



**TEACHING LEARNING CENTRE
RAMANUJAN COLLEGE
(Accredited Grade 'A' by NAAC)
UNIVERSITY OF DELHI**

in collaboration with

**DEPARTMENT OF CHEMISTRY
MIRANDA HOUSE
UNIVERSITY OF DELHI**

under the aegis of

**MINISTRY OF EDUCATION
PANDIT MADAN MOHAN MALAVIYA NATIONAL
MISSION ON TEACHERS AND TEACHING**

is organising an

**ONLINE TWO-WEEK
FACULTY DEVELOPMENT PROGRAMME**

**CHEMISTRY - THE CATALYST
FOR CHANGE**

14 - 28 JULY 2021

**CALL FOR REGISTRATION
AND PARTICIPATION**

CHEMISTRY: THE CATALYST FOR CHANGE

The Ministry of Education (erstwhile, Ministry of Human Resource Development) launched the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) in 2014. One of the main objectives of this mission is to facilitate teacher training by constituting Teaching Learning Centers in various institutions of higher education in our country. The Teaching Learning Centers (TLCs) are mandated to promote on a continuous basis the learning of new pedagogical practices, methodology of forming discipline-specific curricula and creating new learning materials (including e-content) for use by the teachers in colleges and postgraduate departments. It is envisioned that the TLCs will accelerate the teaching-learning process by encouraging independent critical and creative thinking and facilitating research for subject specific growth. The TLCs will assist the faculty in capacity building for curriculum designing, scientific assessment and evaluation and the development of innovative academic programs to strengthen the inclusive nature of higher education. The TLCs are also encouraged to reach out to teachers teaching in regionally disadvantaged locations. The Pandit Madan Mohan Malaviya National Mission emphasizes the need to change the role and workings of a teacher from a mere disseminator of information and knowledge to the one who helps students to develop critical, analytical skills, capabilities to generate information, the ability to reason and to empower themselves through open sources and globally oriented digitalized self-learning processes. The focus is not only on 'what is taught' but also importantly, to 'the way it is taught,' in an effort to develop and enhance individual education, that will eventually go on to define the manner in which the future generations will work and live. The Teaching Learning Centers offer Faculty Induction Programs (FIPs) for newly recruited faculty and Faculty Development Programs (FDPs) for teachers with experience

who wish to update their field of knowledge, expertise and skill with the latest available research, resources and technology. In the FDPs, special emphasis is given to inter and cross-disciplinary methodologies of study.

Currently, the teaching fraternity is missing their lively and interactive classrooms due to COVID-19 Pandemic. To address the present situation, the University Grants Commission (UGC) has intensified its efforts to have a strong virtual engagement with the students through email/social media platform and hosting lectures using Google Class Room and other video-conferencing platforms. Keeping in view the immense benefits and reach of online courses in the present academic set-up, the Teaching Learning Centre Ramanujan College, University of Delhi in collaboration with Department of Chemistry, Miranda House, University of Delhi is offering a Two-Week Faculty Development Programme on "Chemistry - The Catalyst for Change" for faculty members and research scholars of higher education. This Programme is equivalent to Refresher Course.

CONCEPT NOTE

Chemical science is the central science and is required for practically all scientific research. Chemical science is concerned with the understanding and practice of changing one substance into another. Chemists enjoy discovering both naturally occurring and manmade chemical substances with the goal of improving human life. The subject's transdisciplinary nature makes it more fascinating and demanding for researchers all over the world. To keep up with the latest trends and breakthroughs in the field, practical, theoretical, and application-based teaching-learning techniques are required. Due to the introduction of different state-of-the-art facilities, instrumentation and new software, chemical sciences and technology have progressed tremendously in this century. Chemistry and related sciences have made rapid progress in terms of knowledge and invention. This course will touch on a few of the thrust areas.

There is a rising need to provide chemistry faculty members from various colleges/universities/academic institutions with updated information and knowledge in order to develop creative ideas, enhance skills and to provide excellent education.

THEMATICS

- Drug Development
- Theoretical/Computational Chemistry
- Materials Chemistry
- Synthetic Chemistry
- Biocatalysis
- Green Chemistry
- Biochemical warfare
- Nanotechnology
- Bio-orthogonal chemistry
- X-ray Crystallography
- Molecular Spectroscopy

EXPECTED LEARNING OUTCOME

The successful completion of the Faculty Development Programme will facilitate in:

- Enabling teachers in service to debate and share latest developments in Chemical Sciences and Technology, as well as to share their experiences with their peers
- Organizing a forum for teachers to learn about the new developments in the field
- Providing exposure to cutting edge chemical research and technology
- Creating a culture of learning and self-improvement among faculty members.
- Providing platforms for them to expand their expertise and pursue additional research
- Introducing new approaches and innovations in higher education and assist them in establishing their own unique teaching approach

RAMANUJAN COLLEGE

Ramanujan College is a University of Delhi college, located in the well-known area of Kalkaji, near Nehru Place, in South Delhi. Ramanujan College has highly qualified, dedicated, and committed faculty members. The college runs 16 courses in different subjects in Humanities, Commerce and Science streams. It is also the study centre for the students of the Non-Collegiate Women's Education Board (NCWEB), University of Delhi, and the Indira Gandhi National Open University. The college also runs several professional courses. The teachers of Ramanujan College are highly motivated and have original, published academic and creative work, including journals and other print media articles and educational film making to their credit. Ramanujan College are highly motivated and have original, published academic and

creative work, including journals and other print media articles and educational film making to their credit. Ramanujan College is a premier institution of the University of Delhi and has been accredited grade "A" by the National Assessment and Accreditation Council (NAAC). We at Ramanujan College emphasize the holistic development of personality, meaningful exposure to real-world, and inculcating practical skills amongst our students apart from ensuring academic excellence.

Enrichment Spectrum at the Teaching Learning Centre (TLC), Ramanujan College

- Emphasis on creating self-learning space for students
- Hands-on assignments and live projects
- Expert guidance on live projects
- Follow-up tasks
- Provision of study content (wherever required)
- Developing appropriate attitudinal orientation
- A learning experience for personality enrichment
- Augmentation of professional capabilities
- Co-creation and mutual contribution between participants and facilitators
- Access to global resources
- Adaptation skills for the dynamic contemporary environment



MIRANDA HOUSE

Miranda House, College for Women at University of Delhi, is amongst the premiere institutions of the country. It has been awarded All India Rank One amongst colleges under the National Institutional Ranking Framework (NIRF) for four consecutive years in 2017, 2018 2019 and 2020. Department of Biotechnology, Government of India, has given it the Star College status. The National Assessment and Accreditation Council (NAAC) has accredited the college with Grade A+.

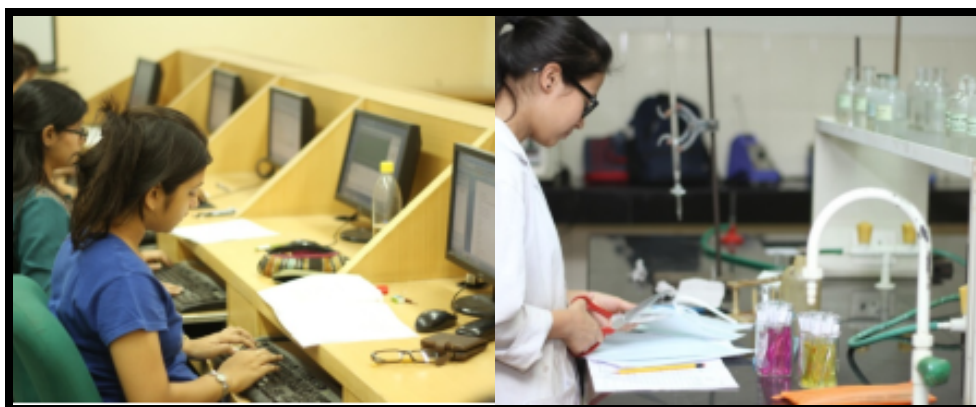
Established on 07 March 1948 by the then Vice Chancellor of University of Delhi Sir Maurice Gwyer, it chronicles the history of women's education in India. Since its inception it has carved a unique niche for itself as a globally recognized premiere institution of higher learning. Miranda House has a rich legacy. The extremely distinguished list of alumnae imparts a sense of confidence and pride in students.

Being a college established and maintained by the University, Miranda House has a special place among the women's colleges of the University of Delhi. Its location in the heart of the University Campus, and its close interaction with the various Departments of the University and other campus colleges gives it a unique advantage. Although a women's college, it is not a cloister. It welcomes interaction with other colleges and educational organizations across the country, actively engaging both men and women in all its extramural activities, competing with the best on equal terms.



DEPARTMENT OF CHEMISTRY, MIRANDA HOUSE

The Department of Chemistry, Miranda House was established in 1948. It currently has three modern and well-equipped Chemistry laboratories. It also has an Instrumentation Laboratory with various instruments enabling the students to carry out all the experiments included in the new syllabus as well as some simple projects. Facilities of a modern computer laboratory are also available to the Department. There is a well-stocked store for apparatus and another for chemicals. The Department Library has a good collection of chemistry books which supplements the wide range of books available in the main library of the College. The faculty is highly qualified and motivated. Some of the faculty members are currently involved in research. They have been recognized as PhD Supervisors and have also presented papers in international conferences. The Department has designated laboratory spaces for experimental work undertaken by the faculty and PhD students. There is also an Instrumentation Lab with state-of-the-art instruments such as Atomic Absorption Spectrophotometer, Photocatalytic Reactor, Microwave Lab-synth oven and Rotary Evaporator. A few faculty members have also authored Chemistry textbooks for undergraduate students. In keeping with the traditions of the Department, the non-academic staff is hardworking, helpful and committed. The Miranda House Chemistry Department alumnae have excelled in academics both at national and international levels.



REGISTRATION PROCESS & PAYMENT DETAILS

ELIGIBILITY

Faculty members (regular/adhoc/temporary) from Chemistry and allied disciplines are eligible to apply for the FDP.

All those who meet the eligibility criterion are required to register and pay a **Non-Refundable fee of INR 1450/-** by visiting rcmoocs.in

REGISTRATION DEADLINE: 13 July 2021

After successful registration & payment, the participants will receive a confirmation via email. Please keep checking the spam folder of the email as the bulk email sent may end up in the spam folder.

An official group has been made for communication with the participants on "Telegram." You are therefore requested to install the Telegram App either from the Play Store or App Store. The link to join the official group will be provided in the confirmation mail.

IMPORTANT:

- Registration is mandatory for participation.
- Attempting and submitting all the quizzes and assignments are mandatory, and each participant should score a **minimum of 50% in total** to avail of the programme completion certificate.
- Graded certificates on the basis of performance will be awarded to the participants.
- As part of the Ministry of Education's requirement under the PMMMNMTT scheme, all participants need to submit online feedback for each session.
- Failing to meet any of the above conditions will result in denial of a certificate of completion to the participants.
- **No Objection Certificate (NOC) or Leave is NOT REQUIRED to participate in the Programme**

For further information, write to us at:
chemistry@ramanujan.du.ac.in

EMINENT SPEAKERS



PROF. AJAY KUMAR BHAGI

DEPARTMENT OF CHEMISTRY,
DYAL SINGH COLLEGE,
UNIVERSITY OF DELHI



DR. ANANT NARAYAN BHATT

SCIENTIST,
DEFENCE RESEARCH AND
DEVELOPMENT ORGANISATION



PROF. ASHOK K GANGULI

INSTITUTE CHAIR,
PROFESSOR OF CHEMISTRY,
IIT DELHI



PROF. ASHOK KUMAR PRASAD

HEAD, DEPARTMENT OF CHEMISTRY
& DEAN, FACULTY OF SCIENCE,
UNIVERSITY OF DELHI



DR. B.S. BALAJI

ASSOCIATE PROFESSOR,
SCHOOL OF BIOTECHNOLOGY,
JAWAHARLAL NEHRU UNIVERSITY



PROF. D.S. RAWAT

DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF DELHI



**PROF. GANAPATI SUBRAY
SHANKARLING**

HEAD, SPECIALTY CHEMICALS
TECHNOLOGY DEPARTMENT, INSTITUTE
OF CHEMICAL TECHNOLOGY,
UNIVERSITY OF MUMBAI



DR. HIMANSHU OJHA

SENIOR SCIENTIST,
INSTITUTE OF NUCLEAR MEDICINE
AND ALLIED SCIENCES, DRDO

EMINENT SPEAKERS



PROF. JITENDER M KHURANA

PROFESSOR (FORMER),
DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF DELHI



**PROF. MANGALA
SUNDAR KRISHNAN**

PROFESSOR & HEAD
DEPARTMENT OF CHEMISTRY,
IIT MADRAS



PROF. R. NAGARAJAN

DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF DELHI



PROF. RAJEEV GUPTA

DEPARTMENT OF CHEMISTRY &
DEAN STUDENT'S WELFARE,
UNIVERSITY OF DELHI



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SENIOR PROFESSOR,
DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF DELHI



PROF. R. K. SHARMA

DEPARTMENT OF CHEMISTRY,
UNIVERSITY OF DELHI



PROF. RUCHI ANAND

DEPARTMENT OF CHEMISTRY,
IIT BOMBAY



PROF. VIBHA TANDON

SPECIAL CENTRE FOR
MOLECULAR MEDICINE,
JAWAHARLAL NEHRU UNIVERSITY

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