



## Koneru Lakshmaiah Education Foundation

(Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' Grade University ♦ Approved by AICTE ♦ ISO 9001-2015 Certified

Campus: Green Fields, Vaddeswaram - 522 502, Guntur District, Andhra Pradesh, INDIA

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01-04-2024

### DEPARTMENT OF CHEMISTRY MINUTES OF 8<sup>th</sup> BOARD OF STUDIES MEETING

The department of chemistry conducted 8<sup>th</sup> BOS meeting on 01-04-2024 in virtual mode (WebEx) Link:  
<https://kluniversity.webex.com/kluniversity/j.php?MTID=m47d27380410edd48de310ba81ba33a16>  
from 11:00AM to 1:00 PM.

#### The following members were present:

1. Dr. A. Venkateswara Rao, Assistant Professor & HOD, BOS-Chairperson
2. Dr. K. Deepti, Asst. Professor, Prof. In-Charge & PG Coordinator, BOS-Secretary
3. Dr. C. Suresh Reddy, Professor, Department of Chemistry, S V University, External Member
4. Dr. K. Mohan Rao, Professor, Department of Chemistry, North-Eastern Hill University (Central University), Meghalaya, External Member
5. Dr. D. Ramachandran, Professor, Department of Chemistry, Acharya Nagarjuna University, Guntur, External Member
6. Dr. V. Sriram, Head of Analytical Development, Bluefish Pharmaceuticals India Pvt Ltd., Bengaluru-Karnataka, Industry Expert
7. Dr. S. Rama Krishna, Senior Scientist-Peptides & Biologics, M/s.Daicel Chiral Technologies-India Pvt. Ltd., Telangana, Industry Expert
8. Dr. J. Subba Rao, Sr. Group leader, Hetero Research and Foundation, Hyderabad, Industry Expert
9. Dr. K Uday Kiran, Assoc Dean (Acad), BOS member from Academics office
10. Dr. A. Vani, Professor, Internal Member
11. Dr. K. R. S. Prasad, Professor, Internal Member
12. Dr. J V Shanmukha Kumar, Professor, Internal Member
13. Dr. Pradeep Kumar Brahman, Associate Professor, Internal Member
14. Dr. Niranjana Patra, Associate Professor, Internal Member
15. Dr. Alka D Kamble, Assistant Professor, Internal Member
16. Dr. M. Naresh, Assistant Professor, Internal Member
17. Dr. K. Rambabu, Assistant Professor, Internal Member
18. Dr. Tinku Baidya, Assistant Professor, Internal Member
19. Dr. T. Anusha, Assistant Professor, Internal Member

#### Members Absent:

1. Prof. N. Venkatram, Dean-Academics & Pro-VC, BOS-Invitee
2. Prof. Hari Kiran Vege, Addl. Dean-Academics, BOS-Invitee
3. Prof. K. Sreenivasulu, HOD BT, KLEF, Subject Expert,
4. Dr. K. Swapna, HOD -Physics, KLEF, Subject Expert

Dr. A. Venkateswara Rao  
11/4/24  
Head of the Department  
Department of Chemistry  
Koneru Lakshmaiah Education Foundation  
(Deemed to be University)  
Green Fields, Vaddeswaram-522 302,  
Guntur Dist., A.P., India.

Dr. A. Venkateswara Rao, the Chairman of the Board of Studies (BOS), initiated the meeting by extending a warm welcome to the external members and introduced them to the internal and co-opted members. He expressed his gratitude to them for agreeing to join the Board of Studies.

After due deliberations, the following resolutions have been adopted.

### AGENDA and RESOLUTIONS

#### AGENDA ITEM 1:

To Review on the minutes of the 7 <sup>th</sup> BOS meeting (conducted on 17-11-2023)	Recommended for approval in academic council
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Dr. A. Venkateswara Rao, HoD, presented the 7<sup>th</sup> BOS meeting minutes.

**Recommendation:** The committee reviewed 7<sup>th</sup> BOS meeting minutes and satisfied with the implementation of agenda points resolved in 7<sup>th</sup> BOS.

**Resolution:** The committee, upon thorough review of the 7<sup>th</sup> Board of Studies (BOS) meeting minutes, expresses satisfaction with the successful implementation of the agenda points resolved during the 7<sup>th</sup> BOS meeting. Recognizing the diligent efforts and effective execution by all stakeholders involved, the committee hereby resolves to acknowledge and commend the progress made in aligning with the decisions and directives established in the 7<sup>th</sup> BOS meeting.

#### AGENDA ITEM 2:

To discuss and approve the 2024-25 admitted batch academic structure of PG program.	Recommended for approval in academic council.
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**Discussion:** Various aspects, such as curriculum design, teaching methodologies, student support services, and assessment practices, were thoroughly examined during the discussion. Members considered the importance of a holistic approach that encompasses both academic and non-academic factors impacting student success.

**Recommendation:** Based on the stakeholder feedback (Dr Narayana Bhat, Professor, University of Texas Rio Grande Valley, USA.), it is recommended to maintain the credits as 80.

**Resolution:** It is also resolved to adhere to the maximum 80 credit system as per the National Education Policy and recommended the same for approval in academic council.

The academic structure for Y24 regulation is given under annexure I.

  
Dr. A. Venkateswara Rao  
Head of the Department  
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Dist. A.P., India.

### AGENDA ITEM 3:

To review and approve the revised syllabus for the courses offered at UG level.	Recommended for approval in academic council.
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**Discussion:** Modified syllabus for the courses offered at UG level was thoroughly examined during the discussion. Members considered the revised syllabus/ courses offered for B. Tech program.

**Recommendation:** Board of Studies recommends approval of the updated curriculum for the undergraduate courses. The revisions are well-conceived, ensuring that the academic offerings remain at the forefront of educational innovation and meet the needs of both students and the industries they will enter upon graduation.

**Resolution:** It is resolved and recommended for approval in academic council that the implementation of the revised syllabus be accompanied by faculty development programs to familiarize instructors with the new content and teaching methodologies.

The syllabus of the new courses offered at UG level is given under annexure II.

### AGENDA ITEM 4:

To review and approve the syllabus for the value-added courses offered to M. Sc Chemistry.	Recommended for approval in academic council.
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**Discussion:** The committee discussed the inclusion of value-added course at PG level. Course content for the course "Good Lab Practices" was discussed thoroughly.

**Recommendation:** Based on the stakeholder feedback (Dr. G. Brahma Reddy, Scientist, Pfizer, Chennai, TN, India.) it is proposed that the course 'Good Lab Practices' with topics related to intellectual property rights shall be included in the curriculum of M. Sc Chemistry 2024 admitted batch.

**Resolution:** It is resolved and recommended for approval in academic council, to include the value-added course 'Good Lab Practices' in the curriculum of M. Sc Chemistry 2024 admitted batch.

The syllabus of the value- added course is given under annexure III.

### AGENDA ITEM 5:

To review and finalize the DAC minutes.	Recommended for approval in academic council.
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**Recommendation:** To approve the DAC minutes.

**Resolution:** It was resolved that the reviewed DAC minutes are approved in BOS and recommended to present in academic council for approval.

*A. Venkateswara Rao*  
Head of the Department  
Department of Chemistry  
New Lakshmalah Education Foundation  
(Deemed to be University)  
New Lakshmalah, Vaddeswaram-522 302.  
Andhra Pradesh, India.

### AGENDA ITEM 6:

To review and finalize the PDD for Y24 regulation.

Recommended for approval  
in academic council.

**Recommendation:** To approve the PDD of M. Sc Chemistry program for Y24 regulation.

**Resolution:** It was resolved that the PDD for Y24 regulation is approved in BOS and recommended to present in academic council for approval.

### AGENDA ITEM 7:

To review and consider the feedback received from various stakeholders.

Recommended for approval  
in academic council.

**Recommendation:** The feedback collected from various stakeholders (students, academic peers, industry professionals, alumni, parents, and faculty) was reviewed and led to the following resolutions being considered.

**Resolution:** It is proposed to include 2 industrial visits per year in the curriculum for the Y24 admitted batch students.

### AGENDA ITEM 8:

Any other points with the permission of chair.

Recommended for approval  
in academic council.

**Discussion:** The committee discussed the inclusion of outreach activities to enhance Knowledge sharing attitude in students.

**Recommendation:** Based on the stakeholder feedback (Dr J V Shanmukha Kumar, Emp ID: 620), outreach activities enhance the skills to identify societal needs and provide solutions. It is recommended to initiate the chemistry student club activities with the support of SAC.

**Resolution:** It was resolved to include the outreach activities such as social immersive learning (SIL) in the curriculum and recommended to present in academic council for approval.

  
A. Venkateswara Rao  
Head of the Department  
Department of Chemistry  
Jyothi Lakshmalah Education Foundation  
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Vaddeswaram, Vaddeswaram-522 302  
Chittoor District, A.P., India.

**8<sup>th</sup> Board of Studies**  
**Department of Chemistry**  
 11:00 AM, 1<sup>st</sup> April 2024

Presiding  
**Dr. A. Venkateswara Rao**  
 Head of the Department

**Agenda:**

1. To discuss and approve the new course work for B.Sc. Chemistry for 2024-25.
2. To discuss and approve the syllabus for the new course work.
3. To discuss the feedback received and give the status for 2023-24 semester back work.
4. To discuss and approve the 2023-24 semester back work completion of PG program.
5. To discuss and approve the new syllabus for the new course work.
6. To discuss and approve the syllabus for the new course work for B.Sc. Chemistry for the new semester.

**Student Placement**

Logos: ALURGEME, ZIFO, gallo, VARSITY, etc.

**Y24 Structure- Category wise**

Sl. No.	Course	Level	Year	Semester	CP	TP	SP	EP	GP											
1	B.Sc. Chemistry	B.A.	2024	1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

**Evaluation plan without lab component**

Sl. No.	Course	Level	Year	Semester	CP	TP	SP	EP	GP										
1	B.Sc. Chemistry	B.A.	2024	1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

**Participants (10)**

- Panelists (10)
- 3321 Dr. J. Deepthi
- DEPARTMENT OF ...
- 7311 Dr. Naresh Mamada
- Dr. K. Ramababu
- Dr. Niranjan Patra
- Dr. Subba Rao Jammula
- Dr. K.S. Prasad
- Dr. Srinam Valiyala
- Dr. SRK
- tinlu baitya
- Attendees (0)

Grid names: 7311 Dr. Naresh Mamada, Dr. Niranjan Patra, Dr. Subba Rao Jammula, Dr. K.S. Prasad

**Dr. A. Venkateswara Rao**  
 Head of the Department  
 Department of Chemistry  
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 Green Fields, Vaddeswaram-522 302,  
 Guntur Dist., A.P., India.

S. No.	Name	Designation	Position	Signature
1	Dr. A. Venkateswara Rao	Assistant Professor & HOD	BOS-Chairperson	
2	Prof. N. Venkatram	Dean-Academics & Pro-VC	BOS-Invitee	
3	Prof. Hari Kiran Vege	Addl. Dean-Academics	BOS-Invitee	
4	Dr. K. Deepti	Asst. Professor, Prof. In-Charge & PG Coordinator	BOS-Secretary	
5	C. Suresh Reddy	Professor Department of Chemistry Sri Venkateswara University Tirupati-517502	External Member & Expert	
6	Dr. K. Mohan Rao	Professor Department of Chemistry North-Eastern Hill University (Central University) Meghalaya-793022	External Member & Expert	
7	Dr. D. Ramachandran	Professor Department of Chemistry Acharya Nagarjuna University Nambur, Guntur-522508.	External Member & Expert	
8	Dr. V. Sriram	Head of Analytical Development Bluefish Pharmaceuticals India Pvt Ltd. Bearys Global Research Triangle B - 3, 3rd Floor, Tower B, Einstein Building Sy. no. 63/3B, Gorvigere Village Bidarahalli Hobli, Whitefield Ashram Road Bengaluru-Karnataka 560067.	Industry Expert	
9	Dr. S. Rama Krishna	Senior Scientist-Peptides & Biologics M/s. Daicel Chiral Technologies-India Pvt. Ltd. IKP Knowledge Park, Survey no: 512/2, Kollur- Village Medchal-Malkajgiri-Dt Telangana-584314	Industry Expert	
10	Dr. J. Subba Rao	Sr. Group leader Hetero Research and Foundation, Plot No B - 80 & 81, Apie, Near Elico Ltd, Shrivani Complex, Sanath Nagar, Balanagar, Hyderabad-500018	Industry Expert	
11	Prof K. Sreenivasulu	HOD BT, KLEF	Subject Expert	
12	Dr K Swapna	HOD -Physics, KLEF	Subject Expert	

  
**Dr. A. Venkateswara Rao**  
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 A.P., India.

13	Dr. K Uday Kiran	Assoc Dean (Academics)	BOS member from Academics office	
14	A. Vani	Professor	Internal Member	
15	Dr. K. R. S. Prasad	Professor	Internal Member	
16	Dr. J V Shanmukha Kumar	Professor	Internal Member	
17	Dr. Pradeep Kumar Brahman	Associate Professor	Internal Member	
18	Dr Niranjan Patra	Associate Professor	Internal Member	
19	Dr. Alka D Kamble	Assistant Professor	Internal Member	
20	Dr. M. Naresh	Assistant Professor	Internal Member	
21	Dr. K. Rambabu	Assistant Professor	Internal Member	
22	Dr. Tinku Baidya	Assistant Professor	Internal Member	
23	Dr. T. Anusha	Assistant Professor	Internal Member	

  
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## ANNEXURE I: MODIFIED ACADEMIC STRUCTURE FOR Y24 REGULATION

S. NO	SEM	Course code	COURSE NAME	Short Name	Mode	Type	L	T	P	S	CR	CH	Prerequisites
1	1	23UC5201	Professional Communication Skills	PCS	R	AUC	0	0	4	0	0	4	NIL
2	1	23CY5101	Symmetry & Molecular Spectroscopy	SMS	R	PCC	2	1	0	0	3	3	NIL
3	1	23CY5102	Chemical bonding & Coordination Chemistry	CBCC	R	PCC	3	0	4	0	5	7	NIL
4	1	23CY5103	Structural Organic & Stereo Chemistry	SOSC	R	PCC	3	0	4	0	5	7	NIL
5	1	23CY5104	Molecular Thermodynamics & Chemical Kinetics	MTCK	R	PCC	3	0	4	0	5	7	NIL
6	2	23CY5205	Reaction Mechanism & Organometallic Chemistry	ROMC	R	PCC	3	0	4	0	5	7	CBCC
7	2	23CY5206	Quantum, Surface & Electrochemistry	QSEC	R	PCC	3	0	4	0	5	7	MTCK
8	2	23CY5207	Biomolecules	BM	R	PCC	3	0	4	0	5	7	SOSC
9	2	23CY5121	Concepts of Organic Synthesis	COS	R	FCC	3	0	0	0	3	3	NIL
10	2	23CY5122	Separation Techniques	ST	R	FCC	3	0	0	0	3	3	NIL
11	3	23CY61E1	Biosensors and Diagnostic Devices	BDD	R	PEC	2	1	0	0	3	3	ST
12	3	23CY61E2	Instrumental Methods of Chemical Analysis	IMCA	R	PEC	3	0	6	0	6	9	NIL
13	3	23CY61E3	Chromatographic Techniques & Method Validation	CTMV	R	PEC	2	1	0	0	3	3	NIL
14	3	23CY61E4	Applied Chemical Analysis	ACA	R	PEC	3	0	6	0	6	9	NIL
15	3	23CY61E5	Nano Chemistry	NC	R	PEC	2	1	0	0	3	3	COS
16	3	23CY61E6	Organic Synthesis	OS	R	PEC	3	0	6	0	6	9	NIL
17	3	23CY61E7	Organic Spectroscopy	OSP	R	PEC	2	1	0	0	3	3	NIL

  
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18	3	23CY61E8	Natural Products and Heterocyclic Chemistry	NPHC	R	PEC	3	0	6	0	6	9	NIL
19	3		OPEN ELECTIVE - 1	OE1	M	OEC	3	0	0	0	3	0	NIL
20	4		OPEN ELECTIVE - 2	OE2	M	OEC	3	0	0	0	3	0	NIL
21	2	23IE5201	Essentials of Research Design	ERD	R	PRI	1	1	0	0	2	2	NIL
22	3	23IE6103	Term Paper	TP	R	PRI	0	0	4	0	2	4	NIL
23	4	23IE6205	Dissertation	MAP	R	PRI	0	0	32	0	16	32	NIL
24	4	23CC6201	VAC	VAC	R/M	VAC	2	0	0	0	0	0	NIL
			<b>GRAND TOTAL</b>				<b>46</b>	<b>4</b>	<b>72</b>	<b>0</b>	<b>80</b>	<b>114</b>	

Type	Sum of CR	No. of Courses
AUC	0	1
OEC	6	2
PCC	33	7
PEC	18	4
PRI	20	3
FCC	3	1
VAC	0	1
Grand Total	80	19

Semester	Sum of CR	Sum of CH
1	21	27
2	20	26
3	20	29
4	19	32
Grand Total	80	114

Legend: PCC - Professional Core related to Major area, PEC - Professional Elective Courses related to Specialization, PRI - Project, Research or Internship Courses, AUC - Audit Courses, VAC - Value Added Courses, OEC - Open Elective, FCC- Flexi core course which leads to specialization

Graduation requirements: Successful attainment of 80 credits, obtain all PEC credits from courses of specific specialization domain, complete 1 SCI publication and obtain Satisfactory in all 0 credit courses (AUC, VAC and PRI categories)

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## ANNEXURE II: SYLLABUS of NEW UG COURSES FOR Y24 REGULATION

**Course Code:** 24XXXXXX

**Course Title:** Computational Chemistry for Computer Science Engineers

**L-T-P-S:** 3-0-2-0

**Credits:** 4

### **Syllabus:**

Introduction to Computational Chemistry: Overview of computational chemistry-Importance and applications-Basic concepts: Quantum mechanics, molecular mechanics-Computational Methods-Ab initio methods-Density functional theory (DFT)-Molecular dynamics (MD)-Simulations-Monte Carlo simulations; Molecular Modeling and Simulations-Molecular modeling software-Building molecular models-Running simulations: energy minimization, molecular dynamics; Cheminformatics: Introduction to cheminformatics-Data mining in chemistry-Molecular descriptors and databases; Computational Tools and Software-Introduction to computational chemistry software (e.g., Gaussian, Autodock)-Practical sessions on using software for chemical analyses and predictions. Applications of Computational Chemistry & Current Trends: Drug discovery and design-Material Science-Environmental chemistry

### **Textbooks and Reference Materials:**

- "Introduction to Computational Chemistry" by Frank Jensen
- "Molecular Modelling: Principles and Applications" by Andrew Leach
- Online resources and software documentation

### **Lab Equipment and Software Requirements:**

- Computers with high processing power
- Software: Gaussian, Autodock, MOE, ChemOffice, etc.

**Course Code:** 24XXXXXX

**Course Title:** Physical Chemistry for Computer Science Engineers

**L-T-P-S:** 3-0-2-0

**Credits:** 4

### **Syllabus:**

Introduction to Physical Chemistry: Overview of physical chemistry and its significance-Review of basic concepts in thermodynamics-States of matter and properties of gases. Thermodynamics: First, second, and third laws of thermodynamics-Free energy, equilibrium, and phase transitions-Applications of thermodynamics in computing and energy storage. Quantum Chemistry: Fundamentals of quantum mechanics-Atomic and molecular orbitals-Introduction to computational quantum chemistry. Chemical Kinetics: Rate laws and mechanisms of chemical reactions-Theories of reaction rates-Computational modeling of reaction dynamics. Spectroscopy and Molecular Structure: Principles of spectroscopy-Computational spectroscopy and analysis of spectral data-Molecular structure determination. Integrating Physical Chemistry with Computer Science: Case studies on the application of physical chemistry in technology-Group projects on computational modeling of chemical systems

### **Textbooks and Reference Materials:**

- "Physical Chemistry: A Molecular Approach" by Donald A. McQuarrie and John D. Simon
- "Introduction to Computational Chemistry" by Frank Jensen
- Software manuals and online resources for computational chemistry tools (e.g., Gaussian, GAMESS)

### **Lab Equipment and Software Requirements:**

- Computer lab with software for computational chemistry (e.g., Gaussian, GAMESS, MATLAB)
- Access to scientific databases and journals

  
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**ANNEXURE III: SYLLABUS OF THE VALUE- ADDED COURSE OFFERED TO M. SC  
CHEMISTRY 2024 ADMITTED BATCH**

**Course Code:** 24CC6201

**Course Title:** Good Lab Practices

**L-T-P-S-I-N:** 0-0-0-0-0-2

**Credits:** 0

**Syllabus:**

**Introduction to chemical analysis:** Nature of analytical chemistry, general directions of chemical analysis: Cleanliness in the laboratory, Recording and planning data. Data quality: Bias, Precision, Uncertainty, Method detection limit, Checking correctness of analysis, Expression of results, Significant figures, Collection and preservation of sample. **Laboratory hazards:** Chemical, Fire, Careless habits, Handling of compressed gases, Stockroom safety rules, Laboratory safety rules. Quality assurance of chemical measurements: Quality assurance, quality control, Quality assessment, Sampling, Sampling custody, Sample preparation, Analytical methodology with case studies, Calibrations, Detection limits, Statistics in chemical analysis, Quality control charts.

**Laboratory apparatus and glassware:** Labware materials, soft vs. heat resistant glassware, plastic, porcelain, platinum, nickel labware. Volumetric flask, pipette, burette, cleaning of volumetric glassware. Types of balances: Analytical balances, Desiccators. **Chemical reagents and standards:** Grade and purity of chemicals, Proper storage of chemicals and standards, Laboratory pure water, Preparation of reagent grade water, Reagent water quality. **Reagents and solutions.** Stock standardization solutions, Preparation and standardization of common standard solutions,

**Filtration:** Gravity, Vacuum, Centrifugation, Distillation: Simple, Fractional, Vacuum, Refluxing, Ion exchange, Drying and washing sample, Liquid-liquid extraction by separating funnel, Soxhlet extraction. Software for stock room management, Role of computers in Laboratory occupational health and safety, Waste minimization and disposal.

**References:**

1. Csuros, M., Environmental Sampling and Analysis, Lewis Publications.
2. Standard methods for the examination of water and wastewater, American Public Health Association, 19<sup>th</sup> ed., Washington D.C.

  
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**Program structure (with all Courses) containing following categorization.**

Course Name	Course Category	L	T	P	S	CR	Pre-Requisite	New Course/Revised Course/Retained Course	Changes Proposed by	Focused on Employability/Entrepreneurship/Skill Development
Symmetry & Molecular Spectroscopy	Prof. Core	2	1	0	0	3	-	Retained	-	Employability
Chemical bonding & Coordination Chemistry	Prof. Core	3	0	6	0	6	-	Retained	-	Skill Development
Structural Organic & Stereo Chemistry	Prof. Core	3	0	6	0	6	-	Retained	-	Skill Development
Molecular Thermodynamics & Chemical Kinetics	Prof. Core	3	0	6	0	6	-	Retained	-	Skill Development
Concepts of Organic Synthesis	Flexi Core	3	0	0	0	3	-	Retained	-	Employability
Separation Techniques	Flexi Core	3	0	0	0	3	-	Retained	--	Employability
Essentials of Research Design	PRI	1	1	0	0	2	-	Retained	-	Skill Development
Reaction Mechanism & Organometallic Chemistry	Prof. Core	3	0	6	0	6	CBCC	Retained	-	Skill Development
Quantum, Surface & Electrochemistry	Prof. Core	3	0	6	0	6	MTCK	Retained	-	Skill Development
Biomolecules	Prof. Core	3	0	6	0	6	SOSC	Retained	-	Skill Development
Biosensors and Diagnostic Devices	Prof. Elective	3	0	0	0	3	ST	Retained	-	Employability
Nano chemistry	Prof. Elective	3	0	0	0	3	COS	Retained	-	Employability
Professional Communication Skills	Prof. Core	0	0	4	0	0	-	Retained	-	Skill Development
Term Paper	Prof. Core	0	0	4	0	2	-	Retained	-	Skill Development
Instrumental Methods of Chemical Analysis	Prof. Elective	3	0	6	0	6	-	Retained	-	Skill Development
Chromatographic Techniques & Method Validation	Prof. Elective	2	1	0	0	3	-	Retained	-	Employability

  
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Applied Chemical Analysis	Prof. Elective	3	0	6	0	6	-	Retained		Skill Development
Organic Synthesis	Prof. Elective	3	0	6	0	6	-	Retained	-	Skill Development
Organic Spectroscopy	Prof. Elective	2	1	0	0	3	-	Retained	-	Employability
Natural Products and Heterocyclic Chemistry	Prof. Elective	3	0	6	0	6	-	Retained	-	Skill Development
Open Elective - 1	Open Elective	3	0	0	0	3	-	Retained	-	Skill Development
VAC	VAC	2	0	0	0	0	-	Retained	-	Skill Development
Open Elective - 2	Open Elective	3	0	0	0	3	-	Retained	-	Skill Development
Dissertation	PRI	0	0	32	0	16	-	Retained	-	Skill Development

Percentage of Syllabus Revision= 10%

Percentage of Courses focusing on Employability=  $10/27=37.03\%$

Percentage of Courses focusing on Entrepreneurship= Nil

Percentage of Courses focusing on Skill Development =  $17/27=62.9\%$

  
**Dr. A. Venkateswara Rao**  
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## Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified

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### DEPARTMENT OF CHEMISTRY

A.Y:2023-2024

KLEF/ CHEM / IQAC - ACADEMICS/ DC Meetings (DAC)/ AQ 8.2

28.03.2024

The DAC meeting was conducted on 28<sup>th</sup> March 2024 at 3:30 PM in F102.

#### Agenda:

1. To review and revise the syllabus for 2024-25 admitted batch students.
2. To discuss and approve the 2024-25 admitted batch academic structure of PG program.
3. To review and approve the revised syllabus for the courses offered at UG level.
4. To review and approve the syllabus for the value-added courses offered to M. Sc Chemistry.
5. To review and consider the feedback received from various stakeholders.
6. To review and approve the PDD for Y24 batch.
7. Review on Analysis of student performance data, identification of areas for improvement and strategies to enhance student outcomes.
8. Review on placements and higher education analytics.
9. Any other item with the permission of the chair.

The meeting started with an address by Dr. A Venkateswara Rao (HOD, Chemistry Department) extending a warm welcome to the department academic Committee members present for the meeting.

The following points were discussed and resolved:

#### Agenda 1: To review and revise the syllabus for 2024-25 admitted batch students.

**Discussion:** Review of present syllabus was presented. Discussed the courses to be revised and the strategies to enhance student outcome.

**Resolution:** It is resolved to continue with the same syllabus for 2024 admitted batch, as the course content is in line with the present industrial needs.

  
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**Agenda 2: To discuss and approve the 2024 admitted batch academic structure of PG program.**

**Discussion:** Review of present academic structure was presented. Based on the feedback by Dr Narayana Bhat, Professor, University of Texas it is recommended to revise the academic structure.

**Resolution:** It is proposed to maintain the 80 credit system providing term paper in 3<sup>rd</sup> semester to get more time for dissertation for the Y24 admitted batch students.

**Agenda 3: To review and approve the revised syllabus for the courses offered at UG level.**

**Discussion:** Syllabus for the courses offered at UG level was reviewed.

**Resolution:** It is proposed to revise the syllabus of Engineering Chemistry course offered to various branches (Biotech, Civil, Mechanical, ECE and CSE) based on the chemistry applications in their respective fields for the Y24 admitted batch students.

It is also proposed to change the course titles with respect to the course content.

**Agenda 4: To review and approve the syllabus for the value-added courses offered to M. Sc Chemistry.**

**Discussion:** Based on the feedback received from Dr. G. Brahma Reddy, Pfizer chemicals, Chennai, the syllabus for the value- added courses offered at PG level was reviewed.

**Resolution:** It is proposed to introduce the courses entitled "Good Lab Practices and Intellectual Property Rights" as value- added courses for the Y24 admitted batch students.

**Agenda 5: To review and consider the feedback received from various stakeholders.**

**Discussion:** Based on the feedback received from various stakeholders (Students, parents, and faculty) the inclusion of industrial visits at PG level was reviewed.

**Resolution:** It is proposed to include 2 industrial visits per year in the curriculum for the Y24 admitted batch students. Various stake holders feedback was considered, reviewed, and recommended to BOS.

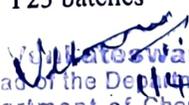
**Agenda 6: To review and approve the PDD of M. Sc Chemistry program for Y24 batch.**

**Discussion:** The revised PDD of M. Sc Chemistry program was reviewed.

**Resolution:** It is proposed to recommend the revised PDD with courses mapped to local/ state/ national/ international needs for approval in BOS.

**Agenda 7: Review of Analysis of student performance data, identification of areas for improvement and strategies to enhance student outcomes.**

**Discussion:** Discussed the result analysis, OBE analysis of ODD semester of Y22 and Y23 batches and suggestions for improvement.

  
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**Resolution:** OBE analysis was reviewed, and the CO attainment was verified for all the courses offered to Y22 and Y23 batches in odd semester. Gap analysis report and course closure minutes submitted by respective course coordinators was reviewed.

It is resolved to bring awareness about the new assessment pattern among the students clearly stating that there is no choice in the question paper and the weightages given for each evaluation component.

It is also resolved to identify the gaps/ recommendations in the courses offered to enhance the student performance.

#### **Agenda 8: Review of placements and higher education analytics.**

**Discussion:** Discussed the present placement, higher education analytics and suggestions for improvement.

**Resolution:** It is resolved to bring awareness to the students about the research opportunities available in India and abroad to enhance the interest in research/ higher education.

It is also resolved to identify the greater number of core companies for placements and initiate the collaboration/ MoU process to have better career opportunities and increase the placement ratio.

#### **Agenda 9: Any other item with the permission of chair.**

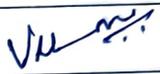
**Discussion:** Discussed about the upcoming semester workload, utilization of library and student internship.

**Resolution:** It is resolved to encourage students to apply for internship/ summer projects in various CSIR labs or IIT's.

It is also resolved to strictly monitor the student library visiting hours to enhance their subject knowledge.

  
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The following members were present during the DAC meeting:

S. No.	Name of the Member	Designation	Signature
1	Dr. A. Venkateswara Rao	Head of the Department	
2	Dr. K. R. S. Prasad	Professor & Advisor- Student Affairs	
3	Dr. J. V. Shanmukha Kumar	Professor & Asst. Director- International affairs & admissions	
4	Dr. Pradeep Kumar Brahman	Assoc. Professor & Assoc. Dean- R&D	
5	Dr. Niranjana Patra	Assoc. Professor	
6	Dr. K. Deepti	Assistant Professor & Prof. in charge-Academics, PG coordinator	
7	Dr. Alka D Kamble	Assistant Professor	
8	Dr. M. Naresh	Assistant Professor & RPAC	
9	Dr. K. Rambabu	Assistant Professor	
10	Dr. Tinku Baidya	Assistant Professor	
11	Dr. T. Anusha	Assistant Professor	

Leave of absence: Dr. J V Shanmukha Kumar

Reason for leave: On duty.

  
**Head of the Department**  
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