ACTIVITY REPORT: CELL DESIGNER

Surendranath College in collaboration with IIT Bombay conducted this course as a part of the Spoken Tutorial project. The Spoken Tutorial is funded by the National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India. Surendranath College conducted this certificate course in collaboration with IIT Bombay under DBT-Star College Strengthening Scheme, GOI.

Organised by: Department of Botany, under DBT-Star College Strengthening Scheme, GOI.

Highlights of the course:

- Self explanatory - uses simple language
- Audio-video - uses multi-sensory approach
- Learner-centered - learn at your own pace Learning by doing - learn and practice
- Simultaneous empowerment - learn a new FLOSS

Year of commencement: 2021

Duration: 6 months

Introduction:

CellDesigner is a process diagram editor for drawing gene-regulatory and biochemical networks. CellDesigner is used for user-friendly visualization Modeling and Simulation of genetic regulatory networks, Protein networks and metabolic networks.
CellDesigner is a modeling tool of biochemical networks with graphical user interface. It is designed to be Systems Biology Workbench compliant, and support the Systems Biology Markup Language format. CellDesigner is developed by the Systems Biology Institute (SBI), Tokyo, Japan. Latest version is 4.4 Details about CellDesigner are available at this link http://www.celldesigner.org/index.html

Course content:
1. Overview of CellDesigner
Outline: CellDesigner series- based on version 4.3 Startup guide for first-time users of CellDesigner
2. Installation of CellDesigner
Outline: Installation of CellDesigner 4.3 Software requirement Download & Installation of CellDesigner On Windows OS Adding a protein species
3. Getting Started with CellDesigner
Outline: Getting Started with CellDesigner General view of CellDesigner The Menu & Toolbar Components, Species & Reaction Creating a simple network: Name & Size o..
4. Installation of CellDesigner on Linux
Outline: System requirement Download & Install CellDesigner On Linux OS How to find out the OS type of the computer Significance of Select mode, Grid Snap and Grid Visible Crea.. System requirement
5. Create and Edit Components
Outline: 1. Open an already saved .xml file 2. Change the following in a Compartment- Size, shape, color and thickness of the border 3. Create multiple files in CellDesigner 4. Learn ..
6. Build and Modify Process Diagram

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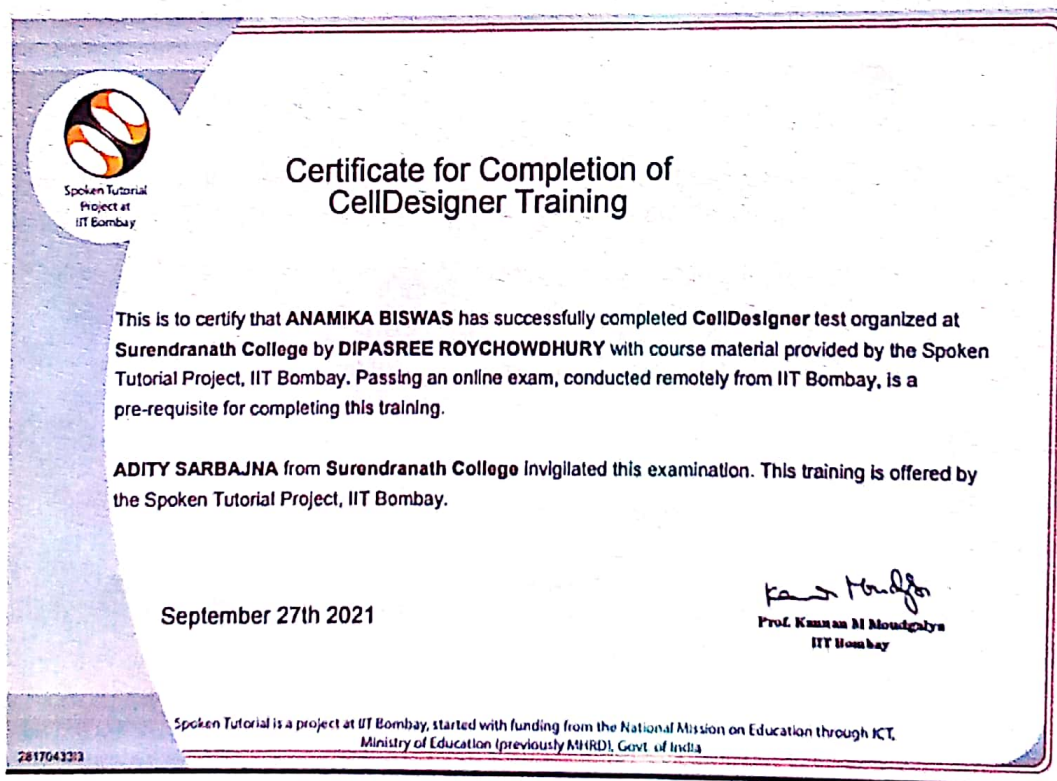Surendranath College
Kolkata-700009

Outline: Use Macros Move all components to another side of the draw area Align a Reaction line Extend a Reaction line Build a Process diagram using CellDesigner

7. Customizing Diagram Layout

Outline: To change color, shape and width of a Reaction line Add Anchor points to a Reaction line Align Components Show/hide Reaction ids Adding notes to Components Editing Protein Ed..

Course outcome: After completion of the course students will have a clear idea about the various features of Cell Designer like: Biochemical Gene Regulatory Networks Modeling with GUI, Visual Representation of Biochemical Semantics, Comprehensive Graphical Notation: SBGN Process Diagram, Is a Systems Biology Markup Language compliant software, Direct integration with SBML ODE Solver and Copasi, Smooth linkage to SBW powered simulation module, Database Connections and Export image to image files including PDF and SVG format. The course will help students with preparation of models for biochemical reaction pathways and networks efficiently with the help of this software.

Sample Certificate:

Certificate for Completion of
CellDesigner Training

Spoken Tutorial
Project at
IIT Bombay

This is to certify that **ANAMIKA BISWAS** has successfully completed **CellDesigner** test organized at **Surendranath College** by **DIPASREE ROYCHOWDHURY** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

ADITY SARBAJNA from Surendranath College invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

September 27th 2021

Prof. Kannan M Moudgalya
IIT Bombay

Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt of India

2817043313

No. of students enrolled in the course: 50
No of students successfully completed the course: 34

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≡ Online Test   Dashboard

Pre-Dated   New   Pending   Waiting for invigilator   Approved   Ongoing   Completed   Reschedule   Rejected

#	State	Academic Code	Institution	Organiser	FOSS	Date	Participants	
1	Bengal	WBN-00324	Surendranath College	DIPASREE	CellDesigner	27 Sep 2021 4 p.m.	17	View Participant
2	Bengal	WBN-00334	Surendranath College	DIPASREE	CellDesigner	27 Sep 2021 5 p.m.	17	View Participant

Course Coordinator
Department of Botany
Surendranath College

DBT-Star Coordinator
Surendranath College

DBT Star Co-ordinator
Surendranath College
24/2, M. G. Road, Kolkata-9

Principal
Surendranath College

Principal
Surendranath College
Kolkata-700009

ACTIVITY REPORT: GIMP

Surendranath College in collaboration with IIT Bombay conducted this course as a part of the Spoken Tutorial project. The Spoken Tutorial is funded by the National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India. Surendranath College conducted this certificate course in collaboration with IIT Bombay under DBT-Star College Strengthening Scheme, GOI.

Organised by: Department of Botany, under DBT-Star College Strengthening Scheme, GOI.

Highlights of the course:

- Self explanatory - uses simple language
- Audio-video - uses multisensory approach
- Small duration - has better retention
- Learner-centered - learn at your own pace
- Learning by doing - learn and practice simultaneously
- Empowerment - learn a new FOSS

Year of commencement: 2021

Duration: 6 months

Introduction:

GIMP (GNU Image Manipulation Program) is a free and open source raster graphics editor. GIMP is written and developed under X11 on UNIX platforms. GIMP works with numerous operating systems, including Linux, OS X and Microsoft Windows.
Graphics art and design software application for the editing and creation of original images, icons, graphical elements of web pages and art for user interface elements. Useful for all graphic related work. Open source equivalent of **Photoshop.**

Course content:
1.An Image For The Web
Outline: GIMP - a powerful image manipulation program Free and open source software that runs on Linux, Windows and Mac OS Equivalent of Photoshop Make an image ready fo..
2.Setting Up GIMP
Outline: Set up GIMP for first time users Main window of GIMP - the Command Central Explanation of the various small windows on the GIMP interface Toolbox ..
3.Rotating And Cropping An Image
Outline: Access histogram within the Image dialog Make the tool box vanish Use rulers Minute details on rotation and cropping Using rule of thirds Saving the i..
4.Adjusting Colours Using Layers
Outline: Adjust color using the Curves Tool Simple filter with layers Using Screen mode and Multiply mode Setting foreground and background color Switching the laye..
5.Using Layers Healing Cloning Tools
Outline: Darker images using layer mask Using Healing tool Paint into a layer Using brushes Increase/Decrease brush size Using Blur filter Using Cloning t..
6.Triptychs In A New Way
Outline: Using layer mask for doing Triptychs Using 3 images to do Triptychs Scale and zoom Using Active Layer option Adding a frame around image Fuzzy border ..

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7. Drawing Tools
Outline: Pencil Tool Paint brush Tool Eraser Tool Difference between pencil and paint brush Incremental option Pressure sensitivity option Tricks to draw ..

8. Sketching
Outline: Sketch effect with Layers Invert colours option Merge two layers Add a border to the image Add Noise

9. Brushes
Outline: Using "jitter" option Difference between Eraser tool and Pencil/Brush tool Using "alpha channel" with the Eraser tool Various brush options Create your own ..

10. Colours And Dialogs
Outline: Color dialog box Select colors in 6 different ways Hue Saturation Value Red Green Blue Dialog box based on..

11. Selecting Sections Part 1
Outline: How to make a selection : (1)Replace the current selection,(2)Add to the current selection,(3)Subtract from the current selection,(4)Intersect with the current selection ..

12. Selecting Sections Part 2
Outline: Fuzzy Select Tool Selecting colour Tool Intelligent scissors or Scissors select Tool Foreground select tool

13. The Curves Tool
Outline: Curves tool in the tool box Gray Scale bar of Curves tool Using Curve type button Get an image with color bandings in it

14. Two Minutes Edit
Outline: Tricks to make text pop out Tips to change only some parts of an image Using the Perspective Tool Aligning objects in the image to the Grid lines Filter fo..

15. Drawing Simple Figures
Outline: Draw simple geometric figures straight line square ellipse Draw complicated figures with Paths Tool

16. Resolutions
Outline: Use Image Properties Use Scale Image

17. How To Fix An Underexposed Image
Outline: Read EXIF information for clues to the original image Use Measurement tool from tool box to see angle info Seperating an image into different layers Applying con..

18. Adjusting Colours with Curves Tool
Outline: Reworking on the earlier image to enhance the colors of the image Using layer masks Removing the halos between layers

19. Easy Animation
Outline: Select the images Create the in-between transition images by varying the opacity Use Animation option to playback the animation Save as GIF animation View i..

20. Comics
Outline: Use Threshold Tool Create a base image Work on multiple copied-layers of the same image Add definition to each layer of the image Using Edge-detect Pl..

Course outcome: After completion of the course students will have a clear idea about the various features of GIMP which is comparable with Photoshop. The students should be able to do the following on successful completion of the course: Image retouching, editing and freeform drawing, Painting cartoons and realistic characters, Resizing, cropping, photomontages, Converting between different image formats,

No. of students enrolled in the course: 25

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Kolkata-700009

No. of students successfully completed the course: Exam is yet to be conducted, exam is not available in IIT Bombay Spoken tutorial for some technical reason.

/software-training/test/organiser/rejected/

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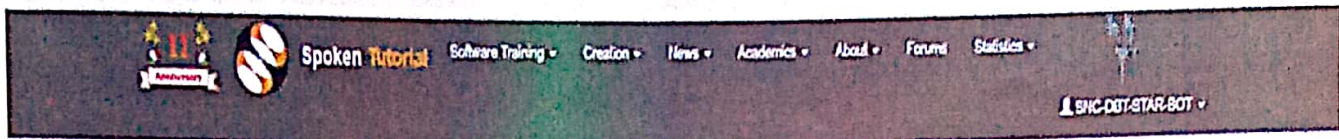
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Keyword Search

For the purpose of course selection, go here : Software Offered

≡ Online Test   Dashboard

Pre-Dated   New   Pending   Waiting for Invigilator   Approved   Ongoing   Completed   Reschedule   Rejected

#	State	Academic Code	Institution	Organiser	FOSS	Date	Participants	
1	Bengal	WBN-00334	Surendranath College	DIPASREE	GIMP	27 Sep 2021 4 p.m.	25	View Participant

Dipasree Roychowdhury .

Course Coordinator
Department of Botany
Surendranath College

Schatterjee

DBT-Star Coordinator
Surendranath College

DBT Star Co-ordinator
Surendranath College
24/2, M. G. Road, Kolkata-9

Principal
Surendranath College

Principal
Surendranath College
Kolkata-700009

Activity Report: GChemPaint Training

Surendranath College in collaboration with IIT Bombay conducted this course as a part of the Spoken Tutorial project. The Spoken Tutorial is funded by the National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India. Surendranath College conducted this certificate course in collaboration with IIT Bombay under DBT-Star College Strengthening Scheme, GOI.

Organised by: Department of Chemistry, under DBT-Star College Strengthening Scheme, GOI.

Highlights of the course:

- Self explanatory - uses simple language
- Audio-video - uses multi-sensory approach
- Learner-centered - learn at your own pace Learning by doing - learn and practice
- Simultaneous empowerment - learn a new FLOSS

Year of commencement: 2021

Duration: 6 months

Introduction:
GChemPaint is a two dimensional chemical structure editor for Linux Operating System. It allows the students to draw and display 2D chemical structures. It is a Free and Open-Source Software (FOSS) developed in 'C'. It is useful for students, teachers, researchers and teacher educators. For details about GChemPaint visit: http://www.nongnu.org/gchempaint/

Course content:

1. Overview of GChemPaint
Outline: Complete installation of GChemPaint along with utility files Explanation about GChemPaint User Manual View Menu bars of GChempaint Explain that GChemPaint

2. Introduction to GChemPaint
Outline: Explanation about GChemPaint , Uses of GChemPaint, Benefits of GChemPaint, Installation,

3. Basic operations
Outline: To Open an existing file, To add and edit text, To Select and Move objects, To Flip and Rotate objects, To Group and Align objects, Explain Cut, copy and paste

4. View Print and Export structures
Outline: Explain View options, Explain Zoom factor, How to setup a page, Preview of structures in different orientations, Print the document, Export the image in SVG and PDF.

5. Edit Preferences Templates and Residues
Outline: Edit Preferences, Types of Arrows, Manage Templates, Select and use ready Templates, Add a New Template, The uses of Residues, To edit Residues

6. Formation of molecules
Outline: Change current element using Periodic table combo button Change the current element using Keyboard Explanation about Alkyl groups Use of Add or modify a text tool

7. Formation of Bonds
Outline: Add bonds to the existing bond Convert saturated hydrocarbons to usaturated hydrocarbons Learn about Tetrahedral geometry Orient the bonds, Inverse wedge hashes Types of Stere..

8. Editing molecules
Outline: Add unbound electrons on an atom. Draw Carbonic acid and Sulphuric acid structures Add and modify a local charge on an atom Add and modify a local charge on a gr..

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9. Aromatic Molecular Structures

Outline: Draw Cyclohexane molecule Convert Cyclohexane to Cyclohexene Use Eraser tool to delete part of the structure Convert Cyclohexene to Benzene. Substitute Hydrogen of Benzene rin..

10. Orbital Overlap

Outline: About Atomic orbital Different orbital figures Shapes of orbitals Use "Add or modify an atomic orbital" tool Rotate and resize the orbitals Positive, n..

11. Analysis of compounds

Outline: Explain "Molecular contextual" menu Use Templates tool Open webpages of the molecule Use of "Chemical Calculator" Show Composition and Isotropic pattern of the compound Save ..

12. Features of GChem3D

Outline: Open a file in GChem3D Menu bar About VRML document Save image in different File types formats Model formats Change Background color

13. Features and Color Schemes

Outline: About GChemTable Open a new GChemTable window Explain about Elemental window Use of different Color Schemes

14. Resonance Structures

Outline: Show electron shift of a pair of electons Show electron shift of an electron Attach a reaction criterion on the reaction arrow Create and Destroy a reaction pathway

15. Charts in GChemTable

Outline: Elemental Charts Create Customized Charts About "Graph hierarchy" tree About "Graph preview" Various tabs and drop downs

Course outcome:

GChem Paint allows to draw and display two dimensional chemical structures. Tool box contains various tools to draw structures, bonds, orbitals and type text. It has inbuilt Templates with different categories of structures to load into GChem Paint Display area. It has an inbuilt Modern Periodic Table. It supports multiple file formats like .mol, .pdb, .svg, .pdf etc. It has an inbuilt Chemical Calculator to calculate molecular weight of compounds. It helps to convert 2D structures to 3D structures using GChem3D feature. In GChem3D, structures can be viewed in Ball and sticks, Space filling, Cylinders and Wireframe. Periodic table trends and properties can be shown using the GChem Table feature. Different types of charts can be created and viewed using GChem Table. After completing this course, the student will learn to view mass spectrum of the molecule using Chemical calculator. The students will also learn to change length, angle and width of the bonds using Preferences window. Structures can be rotated in GChem3D. Magnification of structures, automatic and manual assignment of atoms can be done in the window. They will learn to drag and drop Templates and also create new Templates. It allows to use various residues and create new residues. It can group and align different objects as one single object. The students can view NIST Web Book page and PubChem page for a molecule. Images can used in print media, journals and publications.

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Surendranath College
24/2, M. G. Road, Kolkata-9

Sample Certificate:

Certificate for Completion of GChemPaint Training

This is to certify that **SWALEHA FATIMA** has successfully completed **GChemPaint** test organized at **Surendranath College** by **HARISADHAN GHOSH** with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

PRASANNA KUMAR MONDAL from **Surendranath College** invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

September 2nd 2021

Prof. Kannan M Moudgalya
IIT Bombay

2815628IY0

No. of students Enrolled for the course (SEM-VI-2020 Batch): 41
No. of students appeared in the Test Examination: 23
No of students successfully completed the course and awarded Certificate: 17

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Surendranath College
24/2, M. G. Road, Kolkata-9

(A)   Name of the Students Enrolled for GChemPaint Training

Sl. No	Name of the Student	Email ID	Gender
1	Jayanta Kumar Saha	jayanta1972000@gmail.com	Male
2	Satyaki Aditya Mitra	satyakiaditya38@gmail.com	Male
3	Anushree Santra	anushreesantra78@gmail.com	Female
4	Ayan Sarkar	ayansarkarm10s@gmail.com	Male
5	Subhrajit Kundu	subhrajitkundur235@gmail.com	Male
6	Abhijit Pathak	abhijitpathak38@gmail.com	Male
7	Sneha Dey	sunandadey781@gmail.com	Female
8	Ashish Ranjan	ar149912@gmail.com	Male
9	Abhishek Kumar Jha	abhishekjha1124@gmail.com	Male
10	Soumya Pramanik	soumyapramanik011@gmail.com	Male
11	Kausik Das	imkausik22@gmail.com	Male
12	Subhadip Mukherjee	subhadip2001mukherjee@gmail.com	Male
13	Rajdeep Saha	ronisahamessi@gmail.com	Male
14	Abhinaba Gayen	abhinabagayen710@gmail.com	Male
15	Biswanath Dari	biswanathdari30@gmail.com	Male
16	Sounok Sen	sounoksen38@gmail.com	Male
17	Utsab Sarkar	sarkarutsab2000@gmail.com	Male
18	Soumo Sikdar	soumosikdar@gmail.com	Male
19	Shashi Kant Singh	shasikant748@gmail.com	Male
20	Arka Ghosh	arkaghosh9876@gmail.com	Male
21	Bhumika Pramanik	bhumikapramanik8362@gmail.com	Female
22	Sumit Jana	janasumit741@gmail.com	Male
23	Poolakendra Nath Bandyopadhyay	poolakendra@gmail.com	Male
24	Reraj Biswas	rerajbiswas@gmail.com	Male
25	Abhishek Ballav	abhishekballav012@gmail.com	Male
26	Swarup Giri	swarupgiri364@gmail.com	Male
27	Sukalyan Chatterjee	chatterjee.sukalyan77@gmail.com	Male
28	Anisa Khatoon	khatoonanisa123@gmail.com	Female
29	Shourya Ghosh	shouryaghosh30@gmail.com	Male
30	Indranil Mukherjee	indranilmukh0510@gmail.com	Male
31	Atanu Ganguly	gangulyatanu2001@gmail.com	Male
32	Subhadip Rudra	subhadiprudra5120@gmail.com	Male
33	Abhik Kumar Manna	abhikkumarmannakgp@gmail.com	Male
34	Aniruddha Bhattacharjee	anibhattacharjee2020@gmail.com	Male
35	Shuvadip Das	shuvadipdas55780@gmail.com	Male
36	Sayak Pan	sayakpan9635@gmail.com	Male
37	Rudra Prasad Maiti	rpmdps1902@gmail.com	Male
38	Sritama Chatterjee	sritamachatterjee145@gmail.com	Female
39	Akash Sana	akashsana2000@gmail.com	Male
40	Nandan Nanda Goswami	nandannandagoswami@gmail.com	Male
41	Swaleha Fatima	fatimazahira0786@gmail.com	Female

Harisadhan Ghosh
Course Coordinator
Department of Botany chemistry
Surendranath College

Schatterjee
DBT-Star Coordinator
Surendranath College

DBT Star Co-ordinator
Surendranath College
24/2, M. G. Road, Kolkata-9

Principal
Surendranath College
Principal
Surendranath College
24/2, M. G. Road, Kolkata-9

Activity Report: Chemcollective Virtual Labs

Surendranath College in collaboration with IIT Bombay conducted this course as a part of the Spoken Tutorial project. The Spoken Tutorial is funded by the National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India. Surendranath College conducted this certificate course in collaboration with IIT Bombay under DBT-Star College Strengthening Scheme, GOI.

Organised by: Department of Chemistry, under DBT-Star College Strengthening Scheme, GOI.

Highlights of the course:

- Self explanatory - uses simple language
- Audio-video - uses multi-sensory approach
- Learner-centered - learn at your own pace Learning by doing - learn and practice
- Simultaneous empowerment - learn a new FLOSS

Year of commencement: 2021

Duration: 6 months

Introduction:

ChemCollective Virtual Labs is a simulation of a chemistry laboratory. It allows students to explore and reinforce fundamental concepts, select various standard reagents (aqueous) and use them as they use in a real laboratory. It is designed to help students link chemical computations with authentic laboratory chemistry. ChemCollecve virtual labs are part of National Science Digital Library (NSDL). hps://nsdl.oercommons.org

Course content:

(1) **Overview of ChemCollective VLabs:**
   Outline: About ChemCollective Vlabs software, ChemCollective Vlabs offline interface, Features, Menu bar, Stockroom explorer, Glassware menu, Workbench.

(2) **Download and Installation of VLabs:**
   Outline: Open the Chemcollective website About topics and resource material available on the website About ChemCollective Vlabs online interface Download and run ChemCollective Vlabs

(3) **Preparation of Standard Solutions:**
   Outline: Prepare a standard solution of 1 molar sodium chloride Load Homework using ChemCollective vlabs Use of glassware and lab apparatus from default lab setup.

(4) **Dilutions and pH Measurement:**
   Outline: Dilute 0.1 molar Hydrochloric acid to 0.01 molar Hydrochloric acid, Dilute 0.1 molar sodium hydroxide to 0.01 molar sodium hydroxide, Obtain the acid and base from the cabinet.

(5) **Density of Solids and Liquids:**
   Outline: From the Load homework option, select Molarity and Density, Use Archimedes' Principle to find the densities of metals. About Archimedes' Principle, Rename the glassware us.

(6) **Effect of temperature on solubility:**

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Surendranath College
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Outline: Select the required glassware Use Duplicate option from the context menu to make the copies of glassware Select the tools and duplicate them Arrange the glassware and tools on .

(7) Acid-base Titrations:

Outline: Standardization of the acid-base solutions using titration method Retrieve required chemicals from stockroom. Retrieve the required glassware and arrange them on the workbench...

(8) Buffer Solutions:

Outline: Select Buffer Creation Problem from the Load Homework option. Define buffer solution. Estimate the pH using Henderson–Hassel balch equation. Prepare 0.5 M Acetate buffer of pH ..

(9) Heat of Reaction:

Outline: Define Hess's law. Retrieve the chemicals from the stockroom explorer. Retrieve the required glassware and tools. Record the temperature using the thermometer provided. Use the..

(10) Metal Displacement Reactions:

Outline: Define Redox Reaction. Define metal displacement reaction. Retrieve the required glassware and solutions for the reactions. Rename the glassware using the context menu. Arrange..

(11) Determination of Equilibrium constant:

Outline: Determine equilibrium constant for Cobalt chloride reaction. Check the effect of temperature and concentration on equilibrium. Application of Le-Châtelier's Principle on the equilibrium.

(12) Determination of Solubility Product:

Outline: Determine Solubility of salts. Significance of solubility product. Retrieve the required glassware and tools. Duplicate and rearrange the apparatus on the workbench

(13) Gravimetric Analysis:

Outline: About the principle of Gravimetric Analysis. Steps involved in Gravimetric Analysis. About groundwater poisoning with arsenic. Chemical equations used for the determination of..

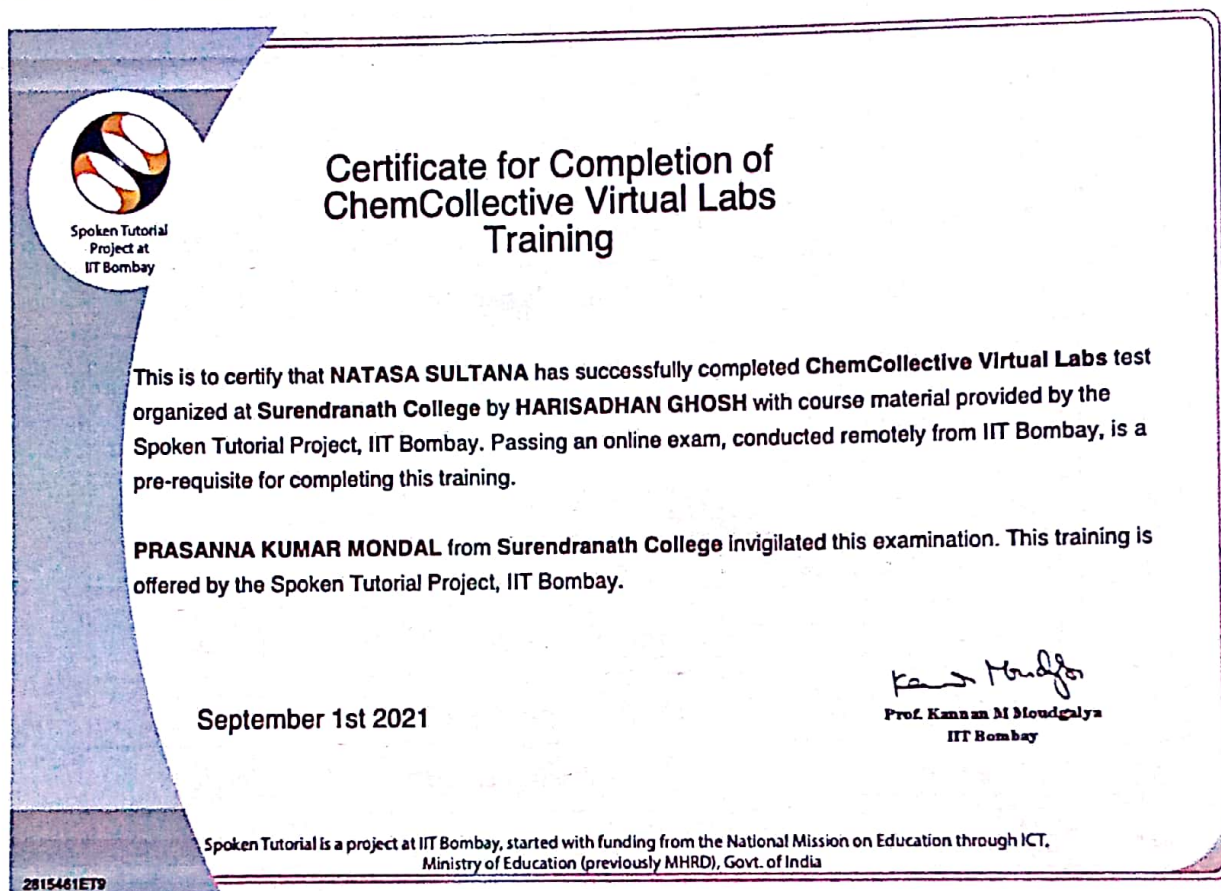**(14) Determination of pKa of Acetic acid:**

Outline: Determination of pKa of Acetic acid About Henderson-Hasselbalch equation. Retrieve chemicals from the Stockroom Explorer. Retrieve the glassware from the glassware menu

<u>Course outcome:</u>

ChemCollecve virtual labs software is available free of charge to all educators and students. Teachers and students can use it on the web without any licensing requirements. The lab allows students to select from hundreds of standard reagents (aqueous) and manipulate them in a manner resembling a real lab. Lab experiments in the following concepts are available as virtual labs. Simulation-based exercises offer new ways to promote learning and motivation. Interactive exercises can allow students to explore and reinforce fundamental concepts. It will help students learn basic laboratory techniques without wastage of chemicals and breakage of apparatus. Teachers can use Vlabs as pre-lab exercise and as classroom activities for individuals or teams. Students can review and learn chemistry concepts using virtual labs. In case where experiments are to be done quickly, virtual labs allows careful observation and safe measurement of parameters. They are useful where experiments involve risks to the health and physical integrity of learners. They are available all around the year, as opposed to school laboratories, limited to a specific place and for a limited me. Virtual labs are cheaper, faster, less risky and more affordable than the real process

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Surendranath College
24/2, M. G. Road, Kolkata-9

Sample Certificate:

Certificate for Completion of ChemCollective Virtual Labs Training

This is to certify that **NATASA SULTANA** has successfully completed **ChemCollective Virtual Labs** test organized at **Surendranath College** by HARISADHAN GHOSH with course material provided by the Spoken Tutorial Project, IIT Bombay. Passing an online exam, conducted remotely from IIT Bombay, is a pre-requisite for completing this training.

PRASANNA KUMAR MONDAL from Surendranath College invigilated this examination. This training is offered by the Spoken Tutorial Project, IIT Bombay.

September 1st 2021

Prof. Kannan M Moudgalya
IIT Bombay

Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India

2815461ET9

No. of students Enrolled for the course (SEM-IV-2020 Batch): 21

No. of students appeared in the Test Examination: 19

No of students successfully completed the course and awarded Certificate: 15

Principal
Surendranath College
24/2, M. G. Road, Kolkata-9

(A) List of the Students enrolled for the Chemcollective Virtual Labs Training

Sl No	Name	Email	Gender
1	Srijita Bhowmick	srijitabhowmick7@gmail.com	Female
2	Tiasa Chatterjee	tiasachatterjee052@gmail.com	Female
3	Natasa Sultana	natasa11nov@gmail.com	Female
4	Jesmin Parveen	jasminegalsi@gmail.com	Female
5	Arghadeep Sarkar	arghadeep003386@gmail.com	Male
6	Arijit Banerjee	arijitbanerjee8700@gmail.com	Male
7	Krishnendu Chatterjee	titochatterjee2000@gmail.com	Male
8	Prince Saha	dazzlingprince28@gmail.com	Male
9	Rajdeep Chakraborty	rajdeepofficial2001@gmail.com	Male
10	Saumik Mal	saumikmal99@gmail.com	Male
11	Shyamsundar Maiti	shyamsundarmaiti615@gmail.com	Male
12	Souradeep Roy	souradeeoroy0001@gmail.com	Male
13	Subhadeep Sengupta	subhadeepsengupta33@gmail.com	Male
14	Suman Mahato	sumanmahato2001wb@gmail.com	Male
15	Suvankar Mallick	suvankarmallick1401@gmail.com	Male
16	Boijoyanta Howlader	boijoyanta@gmail.com	Male
17	Jagannath Dalui	jagannathdalui296@gmail.com	Male
18	Wasekuzzaman Molla	wasekuzzaman.molla@gmail.com	Male
19	Jasimuddin Molla	mollajasimuddin2017@gmail.com	Male
20	Kaushik Bhagat	kaushikbhagat8944@gmail.com	Male

Principal
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| 21 | Supriya Mondal | supriyamondalsnc123@gmail.com | Male |

(B) Name of the Students who appeared for the Test in ChemCollective Virtual Labs Test Examination

Sl No	Name	Email	Gender
1	Srijita Bhowmick	srijitabhowmick7@gmail.com	Female
2	Tiasa Chatterjee	tiasachatterjee052@gmail.com	Female
3	Natasa Sultana	natasa11nov@gmail.com	Female
4	Jesmin Parveen	jasminegalsi@gmail.com	Female
5	Arghadeep Sarkar	arghadeep003386@gmail.com	Male
6	Arijit Banerjee	arijitbanerjee8700@gmail.com	Male
7	Krishnendu Chatterjee	titochatterjee2000@gmail.com	Male
8	Prince Saha	dazzlingprince28@gmail.com	Male
9	Rajdeep Chakraborty	rajdeepofficial2001@gmail.com	Male
10	Saumik Mal	saumikmal99@gmail.com	Male
11	Shyamsundar Maiti	shyamsundarmaiti615@gmail.com	Male
12	Souradeep Roy	souradeeoroy0001@gmail.com	Male
13	Subhadeep Sengupta	subhadeepsengupta33@gmail.com	Male
14	Suvankar Mallick	suvankarmallick1401@gmail.com	Male
15	Boijoyanta Howlader	boijoyanta@gmail.com	Male
16	Wasekuzzaman Molla	wasekuzzaman.molla@gmail.com	Male
17	Jasimuddin Molla	mollajasimuddin2017@gmail.com	Male
18	Kaushik Bhagat	kaushikbhagat8944@gmail.com	Male
19	Supriya Mondal	supriyamondalsnc123@gmail.com	Male

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(C) Name of the Students Awarded Certificate in ChemCollective Virtual Labs

Sl No	Name	Email	Gender
1	Srijita Bhowmick	srijitabhowmick7@gmail.com	Female
2	Natasa Sultana	natasa11nov@gmail.com	Female
3	Arghadeep Sarkar	arghadeep003386@gmail.com	Male
4	Arijit Banerjee	arijitbanerjee8700@gmail.com	Male
5	Krishnendu Chatterjee	titochatterjee2000@gmail.com	Male
6	Prince Saha	dazzlingprince28@gmail.com	Male
7	Rajdeep Chakraborty	rajdeepofficial2001@gmail.com	Male
8	Saumik Mal	saumikmal99@gmail.com	Male
9	Shyamsundar Maiti	shyamsundarmaiti615@gmail.com	Male
10	Souradeep Roy	souradeeoroy0001@gmail.com	Male
11	Suvankar Mallick	suvankarmallick1401@gmail.com	Male
12	Boijoyanta Howlader	boijoyanta@gmail.com	Male
13	Wasekuzzaman Molla	wasekuzzaman.molla@gmail.com	Male
14	Kaushik Bhagat	kaushikbhagat8944@gmail.com	Male
15	Supriya Mondal	supriyamondalsnc123@gmail.com	Male

Harisadhan Ghosh
Course Coordinator
Department of Chemistry
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S Chatterjee
DBT-Star Coordinator
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Principal
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Department of Physics – Activity Report

Name of Event: Certificate Course

Topics Covered: LaTeX, Arduino, Python 3.4.3

Course Coordinator: Prasanna Kumar Mondal, Department of Physics

Test Invigilator: Harisadhan Ghosh, Department of Chemistry

Course Material Provider: Spoken Tutorial Project, IIT Bombay

Year of offering: 2021

Course duration: 6 months

Platform: FOSSEE (Free/Libre & Open Source Software for Education)

Organised by: Department of Physics, Surendranath College, Kolkata.

Number of Participants: 51

Summary: Three online certificate courses LaTeX, Arduino, and Python 3.4.3 were offered to the Physics Hons. students. A total of 51 Undergraduate students were registered for the course. Each course was of 6 months duration and covered various areas of computer programing like, LaTeX, Arduino, and Python 3.4.3.

      LaTeX is a typesetting software for document preparation, letter writing, report writing etc. LaTeX's prominent use is in the preparation and publication of books and articles that contain complex mathematical formulae, numbering and cross-referencing of tables and figures, chapter and section headings, the inclusion of graphics, page layout, indexing and bibliographies.

      Arduino is an open source platform used for building electronics projects. Arduino consists of both a physical programmable circuit board or microcontroller and software, IDE (Integrated Development Environment) that runs on the computer. It is used to write and upload computer code to the physical board.

      Python is a powerful general-purpose programming language. This is part of the free and open source software for science and engineering education. It is used in web development, data science, creating software prototypes, etc.

      An MCQ test was conducted at the end of each course and successful candidates were certified by IIT, Bombay.

A summarized report of number of appeared and successfully passed candidates is mentioned below:

Sr. No.	Batch	Name of the course	No. of students appeared	No. of successful students
1	B.Sc. (Physics Hons. Batch Year - 2018	LaTeX	23	6
2	B.Sc. (Physics Hons. Batch Year - 2019	Arduino	12	4
3	B.Sc. (Physics Hons. Batch Year - 2020	Python 3.4.3	16	3

Course Coordinator
Department of ~~Botany~~ Physics.
Surendranath College

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Principal
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ACTIVITY REPORT: INTRODUCTION TO COMPUTERS

Surendranath College in collaboration with IIT Bombay conducted this course as a part of the Spoken Tutorial project. The Project is funded by the National Mission on Education through Information and Communication Technology, Ministry of Human Resource Development, Government of India.

Organised by: Department of Zoology, under DBT-Star College Strengthening Scheme, GOI.

Highlights of the course:

- Self explanatory - uses simple language
- Audio-video - uses multi-sensory approach
- Small duration - has better retention
- Learner-centered - learn at your own pace Learning by doing - learn and practice
- Simultaneous empowerment - learn a new FLOSS

Year of commencement: 2020-2021

Duration: 6 months

Course content: The course is designed to help beginners to learn the basics about computer components and using Gmail and Google drive.

Course outcome: After completion of the course students will have a clear idea about the various components of the computer, will be able to connect to the printer and take a print, create a Gmail account, compose-edit emails, attach files to emails, share files via google drive, insert a photo or link into an email, about the Compose window options Creating a document, a spreadsheet, and a presentation

Sample Certificate:

No of students participated in the course: 79
No of students successfully completed the course: 46

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