RGUKT BASAR

Department of Chemical Engineering

presents

Curative Curious
A Four Day Workshop on

LaTeX

CHEIF PATRON

Sri. RAHUL BOJJA, I.A.S

Vice Chancellor
RGUKT Basar

SPEAKER

Dr. P.V. GOUTHAM
Assistant Professor
Department of Chemical Engineering
NIT AP

IN-HOUSE SPEAKERS

Mr. T.P. Sunil Kumar
Assistant Professor
Department of Mathematics

Dr. Ajay Kumar R
Assistant Professor
Department of MME

Dr. H. Dattu
Assistant Professor
Department of Mathematics

Dr. Rajendra Prasad G
Assistant Professor
Department of MME

Mr. Ramaraju B
Assistant Professor
Department of Chemical Engineering

Register Here

CONVENER

Mrs. Srujana D
Assistant Professor
Department of Chemical Engineering
RGUKT Basar

ORGANIZERS

**Faculty
& Students Body**
Department of Chemical Engineering
RGUKT Basar

TIME & VENUE

SEMINAR HALL, DEPARTMENT OF CHEMICAL ENGINEERING

**24 - 27 MARCH 2022
(9:30AM - 4:30PM)**

BIT.LY/LATEX_WORKSHOP_RGUKTB

About the Institution:

Rajiv Gandhi University Of Knowledge Technologies(Rgukt) has been established by the Government of erstwhile combined Andhra Pradesh in 2008, and the Basar campus has been taken over by the Government of Telangana, after due amendment of the Rajiv Gandhi University for Knowledge Technologies Act, 2008.

About the LaTeX:

LaTeX, which is pronounced as 'Lah-tech' or 'Lay-tech', is a document preparation system for high-quality typesetting package for producing professional-quality Articles, Thesis, Books, Power Point Presentation (beamer) and other structured documents which involves mathematical symbols and equations. LaTeX encourages authors not to worry too much about the appearance of their documents but to concentrate on getting the right content.

Objective of Workshop:

- The main objective is to provide a comprehensive theoretical and hands on practical experience on LaTeX to the beginners and enable authors to typeset and print their work at the highest typographical quality.

Contents of the workshop

- Introduction to LaTeX
- Basic document creation of various classes using commands
- Letter, Resume & Report writing
- Mathematical equations in LaTeX
- Introduction to Stoichiometry in LaTeX
- Insertion/creation of Tables, Figures and Graphs
- Bibliogarphy in LateX
- Introduction to Beamer Package Presentation

Learning outcomes

- Have conceptual clarity in special commands, including those for mathematics, chemistry, text formatting and tables.
- Get insights into features of beamer package.
- Get familiarity with technical writing for journal /thesis publication

CURATIVE CURIOUS- A Four day Workshop on "LaTeX"

(24th -27th March, 2022)

Programme Schedule

Day 1-24th March, 2022		
Session	**Themes**	**Speaker**
9.30-9:40	Inaugural session	
9:40-9:45	Address by Patron. RGUKT Basar	Prof. Y.Rajeshwar Rao
9:45-9:55	Introduction about the Workshop	Mrs. Srujana D
Session-I 10:00-11:30	**Slot-I:** Introduction to LaTeX	Dr. Rajendra Prasad G Assistant professor Department of Metallurgical and Materials Engg
Break		
11:45-13:00	**Slot-II:** Hands on session on **Slot-I**	Dr. Rajendra Prasad G Assistant professor Department of MME
Lunch break		
Session-II 14:30-15:30	**Slot-I:** Templates & Enumerations	Dr. Rajendra Prasad G Assistant professor Department of MME
Break		
15:30-17:30	**Slot-II:** Hands on Training on	Dr. Rajendra Prasad G Assistant professor Department of MME
Day 2-25th March 2022		
Session-I 9.00-11:30	**Slot-I:** Letter/Report/Cv/Resume writing	Dr.Ajay kumar R Assistant professor Department of Metallurgical and Materials Engg.
Break		
11:45-13:00	**Slot-II:** Hands-on-session on Letter/Report/Cv/Resume writing	Dr.Ajay kumar R Assistant professor Department of MME
Lunch break		
Session-II 14.30 –15:30	**Slot-I:** Equations, symbols in Mathematics in LaTeX	Mr. Sunil Kumar T. P Assistant professor Department of Mathematics.
Break		
15:45- 17:30	**Slot-II:** Hands-on-session on Equations, symbols in Mathematics in LaTeX	Mr. Sunil Kumar T.P Assistant professor Department of Mathematics
Day 3-26th March 2022		
Session-I 9:00- 11:00	**Slot-I:** Introduction to stoichiometry in LATEX	Mr. Ramaraju B Assistant professor. Department of Chemical Engg
Break		
11:15- 13:00	**Slot-II:** Introduction to Beamer package presentation	Dr. Halle Dattu Assistant professor Department of Mathematics
Lunch break		
Session-II 14:30-15:30	**Slot-I:** Insertion/creation of Tables, graphs and images in LaTex	Dr.Goutham P V Assistant professor Department of Chemical Engg NIT, tadepalligudem, AP
Break		
15:45-17:30	**Slot-II:** Hands on session on **Slot-I**	Dr.Goutham P V

		Assistant professor Department of Chemical Engg NIT, tadepalligudem, AP
Day 4-27ᵗʰ March 2022		
Session-I **9:00- 11:30**	**Slot-I:** Bibliography in LATEX	Dr.Goutham P V Assistant professor Department of Chemical Engg NIT, tadepalligudem, AP
Break		
11:15- 13:00	**Slot-II:** Working with templates of various journals	Dr.Goutham P V Assistant professor Department of Chemical Engg NIT, tadepalligudem, AP
Session-II		
14:30-15:30	**Assignment-I** **Assignment-II**	
15:45-17:30	**Valedictory ceremony and Vote of thanks**	

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES-BASAR

Report on A-Four day workshop "Curative Curious-2022" on LaTeX

The Department of Chemical Engineering organized A-Four day workshop Curative Curious-

2022 on "**LaTeX**" from 24th -27th March, 2022 in the seminar hall & simulation laboratory of Chemical Engineering department from 9:00AM-5.30PM. The workshop organized successful with 119 participants from various departments and fields of Engineering and Sciences.

The programme was organized by the Convenor, Mrs.Srujana D, Asst.professor, and Dept. of Chemical Engineering, faculty organizing committee, Dept. of Chemical Engg and student coordinators.

Day-1: 24th March, 2022, Session -1(slots-1&2):

Inaugural Session

The session was commenced by Ms. Shaik.Shaziya, B.Tech(III-yr) student, Chemical Engineering by welcoming the Convenor of the workshop Mrs. Srujana D, Assistant Professor, Chem.Engg Dept. The Convenor addressed the event by welcoming the delegates, speakers, faculty and participants of the workshop. Followed by this Convenor Mrs. Srujana invited Prof. Y Rajeshwar Rao, Administrative Officer, RGUKT-B to address the workshop. Prof. Y Rajeshwar Rao firstly congratulated Mrs. Srujana D and the team for organizing this workshop. He briefed about the importance of LaTeX and suggested 4th year students to make optimal utilization of this workshop. Followed by this Convener invited Dr. I.V.R. Shastry, Director, IQAC (RGUKT-B). Dr. I.V.R. Shastry exhorted the students to importance of LaTeX in reaserch articles in various fields. In continuation, convenor welcomed Mrs. Srujana G, Associate Dean of Engineering to address the gathering. Mrs. Srujana G, appreciated the department of Chemical Engineering for the initiation taken by the department. She also briefed the importance and application of LaTeX in academics. And also suggested students to follow the workshop regularly and try to prepare their project reports using LaTeX.

Later on, Convenor invited Dr. Pavani A, Head of the department, Chemistry. Dr. Pavani A shared her views on utilization of LaTeX in paper/journal/book publication and explained its advanced applications over Ms-Word.

The session followed by introducing about the workshop by Mrs. Srujana D by pronouncing as "Lay-tek". TeX is a typesetting system that incorporates a microprocessor. It is developed by scientific enthusiasts and is widely used for Compiling Reports, Journals, Books, Research Papers, and Bibliography etc. She explained the importance of technical writing in present era. And thanked Mr. Haribabu P HoD, Chemical Engg for giving the opportunity and also thanked department faculty and student coordinators for their support and coordination to be happen the workshop.

The session then continued with introduction of Experts of the workshop. Mrs. Srujana D invited in-house speaker Dr. Rajendra prasad, Asst.professor, Department of Metullurgy and Material Science Engg and handed over the session to him.

Speaker Dr. Rajendra prasad, Asst.professor, Department of Metullurgy and Material Science Engg thanked the event coordinators for giving him this opportunity and began by giving an introduction about LaTeX and explained how it works and what various platforms/search engines available are and their applications. He started the session by explaining the commands/syntax to create class/article/book and sections, subsections, paragraph, subparagraph and enumerations. He asked the students to work out the contents in their system and later session he started by giving assignments and examples by providing hands on training on LateX and he concluded the session by clarifying the queries of the participants.
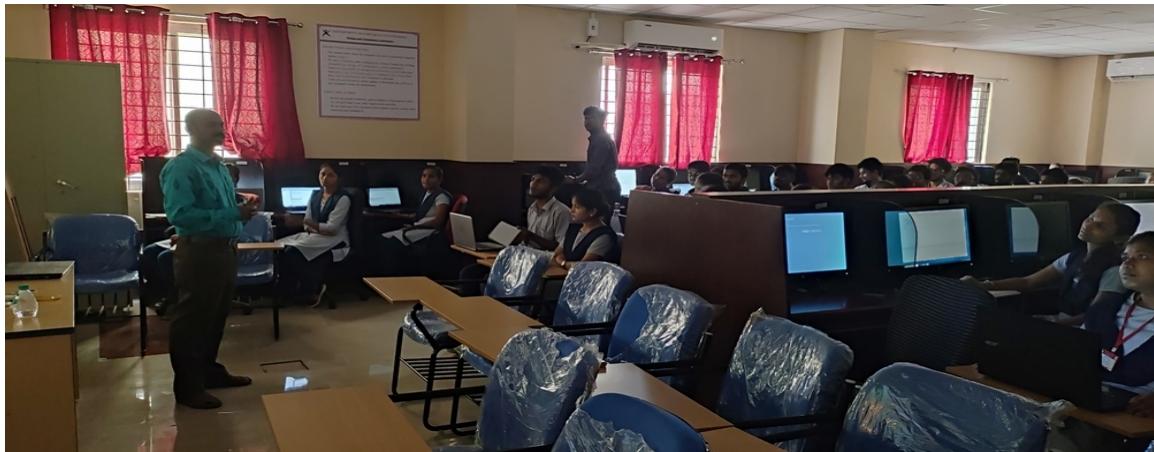
Mr. Haribabu, HoD thanked Dr. Rajendra prasad for sparing his time and delivering an enthralling session on LaTeX. He asked participants to practice and notified them about Day 2's schedule.

Day-2: 25ᵗʰ March, 2022, Session -1(slots-1&2):

The session was initiated by Mrs. Srujana D and Invited in-house speaker Dr. Ajay Kumar R Asst.professor, Department of Metallurgy and Material Science Engg and handed over the session to him.

Dr. Ajay Kumar R thanked the event coordinators for giving him this opportunity and began by giving a brief recap of the contents which were covered in previous sessions and explained how to give input syntax to write a simple letter in LateX and he asked participants to imitate and write their

own letter. Then the session followed by introduction to Resume/CV writing by recapping previous syntax and session concluded by hands on session on assignments provided by speaker.

Mrs. Srujana D thanked speaker Dr. Ajay Kumar R for sparing valuable time and for their enlightened presentation.

Day-2: 25ᵗʰ March, 2022, Session -2(slots-1&2):

Mrs. Srujana D started the session by welcoming all the participants and keynote speaker Mr. Sunil Kumar T P, Asst. professor, Department of Mathematics and handed over the session to him.

Mr. Sunil Kumar T P opined that LaTeX cannot be learnt in weeks or days; it requires constant practice. He began by displaying some equations. Firstly, he discussed Inline equations, why is an equation placed between dollars ($ equation $) and he differentiated between forward-slash (\) and double forward-slash (\\) where later is used to start a new line while forward slash is used to include something from inbuilt Library.

Followed by this Mr. Sunil Kumar T P demonstrated how to write separate equations and he recommended participants practice by themselves and he explained in details about Basics of Equations, Math mode, Mathematical Symbols also demonstrated how to write complex equations in LaTeX and how to use summation. He then went onto explain trigonometric equations, writing matrices, differential equations, integrations and time series equation etc. he ended the session by hands on session on examples and assignment problems by clarifying the queries raised by the participants.

Mr. Haribabu, HoD thanked Mr. Sunil Kumar T.P for delivering wonderful session on mathematical equations in LaTex.

Day-3: 26ᵗʰ March, 2022, Session -1(slot-1):

Mrs. Srujana D began the session by welcoming all the participants and keynote speaker Mr. Ramaraju B, Asst. professor, Department of Chemical Engineering and handed over the session to him.

Mr. Ramaraju B, started the session by importance of LateX in Chemical engg. Especially to state the chemical reactions and structure of compounds. He explained the syntax to be used to write the simple reaction, sequence of reactions, symbols and he also demonstrated how to draw structure of compounds(like linear, triangle, tetrahedron), electronic pairs, positive, negative ions and also explained how to draw lewis structures. Finally he concluded the session by providing assignment and example problems and clarifying the queries of the participants.
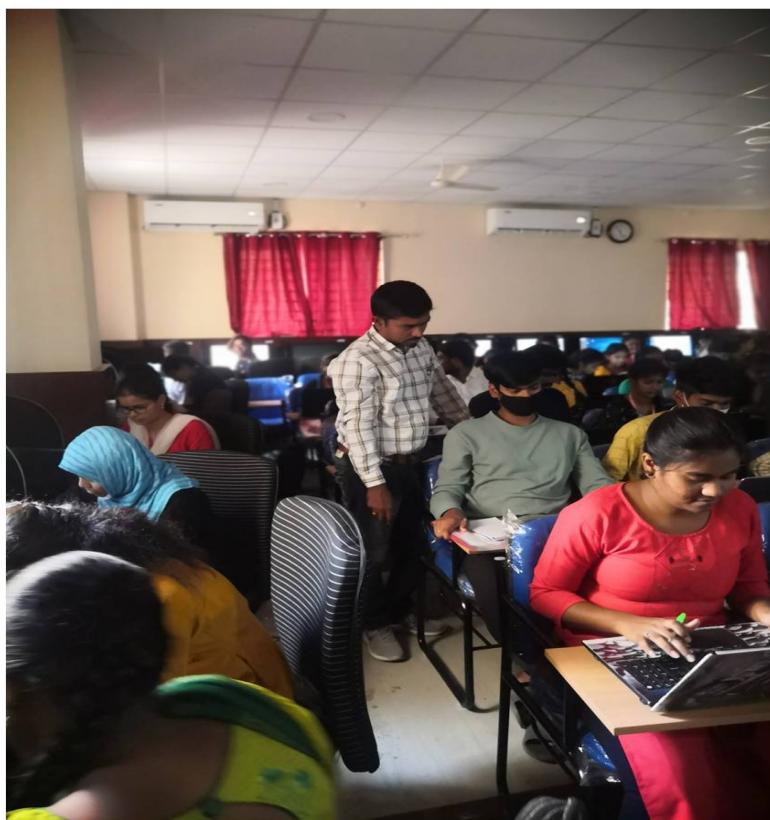
Mr. Haribabu, HoD thanked speaker Mr. Ramaraju B for sparing his valuable time for delivering enlightened presentation on Chemical reactions using LaTeX.

Day-3: 26ᵗʰ March, 2022, Session -1(slot-2):

Mrs. Srujana D initiated the session by welcoming keynote speaker Dr. Halle Dattu, Asst. professor, Department of Mathematics and handed over the session to him.

Dr. Halle Dattu, thanked the event coordinators for giving him this opportunity and began by giving a brief introduction on Beamer package presentation where Beamer presentation is created like any other LaTeX document. It has a preamble and a body, the body contains \sections and \subsections, the different slides (called frames in Beamer) are put in environments, they are structured using itemize and enumerate environments, and so on. He also demonstrated how the themes allow changing the appearance of the presentation and how themes are designed to be usable in practice. He enlightened the layout, the colors, and the fonts used in a presentation can easily be changed globally. This makes it easy to create presentations out of lecture notes or lecture notes out of presentations. And finally he demonstrated that final output is typically a PDF file. He concluded the session by making interaction with the students.

Mr. Haribabu, HoD thanked speaker Dr. Halle Dattu for delivering enlightened information on Beamer Package presentation.

Day-3: 26ᵗʰ March, 2022, Session -2(slots-1&2):

The session was kicked off by Mrs. Srujana D welcoming all the attendees and gave brief introduction about the session's expert speaker Dr. P.V. Goutham, Assistant professor, NIT (AP) and handed over the session to him.

Dr. P.V. Goutham started session by recapping previous topics covered and briefed the significance of appearance of tables and graphs in technical documents. He demonstrated how tables are added in the LaTeX code, how to add rows and columns depending upon their number and also the alignment of the table. He also showed how to draw horizontal and vertical lines for tables and also how to give captions and labels to them. He also gave an idea of how to add graphs and other figures in a LaTeX document wherever required. He concluded the session by advising the participants to practise the same on LaTeX.

Mrs. Srujana D thanked expert speaker Dr. P.V. Goutham for his valuable presentation on insertion/creation of tables/graphs/figures.

Day-4: 27ᵗʰ March, 2022, Session -1(slots-1&2):

The session was initiated by Mrs. Srujana D by welcoming all the participants and invited keynote speaker Dr. P.V. Goutham, Assistant professor, NIT (AP) and handed over the session to him.

Dr. P.V. Goutham firstly addressed the participants and pointed out that the art of writing a bibliography varies based upon the publisher. He demonstrated the style of bibliography for all kinds of items related to books, journals, Conference papers etc. and insisted to follow the same while practicing. He also displayed the syntax for citation, reference and cross reference. He concluded the session by hands on session on bibliography.

Valedictory Ceremony:

The Valedictory Ceremony was commenced by Ms. Shaik.Saziya and she gave a short note on valedictory session and invited Convenor to address the session. Convenor Mrs. Srujana D shared her experienced of the past four days of workshop and gave brief closing remarks of the workshop and thanked the management and participants for their support and cooperation.

Later on, Mrs. Srujana D invited Dr. I.V.R. Shastry to distribute the token of appreciation to the keynote speakers. In continuation to this, certificates distributed to all the participants and letter of appreciations to student coordinators.

Next, to this one of the particpants from ECE department shared her experience and feedback on the workshop. The programme followed by Ms. Shaik.Saziya by proposing a Vote of Thanks and requested Mr. Haribabu P. Head Of the Department, Chemical Engg, to address the audience.

Mr. Haribabu P. Head Of the Department, Chemical Engg firstly, congratulated the Convenor and team for their enormous efforts to making the event to be happen. And he thanked all the speakers for sparing their valuable time to share knowledge on LaTeX. He also thanked management and other supportive staff from various sections of University for their support and Cooperation to make the event to be a phenomenal success.