ಮಂಗಳೂರು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ

MANGALORE UNIVERSITY

(Accredited by NAAC with 'A' Grade)

ಕ್ರಮಾಂಕ/ No. : MU/ACC/CR.27/2021-22/A2

ಕುಲಸಚಿವರ ಕಛೇರಿ
ಮಂಗಳಗಂಗೋತ್ರಿ – 574 199
Office of the Registrar
Mangalagangothri – 574 199
ದಿನಾಂಕ/Date:31.01.2022

NOTIFICATION

Sub: Revised syllabus of M.Sc. in Industrial Chemistry programme.
Ref: Academic Council approval vide agenda
No.: ಎಸಿಸಿ:ಶೈ.ಸಾ.ಸ.3:101 (2021–22) dtd 17.12.2021.

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The Revised syllabus of M.Sc. Industrial Chemistry programme which is approved by the Academic Council at its meeting held on 17.12.2021 is hereby notified for implementation with effect from the academic year 2021-22.

Copy of the Syllabus shall be downloaded from the University Website (www.mangaloreuniversity.ac.in)

REGISTRAR

To,

1. The Chairman, Dept. of Industrial Chemistry, Mangalore University, Mangalagangothri
2. The Chairman PG BOS in Industrial Chemistry, Dept. of Industrials Chemistry Mangalore University.
3. The Registrar (Evaluation), Mangalore University.
4. The Superintendent (ACC), O/o the Registrar, Mangalore University.
5. The Asst. Registrar (ACC), O/o the Registrar, Mangalore University.
6. Guard File.

MANGALORE UNIVERSITY

DEPARTMENT OF INDUSTRIAL CHEMISTRY, MANGALAGANGOTRI-574 199
[Phone No. 0824-2287847 (O)]

Proceedings of PG/Ph.D. BOS in Industrial Chemistry online meeting held on 11.10.2021 at 3.45p.m. in the chamber of the Chairperson, Department of Industrial Chemistry, Mangalore University, Mangalagangotri - 574 199 on online mode with https://meet.google.comfsc-mrxt-kex

Members present:

1. Prof. B.K. Sarojini : Chairperson
2. Prof. J. Seetharamappa : Member
3. Prof. K. P. Elango : Member
4. Prof. R. Karvembu : Member
5. Dr. RavindraSonavane : Member
6. Dr. SangameshBadiger : Member

Members not present : Dr. Ramesh S. Gani

Business transacted:

Agenda 1: Review of existing syllabi

i) New courses introduced: Two

ii) Inclusion/Removal of courses / Units: Three

Sl. No.	Course Code and Title	Existing contents Unit III	Modified Contents
1	ICH401 Inorganic Chemistry	**Metallurgy**: Introduction, Mineraland Ores, Methods of reduction of oxide ores, chemical and electrolytic reductions, reduction potentials, Latimer, Frost diagrams and Ellingham diagram , Theory and applications of pyrometallurgy (Copper, Nickel, Gold and Titanium), hydrometallurgy (Uranium and nuclear fuels, Electrometallurgy (Nickel and lead). Powder metallurgy-Principles and applications.	Transport and storage of dioxygen-heme proteins, oxygen uptake, function of haemoglobin, myoglobin, hemerythrin and hemocyanins, synthetic oxygen carriers.Metal storage and transport – ferritin, transferrin and ceruloplasmin. Electron transferproteins-cytochromes, iron-sulphur proteins. Metalloproteins as enzymes – carboxy peptidase, carbonic anhydrase, alcohol dehydrogenase, catalases, peroxidases, cytochrome P450, superoxide dismutase, copper oxidases, vitamin B12 coenzyme.

2	ICS 404	Unit IV	Topic added : Experimentalprocess and risk assessment
3	ICP 456	Inorganic Chemistry Practicals -II	Techniques in quantitative analysis Removal of experiments from 10-18 and added eight new experiments
4	ICP 457	Organic chemistry Practicals -II	Estimations and extractions in organic chemistry
5	ICP458	Physical Chemistry Practicals-II	Electroanalytical techniques
6	ICH 503	Unit IV Medicinal Chemistry	Changes in Unit IV Removed topics: Drug discovery---nomenclature . Added topics: Concept of fragment based drug discovery
7	ICS 505	Cheminformatics and drug design	Computer aided drug design
7	ICP 506	Inorganic Chemistry Practicals -III	Synthesis of complexes, catalysts and estimation of alloys
8	ICP507	Organic chemistry Practicals -III	Systematic qualitative analysis and identification of organic compounds
9	ICP508	Physical Chemistry Practicals-III	Synthesis,characterization and applications of Polymers

iii) Overall percentage of syllabus revision: On an average 30%

Resolution: The board has thoroughly gone through the courses given under the M.Sc. Industrial Chemistry programme and modified the existing syllabi keeping in view of the programme objective, course objectives and course outcomes.

Agenda 2: Preparation of panel of examiners

Resolution: Panel of Examiners for M.Sc.in Industrial Chemistry / Ph.D. in Industrial Chemistry was prepared and appended.

Agenda 3: Assessment of previous year question papers and examination results

Resolution: Members have verified the question papers of previous year examinations and found to be set appropriately following the guidelines mentioned in the syllabi and also reviewed examination results for the year 2019-20 and found to be 100%.

Agenda 4: Admission of candidates with Industrial experience to Ph.D Programme

The members discussed about this agenda so as to consider the candidates with industrial experience of 10 years and aboveto be admitted underPh.Dadmission guidelines 8.11.which describes that the Scientists 'D' above,need not take entrance test and interview and could be considered for Ph.D. under priority basis. These candidates need not undergo course work during Ph.D. programme.

It was resolved that for admission, the candidates with industrial experience10 years and abovecould be considered at par with the Scientist 'D' and equivalent cadresie., they could

forgo entrance test and interview. But the candidates need to undergo course work and take up examinations during Ph.D. programme.

5. **Any other matter**

1. Whether the M. Tech graduates of Civil/Mechanical/ Chemical / Materials Engineering can be made eligible to do Ph.D under Industrial chemistry?
   It was resolved that M.Tech graduates form Chemical/ Materials engineering stream might be considered for interdisciplinary research in case of eligible candidates from M.Sc. Industrial Chemistry/ Chemistry/Organic chemistry/ Applied Chemistry/Analytical chemistry are not available.
2. Eligibility of B.VOC in Pharmaceutical Chemistry graduates to take admission for M.Sc., Industrial Chemistry programme.
   It was resolved that B.VOC in Pharmaceutical Chemistry could not be considered for admission to M.Sc. Industrial Chemistry programme as these candidates do not have enough exposure to chemistry aspects in graduate level to study M.Sc. Industrial Chemistry programme.
   The Chairperson thanked all the members and concluded the meeting

Prof. J. Seetharamappa
Member

Prof. R. Karvembu
Member

Dr. SangameshBadiger
Member

Prof. K. P. Elango
Member

Dr. Ravindra Sonawane
Member

Prof. B.K. Sarojini
Chairperson

Chairperson
Department of Industrial Chemistry
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MANGALAGANGOTHRI - 574 199