

From
Mr.G.Ravi
Department of Chemistry
University College of Arts and Science
Krishna University
Machilipatnam-521004

Machilipatnam
30th January, 2023

To
The Principal
University College of Arts and Science
Krishna University
Machilipatnam-521004

(Through Proper Channel)

Respected Madam,

Sub: Request for permission to conduct a Value Added Course to the M.Sc., Organic Chemistry 1st semester students in the academic year 2022-23-Reg

With reference to the above subject cited, I request you to grant permission to conduct Value Added Course (VAC) to the M.Sc., Organic Chemistry 1st semester students in the academic year, 2022-23 batch on : **“Mathematical Tools and use of Application Software in Chemistry”** (22OCHVACNC) by the Department of Chemistry, Krishna University, Machilipatnam. The proposed course is scheduled from 09-02-2023 to 28-02-2023.

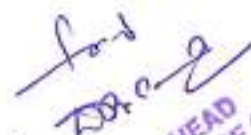
I, (Mr.G.Ravi) am the Coordinator as well as resource person for this Value Added Course. The details of the Value Added Course are enclosed with this letter. A brief report including the Student enrolment, attendance, along with the proof of participants will be submitted to your office immediately after the completion of the Value Added Course. In this connection, I request you to permit me to start the above cited Value Added Course.

Thanking You,

Yours Sincerely



(Mr.G.Ravi)



Enclosure: Details of Value Added Course

HEAD
DEPARTMENT OF CHEMISTRY
UNIVERSITY COLLEGE OF ARTS & SCIENCE
KRISHNA UNIVERSITY
MACHILIPATNAM - 521 004 A.P



Principal
University College of Arts & Science
Krishna University
Machilipatnam - 521 004



Krishna University, Machilipatnam-521004

University College of Arts and Science

Department of Chemistry

Proposed Value Added Course (VAC) to M.Sc., Organic Chemistry-1st semester
students admitted in the Academic Year 2022-23 batch

Duration: Two weeks (09-02-2023 to 28-02-2023)

Date of commencement: 09-02-2023

Name of the Course Co-Ordinator: Mr.G.Ravi

Name of the Course: : **"Mathematical Tools and use of Application Software in Chemistry"**

Course Code: 22OCHVACNC

Mode of Classes: **Offline**

Outcomes of the course:

- After the completion of the course, the students should be able to
- Perform analytical calculations of the mathematics involved in the elementary physical chemistry.
- Use Mathematica and Matlabsoftwares to perform algebraic and numerical calculation and visualize mathematical functions by plotting graphs relevant to the topics of physical chemistry like chemical kinetics, thermodynamics, quantum chemistry etc.
- Write scientific documents using the typesetting platform LATEX.

Day-wise Course Modules

S.No	Date	Topic to be cover
1	09-02-2023	Cartesian and polar coordinate systems and their interconversion
2	10-02-2023	Preliminary idea about complex number and complex variable. Vectors and Matrices
3	13-02-2023	Vectors, preliminary idea of vector space, matrix algebra, matrix inversion,
4	14-02-2023	Elementary analytical methods to solve differential equations
5	15-02-2023	Functional Series and Integral Transforms: Fourier transform, Laplace transform
6	17-02-2023	Power series method for differential equations
7	20-02-2023	Introduction to Mathematica and Matlab for symbolic computation of simple algebra and numerical mathematics
8	21-02-2023	Evaluating and plotting mathematical functions, solving simultaneous equations
9	22-02-2023	differentiation, integration, integral transform,
10	23-02-2023	series, solving differential equations (ODE & PDE), performing matrix algebra, curve fitting.
11	24-02-2023	Fourier transform, Laplace transform
12	25-02-2023	solving algebraic equations
13	27-02-2023	Fourier transform, Laplace transform
14	28-02-2023	matrix eigenvalue and eigenvector, solution of simultaneous algebraic equation with more than two unknowns

KRISHNA UNIVERSITY

Prof. Y.AVASN. MARUTHI

Principal

University College of Arts and Science

Krishna University

Machilipatnam-521 004



Mobile: 9885243126

Email: kru.principal@gmail.com

KrU/UCAS/Chem/ Organic Chemistry/VAC/2022-23

Dt. 02.02.2023

CIRCULAR

The Department of Chemistry is organizing the two week value added course on :

“Mathematical Tools and use of Application Software in Chemistry” by

Mr.G.Ravi, Department of Chemistry is the resource person to the M.Sc., Organic Chemistry 1st semester students in the academic year 2022-23 from 09-02-2023 to 28-02-2023. All the 1st semester M.Sc., Organic Chemistry students here by informed that to enrol for the value added course on or before 07-02-2023 and gets information from the Mr.G.Ravi, Coordinator of the course and utilize the opportunity by attending the classes.

Venue: Room No 123, Chemistry Previous Lecture hall.


Principal
Principal
University College of Arts & Science
Krishna University
Machilipatnam - 521 004

Copy to:

Head, Department of Chemistry.

IQAC

File.





KRISHNA UNIVERSITY
UNIVERSITY COLLEGE OF ARTS AND SCIENCE,
MACHILIPATNAM-521004

VALUE ADDED COURSE ON

“Mathematical Tools and use of Application Software in Chemistry”

From 09-02-2023 to 28-02-2023

Organized by

Department of Chemistry

Chief Patron

Prof. Y. AVASN MARUTHI

Principal

UCAS, Krishna University, Machilipatnam

Patron

Dr. D. Ramasekhara Reddy

Head, Department of Chemistry,

UCAS, Krishna University, Machilipatnam.

Course Coordinator and Resource Person

Mr.G.Ravi

Assistant Professor (Contract)

Department of Chemistry

UCAS, Krishna University, Machilipatnam.



KRISHNA UNIVERSITY, MACHILIPATNAM-521004
UNIVERSITY COLLEGE OF ARTS AND SCIENCE
DEPARTMENT OF CHEMISTRY

Two week Value Added Course on : **“Mathematical Tools and use of Application Software in Chemistry”** to the M.Sc., Organic Chemistry 1st semester students in the academic year 2022-23

from 09-02-2023 to 28-02-2023.

Student Enrollment List

Name of the Coordinator:: Mr.G.Ravi
Designation: Assistant Professor (Contract)

Date: 07-02-2023

S.No.	Name of the Student	Regd.No.	Signature of the Student
1	Ajmira Balaji Naik	Y22OCH101001	A. Balaji Naik
2	Asma Begum	Y22OCH101002	A. Begum
3	Challagurugula Kusuma	Y22OCH101003	Ch. Kusuma
4	Chandika Naga Venkata Durga Bhavani	Y22OCH101004	Ch.N.V.Durga Bhavani
5	Chilli Sumanth Babu	Y22OCH101005	Sumanth babu Ch
6	Dadala Varaprasad	Y22OCH101006	Varaprasad. D.
7	Dendukuri Venkata Krishna Raju	Y22OCH101007	D.Venkata Krishna Raju
8	Dhara Mahesh Babu	Y22OCH101008	D. Mahesh babu
9	Donga Chinnari	Y22OCH101009	D. chinnari
10	Gatte Meghana Sai	Y22OCH101010	G. Meghana Sai
11	Gunturi Sneha	Y22OCH101011	Sneha.G
12	Gurijala Chandra Sekhar	Y22OCH101012	G. Chandrasekhar
13	Jangam Sagar Babu	Y22OCH101013	J. Sagar Babu
14	Jyothula Ravi Kumar	Y22OCH101014	J. Ravi kumar
15	Kandukuri Jusri Naga Vasundhara Devi	Y22OCH101015	K.J.N. Vasundhara Devi
16	Kelam Kiran Kumar	Y22OCH101016	K.kiran kumar
17	Kumbha Durga Prasad	Y22OCH101017	Durga Prasad k
18	Maddula Shanmukha	Y22OCH101019	M. Shanmukha
19	Madupu Bhavana	Y22OCH101020	M. Bhavana
20	Matta Roshna Satya	Y22OCH101022	H. Roshna satya
21	Musireddi Lakshmi Deepika	Y22OCH101023	M. lakshmi Deepika

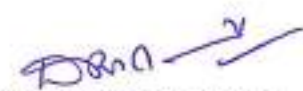
Signature of the Coordinator

Signature of the HOD

HEAD
DEPARTMENT OF CHEMISTRY
UNIVERSITY COLLEGE OF ARTS & SCIENCE
KRISHNA UNIVERSITY
MACHILIPATNAM - 521 003, A.P.

S.No.	Name of the Student	Regd.No.	Signature of the Student
22	Muthukuri Venakta Subbarao	Y22OCH101024	M. Venkata Subbarao
23	Nukella Janardhan	Y22OCH101025	N. Janardhan
24	Paluri Lavanya Satya Virajitha	Y22OCH101026	P. Lavanya Satya Virajitha
25	Pathan Dil Shad Khan	Y22OCH101027	P. Dil Shad Khan
26	Pinninti Sridevi	Y22OCH101029	P. Sridevi
27	Polisetti Indumathi	Y22OCH101030	P. Indumathi
28	Potnuru Hima Bindu	Y22OCH101031	P. Hima Bindu
29	Pullella Sandeep	Y22OCH101032	P. Sandeep
30	Ravulapati Sri Sai Surya Teja	Y22OCH101033	R. S. S. Teja
31	Tenka Hemasundar	Y22OCH101034	T. Hemasundar
32	Thimmasani Lakshmi Jeevan Reddy	Y22OCH101035	T. Lakshmi Jeevan Reddy
33	Thorati Vinesh	Y22OCH101036	T. Vinesh
34	Udayabhanu Nagu	Y22OCH101037	U. Nagu


Signature of the Coordinator


Signature of the HOD
HEAD
DEPARTMENT OF CHEMISTRY
UNIVERSITY COLLEGE OF ARTS & SCIENCE
KRISHNA UNIVERSITY
MACHILIPATNAM - 521 003, A.P.



KRISHNA UNIVERSITY, MACHILIPATNAM-521004
UNIVERSITY COLLEGE OF ARTS AND SCIENCE
 Department of Chemistry

Two week Value Added Programme on : **"Mathematical Tools and use of Application Software in Chemistry"** to the M.Sc., Organic Chemistry 1st semester students in the academic year 2022-23 from 09-02-2023 to 28-02-2023.

Attendance List

S. No	Name of the Student	Regd.No.	Date														Total	
			09/02	10/02	13/02	14/02	15/02	17/02	20/02	21/02	22/02	23/02	24/02	25/02	27/02	28/02		
1	Ajmira Balaji Naik	Y22OCH101001	X	X	X	X	A	X	X	X	X	X	X	X	X	X	13	
2	Asma Begum	Y22OCH101002	X	X	X	X	X	X	A	X	X	X	X	X	X	X	13	
3	Challagurugula Kusuma	Y22OCH101003	X	X	X	X	X	A	X	X	X	X	X	A	X	X	12	
4	Chandika Naga Venkata Durga Bhavani	Y22OCH101004	X	X	X	X	X	X	X	A	X	X	X	X	X	X	13	
5	Chilli Sumanth Babu	Y22OCH101005	X	X	X	X	A	X	X	A	X	X	X	X	X	X	12	
6	Dadala Varaprasad	Y22OCH101006	X	A	A	X	X	X	X	X	X	X	X	X	X	X	12	
7	Dendukuri Venkata Krishna Raju	Y22OCH101007	X	X	X	X	X	X	A	X	X	A	X	X	X	X	12	
8	Dhara Mahesh Babu	Y22OCH101008	X	X	X	A	X	X	X	X	X	X	X	X	X	X	13	
9	Donga Chinnari	Y22OCH101009	X	X	X	X	X	X	X	X	X	A	X	X	X	X	13	
10	Gatte Meghana Sai	Y22OCH101010	X	X	X	X	X	A	X	X	X	X	X	X	X	X	13	
11	Gunturi Sneha	Y22OCH101011	X	X	X	X	X	X	X	X	X	X	X	X	X	X	13	
12	Gurijala Chandra Sekhar	Y22OCH101012	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14	
13	Jangam Sagar Babu	Y22OCH101013	X	X	X	X	X	X	X	X	X	X	X	X	X	A	13	
14	Jyothula Ravi Kumar	Y22OCH101014	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14	
15	Kandukuri Jusri Naga Vasundhara Devi	Y22OCH101015	X	X	X	A	X	X	X	X	X	X	X	X	A	X	12	
16	Kelam Kiran Kumar	Y22OCH101016	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14	
17	Kumbha Durga Prasad	Y22OCH101017	X	X	X	X	X	X	X	X	X	X	X	A	X	X	13	

(Signature)

Signature of the
Programme Coordinator

(Signature)

Signature of the
Resource Person

(Signature)

Signature of Hod
HEAD

S. No	Name of the Student	Regd.No.	Date														Total
			09/ 02	10/ 02	13/ 02	14/ 02	15/ 02	17/ 02	20/ 02	21/ 02	22/ 02	23/ 02	24/ 02	25/ 02	27/ 02	28/ 02	
18	Maddula Shanmukha	Y22OCH101019	X	A	X	X	X	X	X	X	X	X	X	X	X	X	13
19	Madupu Bhavana	Y22OCH101020	X	X	X	A	X	X	X	X	X	X	X	X	X	X	13
20	Matta Roshna Satya	Y22OCH101022	X	X	X	A	X	X	X	X	X	X	X	X	A	X	12
21	Musireddi Lakshmi Deepika	Y22OCH101023	X	X	X	X	A	X	X	X	X	X	X	X	X	X	13
22	Muthukuri Venakta Subbarao	Y22OCH101024	X	X	X	X	X	A	X	X	X	X	X	X	X	X	13
23	Nukella Janardhan	Y22OCH101025	X	X	X	X	X	X	X	A	X	X	X	X	X	X	13
24	Paluri Lavanya Satya Virajitha	Y22OCH101026	X	X	X	X	X	A	X	X	X	X	X	X	X	X	13
25	Pathan Dil Shad Khan	Y22OCH101027	X	X	X	X	X	X	A	X	X	X	X	X	X	X	13
26	Piminti Sridevi	Y22OCH101029	X	X	A	X	X	X	X	A	X	X	X	X	X	X	12
27	Poliseti Indumathi	Y22OCH101030	X	X	X	X	A	X	X	X	X	X	X	X	X	X	13
28	Posturu Hima Bindu	Y22OCH101031	X	X	X	X	X	X	X	X	X	A	X	X	X	X	13
29	Pullella Sandeep	Y22OCH101032	X	X	A	X	X	X	X	X	X	X	X	X	X	X	13
30	Ravulapati Sri Sai Surya Teja	Y22OCH101033	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
31	Tenka Hemasundar	Y22OCH101034	X	X	X	X	X	X	X	X	X	X	X	X	X	X	14
32	Thimmasani Lakshmi Jeevan Reddy	Y22OCH101035	X	X	X	X	X	X	X	X	X	X	A	X	A	X	12
33	Thorati Vinesh	Y22OCH101036	X	X	X	X	X	X	X	X	X	X	X	A	X	X	13
34	Udayabhanu Nagu	Y22OCH101037	X	X	X	X	A	X	X	X	X	X	X	X	X	A	12

Shani

Signature of the
Programme Coordinator

Shani

Signature of the
Resource Person

Shani

Signature of Hod

HEAD

DEPARTMENT OF CHEMISTRY
UNIVERSITY COLLEGE OF ARTS & SCIENCE
KRISHNA UNIVERSITY
MACHILIPATNAM - 521 003, A.P



KRISHNA UNIVERSITY
UNIVERSITY COLLEGE OF ARTS AND SCIENCE
Rudravaram, Machilipatnam-521004

Department of Chemistry
Organized

Two Weeks Value Added Course on : "Mathematical Tools and use of Application Software in Chemistry"

Certificate of Participation

This is to certify that Mr./Mrs. TENKA HEMASUNBAR Regd. No. Y22DCH101034 has successfully completed the two weeks Value Added Course on : "Mathematical Tools and use of Application Software in Chemistry" organized by Department of Chemistry, University College of Arts and Science, Krishna University, Machilipatnam from 09-02-2023 to 28-02-2023.


Mr. G. Ravi.
Programme Coordinator


Dr. D. Ramasekhara Reddy
Head of the Department


Prof. Y. A. V. ASN. Maruthi
Principal



KRISHNA UNIVERSITY
UNIVERSITY COLLEGE OF ARTS AND SCIENCE
Rudravaram, Machilipatnam-521004

Department of Chemistry
Organized

Two Weeks Value Added Course on : "Mathematical Tools and use of Application Software in Chemistry"

Certificate of Participation

This is to certify that Mr./Mrs. GUNTURI SNEHA Regd. No. Y220CH101011 has successfully completed the two weeks Value Added Course on : **"Mathematical Tools and use of Application Software in Chemistry"** organized by Department of Chemistry, University College of Arts and Science, Krishna University, Machilipatnam from 09-02-2023 to 28-02-2023.

Mr. G. Ravi

Mr. G. Ravi.
Programme Coordinator

Dr. D. Ramasekhara Reddy

Dr. D. Ramasekhara Reddy
Head of the Department

Prof. Y. A. V. ASN Maruthi
Prof. Y. A. V. ASN Maruthi
Principal



KRISHNA UNIVERSITY
UNIVERSITY COLLEGE OF ARTS AND SCIENCE
Rudravaram, Machilipatnam-521004

Department of Chemistry
Organized

Two Weeks Value Added Course on : "Mathematical Tools and use of Application Software in Chemistry"

Certificate of Participation

This is to certify that Mr./Mrs. PINNINTI SRIAEVI Regd. No. Y220CH101029 has successfully completed the two weeks Value Added Course on : "Mathematical Tools and use of Application Software in Chemistry" organized by Department of Chemistry, University College of Arts and Science, Krishna University, Machilipatnam from 09-02-2023 to 28-02-2023

Mr. G. Ravi.
Programme Coordinator

Dr. D. Ramasekhara Reddy
Head of the Department

Prof. Y. AVASN Maruthi
Principal



KRISHNA UNIVERSITY
UNIVERSITY COLLEGE OF ARTS AND SCIENCE
Rudravaram, Machilipatnam-521004

Department of Chemistry
Organized

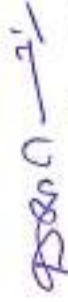
Two Weeks Value Added Course on : "Mathematical Tools and use of Application Software in Chemistry"

Certificate of Participation

This is to certify that Mr./Mrs. P.L.S. VIRAJITHA Regd. No. Y220CH101026 has successfully completed the two weeks Value Added Course on : "Mathematical Tools and use of Application Software in Chemistry" organized by Department of Chemistry, University College of Arts and Science, Krishna University, Machilipatnam from 09-02-2023 to 28-02-2023.



Mr. G. Ravi.
Programme Coordinator



Dr. D. Ramasekhara Reddy
Head of the Department



Prof. Y. AVASN Maruthi
Principal



KRISHNA UNIVERSITY
UNIVERSITY COLLEGE OF ARTS AND SCIENCE
MACHILIPATNAM-521004
Department of Chemistry

Submission of a brief report on value added course on : **“Mathematical Tools and use of Application Software in Chemistry”** to the M.Sc. Organic Chemistry 1st semester students in the academic year 2022-23 from 09-02-2023 to 28-02-2023

Date: 01-03-2023

Name of the course coordinator: Mr.G.Ravi
Assistant Professor (Contract), Department of Chemistry, Contact Number: 9908866214
Email: abnravill@gmail.com

Name of the Resource person: Mr.G.Ravi
Assistant Professor (Contract), Department of Chemistry, Contact Number: 9908866214
Email: abnravill@gmail.com

Brief Report,

Vectors, preliminary idea of vector space, matrix algebra, matrix inversion, matrix eigenvalue and eigenvector, solution of simultaneous algebraic equation with more than two unknowns. Elementary analytical methods to solve differential equations

Evaluating and plotting mathematical functions, solving algebraic equations, solving simultaneous equations, differentiation, integration, integral transform, series, solving differential equations (ODE & PDE), performing matrix algebra, curve fitting

Signature
Resource person

Signature
Coordinator

Signature
Head of the Department
HEAD

DEPARTMENT OF CHEMISTRY
UNIVERSITY COLLEGE OF ARTS & SCIENCE
KRISHNA UNIVERSITY
MACHILIPATNAM - 521 003. A.P

2nd March, 2023

From
Mr.G.Ravi
Department of Chemistry
University College of Arts and Science
Krishna University
Machilipatnam-521004

To
The Principal
University College of Arts and Science
Krishna University
Machilipatnam-521004

(Through Proper Channel)

Respected Sir,

Sub: KRU-Dept. of Chemistry-Submission of a Brief Report on : **"Mathematical Tools and use of Application Software in Chemistry"** Value-Added Course to the M.Sc., Organic Chemistry 1st semester students in the academic year 2022-23 -Reg.

Ref: Letter No. Nil, Dated 30th January, 2023.

With reference to the above subject and references, I am herewith submitting the brief report on the Value Added Course to the M.Sc., Organic Chemistry 1st semester students in the academic year 2022-23 on : **"Mathematical Tools and use of Application Software in Chemistry"**. This course work was conducted from 09-02-2023 to 28-02-2023. I am here to submit a brief report, including student enrolment and attendance, to your office.

Thanking You,

Yours Sincerely



(Mr.G.Ravi)

Enclosure: Report of Value-Added Course



HEAD
DEPARTMENT OF CHEMISTRY
UNIVERSITY COLLEGE OF ARTS & SCIEN
KRISHNA UNIVERSITY
MACHILIPATNAM - 521 003, A.P



Principal
University College of Arts & Science
Krishna University
Machilipatnam - 521 004