



# TEACHING LEARNING CENTRE

Ramanujan College  
(Accredited Grade 'A' by NAAC)  
University of Delhi

in collaboration with

## INTERNAL QUALITY ASSURANCE CELL MIRANDA HOUSE

University of Delhi

under the aegis of

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

are organising an

ONLINE TWO-WEEK FACULTY  
DEVELOPMENT PROGRAMME

# CHEMICAL SCIENCES

01 - 15 February 2022

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CALL FOR REGISTRATION  
AND PARTICIPATION

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## 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.



## 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.

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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.

## **THEMES**

- **Drug Development**
- **Theoretical/Computational Chemistry**
- **Materials Chemistry**
- **Synthetic Chemistry**
- **Biocatalysis**
- **Green Chemistry**
- **Biochemical Chemistry**
- **Nanotechnology**
- **X-ray Crystallography**

## EXPECTED LEARNING OUTCOMES

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

## REGISTRATION PROCESS & PAYMENT DETAILS

### ELIGIBILITY

Faculty members (regular/adhoc/temporary) and research scholars from Chemistry and allied disciplines are eligible to apply for this programme.

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

**REGISTRATION DEADLINE: 31 January 2022**

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**
- **The Course is beneficial for the Career Advancement Scheme (CAS) and is equivalent to Refresher Course.**

**For further information, write to us at:**

**[chemistry@ramanujan.du.ac.in](mailto:chemistry@ramanujan.du.ac.in)**

**or contact us through WhatsApp:**

**+91 - 7011863335**

**+91 - 7011527088**

# **ORGANISING BOARD OF THE FACULTY DEVELOPMENT PROGRAMME**

## **DIRECTOR (Teaching Learning Centre, Ramanujan College)**

**Dr. S.P. Aggarwal**

*Principal, Ramanujan College, University of Delhi*

## **PATRON**

**Dr. Bijayalaxmi Nanda**

*Principal (Acting) , Miranda House*

## **CONVENORS**

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*Ramanujan College, University of Delhi*

**Dr. Anshika Lumb**

*Miranda House, University of Delhi*

## **CO - CONVENORS**

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*Ramanujan College, University of Delhi*

**Dr. Sharda Mahilkar Sonkar**

*Miranda House, University of Delhi*

## **PROGRAMME CO-ORDINATOR**

**Dr. Ashish Kumar Shukla**

*Ramanujan College, University of Delhi*

## **ORGANISING TEAM**

**Dr. Sachin Tomer**

*Ramanujan College, University of Delhi*

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