAAC Accreditation Awareness Programme for College” on 02.03.2022.

Dr Sanjay Kumar Singh from Department of Physics participated in FDP on “Creating and Publishing e-Content in Technical Teaching-Learning Process”. In this FDP, the focus was on enriching the knowledge of the participants in digging internet information for academic resources. Tools for content preparation and course delivery were discussed. He also participated in Short Term Course (STC) on “Optics: Diffraction and Interference of Light” at IIT

Kanpur from 25.02.2022 to 2.3.2022. The resource person Dr. H.C.Verma explained various Optical Phenomenon by using Experimental Exposure.

Dr. Kulbhushan Rana and Miss Rajni Gupta from Department of chemistry attended two-week online FDP on “Chemistry-The Catalyst for Change” from 14.7.2021 to 28.7.2021. This program aimed at to provide exposure to cutting-edge Chemical Research and Technology and create a culture of learning and self-improvement among faculty members. Ms Rajni Gupta also attended one week of FDP on “Research Methodology”.

Ms Nirmal Gupta, Miss Neeru Goyal, Dr. Khulbhusan Rana, Dr.Renu Bala, Dr. Manish Kumar and Dr Amandeep Kaur attended seven days FDP on “Together for Education” from 28.7.2021 to 03.08.2021. In this program, SPSS usage and its elements in education research was discussed. Some of the topics like psychology, learning of differently abled child, Indian Education System, were thoroughly discussed. This FDP resulted in overall enhancement in quality of the faculty.

Dr Manoj Kumar, Dr Manjeet Singh, Dr Manish Kumar and Ms. Sonia Goyal attended 4-week Induction Orientation Programme. This Orientation Programme was supporting tool for Career Advancement of faculty.

Dr Renu Bala from Department of Zoology attended seven days FDP on “Understanding Geodiversity and Geoheritage” from 22.2.2022 to 28.2.2022. During different sessions, the learned personalities explained in detail Geodiversity, Geoheritage and Geoparks.

Dr. Khulbhushan Rana attended National Symposium on “Scope and Prospectus of Chemical Science” from 26.7.2021 to 31.7.2021. The information related to innovations in the field of chemical science and their score in daily life was provided to the participants.



Dr. Vandana Kukreja along with Ms. Savita Sood and Ms. Rajni Gupta attended online STC on “ATRMM-21” from 26.7.2021 to 31.7.2021 in which they were enlightened on latest analytical techniques highlighting spectroscopic techniques and their use in Material Sciences.

A workshop on “Admission Software” was organised in the institute by the Department of B.Voc(Software Development)for teaching and non-teaching staff. 56 teaching staff members and 6 non-teaching staff members got benefited by this workshop. The aim of this workshop was to get the staff members acquainted with various salient features and working of newly developed Admission Software.

The Department of Chemistry Organised a workshop on “Chemistry Software” on 2-6-2022 in which 19 teaching staff members were present. The members were provided the training regarding CHEMSKETCH software and its utility while writing chemical equations and preparing PPTs.

The Department of Mathematics organised a seven-day workshop on “MATLAB Software” from 5-02-2022 to 12-02-2022. The participants were made aware of new computational techniques for making plots and graphs.

  
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## **ANNUAL REPORT OF THE PROGRAMMES UNDERTAKEN BY THE TEACHERS – 2022-23**

Dr Baltej Singh, Dr Manoj Kumar Gupta, Dr Sanjay Kumar Singh, Dr Kulbhushan Ranna, Ms Rajni Gupta, Ms Savita, Sood, Dr Renu Bala, Dr KamalPreet Kaur, Dr Manish Dr Amardeep Kaur Dr Rajesh Gupta, Ms Upasana, Ms Dimple Rani attended “26th Punjab Science Congress-National Conference on Environment, Food, Security and Health with reference to Climate Change” from 7-2-23 to 9-2-23 in which the faculty members presented their papers through posters also. During the different sessions, eminent resource persons highlighted the applicability of bio compatible alloys in the field of radiation dosimetry, medical imaging, medical technology etc. The participants got the opportunity to interact with eminent academicians of different disciplines and know about their latest findings.

Dr Manoj Kumar Gupta attended two-day National Conference on “Radiation Physics” from 15-12-2022 to 16-12-2022, organised by Bangalore University, Bengaluru. He presented his research paper entitled “A Study of Fundamental Aspects of Magnified and Non-magnetised Ferromagnetic Materials”. In this conference, the uses of radiation for future requirement of power generation within economical cost were briefed.

Dr Sanjay Kumar Singh attended a five days event entitled “Physics Teachers Training Program (PTTP)- Quantum Mechanics” at International Centre for Theoretical Science (ICTS), Tata Institute of fundamental research, Bengaluru Karnataka from 9-1-2023 to 13-1-2023. Dr Kulbhushan Rana participated in nine days (10-19<sup>th</sup>Jan.,2023) GIAN course on “Miniaturised Total Analysis Systems” organised by Punjabi University Patiala. The focus of this course was to expose the participants to the fundamentals of microfluidics, microfabrication

and separation science. The resource persons also provide an understanding of the impact of the manufacturing approach on design, integration and cost of prototyping and upscaling.

Dr Sanjay Kumar Singh participated in seven days training programme on the topic "Advances in the tradition of Materials from 12th to 18th September 2022 under DST-STUTI M.S. University, Benoda, Gujarat. He participated in "Advances in Experimental and Simulation Techniques for Materials Science" under STUTI Program at DST IIIT Allahabad, Prayagraj, UP from 21<sup>st</sup> to 27<sup>th</sup> June 2023 also. He attended "Mini Physics Training and Talent Search Programme PTTS 2023" as a resource person at H.P.T.Arts and R.V.K Science College Nashik, Maharashtra from 17th to 21st March 2023.

Two faculty members, Dr Baltej Singh and Dr Manoj Kumar Gupta attended sixth national conference on "Advanced Materials and Radiation Physics" organised by Department of physics SLIET, Punjab from 18th to 19th of May 2023. They present their research papers.

Dr Baltej Singh and Dr Manoj Kumar Gupta from the Department of physics attended one week online FDP on "Principles of Radiation Detection and Measurements and Experimental Techniques" on 03-09, April 2023. Lectures on different topics like "Introduction to Radioactivity and Decay" "Nuclear Application using Nanotechnology", "Interaction of radiation with matter", "Solid state Nuclear Detectors" were delivered by the experienced and eminent academicians personalities.

Dr Manish Kumar and Dr Amardeep Kaur from Department of Botany attended "4<sup>th</sup> National Research Scholars Meet-2023" conference on "Evolving Trends and Challenges in Multidisciplinary Research" from 16-3-2023 to 17-3-2023 at SGGS World University Fatehgarh Sahib.

Miss Savita Sood Mam attended a “Conference on Recent Advances in Chemistry CRAC-2023” on February 23<sup>rd</sup> -24<sup>th</sup> ,2023. She presented a poster entitled “Role of Fish Oil in Human Health-A Review”. The main motive of this conference was to provide platform to the young scientists to directly interact with the experts from the fields of chemical, environmental sciences, nanotechnology and green chemistry.

The Department of chemistry organised a workshop on “Lab Safety Measures” on 13 February 2023. Dr Kuldeep Kaur elaborated the identification of chemical hazards and lab safety practises. Shri Vijay Sharma, training supervisor, Red Cross Society, Barnala imparted training regarding artificial respiration, handling and burning incidents etc. 16 teaching and 5 non-teaching staff members attended this workshop. The department conducted Two days, Hands on Training Program for Laboratory Staff on 17th and 18 February 2023 on “Repair, Maintenance and Calibration of the Instruments”. Mr Kavish Kumar, Engineer, Lab Technology Solutions Ambala shared his knowledge about technical fault that can occur in various instruments such as PH Meter, Colori Meter, conductometer, water bath etc and train them about the repair, collaboration and maintenance of the instruments. 12 non-teaching staff-members attended this training.

Dr Bahadur Singh attended a seven-days workshop on “Athletics” from 8 to 14 February 2023. The objective of the workshop was to provide knowledge to delegates in the field of athletics.

Ms Nirupama participated in one week, FDP on “Amazon Web Services” organised by Magna Institute of Engineering at the end technology for women from 22nd to 27th of August 2022. This FDP provided knowledge regarding the AWS services to the developed so that they can assess them from anywhere if the need so arises

Ms Sonia Goyal from Department of Commerce participated in an International Conference on Digital Transformation, Redefining Business Models and Strategies for the Digital Era organised by Christ College, Pune from 6<sup>th</sup> to 7<sup>th</sup> June 2023 and presented the research paper titled “Role of Social Media in the Selection of Cultural Heritage Destinations: Review of Literature”. She participated in a five days virtual FDP on “Advance Tactical Techniques for Data Analysis using R” organised by Department of Management Studies, Acharya Bangalore B School from 22<sup>nd</sup> to 26<sup>th</sup> May 2023.

Dr Rama Sharma along with Dr Rajesh Gupta attended “One day NAAC Awareness Programme” organised by state project directorate Rashtriya Uchchatar Shiksha Abhiyan, Department of higher education, Chandigarh on 20-12-2022.

Dr Dimple rani attended International Conference on “Analysis and Its Application” (ICEA 2023) organised by Department of mathematics Shivaji College, University of Delhi from February 27<sup>th</sup>-28<sup>th</sup>, 2023. The main motive of the conference was to provide a platform to the researchers where they can directly interact with the learned specialists of the field and acquaint themselves with one of the fascinating branches of mathematics analysis.

Mr Satpal Singh from Department of English attended an Orientation Programme for Faculty in Universities/Colleges, institutions of Higher Education from 20 July to 18 August 2022. In this program, the participants were acquainted with the recent techniques in pedagogy along with a focus on developing their technological administrative skill set.

The faculty members were provided financial assistance by the institute to attend the programs.

  
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2018-19

(2018-19)

18/12/18

# S.D. COLLEGE BARNALA



## ORGANIZING WORKSHOP

BY DEPARTMENT OF COMPUTER SCIENCE

# MICROSOFT - EXCEL

DATE:  
26<sup>TH</sup> DEC. 2018 TO 31<sup>ST</sup> DEC. 2018

VENUE: COMPUTER  
LAB-3  
S.D. COLLEGE

(2018-19) 10-17 (2)

(3)

**S.D. College Barnala**  
**PG Dept of Commerce**  
**Organises**  
**Six Days Training Programme on**  
**MODERN ACCOUNTING PRACTICES**

<i>Resource Person</i>	<i>Date</i>
<i>Amrish Kumar (Associate Prof. &amp; Head Department of Commerce S.D. College, Barnala)</i>	<i>Jan. 01, 2019 to Jan. 06, 2019</i>
<i>Venue: Computer Lab-III</i>	

**For Registration & More Information Contact**  
**Gitanjali Jain (Assistant Prof. Commerce)**  
**(814610-6999)**

(2020-21)

2020-21

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7/12

# S.D.College Barnala



## ORGANIZING WORKSHOP

BY DEPT. OF COMPUTER SCIENCE & IQAC  
CAMPUS MANAGEMENT  
SOFTWARE

DATE:

17<sup>TH</sup> MARCH 2021 TO 29<sup>TH</sup> MARCH  
2021

VENUE:

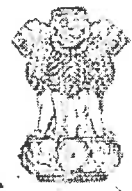
S.D.COLLEGE



(2021-22)



**S.D. College Barnala**  
**Department of Mathematics**  
(Under DBT Star College Scheme)



सत्यमेव जयते  
Department of  
Biotechnology

**Organised**  
**Seven Days Workshop on**  
**MATLAB**

<i>Resource Person</i>	<i>Date</i>
<i>Dr. Savita Bansel (Department of Mathematics S.D. College, Barnala)</i>	<i>Feb. 05, 2022 to Feb. 12, 2022</i>
<i>Venue: Department of Mathematics S.D. College , Barnala</i>	

**For Registration & More Information Contact**  
**1. Prof. Ashwani Sikri(98725-33442)**  
**2. Prof. Manish Kumar Garg(90417-23803)**

(2021-22)

05.7.2021 - 09.07.2021



## **FDP On Creating and Publishing e-Content in Teaching Learning Process**

### **About the Institute**

College of Engineering Thalassery, established by Govt. of Kerala in the year 2000 under Co-operative Academy of Professional Education (CAPE) of Ministry of Co-operation, affiliated to APJ Abdul Kalam Technological University (KTU) and Cochin University of Science and Technology (CUSAT) and Approved by the AICTE. The College Offers B.Tech courses in the following six Engineering streams and M.Tech courses under Electronics and Communication Engineering and Mechanical Engineering Departments. Admission is purely based on the Common Entrance Examination (CEE) conducted by the Govt. of Kerala. Students of this college are getting top ranks right from the first batch itself among the colleges under CUSAT. This college is the choice of top rank holders in the CEE. College has made a distinction in discipline, quality teaching and in excellence of students.

### **About the Department**

Since its inception in 2004, The Department of Mechanical Engineering has been imparting quality education to under graduate students by training them to meet the demands of the various fields of Mechanical Engineering. The highly qualified and committed faculty is the backbone of the department. Well equipped labs provide the exposure to students for hands on experience. There is a determined desire to propel the department and institution into a centre of excellence in teaching, research and consultancy that is rooted in its local milieu. The Department of Mechanical Engineering envisages to produce ethical global personnel by providing excellent, forward-looking education and research facilities, in a collegial and respectful environment.

### **Content of the FDP**

- Google apps for class room
- Internet information digging for academic resources
- Cloud platform for education
- Tools for content preparation and course delivery
- An introduction to flipped class room
- An introduction to learning management system in education
- Nurturing a rich heritage in younger generation

(2021-22)

### Contact Details

<b>Institute</b> COLLEGE OF ENGINEERING THALASSERY ERANHOLI-PO, THALASSERY, KANNUR- DT, KERALA, Kannur Kerala,670107,India +91 490 2388930 <a href="http://www.cethalassery.ac.in">http://www.cethalassery.ac.in</a>	<b>Co-ordinator</b> Eby David, Associate Professor and Head (I/c), Mechanical Engineering Department, COLLEGE OF ENGINEERING THALASSERY ERANHOLI-PO, THALASSERY, KANNUR-DT, KERALA, Kannur Kerala,670107,India +91 490 2388930 <a href="http://www.cethalassery.ac.in">http://www.cethalassery.ac.in</a>
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### Targeted Participants

Teaching faculty and Technical staff from Institutes running Degree and Diploma level technical programmes, Professionals from Industry dealing with e-Content creation for technical programmes, PG Scholars and Research Scholars who aspire to become teachers in technology,

### Session-wise Time Schedule

Date/Day	Session I (2 PM – 3.30 PM)	Break I (3.30PM – 4 PM)	Session II (4 PM – 5.30 PM)	Break II (5.30 PM – 6 PM)	Session III (6 PM – 7.30 PM)
05/07/2021 Monday	Inauguration and Programme overview		Google apps for class room I Dr. Umesh P, Asst. Professor Maths CETLY		Google apps for class room II Dr. Umesh.P
06/07/2021 Tuesday	Key note session: Internet information digging for academic resources I, Sri. Sunil Prabhakaran, Consultant, Mathrubhumi Online		Internet information digging for academic resources II, Sri. Sunil Prabhakaran		Tools for content preparation and course delivery I - Antonio Joseph V K, Technical Head, Skillgenics, Kochi
07/07/2021 Wednesday	Cloud platform for Education I Nikhil Dharman, Asst. Prof CS, CETLY		Cloud platform for Education II Nikhil Dharman,		Tools for content preparation and course delivery II - Antonio Joseph V K.
08/07/2021 Thursday	“Latex – Academic type setting for beginners” I, Antonio Joseph V K		“Latex – Academic type setting for beginners” II, Antonio Joseph V K		An introduction to flipped class room, Eby David, Assoc. Professor CETLY
09/07/2021 Friday	Introduction to Learning Management System in Education, Shameem, ETLab		Nurturing a Rich Heritage in the younger generation Dr. Isaac, Professional Councillor		Valediction/Feedback

Eby David  
Co-ordinator

(2021-22)



*Shiksha Sopan*  
Short Term Course  
Workshop on Optics (Diffraction and Interference)  
25<sup>th</sup> February – 02<sup>nd</sup> March, 2022  
At  
Sopan Ashram

Dear Friends

Date : 01/02/2022

This is in response to your request for attending the proposed workshop/ short term course on "Optics", at Sopan Ashram, Nankari, IIT Kanpur during **25<sup>th</sup> February - 02<sup>nd</sup> March, 2022**. I invite you to join the workshop.

**Structure of the workshop:**

The workshop will have sessions on (a) Concept building through discussion on short demo experiments (b) Hands on activities on demo experiments. (c) Lectures on Optics (Diffraction and Interference) (d) Question-Answer sessions (open house) (e) Presentation by participants (f) other sessions as planned by the organizers.

Please note that everyone is supposed to participate actively in ALL the sessions and no personal work should be scheduled during the workshop. The normal duration of the sessions will be from 8:00AM to 10:00PM with 2-to 2.5 hours break for dinner and 45 minutes to 1 hour break for lunch.

**Travel Plan:**

Kindly plan your journey so as to reach Sopan Ashram IIT Kanpur latest by the afternoon of **25<sup>th</sup> February 2022**. The introductory session will be at **6 PM** on **25<sup>th</sup> February**. The formal Inauguration will be on **26<sup>th</sup> February from 10AM**.

The workshop will be over by 3:00PM on 02<sup>nd</sup> March, 2022. Plan your Journey to leave Kanpur earliest by 5:00PM on 02<sup>nd</sup> March, 2022.

The guideline to reach Sopan Ashram are as follows. Take an auto rickshaw from Railway Station (outside Platform 1), If you are coming by train. Tell him that you will go about 2 km inside Alimco/Naramau Railway crossing. It should ask for around Rs.350. If you are not coming by train but by bus, there are several stands. Ask local people how to get to Gol Chauraha or Rawatpur or Kalyanpur. You can get auto rickshaw and reach Ashram.

1. ALIMCO is an institute where Artificial Limbs are made. The locality itself is known Naramau and this is about 2 km ahead of IIT Kanpur.
2. After crossing the railway tracks at ALIMCO crossing, take the road sloping down, slightly to the right of the railway Phatak. Keep moving on this road till it takes a 90 deg turn towards left. In between there

(2021-22)

are one or two bifurcations for going into villages on right but you keep moving on your road, always keeping left.

Once the road makes 90 deg turn, you will see some shops like Gupta Sweet and Restaurant etc. on left. Keep moving about 100 meters and you will see Pal Medical Store, at the corner of a market building. Cross this building and you will get a 20 ft wide cemented bricks road on your left Turn in this road, you will see shops of barber and cosmetic. Move on this road looking at your right. You will see a White building with some red lining and solar panels on the roof. This is Sopan Ashram.

However if you make a phone call from ALIMCO crossing, we will help you to reach Sopan Ashram easily.

**Presentation by Participants:**

Many of you might have developed some new experiments to serve as teaching aid and used them during your teaching. I will appreciate if you demonstrate your experiments to all participants including us. If you plan to make such a presentation, please write to us as soon as possible.

**T.A./ Hospitality:**

We will not provide you any kind of Travel Expenses

Local stay and normal Vegetarian food will be provided by us.

Please send your confirmation of participation and Travel Details on this email: [sopanbajpai@gmail.com](mailto:sopanbajpai@gmail.com) upto 15<sup>th</sup> February, 2022.

Sincerely Yours

**Dr. H. C. Verma**  
Professor (Retd), IIT Kanpur  
Mentor, Shiksha Sopan  
[hcovermaed@gmail.com](mailto:hcovermaed@gmail.com)

**Amit Kumar Bajpai**  
Secretary  
Shiksha Sopan, IIT Kanpur  
9506611484 (WhatsApp)

अंधकार को क्यों धिक्कारें, अच्छा है एक दीप जलायें

[www.shiksha-sopan.org](http://www.shiksha-sopan.org)

(2022-23)



INTERNATIONAL  
CENTRE for  
THEORETICAL  
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

# Physics Teachers Training Program – Quantum Mechanics

The modern method of physics pedagogy promotes 'active learning', wherein students are active participants in the class instead of being passive listeners. This approach includes interactive classes, peer discussion, interactive simulations, and project-based learning.

Physics Teachers Training Program (PTTP) is a program to engage with motivated teachers from across India to introduce them to modern trends in physics teaching. The program from January 9-13, 2023 will focus on discussing Quantum Mechanics at the MSc level with interactive classes and discussion.

Physics Teacher Training Program (PTTP) is an extension for teachers of the highly successful Physics Training and Talent Search (PTTS) program (<https://www.ptts.org.in/>) for students. Over the past seven years PTTS has organised several schools for undergraduate and postgraduate students following the active learning pedagogy.

This PTTP program is for motivated teachers teaching Quantum Mechanics at the MSc level. The emphasis will be on strengthening one's understanding of the topics in the MSc curriculum. The program is designed to be highly interactive and participants are expected to engage with the instructors and each other. It will also include project-based learning. Attempts will be made to include hands-on interactive simulations.

25 participants from across India will be selected for the program. This is a residential program and all participants are expected to stay on the ICTS campus.

## Organisers |

M Sivakumar (*University of Hyderabad, Hyderabad, India*)

Raghavan Rangarajan (*Ahmedabad University, Ahmedabad, India*)

SVM Satyanarayana (*Pondicherry University, Pondicherry, India*)

## Speakers |

Arun Mangalam (*Indian Institute of Astrophysics, Bangalore*)

Kripa Gowrishankar (*Azim Premji University, Bangalore*)

Kaushik Dutta (*IISER Kolkata*)

M.Sivakumar (*University of Hyderabad, Hyderabad*)

## Registration Deadline:

**December 26, 2022**

**January 9-13, 2023**

**Madhava Lecture  
Hall**

✉ [pttp@icts.res.in](mailto:pttp@icts.res.in)

🔗 <https://www.icts.res.in/discussion-meeting/PTTP2023>

**Eligibility criteria:** Teachers teaching Quantum Mechanics at the MSc level

(2022-23)



**Global Initiative of Academic Networks (GIAN)** is a new program in Higher Education approved by the Ministry of Human Resource Development, Govt. of India. It is aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence. In order to garner the best international experience into our systems of education, enable interaction of students and faculty with the best academic and industry experts from all over the world and also share their experiences and expertise to motivate people to work on Indian problems. Punjabi University, Patiala is one of the several distinguished institutes of higher education selected across India for conducting courses under this program. The University is delighted to announce the second course entitled as

## **Miniaturised Total Analysis Systems**

(Course Code : 196051M01)

### **1.0 Overview:**

Thirty years after the introduction of the miniaturised total analysis systems ( $\mu$ TAS), also referred to as Lab on a Chip, has successfully introduced microscale solutions to resolve many challenges in life sciences. Its original scope was the miniaturisation of chemical analysis systems, aiming for the creation of systems that combine the ease of use of a sensor with the richness of (bio)chemical information that only benchtop chemical analysis instrumentation can provide. The microfluidic systems underpinning the early developments of these systems, however, have found a myriad of applications beyond separation science, partially driven by the high level of geometrical commonalities between cells and cellular systems and the 50-500  $\mu$ m channels. While the scope of this lecture series is on the original analytical scope of the field, its relevance to the cell biology community is warranted by the shared underpinning physics, design, and manufacture aspects.

The Lab on a Chip research field is transdisciplinary, and hosts scientists with backgrounds ranging from physics and fluid dynamics to cell biology and neuroscience. This course provides an umbrella, providing insight in the analytical and manufacturing aspects by creating insight opportunities and restrictions in the design underpinned by physical principles of miniaturisation, microfabrication, and application. With 3D printing playing an important and growing role in the manufacture of these devices, particularly in the research prototyping, a strong focus on the different 3D printing approaches will be provided.

### **Objectives**

The primary objectives of the course are as follows:

- i) Exposing participants to the fundamentals of microfluidics, microfabrication, and separation science
- ii) Providing an understanding of the impact of the manufacturing approach on design, integration, and cost of prototyping and upscaling,
- iii) Building in confidence and capability amongst the participants in the analysis of existing systems to reverse-engineer the application, (bio)chemical, fluid dynamic, and manufacturing-induced challenges and solutions
- iv) Providing exposure to practical problems and their solutions in Point of Care analysis
- v) Enhancing the capability of the participants in the selection of the appropriate analytical and manufacturing path for addressing an analytical challenge with a lab on a chip solution.

(2022-23)

**GIAN Course**  
**Miniaturised Total Analysis Systems**  
**Lectures Schedule: January 10 – January 19, 2023 (9 days)**

Module	Day and Date (Jan., 2023)	Time	Topic	(Resource Person)
MicroTAS and lab on a chip	Day 1 (10/1)	09:30 am - 10:00 am	Inauguration	VC
		10:00 am - 11:00 am	Introduction*	RG
		11:00 am - 01:00 pm	Scaling laws*	RG
		01:00 pm - 02:00 pm	LUNCH	
		02:00 pm - 03:00 pm	Mixing at the microscale*	RG
		03:00 pm - 04:00 pm	Examples*	RG
Analytical chemistry	Day 2 (11/1)	10:00 am - 11:00 am	Liquid chromatography, theory and mass spectrometry	AKM
		12:00 pm - 01:00 pm	Practical Training on HPLC	JSA
			LUNCH	
		02:00 pm - 03:00 pm	Miniaturisation of analytical techniques	RG
		03:00 pm - 04:00 pm	Miniaturisation of Detection*	RG
Electrophoresis	Day 3 (12/1)	04:00 pm - 05:00 pm	Miniaturisation of the analytical workflow*	RG
		10:00 am - 12:00 pm	Capillary electrophoresis and Electro-osmotic flow	PSK
		12:00 pm - 01:00 pm	Free flow electrophoresis*	RG
		LUNCH		
	Day 4 (13/1)	02:00 pm - 03:00 pm	CE on a chip – pinched and gated injection	RG
		10:00 am - 11:00 am	In Silico Electrophoresis*	RG
		11:30 am - 1:00 pm	In Silico Electrophoresis tutorial	RG
		LUNCH		
	2.00 pm – 5.00 pm	1) Modelling and simulation of electrophoresis techniques: with hands-on training using open-source software. 2) Isotachophoresis: Theory and applications	SB	
Microfabrication	Day 5 (16/1)	10:00 am - 11:00 am	Microfabrication using clean room technology*	RG
		11:00 am - 12:00 pm	Microfabrication by replication*	RG
			LUNCH	



2022-23

# 7 DAYS WORKSHOP ON ATHLETICS

(8<sup>th</sup> TO 14<sup>th</sup> FEBRUARY, 2023)

ORGANIZED BY  
JAL COLLEGE OF PHYSICAL EDUCATION  
MASTRAMA SAHIB, CAMBOUR (P.S.)

College Council

University, Patiala

Association of Sports Medicine

Education Foundation of India

Association of Physical

Education, Fitness & Sports



Capt. Dr. Bhupinder Singh Pur



Dr. Nishan Singh Deol



Mr. Kamal Ali Khan



Dr. Jasbir Singh



Dr. Baljinder Singh



Dr. Rupinder Singh



Mr. Paramjit Singh Rana



Mr. Rashpal Singh

## Areas will be covered under this workshop

1. General Introduction of Athletics
2. Bio mechanics used in Athletics
3. Marking of Athletics track
4. Track Events (Race & Relays)
5. Throwing Events (Javelin & Shot)
6. Jumping Events (High & Long)
7. Overall changes in Athletics  
(Current Scenario)

### Registration Fee :

For Faculty Members : Rs. 500/

For Students : Rs 200/

**DR. GEETA THAKUR**

Workshop Director

Contact : 81264 42200, 97885 81720

E-mail : gpt972@rediffmail.com



(2022-23)



# 7 DAYS WORKSHOP ON ATHLETICS

(8<sup>th</sup> TO 14<sup>th</sup> FEBRUARY, 2023)

ORGANIZED BY:

**AKAL COLLEGE OF PHYSICAL EDUCATION  
MASTUANA SAHIB, SANGRUR (PB.)**

In Collaboration with

Punjabi University, Patiala

Akal College Council, Gursagar Mastuana Sahib

Physical Education Foundation of India (PEFI)

Indian Association of Sports Medicine (IASM)

International Federation of Physical Education, Fitness & Sports (IFPEFS)



(2022-23)



## **TEACHING LEARNING CENTRE**

**RAMANUJAN COLLEGE**

(ACCREDITED GRADE 'A++' BY NAAC)

**UNIVERSITY OF DELHI**

under the aegis of the

**PANDIT MADAN MOHAN MALAVIYA NATIONAL  
MISSION ON TEACHERS AND TEACHING**

**MINISTRY OF EDUCATION**

is organising an

**Online Induction Training/  
Orientation Programme for Faculty  
in Universities/Colleges/  
Institutions of Higher Education**

**20 July - 18 August 2022**

**Call for Registration  
& Participation**



सत्यमेव जयते  
Ministry of Education  
Govt of India



(2022-23)



**IQAC, Ramjas College  
(University of Delhi)**

in collaboration with

**Mahatma Hansraj Faculty Development Centre**  
(A Centre of MoE, Govt. of India, under PMMMNMTT Scheme)

**Hansraj College  
(University of Delhi)**

organises

**ONE WEEK ONLINE**

**FACULTY DEVELOPMENT PROGRAMME**

on

**“Principles of Radiation Detection and  
Measurement and Experimental Techniques”**



**3 - 9 April, 2023**

1:00 PM - 4:30 PM

Register here:

<https://bit.ly/3koV4rB>

or scan



**Hansraj College**

(NAAC A+ CGPA3.62, NIRF Rank #14)

University of Delhi

Malka Ganj, Delhi-110007

<https://www.hansrajcollege.ac.in>

**Ramjas College**

(NIRF Rank #66)

University of Delhi

University Enclave, Delhi-110007

<https://www.ramjas.du.ac.in>



[fdp.hrc@gmail.com](mailto:fdp.hrc@gmail.com)




[www.mhrfdc.in](http://www.mhrfdc.in)



@hrcduofficial

# Advances in Characterization of Materials (2022-23)


12.09.2022 - 18.09.2022



**Department of Science and Technology (DST) Funded**  
7-days workshop on  
**Training and Workshop on**  
**Venue - Applied Physics Department, MSU**  
**12<sup>th</sup> -18<sup>th</sup>, September 2022**

**ADVANCES IN CHARACTERIZATION OF MATERIALS**

**Synergistic Training program Utilizing the Scientific and Technological Infrastructure<sup>1</sup> (STUTI)**



The Maharaja Sayajirao University of Baroda  
**Faculty of Tech. & Engg**

The postgraduate course in applied physics is one of its kind which is offered in very few universities across the country. The department comprises of various research groups working in the fields of condensed matter physics, applied optics and photonic, luminescence, theoretical physics, nano-crystalline alloys, laser diodes, fluorescent and display materials etc. They have made contributions in their respective fields through publications in internationally acclaimed Journals. The department has received major research funding from various Govt. of India funding agencies like UGC, DST, AICTE, DAE etc. Through these research projects, many new state-of-the-art equipment have been procured.

- Minimum qualification: Post Graduate (Science) or B.Tech/B.E. (Technology/Engineering)
- Professors/Scientists/Post-Doc Fellows/Ph.D. Fellows/Industry persons who are actively involved in R & D
- Not more than 5 peoples from one institute

Registration Deadline: 31<sup>st</sup> August 2022  
Shortlisted candidates will be intimated by email latest by 1<sup>st</sup> Sept 2022

**Training and Workshop: 12<sup>th</sup> to 18<sup>th</sup> September 2022**


**Overview of STUTI**

DST welcomes all their participants for the workshop of ADVANCES IN CHARACTERIZATION OF MATERIALS organized under STUTI. The STUTI program envisions hand-on training and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access to S & T facilities. DST has identified Applied Physics Department, PDE, MSU to organize the STUTI program.

This workshop aims to provide an insight into the functioning of the XRD, DSC, UV-Vis, Digital Holography etc. The participants will be introduced to the basics of characterization techniques, instrumentation and digital imaging and analysis. The participants will be provided hand-on experience of the various techniques and will have a chance to interact with the subject experts and analyze their own sample (with prior approval).

**Objective of Workshop**

To conduct a 7-day long program aimed to provide hands-on training to the participants on DST funded instruments to promote the expansion of R&D Infrastructure at academic institutions by ensuring transparent access to S&T facilities. STUTI program is also intended to build human resources and its knowledge capacity through open access of S&T Infrastructure across the country. The focus will be on Scientists/Professors/PhDs and Post Doc Fellows actively involved in research across various institutions in the country.




**Scope of the Workshop**

- It is essential that the STUTI training include both theoretical and practical sessions in which topic experts give in-depth knowledge of the instrument and its applications
- Faculty/experts will be engaged to demonstrate their knowledge of the subject and give appropriate study material to participants, along with an introduction to the instrument's fundamentals.
- Participants will be allowed to use the lab facilities and also be allowed to bring their research samples for examination/characterization from the existing S&T facilities


**Outcome of the Workshop**

By the end of the workshop, the participants will be able to Practice good laboratory methods for sample preparation and its preservation. Design of experiments for a thorough understanding of step by step activities. Understanding the basic operations of the instruments and know-how to operate, troubleshoot along with maintenance of the instrument. Critical evaluation of the experimental approaches and data analysis.


**Speakers**



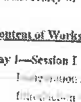
**Dr. P. K. Kuriya**  
Associate Professor at School of Physical Sciences Jawahar Lal Nehru University.



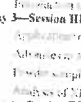
**Dr. Rajesh Prasad**  
Assistant Professor at Department of M.E.M.S., IIT Bombay.




**Prof. Anil Tripathi**  
Retired Professor Applied Physics Department, Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda, Vadodra.



**Prof. Utpal Joshi**  
Professor at Department of Physics, Electronics and Space Science, Gujarat University, Ahmedabad.



**Dr. Srinivasan**  
Assistant Professor in Applied Physics Department, Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda, Vadodra.



**Prof. Prafulla K. Ma**  
Professor at Department of Physics, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodra.

**Content of Workshop**

**Day 1—Session I**

- Introduction and Welcome
- Introduction to the program and Day 1
- Lab Visit

**Day 2—Session II**

- Fundamentals of X-ray Diffraction
- Basics of XRD technique
- Preparation of XRD instrument, Lab

**Day 3—Session III**

- Application of XRD in various fields
- Advantages and limitations of XRD
- Analysis of XRD instrument data

**Day 4—Session IV**

- Fundamentals of Differential Scanning Calorimetry (DSC)
- Advantages and limitations of DSC
- Preparation of DSC instrument and sample preparation

**Day 5—Session V**

- Fundamentals of UV-Vis Spectrophotometry
- Advantages and limitations of UV-Vis
- Preparation of UV-Vis instrument and sample preparation

**Day 6—Session VI**

- Introduction to Digital Holography
- Advances/Applications in 3-D Microscopy
- Set up for Digital Holography (Lab)

**Day 7—Session VII**


- Fundamentals of Raman spectroscopy
- Analysis of participant's sample (YRD) (Lab)
- Analysis of participant's sample (DSC) (Lab)
- Valedictory

Session I	Session II	Session III	Session IV	Session V	Session VI	Session VII
8:30 am Registration 9:45 am Introduction and Welcome 11:30 am Break 11:45 am Lab visit to the participant's institute 1:30 pm Lunch 2:30 pm Lab Visit 3:45 pm Tea Break 4:30 pm Lab Visit	9:45 am Fundamentals of X-ray Diffraction 11:30 am Break 11:45 am Lab Visit to the participant's institute 1:30 pm Lunch 2:30 pm Lab Visit 3:45 pm Tea Break 4:30 pm Lab Visit	9:45 am Fundamentals of X-ray Diffraction 11:30 am Break 11:45 am Lab Visit to the participant's institute 1:30 pm Lunch 2:30 pm Lab Visit 3:45 pm Tea Break 4:30 pm Lab Visit	9:45 am Fundamentals of X-ray Diffraction 11:30 am Break 11:45 am Lab Visit to the participant's institute 1:30 pm Lunch 2:30 pm Lab Visit 3:45 pm Tea Break 4:30 pm Lab Visit	9:45 am Fundamentals of X-ray Diffraction 11:30 am Break 11:45 am Lab Visit to the participant's institute 1:30 pm Lunch 2:30 pm Lab Visit 3:45 pm Tea Break 4:30 pm Lab Visit	9:45 am Fundamentals of X-ray Diffraction 11:30 am Break 11:45 am Lab Visit to the participant's institute 1:30 pm Lunch 2:30 pm Lab Visit 3:45 pm Tea Break 4:30 pm Lab Visit	9:45 am Fundamentals of X-ray Diffraction 11:30 am Break 11:45 am Lab Visit to the participant's institute 1:30 pm Lunch 2:30 pm Lab Visit 3:45 pm Tea Break 4:30 pm Lab Visit

Interested participants must register and only selected candidates would be invited for the workshop.  
For selected candidates Registration Fee, local travel, Boarding and lodging will be covered by DST/Applied Physics Department.  
Interested participant should register through the following link:

For more information:  
Email: [apd@msu.ac.in](mailto:apd@msu.ac.in)

Applied Physics Department  
Faculty of Technology and Engineering  
The Maharaja Sayajirao University of Baroda  
Vadodra-390 001





(2022-23)



सत्यमेव जयते  
Department of Science & Technology  
Govt. of India

**One-week Training Program on  
"Advanced Training Program on Experimental & Simulation Techniques for Materials Science"**  
21-27 June 2023

Organized by  
**Department of Applied Sciences, IIT Allahabad, Prayagraj, U.P.**

In association with  
**Banasthali Vidyapith, Rajasthan**  
Under the scheme

**Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI)**  
Department of Science and Technology (DST), Government of India.

**Chief Patron**

**Prof. Mukul Sharad Sutaone**  
(Director, IIITA)

**Patron**

**Prof. Ina Aditya Shastri,**  
(Vice Chancellor, Banasthali Vidyapith)

**Chairperson**

**Prof. Satish K Singh**  
(Registrar IIITA)

**Prof. Manish Goswami**  
(Dean R&D, IIITA)

**Dr. Ratan K Saha**  
(HoD AS, IIITA)

**Secretary**

**Dr. Akhilesh Tiwari**

**Dr. Pramod Kumar**

(Department of Applied Science)

**Convener**

**Dr. Upendra Kumar**

(Department of Applied Science)

**Coordinators**

**Dr. P.A. Alvi**

(PMU Coordinator)

**Dr. Saral K. Gupta**

**Dr. C. M. S. Negi**

Banasthali Vidyapith, Rajasthan

**Contact**

**Dr. Upendra Kumar +91-9936206263**

**Dr. Pramod Kumar +91-9616626504**

**Ms. Manisha +91-9756606100**

**Email:**

**[dststutiiiita@gmail.com](mailto:dststutiiiita@gmail.com)**

**Eligibility:**

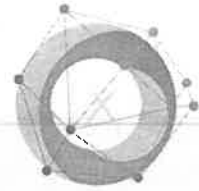
**Faculty Members, Doctoral and Post-Doctoral students, Scientist, Post graduate students of basic sciences, and its allied areas.**

**About STUTI Program**

The Scheme "Synergistic Training Program Utilizing the Scientific and Technological Infrastructure" (STUTI) is intended to build human resources and its knowledge capacity through open access S & T Infrastructure across the country. As a complement to the various schemes of DST funding for expansion of R & D Infrastructure at academic institution. STUTI schemes envisions a hands-on training program and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access of S & T facilities.

**Topics to be Covered**

- X-ray diffraction
- Impedance analysis
- Hall Effect
- Photonics and Metamaterials
- Density Functional Theory
- COMSOL Multiphysics
- Raman Spectroscopy
- Vector Network Analyzer



**DENSITY FUNCTIONAL THEORY**

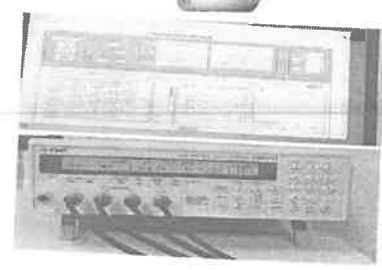
**Registration and Other information:**

**Application Deadline: 15 June 2023**

- ❖ Interested candidates need to register via the given link. Only 40 candidates are allowed to attend the training program.
- ❖ Only 3 candidates are allowed from the same institute.
- ❖ Selected candidates will be informed via registered email.
- ❖ Lodging and boarding will be provided by the host institute.
- ❖ TA: 2<sup>nd</sup> class sleeper Train or Bus fare as per rules of DST, Govt. of India.



**COMSOL MULTIPHYSICS**



**Registration Link:**

**<https://forms.gle/SMrPmKvE8z8iFEfo6>**

**For Free Registration Scan QR Code**



(2022-23)



DST-STUTI Training Program

ON

EXPERIMENTAL AND SIMULATION TECHNIQUES FOR MATERIALS SCIENCE

21-27 JUNE, 2023

JOINTLY ORGANIZED BY

DEPARTMENT OF APPLIED SCIENCES, INDIAN INSTITUTE OF INFORMATION TECHNOLOGY  
ALLAHABAD, PRAYAGRAJ

&

BANASTHALI VIDYAPITH, RAJASTHAN

*Under the scheme*

Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI)  
Department of Science and Technology (DST), Government of India.

Minute - to - Minute Program

Date: 21<sup>st</sup> June 2023 (Wednesday)

TIME	PROGRAM
09:00 AM	Venue: Room No. 5055, CC-3
09:30 AM	Registration (Distribution of registration kit)
09:35 AM	Start of Inaugural
09:40 AM	Welcome of the Guests
09:45 AM	Lighting of the lamp
09:50 AM	Introduction and Welcome Address by convener Dr. Upendra Kumar
09:55 AM	Address by HoD-AS (Dr. Ratan K Saha)
10:00 AM	Address by Dean A & R (Prof. Manish Goswami)
10:05 AM	Address by PMU Coordinator (Prof. P A Alvi)
10:10 AM	Address by Secretary Dr. Akhilesh Tiwari
10:15 AM	Address by Guest of Honor, Prof. Satish K. Singh (Chairman, IEEE UP Section)
10:20 AM	Address by Chief Guest, Prof. Mukul Sharad Sutaone (Director, IIT Allahabad)
10:25 AM	Address and Vote of Thanks by Dr. Pramod Kumar
10:30 AM	Group Photograph
	Tea Break

(2022-23)

## Program Schedule

**One-Week Advanced Training Program on Experimental and Simulation Techniques for Materials Science**

**21<sup>st</sup> to 27<sup>th</sup> June 2023 (Room No- 5055, CC-3)**

Day & Date	10:00-11:30 AM	11:30-11:45 AM	11:45-01:15 PM	01:15-3:00 PM	3:00-4:30 PM	4:30-4:45 PM	4:45-6:15 PM	
Wednesday, 21/06/2023	9:30-10:00 AM Inaugural Session	Tea-Break	Lecture-2, Prof. P. Kumar	Lunch	Demonstration on COMSOL Multiphysics	Tea-Break	Demonstration on COMSOL Multiphysics	
	Lecture-1, Prof. Akhilesh Tiwari, IIIT A		Quasi 2D materials and its applications					Demo 1 for Group-1 Demo 2 for Group-2 Demo 3 for Group-3
	Photonics Crystal & Metamaterials		Lecture-4, Dr. Upendra Kumar, IITA					
Thursday, 22/06/2023	Lecture-3, Dr. Abhishek Singh, RGIPT				Lecture-6 Dr. Prem Prakash, ECC College		Demo 2 for Group-1 Demo 3 for Group-2 Demo 1 for Group-3	
	Recent Advanced Simulation, Modeling, and Experimental Techniques for Flexible Transistors Using Novel Materials.		Silicon Optical MEMS devices					Demo 3 for Group-1 Demo 1 for Group-2 Demo 2 for Group-3
Friday, 23/06/2023	Lecture-5, K. N. Uttam, Allahabad University				Lecture-8, Dr. Sanjay Singh, IITA		Lecture-11, Dr. Sanjay Singh, SMST IIT BHU	
	Spectroscopic Characterization		Thermoelectric materials: An ab-initio approach					Understanding the atomic ordering and magnetic structure: Fundamental and analysis tool
Saturday, 24/06/2023	Lecture-7, Prof. Prabhakar Singh, IIT BHU				Lecture-10, Prof. S. N. Pandey, MNNIT Allahabad		Demonstration on Machine Learning Approach for materials Science	
	Conductivity Spectroscopy		Supercapacitor					Demonstration on an ab-initio approach using DFT
Sunday, 25/06/2023	Lecture-9, Dr. Piyush K Sonkar, BHU Varanasi				Lecture-14, Prof. K. P. Singh, IITA		Demonstration on Machine Learning Approach for materials Science	
	Electrochemical Sensor		Machine Learning in Materials Science					Demonstration on an ab-initio approach using DFT
Monday, 26/06/2023	Lecture-13, Prof. Animesh Ojha, MNNIT Allahabad				Demonstration on Electrochemical Measurement		Demonstration on an ab-initio approach using DFT	
	Raman Spectroscopy							
Tuesday, 27/06/2023	Demonstration on Electrochemical Measurement							

\*Demonstration on experimental set-up will be carried out on rotation basis, for example Group 1 performed their Hands-on on Thursday will be shifted to XRD on next day and so-on.

Demo 1: Demonstration on Hall measurements, Mr. Sanjay Sharma

Demo 2: Demonstration on LCR measurement, Dr. Upendra Kumar

Demo 3: Demonstration on XRD Analysis, Ms. Vidushi Gautam and Manisha Jatiya



(2022-23)



## MINI PHYSICS TRAINING AND TALENT SEARCH PROGRAM (PTTS) 2023



**IF YOU ARE AN UNDERGRADUATE PHYSICS STUDENT INTERESTED IN PURSUING RESEARCH, THEN THIS PROGRAM IS FOR YOU!**

There will be a 5-day Mini-Physics Training and Talent Search (PTTS) program, with emphasis on active learning for Physics students from Gokhale Education Society's, H.P.T. Arts & R.Y.K. Science College, Nashik, Maharashtra. The candidates who complete the course successfully will receive certificates.

### PROGRAMME DETAILS

- Eligibility** : Undergraduate (S.Y.B.Sc. & T.Y.B.Sc.) Physics Students  
**Number of Participants** : 50  
**Venue** : Department of Physics, H.P.T. Arts & R.Y.K. Science College, Nashik, Maharashtra  
**Dates** : 17<sup>th</sup> March (Friday) – 21<sup>st</sup> March (Tuesday), 2023  
**Time** : 10.00 am to 5.00 pm  
**Subjects** : Quantum Mechanics, Statistical Mechanics & Experimental Physics  
**Registration Fees** : No charges

### REGISTRATION DETAILS

1. Register by filling up the Google Form. The link will be open from 6<sup>th</sup> March to 7<sup>th</sup> March 2023. **Registration Link** : <http://surl.li/fbbsp>
2. Registered applicants will receive a link on 8<sup>th</sup> March 2023, at 12.00 pm via registered email for a 30 minutes exam via a Google form containing multiple choice questions on the basics of quantum mechanics & statistical physics.

### SELECTION DETAILS

1. It will be based on the academic performance in B.Sc. and performance in MCQ Exam.
2. List of selected candidate will be displayed on 11<sup>th</sup> March 2023.
3. Detailed information of Programme will be given to selected students on 13<sup>th</sup> March 2023.

**For further details contact Local Coordinator :**

Mr. Dheeraj Dhiman, Department of Physics, H.P.T. Arts & R.Y.K. Science College, Nashik-05  
Mobile: +91-8010-160688 Email id : [dheerajd123@gmail.com](mailto:dheerajd123@gmail.com)

**This program is funded by the Infosys Science Foundation, through Physics Training & Talent Search (PTTS)-23 hosted by Ahmedabad University.**

For more information on PTTS program please visit <https://www.ptts.org.in>



**National Coordinators:**

**Dr. M. Sivakumar** (Chief Coordinator) University of Hyderabad  
**Dr. Raghavan Rangarajan** ; Ahmedabad University  
**Dr. S. V. M. Satyanarayana**, Pondicherry University.



2022-23



**S.D COLLEGE BARNALA**

**IQAC**

**In association with NSS Wing  
Organises**

**Faculty Lecture**

**Date. 24/5/2023 Time 10.30 a.m**

**TOPIC : JOURNEY OF LEARNING THROUGH SERVICE**

**KEY SPEAKER : DR. REETU AGGARWAL (NSS COORDINATOR)**

**DEPARTMENT OF ENGLISH**

**S.D COLLEGE BARNALA**

2022-23



**S.D COLLEGE BARNALA**

**IQAC**

in association with  
**Commerce Department**  
**Organises**

**Faculty Lecture**

**Date. 24/5/2023 Time. 12 p.m**

**Topic : Residence & Tax Planning**

**Key Speaker : Prof. Amrish Garg (H.O.D)**

**Department of Commerce**

**S.D College Barnala**

2022-23



# **S.D COLLEGE BARNALA IQAC**

in association with  
Department of Computer Application  
**organises**

Faculty Lecture

**Date. 25-05-2023**

**Time. 10.30 a.m**

**Topic : Cyber Crime & Cyber Security**

**Key Speaker : Prof. Amandeep Kaur and Prof Shipali**

**Department of Computer Application**

**S.D College Barnala**

2022-23



**S.D COLLEGE BARNALA**  
**IQAC in association with**  
**Department of M.L.M.D.T**  
**organises**

**Faculty Lecture**

**Date. 25-05-2023 Time. 12 p.m**

**Topic : Know Your Health through Medical**  
**Tests**

**Key Speaker : Dr. Vandana Kukreja**

**Department of M.L.M.D.T**

**S.D College Barnala**

2022-23



**S.D COLLEGE BARNALA**

**IQAC in association with  
Department of Biology  
organises**

**Faculty Lecture**

**Date. 27-05-2023 Time. 10.30 a.m**

**Topic : Medicinal Plants & their  
Importance**

**Key Speaker : Dr. Manish Kumar**

**Department of Biology**

**S.D College Barnala**

2022-23



**S.D COLLEGE BARNALA**  
**IQAC** in association with  
**Department of J.M.C**  
**organises**

**Faculty Lecture**

**Date. 27-05-2023 Time. 12 p.m**

**Topic : Media Literacy : Fake News &  
information**

**Key Speaker : Prof. Gurparvesh Singh**

**Department of JMC**

**S.D College Barnala**

2022-23



**S.D COLLEGE BARNALA**  
**IQAC in association with**

**Department of Software Development**  
**organises**

**Faculty Lecture**

**Date. 30-05-2023      Time.10.30 a.m**

**Topic : Chat GPT**

**Key Speaker : Prof. Gaurav Singla and Prof. Sahil Garg**

**Department of B.Voc.( Software Development)**

**S.D College Barnala**



2022-23



**S.D COLLEGE BARNALA**  
**IQAC** in association with  
Department of Political Science  
**organises**

**Faculty Lecture**  
**Date. 30-05-2023 Time. 12 p.m**

**Topic : AAP's One Year Performance in Punjab :**  
**An Overview.**

**Key Speaker : Prof. Shoaib Zafar**

**Department of Political Science**

**S.D College Barnala**

Principal  
S.D. College Barnala