

# DEPARTMENT OF CHEMISTRY

## M.Sc. Chemistry

2020-22



# Placement Brochure



## VISION

- To be globally recognized as a premier institution engaged in cutting-edge research in Basic and Applied Sciences

## MISSION

- To be a Center of Excellence providing quality education and research training.
- To translate research outcome for betterment of society
- To collaborate with Educational Institutions/Universities of repute in frontier areas of Science and Technology

## MESSAGE FROM THE DEAN



**Dr. Neetin Desai**  
Dean  
SVKM's NMIMS  
Sunandan Divatia School of  
Science

The SVKM's NMIMS Sunandan Divatia School of Science, was born out of the foresight of the University with a view to providing undergraduate and post-graduate students an opportunity to venture into the fascinating world of Sciences. The School aspires to be a Centre of Excellence by creating a conducive student-centric environment that supports high quality teaching and research in niche areas of Science & Technology.

The Master's program in Chemical Sciences is designed to develop a student's scientific, experimental and analytical skills. Further, the research-intensive and laboratory-based curriculum covers contemporary subjects and is intended to meet the needs of the ever-evolving chemical & pharmaceutical industry, medical diagnostics industry, clinical research organizations and research institutions. Our students have been trained by excellent faculty who have a strong academic research background. Besides, the students are exposed to state-of-the-art infrastructure and equipment to enhance their hands on skills. Moreover, the compulsory research project as part of the curriculum, develops their technical skills and makes them ready to face the industry. To ensure a holistic development of the student, besides academics, students are a part of various committees/cells to hone their creative, social, cultural and inter-personal skills.

I take the pleasure in inviting companies to our School for placements. Our effort is to enable interaction between students and companies to find the best match between their aspirations and requirements.

The SVKM's NMIMS introduced, highly innovative and unique interdisciplinary courses at the Sunandan Divatia School of Science from the academic year 2007-2008. All the Curriculums offered at the Sunandan Divatia School of Science are programs involving 'Research' and hence research constitutes a major thrust in all the programs. The focus is to generate a pool of highly qualified scientific talent who can fulfil the needs of Research Institutions as well as the demands in an industry setting. Thus the programs ensure employability; address global demands and community development.

We conduct guest lectures by experts from different sectors which helps students to know the various applications in their subjects. We focus on development of student through case studies, presentations, research approach in journal club, soft skills etc. Students are also a part of various committees/cells to hone their creative, social, cultural and inter-personal skills.

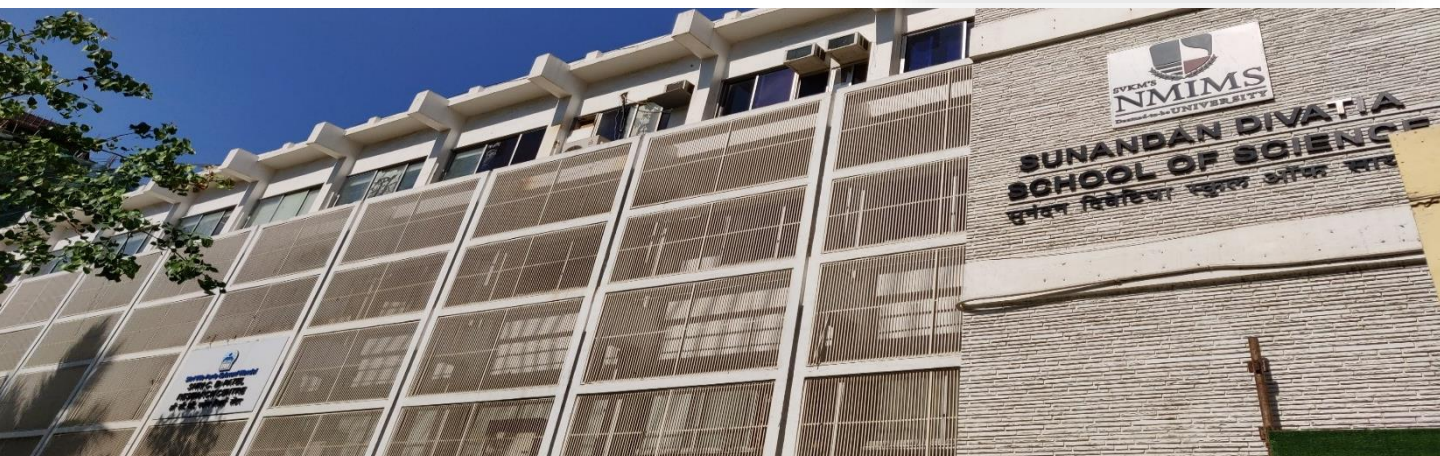
Our last year batch got final placement from good companies/organizations like Jove, Asian paint, Yasham Speciality ingredients, Clearsynth, Firmenich, Lupin Pharmaceuticals, Bio-Genomics, Zydus Cadila, etc.

We welcome you to our final placement process at NMIMS Sunandan Divatia School of Science.

## PLACEMENT AREA CHAIRPERSON'S MESSAGE



**Sunil S. Shirvaiker**  
Area Chairperson (Placements)  
SVKM's NMIMS  
Sunandan Divatia School of  
Science



## NMIMS SDSOS

Sunandan Divatia School of Science was started in 2007 with a view to provide undergraduate and post graduate students an opportunity to be a part of the unique learning methodology of the university, which lays emphasis on academic excellence combined with industry oriented training. The goal of the Sunandan Divatia School of Science is to be a Centre of Excellence in the domain of Pure and Applied Science by providing quality education and research.

Currently the school is offering following programs:



Ph.D. in Biological Sciences  
and Chemistry



B.Sc. in Applied Psychology



M.Sc. in Statistics, Applied  
Statistics & Analytics, Biological  
Sciences & Chemistry



Integrated M.Sc.-Ph.D. in  
Biological Sciences and  
Chemistry



B.Sc. in Applied Statistics and  
Analytics



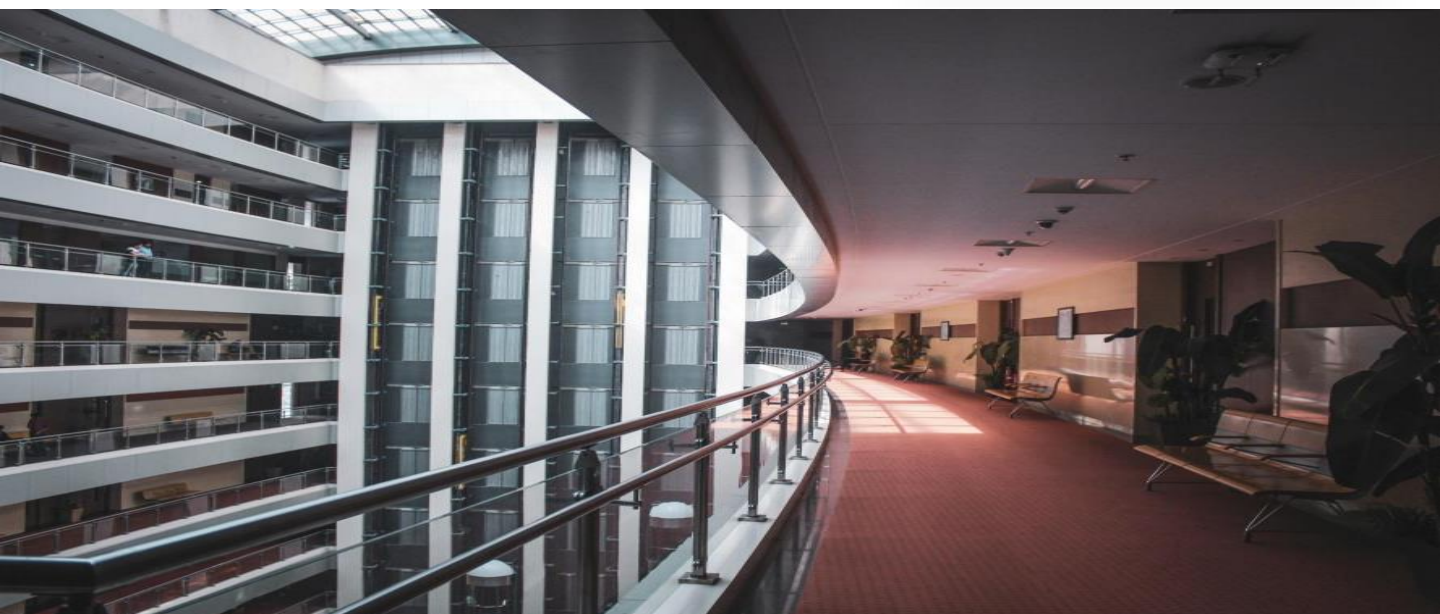
B.Sc. in Data Science



Masters of Physiotherapy



Integrated M.Sc. in Biomedical  
Science



## DEPARTMENT OF CHEMISTRY



- The Department of Chemistry offers degrees in **M.Sc. Chemistry, Integrated M.Sc.-Ph.D. Chemistry, Ph.D. Chemistry (Regular & Professional)**. The courses are reviewed regularly in consultation with our Board of Studies, which comprises of experts from academia, research institutions and industry from all over India. Thus, the courses are tailor made to fulfil the requirements needed to keep pace with the current developments in scientific research
- In the first year, along with the permanent faculties, the regular lectures are also conducted by visiting faculties who are experts in their respective fields. Apart from the course work, the Faculty also conducts Guest lectures by eminent academicians and scientists, paper presentations (Journal Club), etc. to ensure learner centric environment
- After the 3<sup>rd</sup> semester in the second year students undertake 6 months research projects on varied topics either in industry or research institutions of repute

# Journey at NMIMS

## FINAL PLACEMENTS



- Emphasis on Employability
- Industry Oriented Education
- Inculcation of work ethics
- Mock interviews



## DISSERTATION PROJECT



- Student Counselling in order to learn their subject interests.
- Research projects at reputed institutes.



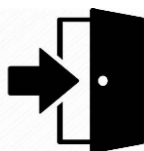
## RIGOROUS CURRICULUM



- Interdisciplinary curriculum
- Broad Domain Knowledge
- Inculcation of Research Aptitude
- Development of Interpersonal Skills
- Research seminar/Journal club
- Guest talks/Industrial visits



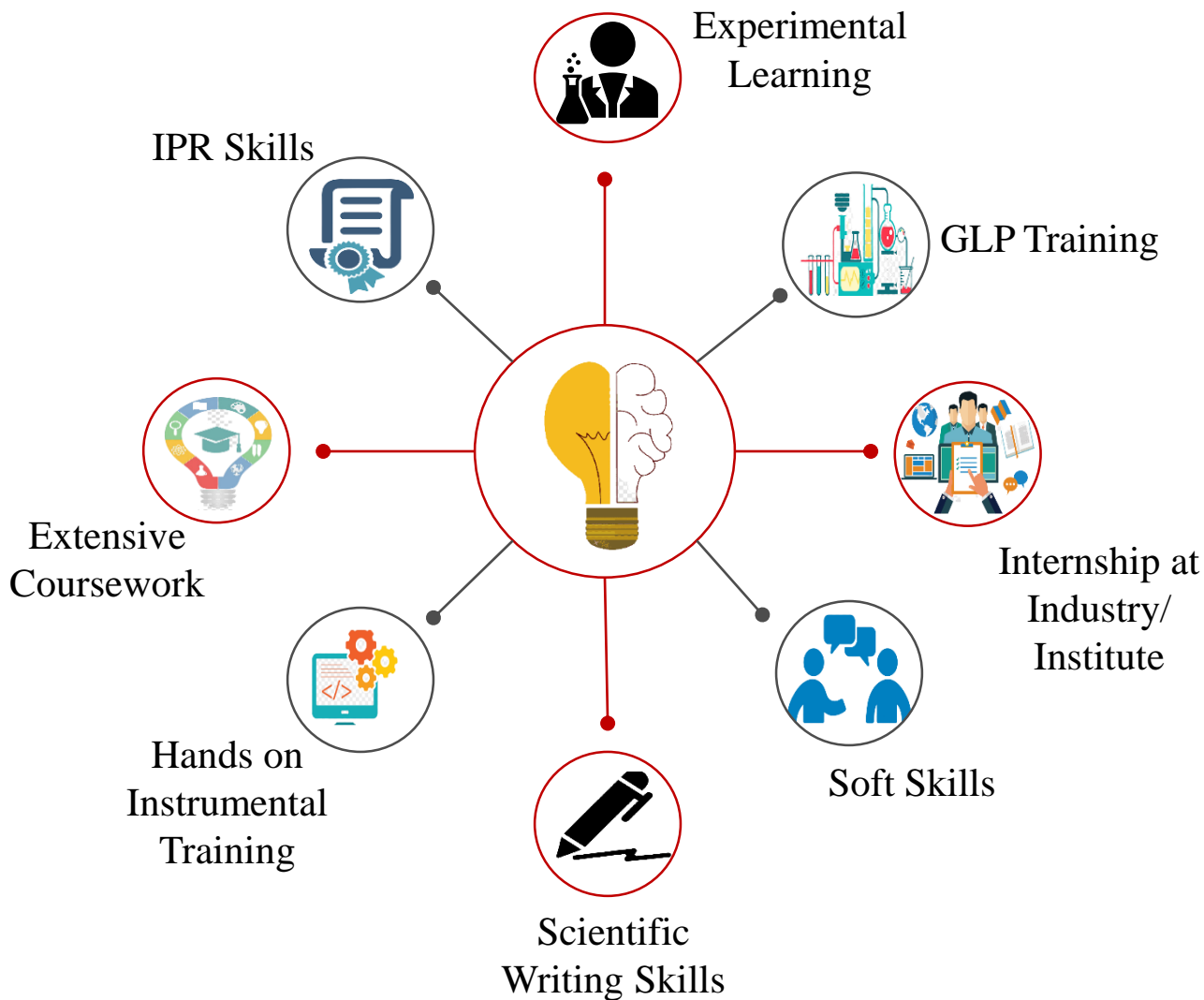
## ENTRY INTO NMIMS



- Chemistry Graduates Applicants
- Screening by Written test
- Selection by Interview Performance



## WHY RECRUIT US ?





# EXTENSIVE COURSEWORK



## Semester I

Analytical Chemistry

Physical Chemistry

Inorganic Chemistry

Organic Chemistry

## Semester II

Advanced Organic  
Chemistry

Nanoscience &  
Nanotechnology

Research Methodology  
& IPR

Environmental & Green  
Chemistry

## Semester III

Organic Chemistry

Analytical Chemistry

Materials Chemistry

## Semester IV

Dissertation  
Project at Research  
Institutes or  
Industry

# SPECIALIZATION IN CHEMISTRY

Specialization has been provided in 3 disciplinary subjects in chemistry, where we provide the following coursework.



## Organic Chemistry

- Organic Chemistry II
- Organic Chemistry III
- Organic Chemistry IV
- Medicinal Chemistry



## Analytical Chemistry

- Analytical Chemistry
- Advanced Analytical Techniques
- Industrial Chemistry
- Applied Electrochemistry

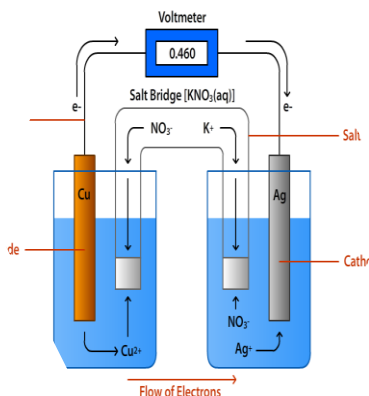


## Materials Chemistry

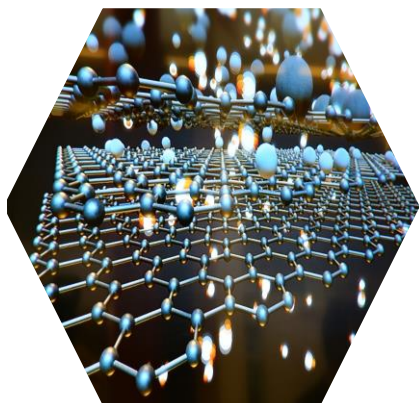
- Introduction to Solid State Chemistry
- Materials Characterisation and Introduction to Biomaterials
- Electroics of Materials
- Design of Experiments

## RESEARCH AT SDSOS

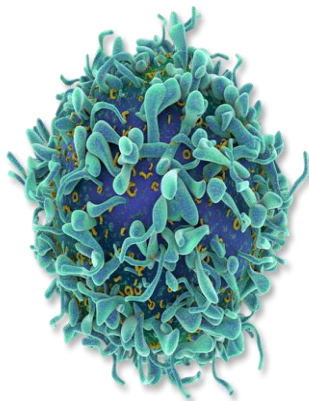
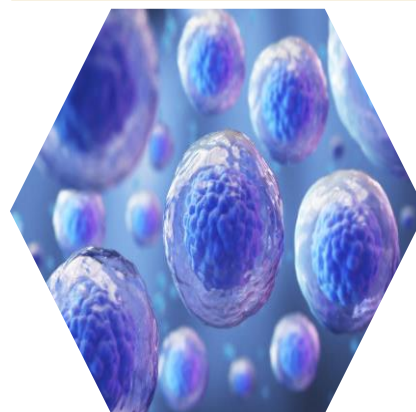
### Electrochemistry



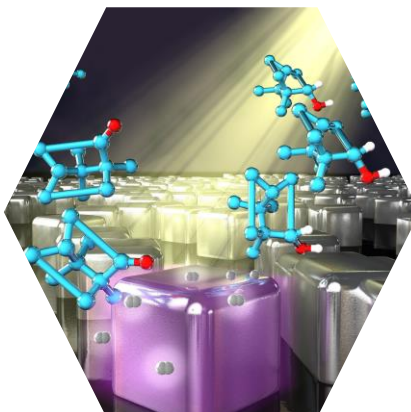
### Nanomaterials



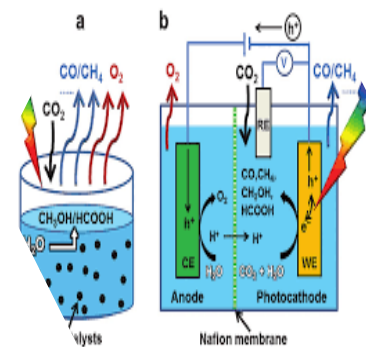
### Stem Cell Research



### Translational Cancer Research



### Nanocatalysis



### CO₂ Photoreduction

# Online Learning

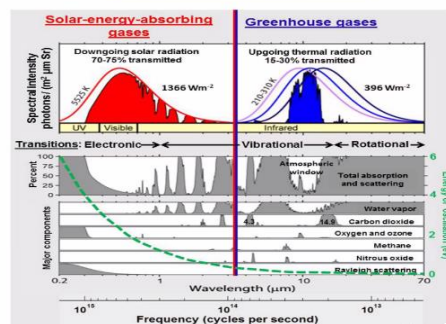
## A Panacea in the Time of COVID-19

The COVID-19 pandemic has shaken the world to its core. It all began with the announcement of the nationwide lockdown for 21 days that was further extended for months. Additionally, most of the governments around the world had temporarily closed.

At the time when the universities were at forefront battling against the virus, SVKM'S NMIMS was one of the first institutes to commence with the process of E-Learning & teaching. NMIMS with its thoughtful leadership, vision & regulations initiated the process of online academic learning & activities in tandem with the academic calendar.

Online entrance exams, Interviews & admissions were scheduled & in no time the academic session had begun amidst the crisis.

### Greenhouse Gases



### Career Opportunities in (industrial) R&D

Quantum mechanical calculation of most favoured conformation of a drug molecule will *also* be of interest to industry (not just any molecule).

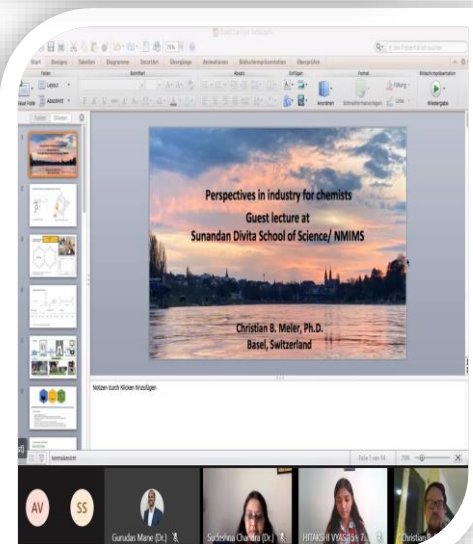
To sum up, research in industry covers the entire gamut starting from basic research to product development, process development, testing and quality control.

Phenomenological studies which is actually basic or fundamental research are also done in industrial R&D.

If the work is enabling a product development, it is of interest. The profit motive is the over ruling criteria for industry.

Each of the 'branches' in R&D is different in nature and needs different kind of expertise.

For e.g. QC is a highly repetitive activity with focus on reproducibility while Testing requires focus on accuracy rather than speed. Basic research suits an exploratory and questioning mind while product development requires focus on end objective.

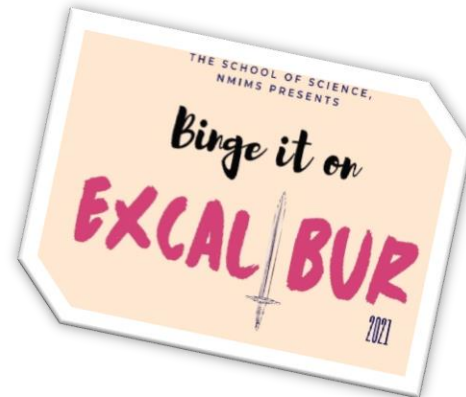


# Online Learning

## A Panacea in the Time of COVID-19

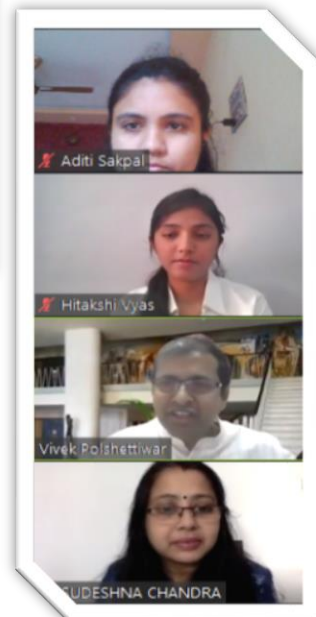
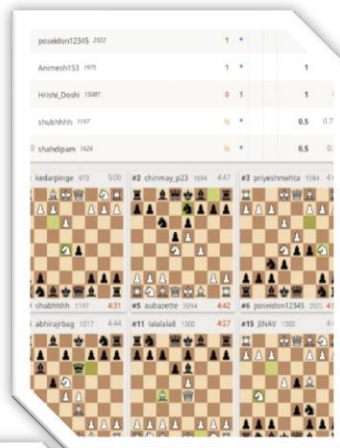
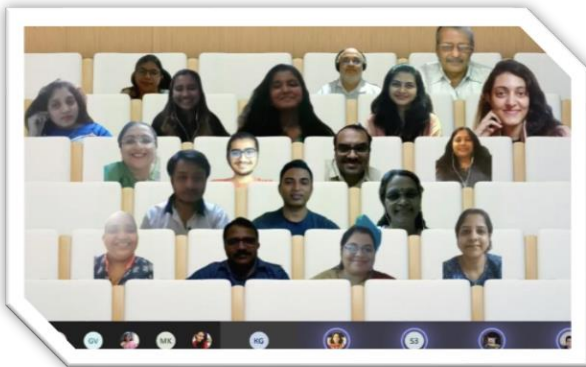
### The Online lockdown activities:

- Orientation Program
- Independence Day Celebration
- The Student Council Committee (2020-2021) was set up along with various Clubs such as Science, Sports etc.
- The Placement cell Selection (2020-2022)
- Mentor-Mentee Sessions



SVKM'S NMIMS 18th Annual Celebration, various Guest Talks and so on and so forth. It left no stone unturned to make the students and the teachers feel welcoming to the virtual world.

During the turbulent times, with such an ease, everyone was adhering to this new virtual environment, imbibing knowledge and inculcating to the new fields of education and activities



## COLLABORATIONS WITH INTERNATIONAL INSTITUTES



**INTERNATIONAL  
COLLABORATIONS**

### **Universität Regensburg**

- IPUR Funding
- Prof. Dr. Antje Baeumner
- ECL- based Nano -Immunosensor for Liver Cancer

### **Technische Universität Chemnitz**

- InPro TUC finding
- Prof. Dr. Heinrich Lang
- Ink-Jet printing of dendrimer-magnetic nanoparticles

## CSIR SUMMER INTERNSHIP



### **Kurukshetra University, Haryana:**

- Finding the various phospholipids present in milk
- Determining structure of phospholipids using analytical techniques like NMR, XRD, HPLC etc.
- Finding out about the cardiovascular diseases caused by imbalance of phospholipids in the human body

Done by: Sanjana Singh

Guide: Dr. Vijay Kumar

Kurukshetra University, Haryana

# LAB INFRASTRUCTURE



**HPLC**



**Photoreactor**



**Tube Furnace**

# LAB INFRASTRUCTURE



**Dissolution Apparatus**



**ATR-FTIR**



**Centrifuge**

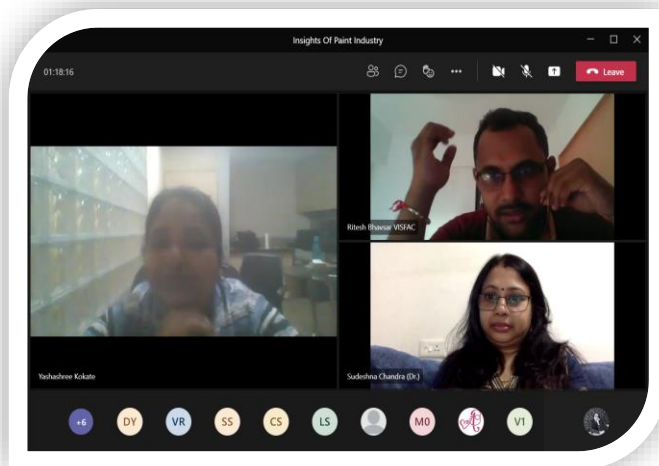
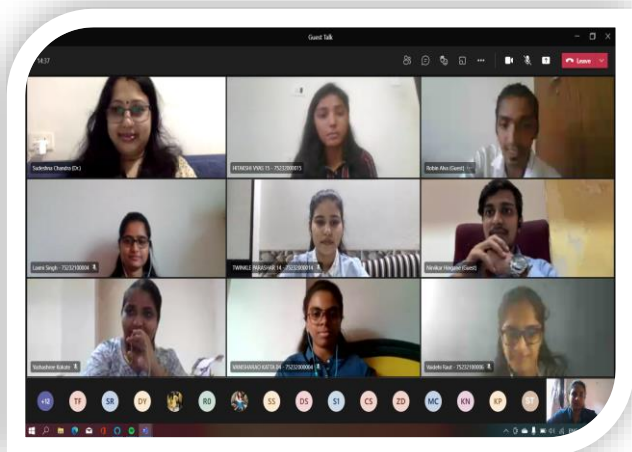


**Shimadzu UV-Vis Spectrophotometer**





# PLACEMENT ACTIVITIES



Guest Talk (14/08/2021)  
**Recruitment Vs Covid**  
By Mr. Nirvikar Hingane &  
Mr. Robin Alva

Guest Talk (28/08/2021)  
**Insights of Paint Industry**  
By Mr. Ritesh Bhavsar



Industrial Visit by M.Sc. Students at Anchrom  
Enterprises

# GUEST LECTURES



## **Dr. Vandana Patravale**

Professor of Pharmaceuticals  
Institute of Chemical Technology (ICT)

**Topic:** Computational Pharmaceuticals &  
Drug Targeting (07/01/2021)



## **Dr. Vivek Polshettiwar**

Associate Professor  
Tata Institute of Fundamental Research  
(TIFR)

**Topic:** Climate Change &  
Nano-Chemistry (05/02/2021)



## **Dr. Mohan Rao**

Former Vice President  
Pidilite Industries

**Topic:** Career Opportunities in the  
Industrial Sector (R&D) (12/02/2021)

# GUEST LECTURES



## **Dr. Prashant Kharkar**

Professor of Medicinal Chemistry  
Institute of Chemical Technology (ICT)

**Topic:** Machine learning tools in  
Biomedical Science (27/02/2021)



## **Dr. Amit Asthana**

Associate Professor  
Dept. of Pharmaceuticals Analysis (NIPER)

**Topic:** Affordability of diagnosis using  
paper-based devices (06/03/2021)



## **Dr. Christian B. Meier**

Application Scientist  
Chemspeed Technologies & Tecan  
(Zurich/ Switzerland)

**Topic:** Perspectives in industry for chemists  
(30/03/2021)

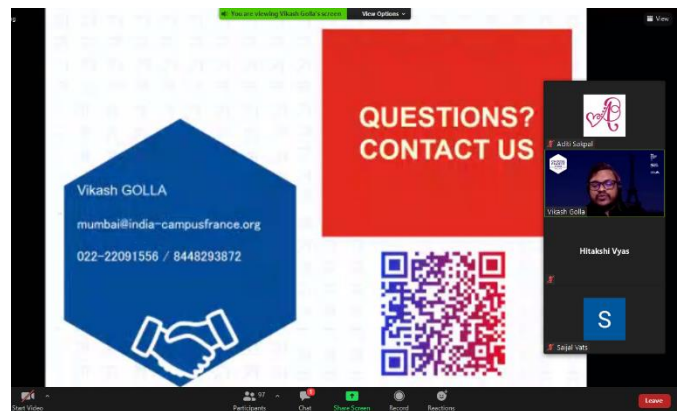
# CHOOSE FRANCE TOUR 2021: Virtual edition

- The virtual edition of the Choose France Tour 2021 was organized by the Embassy of France in India and Campus France, on 26<sup>th</sup> - 27<sup>th</sup> February 2021 via Zoom.
- More than 40 public and private institutions from France were present. They specialize in Engineering, Management, Tourism & Hospitality, Design & Arts.
- These institutions offer more than 1600 graduate, post-graduate and doctoral programmes in English and even more in French
- During the Tour, one-on-one counselling sessions on public and private chats with each school were done.



Conducted by: Vikash Golla, Manager, Campus France - Mumbai,  
 Institut Français en Inde, Embassy of France - India


 A promotional poster for the Choose France Tour Online. It features a blue and yellow color scheme. Text includes: "AMBASSADE DE FRANCE EN INDE", "INSTITUT FRANÇAIS INDIA", "CAMPUS FRANCE", "STUDY IN FRANCE", "BACHELORS MASTERS & PHD", "CHOOSE FRANCE TOUR ONLINE", "LIVE SESSIONS QUIZ & GAMES WEBINARS", "MEET ONE-ON-ONE with leading French Institutes", "26 FEB 27 2021", "FREE REGISTRATION CFT.IFINDIA.IN", "#choosefrance #ThinkDifferent", and "www.inde.campusfrance.org".


 A screenshot of a Zoom meeting. The main screen shows a slide with the text "Vikash GOLLA", "mumbai@inde-campusfrance.org", "022-22091556 / 8448293872", and a QR code. A red box on the right says "QUESTIONS? CONTACT US". A sidebar on the right shows a list of participants including Vikash Golla and Hitakshi Vyas.


 A banner for the Choose France Tour Online. It features a background image of the Eiffel Tower. Text includes: "Study in France Bachelors, Masters & PhD", "CHOOSE FRANCE TOUR ONLINE", "Meet one-on-one leading French institutions", "SAVE THE DATE 26 & 27 Feb 2021 Virtual Education Fair", "#choosefrance #ThinkDifferent", "CFT.IFINDIA.IN", "www.inde.campusfrance.org", and logos for "REPUBLIQUE FRANÇAISE" and "INSTITUT FRANÇAIS".



## INTERNSHIP



**ARTEK SURFIN  
CHEMICALS LTD**  
*The Finishing Specialist*



**MUKESH PATEL SCHOOL OF  
TECHNOLOGY MANAGEMENT  
& ENGINEERING**



**Ambernath  
Organics Pvt Ltd**



**Indian Institute of  
Technology Bombay**



**KHURANA & KHURANA**  
ADVOCATES AND IP ATTORNEYS



## PLACEMENTS



2019-20





## PLACEMENTS



2020-21



# EMINENT ALUMNI: TESTIMONIALS

## (2018-2020)



**PRUTHA PATEL**  
(Researcher – Asian Paints)

*Think different is one thing that SDSOS NMIMS urges and to some extent, succeeds in teaching their students which invariably helps us achieve what we need. The institute provided me with the platform to work as an intern for 6 months under reputed pharmaceutical company. Being a chemist and getting placed in multinational paint company .Asian Paints in the beginning of my career is a dream come true. I am really thankful to our Dean, our faculties of chemistry department, and non-teaching staff for inculcating a sense of confidence in me.*

*My experience at NMIMS deemed to be University is great and memorable. The teachers and mentors are really helpful and that helped me to improve my academic and interpersonal skills. I thank NMIMS & all the faculties for putting in all the efforts to groom us and make us corporate professionals*



**JINAL PATEL**  
(Inventory & Dispatch Ex – Clearsynth)

*I can positively say that NMIMS SDSOS has been the best part of my life. I am grateful to NMIMS SDSOS for the environment they provided to us. The number of topics available here in different subjects is vast as compared to other colleges. The syllabus is industry oriented which helped me to learn about the latest instruments & technologies which are in demand in the current industries.. With the help of the placement cell, I got placed in one of the largest company like Firmenich aromatics Pvt. Ltd*



**MAHAGANESH**  
(Lab Assistant – Firmenich)



# EMINENT ALUMNI: TESTIMONIALS

## (2019-21)



*A wonderful two year journey is difficult to be mentioned in just a few sentences. I can see myself transformed in a productive manner in terms of knowledge, conduct and confidence during this journey. NMIMS Sunandan Divatia School of Science has provided me a platform to nurture and develop my abilities and now I can consider myself prepared for a professional environment. I feel blessed to be a part of this institute and would like to thank the excellent faculty of the Chemistry department for their guidance.*

**NIDHI PAWAR**  
**(Sales Ex – Firmenich)**

*My 2 years of education at NMIMS-SDSOS was one of the best years of my academic journey. I've grown overall a lot as a person in this time span. The staff and professors are easy to approach. The courses offered are designed in such a way that students get both research and industrial experience. The extra-curricular activities help students to strengthen and explore their talents. Thank you NMIMS for making this journey memorable.*



**LETIZIA MAHE**



*To express this whole wonderful journey in few lines is definitely a task, learning in NMIMS has been fun with acquiring knowledge. The professors assisted us with learning the subject topic in the best way possible taking it to the profundity. We also performed experiments on variety of instruments in the laboratory gaining hands on experience. Guest lectures that were arranged has helped us to make decisions in a better way. Apart from scholastics, various fests, competitions and events were a cheery on top.*

**DHARA JOSHI**  
**(Business Development- Clearsynth)**

**CLASS OF M.Sc. CHEMISTRY**  
**2020-2022**



**Bhushan Ganeshpure**  
Graduated from  
Thakur College of Science  
& Commerce



**Aadarsh Sharma**  
Graduated from  
Bhavan's College



**Prajeet Khedekar**  
Graduated from  
Thakur College of Science  
& Commerce



**Vanisha Katta**  
Graduated from  
Thakur College of Science &  
Commerce



**Abhay Dubey**  
Graduated from  
Bhavan's College

# CLASS OF M.Sc. CHEMISTRY

## 2020-2022



**Riya Dubey**  
Graduated from  
Thakur College of Science  
& Commerce



**Darshan Solanki**  
Graduated from  
Thakur College of Science  
& Commerce



**Vighnesh Chandan**  
Graduated from  
Mithibai (Autonomus)  
College



**Mohd. Arfaat Shaikh**  
Graduated from  
Bhavan's College



**Salman Shah**  
Graduated from  
Bhavan's College

## CLASS OF M.Sc. CHEMISTRY 2020-2022



**Ameesha Bhargava**  
Graduated from  
St. Xavier's (Autonomus)  
College



**Yugashree Surve**  
Graduated from  
Bhavan's College



**Reeti Panchal**  
Graduated from  
Mithibai (Autonomus)  
College



**Twinkle Parashar**  
Graduated from  
R.D National College



**Hitakshi Vyas**  
Graduated from  
Jai Hind (Autonomus)  
College

**CLASS OF M.Sc. CHEMISTRY****2020-2022**

**Aditi Sakpal**  
Graduated from  
Mithibai (Autonomous)  
College



**Srushti Rane**  
Graduated from  
Mithibai (Autonomous)  
College



**Vinay Adhikari**  
Graduated from  
Bhavan's College



**Sajida Sayed**  
Graduated from  
Thakur College of Science  
& Commerce



**Priyaj Pathak**  
Graduated from  
Navrachna University,  
Vadodara (Deemed)



**Sweta Samala**  
Graduated from  
Jai Hind (Autonomous)  
College

# STUDENT PLACEMENT COMMITTEE

## 2020-2022



**HITAKSHI VYAS**

**PRESIDENT**



**VINAY ADHIKARI**

**VICE PRESIDENTS**



**TWINKLE PARASHAR**



**ADITI SAKPAL**



**VANISHA KATTA**

**CO-ORDINATORS**

## CONTACT US



### **Area Chairperson Placements**

Prof. Sunil Shirvaiker

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### **Placement and Internship Advisor (Chemistry)**

Dr. Gurudas Mane

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### **Student Placement committee President**

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Tel: +91 96534 26441

### **Vice President**

Mr. Vinay Adhikari

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Tel: +91 91671 66808

Ms. Twinkle Parashar

Email:

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