



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 REFRESHER COURSE IN

LIFE SCIENCES

01 - 15 SEPTEMBER 2021

**CALL FOR REGISTRATION
AND PARTICIPATION**

RAMANUJAN COLLEGE

Ramanujan College is a constituent College of the University of Delhi (DU). It is inspired by the life and work of Srinivasa Aiyangar Ramanujan, one of the world's greatest mathematicians. The College has been accredited Grade "A" by the National Assessment and Accreditation Council (NAAC) in its First Cycle. It is located in the well-known area of Kalkaji, near Nehru Place, in South Delhi.

The College was established in 1958 as an evening college for boys with just five programmes. Since 2010, Ramanujan College has been expanding and now with the latest addition of B.Sc. Environmental Sciences (Hons) in 2020, it at present offers sixteen undergraduate programmes in different disciplines. This achievement, in alignment to the recommendations of the National Education Policy (NEP) 2020, makes the College a centre for interdisciplinary studies and research with a future focus on blended learning. It has gradually grown into a self-sufficient and self-reliant institution owing to its academic vigour and intellectual capital.

Ramanujan College was awarded the Deen Dayal Upadhyay - Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (DDU KAUSHAL) Kendra in 2016 by the UGC, under which two vocational courses were started in Banking Operations and Software Development.

The College has conducted a Course on Human Rights, Environment and Ethics through its National Resource Centre (NRC), under the Annual Refresher Programme in Teaching (ARPIT) scheme of Ministry of Education (MoE). This Course was uploaded on MoE's Massive Open Online Course (MOOC) platform SWAYAM and many participants registered for it.

Ramanujan College offers various short-term diploma, certificate, and executive development programmes on contemporary and skill-oriented themes. These are conceived and designed by faculty members in consultation with external experts.

The courses get exceptional response from the students and are conducted throughout the academic session. They are open to alumni and students of all the colleges. Some of these courses support the curriculum, some prepare the students for higher studies and also accelerate the professional growth.

The College is the Study Centre of School of Open Learning (SOL), Non-Collegiate Women Education Board (NCWEB) and Indira Gandhi National Open University (IGNOU) for various courses. As an initiative towards students and teachers exchange programmes, the College has entered into Memorandum of Understanding(s) with foreign universities. It is also working for collaboration with other higher education institutions located in remote areas of the country, under the Vidya Vistar Scheme of the University of Delhi.

The prestigious Teaching Learning Centre was awarded to Ramanujan College in 2017 by the Ministry of Education, under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) scheme.

In pursuit of its vision: "Discover, Empower, Transform: Building A Better World", Ramanujan College is today perceived as one of the best colleges in the country.



TEACHING LEARNING CENTRE RAMANUJAN COLLEGE

Teaching Learning Centre (TLC) is mandated by the Ministry of Education (MoE) to organise Faculty Development Programmes (FDPs), Faculty Orientation and Induction Programmes (FIPs), discipline specific and interdisciplinary Refresher Courses, conferences, workshops, through offline and online modes. These programmes are based on in-depth subject knowledge, quantitative and qualitative research methodologies, and on an interdisciplinary approach as is envisaged in the National Education Policy (NEP), 2020.

The TLC, Ramanujan College has been set up with the aim of "Reaching the Unreached" teachers in terms of regional diversity and geographically remote areas of the country. It has successfully conducted more than hundred learner-centric programmes since October 2017 and trained over one lakh teachers across the country in various discipline specific and interdisciplinary programmes.

In the TLC Programmes distinguished and internationally acclaimed resource persons deliver lectures and conduct sessions on wide ranging disciplines/topics of relevance in the contemporary and ever evolving global scenario to benefit the teaching fraternity, corporates and researchers. The sessions are also uploaded for larger audiences on the official YouTube Channel of the College.

Ramanujan College is a pioneer in offering offline/online courses for faculty members of higher education institutions and research scholars through the customised Learning Management System (LMS), designed by the College's Research Development and Services Cell. It is predominantly participant-friendly and incorporates evaluation methods and comprehensive feedback systems to judge learning outcomes. The LMS is hosted on CLOUD with high scalability and reliability. The College has installed its own Cloud Infrastructure to host its servers for research and data analysis.

Enrichment Spectrum at the TLC, Ramanujan College

- Transforming teachers into knowledge-creators
- Emphasis on creating self-learning space for participants
- Interaction with eminent scholars and academicians
- Four Quadrant Approach (e-tutorial, e-content, Self-Assessment and Web Resources).
- Regular follow-up with the participants through Google Classroom/ Telegram/ Discussion Forum.
- Adaptation skills for the dynamic contemporary environment
- Augmentation of professional capabilities and research-based knowledge
- Inter and cross-disciplinary methodologies of study
- Co-creation and mutual contribution between participants and facilitators
- Formation of knowledge capital
- Online certificates using the Blockchain Technology to ensure authenticity and verifiability

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.



CONCEPT NOTE

Pharmaceutical sciences, chemical sciences, bioinformatics, biotechnology, chemical biology, and nutraceuticals have all faced new opportunities as a result of progress in life science research and development. Exploration in the biological sciences has resulted in significant advances in our understanding of basic molecular and cellular processes and mechanisms. The molecular understanding of health and illness is built on the knowledge gathered from numerous branches of biological sciences. The life sciences have seen massive

transformations, with new disciplines such as genomic and metabolomic technology revolutionising the descriptive and normative power of these fields. The daily practises in life science laboratories are drastically different from life science practises before these breakthroughs, thanks to technological advancements followed by new scientific perspectives and positions. It has significant uses in education, research, and innovative health care, pharmaceutical and biotechnology industries.

Research and education prepare us for a better future, but finding the best possible means to network with people from academia and industry around the world and to learn how to develop our talents and contribute to our country's productive force is just as vital. Through the Refresher Program, faculty members and research scientists from various institutes/colleges will be able to stay up to date on the most recent discoveries in the field of Life Sciences. Faculty members will also be able to improve their teaching effectiveness, update their instructional methodologies, and publish their findings in journals and publications as a result of this programme. It will also help faculty members develop their research skills by exposing them to cutting-edge research.

THEMATICS

- **Molecular Biology**
- **Genomics**
- **Ecology**
- **Pharmacology**
- **Toxicology**
- **Biocomputers**
- **Optogenetics**
- **Biotechnology**
- **Food Science**
- **Biomaterials**

RESOURCE PERSONS



PROF. AYYAPPA DAS MP
RVS College of Arts and Science
Coimbatore



DR. HIMANSHU OJHA
Senior Scientist, Institute of Nuclear
Medicine and Allied Sciences, DRDO



PROF. JITENDER M KHURANA
Professor (Former), Department of Chemistry
University of Delhi



DR. KOUSTUBH SHARMA
Senior Regional Ecologist, Snow
Leopard Trust, Seattle, USA



PROF. L. S. SHASHIDHARA
Dean of Research and Professor of Biology
Ashoka University



DR. NITISH KHURANA
Graduate Research Assistant,
Salt Lake City, Utah, USA



DR. RAMA RAO DAMERLA

Department of Medical Genetics, Kasturba
Medical College, Manipal Academy
of Higher Education



PROF. RAMAN RAJAGOPAL

Department of Zoology
University of Delhi



DR. SAMAN DEV HABIB

Principal Scientist and Scientist in charge
Molecular & Structural Biology
Central Drug Research Institute



PROF. SHRIKANT KUKRETI

Department of Chemistry
University of Delhi



**PROF. SUDESHNA MAZUMDAR
LEIGHTON**

Department of Botany
University of Delhi



PROF. SUMAN KUNDU

Professor, Department of Biochemistry
Director South Campus
University of Delhi



DR. VANSHIKA LUMB

**Assistant Professor, Deshbandhu College
University of Delhi**



PROF. VIBHA TANDON

**Special Centre for Molecular Medicine
Jawaharlal Nehru University**

REGISTRATION PROCESS & PAYMENT DETAILS

ELIGIBILITY

Faculty members (regular/adhoc/temporary) from Botany, Zoology, Life sciences and allied disciplines are eligible to apply.

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: 31 August 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:

rclifesci@ramanujan.du.ac.in

ORGANISING BOARD OF THE REFRESHER COURSE

DIRECTOR (Teaching Learning Centre, Ramanujan College)

Prof. S.P. Aggarwal

Principal, Ramanujan College, University of Delhi

PATRON

Dr. Bijayalaxmi Nanda

Principal (Acting) , Miranda House

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