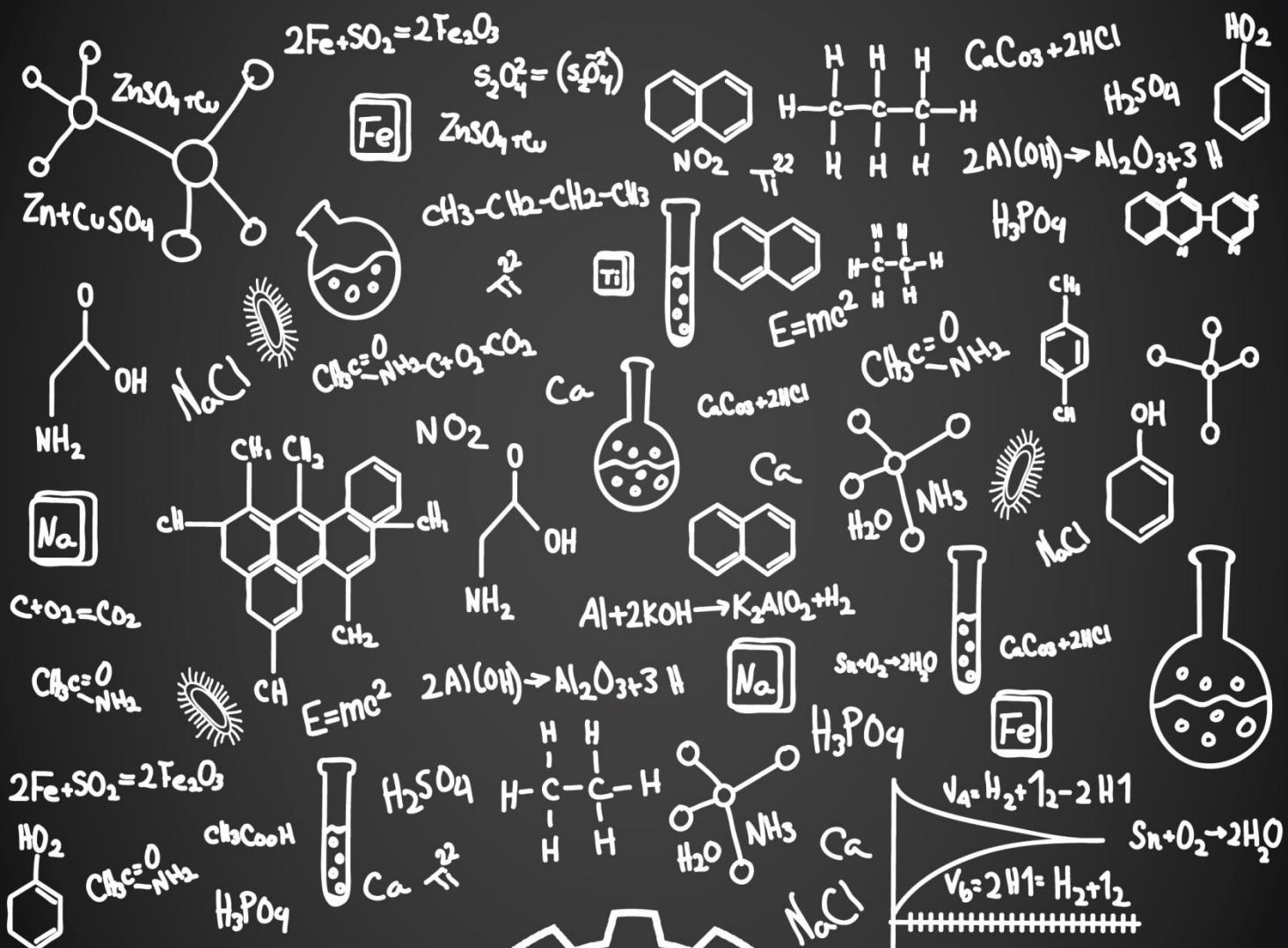




# DEPARTMENT OF CHEMISTRY

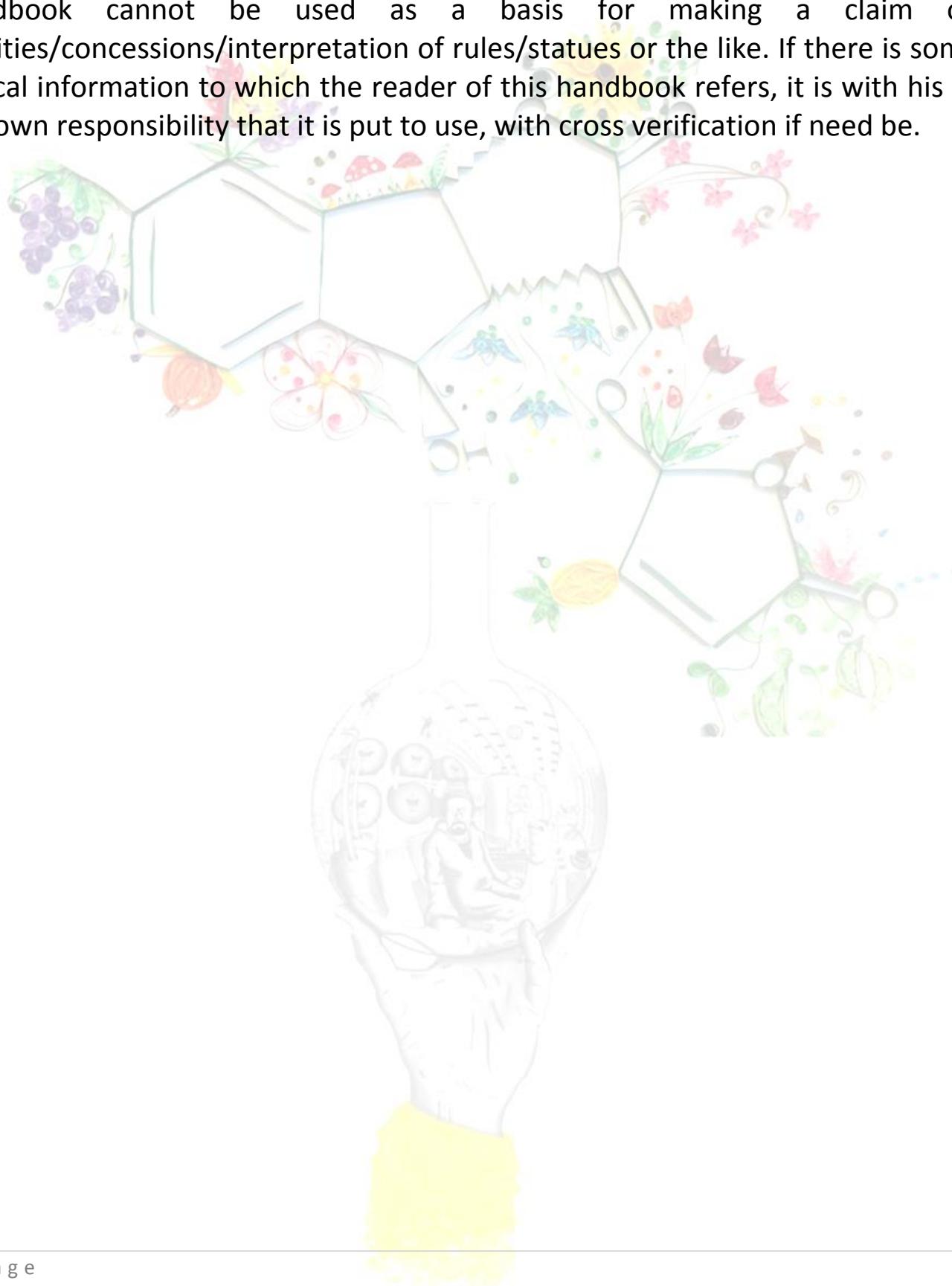
## PG HANDBOOK 2020-21



..Chemistry is at once, a science and an art.

## Disclaimer

Though the ISCP (Institute Student Companion Program) has taken care while compiling the handbook, neither the council nor the Institute can be held responsible for errors/inadequacies that may inadvertently creep in. This handbook cannot be used as a basis for making a claim on facilities/concessions/interpretation of rules/statutes or the like. If there is some critical information to which the reader of this handbook refers, it is with his or her own responsibility that it is put to use, with cross verification if need be.



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## About The Department

From a small department started in 1965, the Department of Chemistry has grown into a major centre for teaching and research in Chemical Sciences in India. Today our academic program includes Masters in Chemistry (2 years), Ph.D. Program and a new 4 Year BS program has been initiated to mark the completion of 50 years of the department in 2014. Not drifting away from the original mandate of providing undergraduate chemistry education, the department has taken conscious efforts over the last 50 years to nurture high quality research in all areas of chemistry. Alongside, we have also built good research infrastructure. Today the department consists of 37 research groups and 250 Ph.D. students apart from 200+ M.Sc. students, project staff, and postdoctoral fellows. Our research is published in the best of the chemistry journals and cited at impressive rates. Thus, it is not surprising that we have been able to attract some of the best students and faculty even at a time when a large number of new institutes have been established all over the country, which offer excellent new infrastructure and large start-up grants.

Official Website: <http://www.chem.iitb.ac.in>

## Message from the HOD



# Welcome Message from the ISCP Team

Dear New Entrants,

These are tough times, but you are not alone.

We welcome you to one of the most prestigious institutes in the nation. Congratulations on having achieved this incredible feat. You are about to become part of a culture that will leave its traces within you for a long, long time, even if it begins ‘untraditionally.’ You will be the ones witnessing the first term to happen entirely online in the history of IIT-Bombay. It might feel overwhelming, and for all the right reasons, we must say. There will be several things you might be worried about, from coping up with the academics in online mode to missing out on things; however, as we said, “You are not alone.”

Institute Student Companion Programme (ISCP) is a student body with the primary objective of building a relationship of trust and comfort between the final year students and the incoming students of the PG programmes. We are here to help you in getting familiar with the ways of IIT-B, which is even more critical in these times. You will become a part of a culture where people want to perfect their craft and thus work day in and day out at it. The scope of these is not limited just to academics. Various online events are and will be organized by the cultural, technical, and sports clubs in IITB, like Code in Quarantine, Fitness challenges, Dance Challenges, etc. Managing these along with online lectures might seem daunting at first, and hence, to help you with a world of problems including these, we assign you a Student Companion.

The Student Companions are self-motivated volunteers who will genuinely help you in low and high tides as an act of giving back what they received from the programme. You can look up to the team for any form of support, any information before venturing out into an unknown domain, be it academics or extracurricular activities. You can reach out to us for any issue regarding the curriculum, facilities provided, your physical, social or mental health, and last but certainly not the least, reach out to have a chat with us because that is what we are for, for you.

The COVID -19 pandemic has affected all of us. For now, Health concerns prevent your arrival in our beautiful lush-green IIT-B campus; it also prevents your participation in hostel activities, sports, cultural activities. There are many things here at IIT-B waiting for you, but the most important thing is the campus, and the buildings do not define IIT-B. It's you. You set the culture, the activities, you represent IIT-B to the world, and you make IIT-B what IIT-B is. So, knowing that time flies at IITB, we strongly suggest participating in things that happen online other than attending lectures, make memories, reach out to us for any queries, and relax with the comfort of your home. At least till we get an opportunity to welcome you into the campus, let's be safe, let's be optimistic and let's keep our learning spirits high.

Looking forward to getting to know you. Giving out some motivation for these difficult times, we end with a quote by Albus Dumbledore: “Happiness can be found, even in the darkest of times, if one only remembers to turn on the light.”

Stay Safe!



Overall Coordinators,

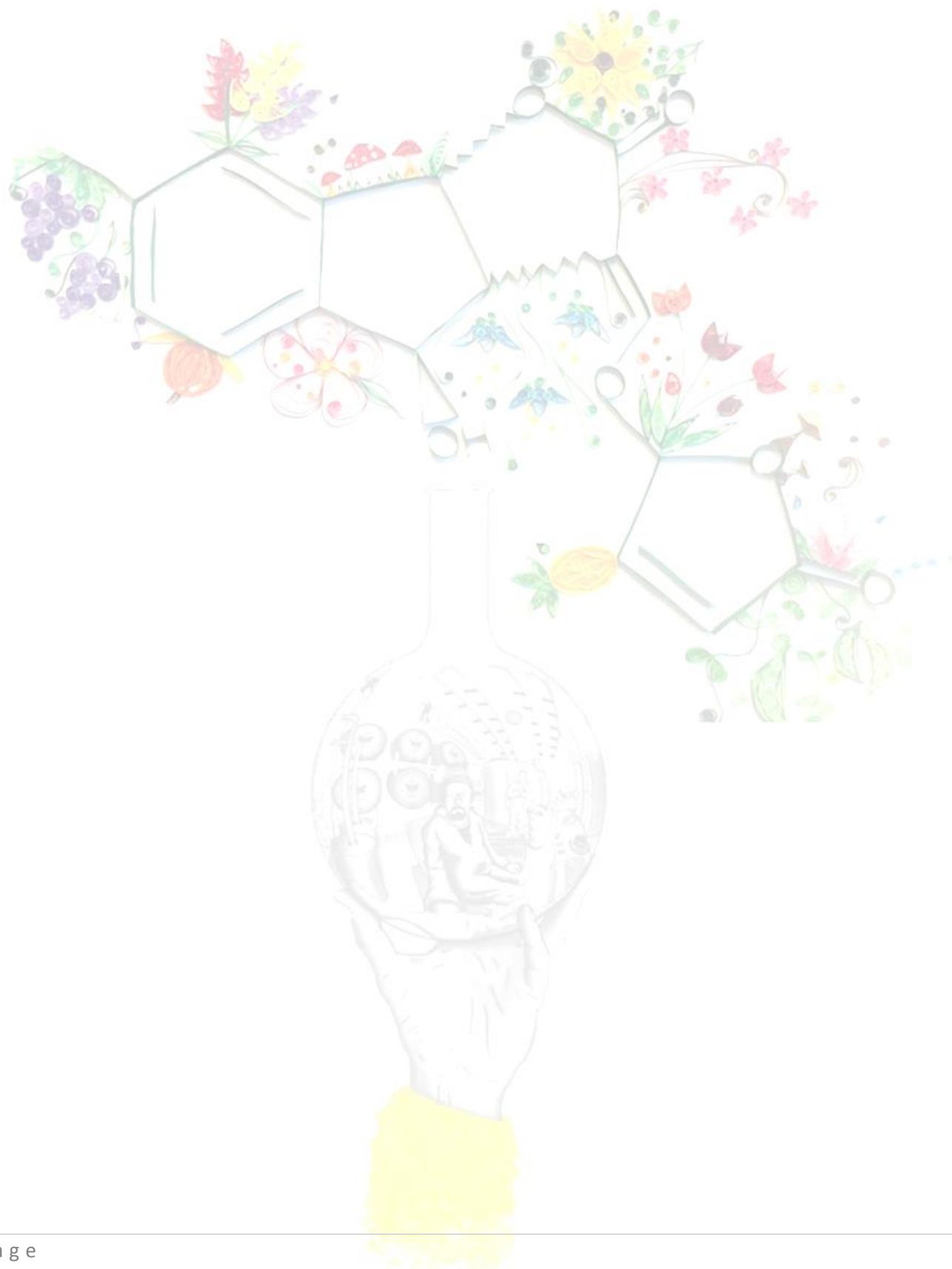
Institute Student Companion Programme (2020-21)

IIT Bombay

Email:iscp@iitb.ac.in



# Welcome Message from the IMR



# Welcome message from the Department Coordinator

Welcome juniors

Heartiest congratulations on having made it to the finest institute in India. You are about to embark on a journey of knowledge and exploration.

I know the current situation is not on our side and sometimes the journey can be really daunting and stressful. But don't worry; we are here to guide you through this journey. Together we will thrive and make this journey a memorable one.



This journey will teach you things which will constantly reshape your perspective and make you a better version of yourself. You will learn to realize that however good you may be at something, there will always be someone equally good or better than you. IIT-B harbours the finest minds of the nation and throughout your journey you will see how fortunate you are to be in such a great environment. You will learn to broaden the horizon of your mind and constantly strive for knowledge.

As you are already aware that everything will happen online in this semester, so at times you may feel unlucky to miss the warmth of the campus life. But hopefully everything will return to normal by January and you will be able to do everything you have dreamed for so long.

I know first-hand how important it is for the new entrants to have a mentor who can guide them through the transition period. For me, my ISCP mentor and the DC were like the guiding stars without whom I am not sure if my journey would have been this smooth. For the first time in the history of IIT-B, it's going start the academic session in a distinctly untraditional way. We know you will have lots of questions ranging from online registrations, lectures, and study materials to exams. So it is imperative that you ask questions however naive that may be. Our ISCP team is always there for you to clear your doubts.

You are about to embark on a journey which we have already embarked. You may not know about the obstacles that you will find in this journey but we know from our experience. So we are here to help you avoid the mistakes we made. Feel free to contact us anytime regarding anything. We will be glad to help. I end with a quote by Surak "May we together become greater than the sum of both of us".

*Bon Voyage People!*

Achyut Ranjan Gogoi

Department Coordinator, ISCP

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**WhatsApp:** 9706970811

**Mail:** achyutrone@gmail.com

## DEPARTMENT ISCP TEAM



### Achyut Ranjan Gogoi (195030016)

Achyut is the prodigy of our class. He is well aware of all the things of your benefit happening in insti, or in the world to be honest. A kind-hearted person, always there to help and has his goals set.

**Phone:** 9958431365

**WhatsApp:** 9706970811

**Mail:** achyutrone@gmail.com

### Ankush Goyal (195030009)

Ankush is the perfect balance of sincere and fun. He is the person to look up to for making your stay at insti, fun. When it comes to chemistry, he is fierce and hard-working.

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**WhatsApp:** 7814323598

**Mail:** ankushgoyal78143@gmail.com



### Shweta Gaikwad (195030001)

Shweta is the busy bee of our class. She always has a hundred things on her plate, and manages all with ease. She is the best person to-go to for academic advices and light-hearted chats.

**Phone:** 9987678934

**WhatsApp:** 9987678934

**Mail:** gaikwadshweta199728@gmail.com



### Rajesh Khushwaha (195030029)

Rajesh is your human guide to all the matters related to insti.

His humor is just perfect to cheer up a mundane person/chat/meeting. His dedication for chemistry is pure.

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**WhatsApp:** 7379758457

**Mail:** rajeshkush121@gmail.com



### Aashi Kasera (195030005)

Aashi is a people person, thus approachable 365 X 24 X 7. She is the one you should be looking for every time the tourist in you wishes to explore Bombay. Her love for chemistry, NYC and waffles is invincible.

**Phone:** 9711337200

**WhatsApp:** 9711337200

**Mail:** aashikasera@gmail.com

### Yeshvi Tomar (195030008)

Yeshvi is sincerely dedicated to achieving her goals. She likes to try new things and is always up for a friendly banter. She is the one to approach for sports related queries and every time you are feeling low in your stay here.

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**WhatsApp:** 7289046590

**Mail:** yeshvit@gmail.com



### Debasree Mandal (195030041)

Debasree is a free-spirit. She is always up for a game (even the night before an end-sem exam). The best thing about her is her comforting and friendly nature. Wait for her to open up; you'll see an entirely different person.

**Phone:** 9679610912

**WhatsApp:** 9679610912

**Mail:** debasree.mandal99@gmail.com



### Satyabrata Behera (195030010)

Satya is a hidden gem. He is the organic prodigy of our class, and also the game-changer when it comes to volleyball. His patience is something you'd love to acquire. Be it chemistry, or sports, he gives everything his 100%.

**Phone:** 7978071973

**WhatsApp:** 7978071973

**Mail:** beherasatyabrata0@gmail.com



## Department Council

Name	POR	Contact	Email
Mrinal Agarwal	General Secretary	9314235448	<a href="mailto:mrinalagarwal99@gmail.com">mrinalagarwal99@gmail.com</a>
Ajit Yadav	Sports Secretary	8417851339	<a href="mailto:ajit.cni@gmail.com">ajit.cni@gmail.com</a>
Arnab Sadhukhan	Cultural Secretary	8372815775	<a href="mailto:sadhukhanarnab267@gmail.com">sadhuhanarnab267@gmail.com</a>
Suraj Shukla	Masters Representative	8318546891	<a href="mailto:surajshukla872@gmail.com">surajshukla872@gmail.com</a>
Amit Kumar Barik	C.R. Masters 2 <sup>nd</sup> Year	9718403993	<a href="mailto:amitkumarriana@gmail.com">amitkumarriana@gmail.com</a>

The department council is a student association who is responsible to foster and develop all academic as well as non-academic student activities of the department. They are responsible to increase the social interaction between the faculties and students as well as among the students of different batches.

The council comprises of General Secretary, M.Sc. Representative, PhD Representative and various secretaries including cultural, sports, alumni and design and cultural representatives of all batches.

## Placement Cell

Name	POR	Contact	Email
Aashi Kasera	Department Placement Coordinator	9711337200	<a href="mailto:aashikasera@gmail.com">aashikasera@gmail.com</a>
Sahil Singh	Company Coordinator	8076508423	<a href="mailto:troubleshootsahil12@gmail.com">troubleshootsahil12@gmail.com</a>
Shweta Gaikwad	Internship Coordinator	9987678934	<a href="mailto:gaikwadshweta199728@gmail.com">gaikwadshweta199728@gmail.com</a>

The Placement Office (nodal point for placements at IITB) or the Placement Cell (a body of student representatives) sends invitations to companies/organizations along with relevant information to conduct campus interviews for their requirements. The dynamic and constantly evolving academic program of IITB reflects the institute's commitment to stay in tune with the expanding frontiers of knowledge worldwide. The institute also gives equal importance to extracurricular activities with a focus on the overall development of its students to equip them to face the challenges of the highly competitive corporate world.

# FACULTY MEMBERS

## Inorganic Chemistry

Name	Research Interests
<b>Prof. R. Murugavel</b> Room 355, Chemistry Bldg. <a href="mailto:rmv@chem.iitb.ac.in">rmv@chem.iitb.ac.in</a> +91 22 2576 7163 <a href="https://rmuruks.wixsite.com/rmurugavel">https://rmuruks.wixsite.com/rmurugavel</a>	<ul style="list-style-type: none"> <li>Organometallic Chemistry</li> <li>Materials</li> <li>Catalysis</li> <li>Synthesis</li> </ul>
<b>Prof. G.K. Lahiri</b> Room 319, Chemistry Bldg. <a href="mailto:lahiri@chem.iitb.ac.in">lahiri@chem.iitb.ac.in</a> +91 22 2576 7159 <a href="http://ether.chem.iitb.ac.in/~lahiri/">http://ether.chem.iitb.ac.in/~lahiri/</a>	<ul style="list-style-type: none"> <li>Synthetic Inorganic</li> <li>Physical Inorganic</li> <li>Organometallic Chemistry</li> <li>Catalysis</li> </ul>
<b>Prof. M.S. Balakrishna</b> Room 333, Chemistry Bldg. <a href="mailto:krishna@chem.iitb.ac.in">krishna@chem.iitb.ac.in</a> +91 22 2576 7181 <a href="http://ether.chem.iitb.ac.in/~krishna/msb/Home.html">http://ether.chem.iitb.ac.in/~krishna/msb/Home.html</a>	<ul style="list-style-type: none"> <li>Organometallics</li> <li>Transition Metals</li> <li>Catalysis</li> <li>Inorganic rings, cages and clusters and their transition metal chemistry</li> </ul>
<b>Prof. Debabrata Maiti</b> Room 215, Chemistry Bldg. <a href="mailto:dmaiti@chem.iitb.ac.in">dmaiti@chem.iitb.ac.in</a> +91 22 2576 7155 <a href="https://www.dmaiti.com/">https://www.dmaiti.com/</a>	<ul style="list-style-type: none"> <li>Remote C-H Functionalization</li> <li>Bioinspired Catalysis</li> <li>Heterocyclic Chemistry</li> <li>Quantum Dots (QD)</li> <li>Photoredox Catalysis</li> <li>Lignin Valorization</li> </ul>
<b>Prof. Maheswaran S.</b> Room 4XZ, Chemistry Bldg. <a href="mailto:eswar@chem.iitb.ac.in">eswar@chem.iitb.ac.in</a> +91 22 2576 7187 <a href="https://kamal1607.wixsite.com/mysite">https://kamal1607.wixsite.com/mysite</a>	<ul style="list-style-type: none"> <li>Coordination Chemistry</li> <li>Molecular nano magnets</li> <li>Small Molecule activation</li> <li>Functionalization of molecules on surfaces for electronic device application</li> </ul>
<b>Prof. Arnab Dutta</b> Room No. 339, Chemistry Bldg. <a href="mailto:arnabdutta@chem.iitb.ac.in">arnabdutta@chem.iitb.ac.in</a> +91 22 2576 7162	<ul style="list-style-type: none"> <li>Bioinspired catalyst design</li> <li>Chemical Synthesis</li> <li>Electrochemistry</li> <li>Photocatalysis</li> <li>First row transition metal based molecular catalysts</li> </ul>

<p><b>Prof. Gopalan Rajaraman</b>        Room 4XY, Chemistry Bldg.  <a href="mailto:rajaraman@chem.iitb.ac.in">rajaraman@chem.iitb.ac.in</a>        +91 22 2576 7183  <a href="http://ether.chem.iitb.ac.in/~rajaraman/">http://ether.chem.iitb.ac.in/~rajaraman/</a></p>		<ul style="list-style-type: none"> <li>• Surface Chemistry</li> <li>• Spectroscopy</li> <li>• Catalysis</li> <li>• Molecular Magnetism</li> </ul>
<p><b>Prof. M. Ravikanth</b>        Room 338, Chemistry Bldg.  <a href="mailto:ravikanth@chem.iitb.ac.in">ravikanth@chem.iitb.ac.in</a>        +91 22 2576 7176  <a href="http://ether.chem.iitb.ac.in/~ravikanth/homepage/">http://ether.chem.iitb.ac.in/~ravikanth/homepage/</a></p>		<ul style="list-style-type: none"> <li>• Porphyrin and Macroyclic Chemistry</li> <li>• Inorganic rings as scaffold for multi-chromophore assemblies</li> <li>• Designing new cationic and anionic fluorescent Sensors</li> </ul>
<p><b>Prof. Prasenjit Ghosh</b>        Room 363 B, Chemistry Bldg.  <a href="mailto:pghosh@iitb.ac.in">pghosh@iitb.ac.in</a>        +91 22 25767178  <a href="http://ether.chem.iitb.ac.in/~pghosh/">http://ether.chem.iitb.ac.in/~pghosh/</a></p>		<ul style="list-style-type: none"> <li>• Non-N-heterocyclic carbene Chemistry</li> <li>• Biomedical applications</li> <li>• Chemical Catalysis</li> </ul>
<p><b>Prof. Pradeep Mathur</b>        Ground floor. CESE,  <a href="mailto:mathur@chem.iitb.ac.in">mathur@chem.iitb.ac.in</a>  <a href="http://ether.chem.iitb.ac.in/~mathur/">http://ether.chem.iitb.ac.in/~mathur/</a></p>		<ul style="list-style-type: none"> <li>• Organometallic Chemistry</li> <li>• Metal mediated transformations of acetylenes</li> <li>• Metal-acetylide and metal-oxo chemistry</li> <li>• Synthesis of mixed-metal clusters</li> </ul>
<p><b>Prof. L.S. Panchakarla</b>        Room 435, Chemistry Bldg.  <a href="mailto:panchakarla@chem.iitb.ac.in">panchakarla@chem.iitb.ac.in</a>        +91 22 2576 7175  <a href="https://nivasuoh.wixsite.com/panchakarla">https://nivasuoh.wixsite.com/panchakarla</a></p>		<ul style="list-style-type: none"> <li>• Low-Dimensional Materials for Energy Conversion</li> <li>• Studies on Nano scale Meta-Stable Compounds</li> <li>• Self-Assembly of Nanostructures</li> </ul>
<p><b>Prof. Harkesh B. Sing</b>        Room 430, Chemistry Bldg.  <a href="mailto:chhbsia@chem.iitb.ac.in">chhbsia@chem.iitb.ac.in</a>        +91 22 2576 7190  <a href="http://ether.chem.iitb.ac.in/~chhbsia/">http://ether.chem.iitb.ac.in/~chhbsia/</a></p>		<ul style="list-style-type: none"> <li>• Organochalcogen (S, Se and Te) Chemistry; Stabilization of Unusual Species</li> <li>• Selenoenzyme Mimics; Chalcogen based HYBRID Multidentate Ligands (chiral and macrocyclic) and Role in Catalysis</li> </ul>
<p><b>Prof. Sanjog S. Nagarkar</b>        Room ##, Chemistry Bldg.  <a href="mailto:sanjog.na@chem.iitb.ac.in">sanjog.na@chem.iitb.ac.in</a>        +91 22 2576 xxxx</p>		<ul style="list-style-type: none"> <li>• Molecular Materials</li> <li>• Coordination Cages</li> <li>• Coordination Polymers</li> </ul>

# Organic Chemistry

Name	Research Interests
<b>Prof. Krishna P. Kaliappan</b> Room 419, Chemistry Bldg. <u><a href="mailto:kpk@chem.iitb.ac.in">kpk@chem.iitb.ac.in</a></u> +91 22 2576 7177 <u><a href="http://ether.chem.iitb.ac.in/~kpk/">http://ether.chem.iitb.ac.in/~kpk/</a></u>	<ul style="list-style-type: none"> <li>Natural Products Synthesis</li> <li>Development of new synthetic methodologies</li> <li>Organocatalysis</li> <li>Development of New Chiral Ligands for Asymmetric Synthesis</li> </ul>
<b>Prof. Santosh J. Gharpure</b> Room 440, Chemistry Bldg. <u><a href="mailto:sjgharpure@chem.iitb.ac.in">sjgharpure@chem.iitb.ac.in</a></u> +91 22 2576 7171 <u><a href="http://ether.chem.iitb.ac.in/~sjgharpure/research.html">http://ether.chem.iitb.ac.in/~sjgharpure/research.html</a></u>	<ul style="list-style-type: none"> <li>Organic synthesis</li> <li>New synthetic methods</li> <li>Asymmetric synthesis</li> <li>Natural product synthesis</li> <li>Catalysis</li> </ul>
<b>Prof. Rodney A. Fernandes</b> Room 404, Chemistry Bldg. <u><a href="mailto:rfernand@chem.iitb.ac.in">rfernand@chem.iitb.ac.in</a></u> +91 22 2576 7174 <u><a href="http://ether.chem.iitb.ac.in/~rfernand/default.htm">http://ether.chem.iitb.ac.in/~rfernand/default.htm</a></u>	<ul style="list-style-type: none"> <li>Asymmetric synthesis of natural products.</li> <li>Total synthesis of natural products and analogs.</li> <li>Organometallic chemistry</li> <li>Heterocyclic chemistry.</li> </ul>
<b>Prof. Sambasivarao Kotha</b> Room 425, Chemistry Bldg. <u><a href="mailto:srk@chem.iitb.ac.in">srk@chem.iitb.ac.in</a></u> +91 22 2576 7160 <u><a href="http://ether.chem.iitb.ac.in/~srk/">http://ether.chem.iitb.ac.in/~srk/</a></u>	<ul style="list-style-type: none"> <li>New Synthetic methods</li> <li>Unusual amino acids</li> <li>Suzuki coupling reaction</li> <li>Metathesis</li> <li>Peptide modifications</li> <li>Nanotechnology</li> </ul>
<b>Prof. Suvarn S. Kulkarni</b> Room 211, Chemistry Bldg. <u><a href="mailto:suvarn@chem.iitb.ac.in">suvarn@chem.iitb.ac.in</a></u> +91 22 2576 7166 <u><a href="http://ether.chem.iitb.ac.in/~suvarn/">http://ether.chem.iitb.ac.in/~suvarn/</a></u>	<ul style="list-style-type: none"> <li>One-pot methods for glycomics</li> <li>Synthesis of cell-surface carbohydrates</li> <li>Study of carbohydrate recognition in infectious diseases and Cancer</li> </ul>
<b>Prof. I.N.N. Namboothiri</b> Room 409, Chemistry Bldg. <u><a href="mailto:irishi@chem.iitb.ac.in">irishi@chem.iitb.ac.in</a></u> +91 22 2576 7196 <u><a href="http://ether.chem.iitb.ac.in/~irishi/">http://ether.chem.iitb.ac.in/~irishi/</a></u>	<ul style="list-style-type: none"> <li>Organic Synthesis</li> <li>Physical Organic Chemistry</li> <li>Reaction Mechanisms</li> <li>Development of new synthetic methods</li> </ul>
<b>Prof. Raghavan B. Sunoj</b> Room 418A, Chemistry Bldg. <u><a href="mailto:sunoj@chem.iitb.ac.in">sunoj@chem.iitb.ac.in</a></u> +91 22 2576 7173 <u><a href="http://ether.chem.iitb.ac.in/~sunoj/">http://ether.chem.iitb.ac.in/~sunoj/</a></u>	<ul style="list-style-type: none"> <li>Organocatalysis</li> <li>Transition metal Catalysis</li> <li>Solvent effects in Chemical Reactivity</li> <li>Weak interaction</li> <li>Main group organometallics</li> </ul>

<p><b>Prof. Chandra M. R. Volla</b>        Room 418B, Chemistry Bldg.  <a href="mailto:chandra.volla@chem.iitb.ac.in">chandra.volla@chem.iitb.ac.in</a>        +91 22 2576 7188  <a href="https://chandrvolla.wixsite.com/volla">https://chandrvolla.wixsite.com/volla</a></p>	 <ul style="list-style-type: none"> <li>• Transition-metal Catalysis</li> <li>• Organocatalysis</li> <li>• Asymmetric Synthesis</li> <li>• Natural product synthesis</li> <li>• Heterocyclic chemistry</li> </ul>
<p><b>Prof. Pradeepkumar P. I.</b>        Room 330, Chemistry Bldg.  <a href="mailto:pradeep@chem.iitb.ac.in">pradeep@chem.iitb.ac.in</a>        +91 22 2576 7184  <a href="http://ether.chem.iitb.ac.in/~pradeep/">http://ether.chem.iitb.ac.in/~pradeep/</a></p>	 <ul style="list-style-type: none"> <li>• RNA modifications for therapeutic as well as functional studies.</li> <li>• Stabilization and sensing of G Quadruplex nucleic acids.</li> <li>• Molecular modeling and dynamic Studies of functional nucleic acids.</li> </ul>
<p><b>Prof. Anil Kumar</b>        Room 443, Chemistry Bldg.  <a href="mailto:anilkumar@iitb.ac.in">anilkumar@iitb.ac.in</a>        +91 22 2576 7153  <a href="http://ether.chem.iitb.ac.in/~akumar/">http://ether.chem.iitb.ac.in/~akumar/</a></p>	 <ul style="list-style-type: none"> <li>• Continuous Flow Chemistry</li> <li>• Green Chemistry</li> <li>• Catalysis</li> <li>• Synthesis</li> </ul>
<p><b>Prof. Nandita Madhavan</b>        Room 426, Chemistry Bldg.  <a href="mailto:nanditam@chem.iitb.ac.in">nanditam@chem.iitb.ac.in</a>        +91 22 2576 7164  <a href="https://sites.google.com/view/nanditaresearch">https://sites.google.com/view/nanditaresearch</a></p>	 <ul style="list-style-type: none"> <li>• Peptide Synthesis</li> <li>• Self-Assembly - Design of robust three-dimensional peptide derived pores.</li> <li>• Function – Design of selective and gated synthetic ion channels.</li> </ul>
<p><b>Prof. Chidambar Kulkarni</b>        Room 4YY, Chemistry dept. 3rd floor annex  <a href="mailto:chidambark@chem.iitb.ac.in">chidambark@chem.iitb.ac.in</a>        +91 22 2576 7186</p>	 <ul style="list-style-type: none"> <li>• Organic Synthesis</li> <li>• Materials Science</li> <li>• Synthesis and Characterization of Non-Covalent Systems</li> </ul>

## Physical Chemistry

Name	Research Interests
<p><b>Prof. Ruchi Anand</b>        Room 4XX, Chemistry Bldg.  <a href="mailto:ruchi@chem.iitb.ac.in">ruchi@chem.iitb.ac.in</a>        +91 22 2576 7165  <a href="https://structuralbioiitb.wixsite.com/ruchianand">https://structuralbioiitb.wixsite.com/ruchianand</a></p>	 <ul style="list-style-type: none"> <li>• Structural Biochemistry</li> <li>• Antibiotic Resistance and biosynthesis regulation</li> <li>• Purine Metabolism</li> <li>• Structure-Function relationship of nucleobase deaminase</li> </ul>

<p><b>Prof. Sandip Kar</b>  Room XXX, DESE-CESE Building  <a href="mailto:sandipkar@chem.iitb.ac.in">sandipkar@chem.iitb.ac.in</a>  +91 22 2576 7193  <a href="https://sandipkar8.wixsite.com/sandip-kar">https://sandipkar8.wixsite.com/sandip-kar</a></p>	 <ul style="list-style-type: none"> <li>Theoretical Systems Biology</li> <li>Nonlinear dynamics</li> <li>Modeling cell specific effect of signalling pathways to cell cycle and cancer</li> </ul>
<p><b>Prof. Nand Kishore</b>  Room 344, Chemistry Bldg.  <a href="mailto:nandk@chem.iitb.ac.in">nandk@chem.iitb.ac.in</a>  +91 22 2576 7157  <a href="http://ether.chem.iitb.ac.in/~nandk/">http://ether.chem.iitb.ac.in/~nandk/</a></p>	 <ul style="list-style-type: none"> <li>Bio thermodynamics</li> <li>Protein-folding and protein solvent interactions</li> <li>Drug-protein interactions</li> <li>Building block-solvent interactions</li> </ul>
<p><b>Prof. Y.U. Sasidhar</b>  308, Chemistry Bldg.  <a href="mailto:sasidhar@chem.iitb.ac.in">sasidhar@chem.iitb.ac.in</a>  +91 22 2576 7179  <a href="http://ether.chem.iitb.ac.in/~sasidhar/">http://ether.chem.iitb.ac.in/~sasidhar/</a></p>	 <ul style="list-style-type: none"> <li>Biophysical Chemistry</li> <li>Protein Folding and Dynamics</li> <li>Protein dynamics in the design of agonists and antagonists.</li> </ul>
<p><b>Prof. G. Naresh Patwari</b>  Room 206, Chemistry Bldg.  <a href="mailto:naresh@chem.iitb.ac.in">naresh@chem.iitb.ac.in</a>  +91 22 2576 7182  <a href="https://chemphysgrpiitb.wixsite.com/chemphysgrp">https://chemphysgrpiitb.wixsite.com/chemphysgrp</a></p>	 <ul style="list-style-type: none"> <li>Experimental Spectroscopy</li> <li>Chemical dynamics</li> <li>Weak intermolecular interactions</li> <li>Bio-conjugate Chemistry</li> </ul>
<p><b>Prof. Chandramouli Subramaniam</b>  Room 17, Ground floor, Physics Bldg.  <a href="mailto:csubbu@chem.iitb.ac.in">csubbu@chem.iitb.ac.in</a>  +91 22 2576 7194  <a href="http://ether.chem.iitb.ac.in/~csubbu/">http://ether.chem.iitb.ac.in/~csubbu/</a></p>	 <ul style="list-style-type: none"> <li>Electrochemistry</li> <li>Nano chemistry</li> <li>Structure-property relations of nano-form of carbon allotropes - Carbon nanotubes (CNTs), Graphene</li> </ul>
<p><b>Prof. Kamendra P. Sharma</b>  Room 322, Chemistry Bldg.  <a href="mailto:k.sharma@chem.iitb.ac.in">k.sharma@chem.iitb.ac.in</a>  +91 22 2576 7170  <a href="http://ether.chem.iitb.ac.in/~k.sharma/">http://ether.chem.iitb.ac.in/~k.sharma/</a></p>	 <ul style="list-style-type: none"> <li>Multifunctional Nanomaterials</li> <li>Soft Nano biomaterials</li> <li>Liquid Crystals</li> <li>Polymers and Proteins</li> </ul>
<p><b>Prof. Rajarshi Chakrabarti</b>  Room 408 B, Chemistry Bldg.  <a href="mailto:rajarshi@chem.iitb.ac.in">rajarshi@chem.iitb.ac.in</a>  +91 22 2576 7192  <a href="https://rajarshichakrabarti.wixsite.com/rajarshichakrabarti">https://rajarshichakrabarti.wixsite.com/rajarshichakrabarti</a></p>	 <ul style="list-style-type: none"> <li>Theory of active polymers</li> <li>Statistical Mechanics</li> <li>Chemical Physics</li> <li>Internal friction and polymer dynamics</li> </ul>

<p><b>Prof. Shobhna Kapoor</b>  Room 21, Physics Bldg.  <a href="mailto:shobhnakapoor@chem.iitb.ac.in">shobhnakapoor@chem.iitb.ac.in</a>  +91 22-2576 7161  <a href="https://shobhnakapoor.wixsite.com/skapoor">https://shobhnakapoor.wixsite.com/skapoor</a></p>		<ul style="list-style-type: none"> <li>Molecular Biophysics and Chemical Biology with focus on lipids and lipid-induced signalling pathways</li> <li>Cellular signalling pathways involved in infectious diseases</li> </ul>
<p><b>Prof. Anindya Datta</b>  Room 206, Chemistry Building  <a href="mailto:anindya@chem.iitb.ac.in">anindya@chem.iitb.ac.in</a>  +91 22 2576 7149  <a href="https://adutta6.wixsite.com/anindya">https://adutta6.wixsite.com/anindya</a></p>		<ul style="list-style-type: none"> <li>Ultrafast Spectroscopy</li> <li>Excited state dynamics for photovoltaic applications</li> <li>Photophysics of fluorescent molecules and their application in the study of microenvironments</li> </ul>
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<p><b>Prof. Amber Jain</b>  Room 326, Chemistry Bldg.  <a href="mailto:amberj@chem.iitb.ac.in">amberj@chem.iitb.ac.in</a>  +91 22 2576 7180  <a href="https://amberj74.wixsite.com/quantumdynamics">https://amberj74.wixsite.com/quantumdynamics</a></p>		<ul style="list-style-type: none"> <li>Proton tunnelling</li> <li>Catalysis</li> <li>Chemical Dynamics simulations</li> </ul>
<p><b>Prof. Achintya Kumar Dutta</b>  Room 380, Chemistry Bldg.  <a href="mailto:achintya@chem.iitb.ac.in">achintya@chem.iitb.ac.in</a>  +91 22 2576 7156  <a href="https://achintyachemist.wixsite.com/achintya">https://achintyachemist.wixsite.com/achintya</a></p>		<ul style="list-style-type: none"> <li>Physics and Chemistry of Anions</li> <li>Lower Scaling Excited state Methods</li> <li>Environmental effects on excited states</li> </ul>
<p><b>Prof. Rahul Maitra</b>  Room 325, Chemistry UG Lab. Transit Bldg.  <a href="mailto:rmaitra@chem.iitb.ac.in">rmaitra@chem.iitb.ac.in</a>  +91 22 2576 7185  <a href="https://rahulmaitra.wixsite.com/theomolscilab">https://rahulmaitra.wixsite.com/theomolscilab</a></p>		<ul style="list-style-type: none"> <li>Theoretical Quantum Chemistry</li> <li>Multi-Reference (MR) effects inclusive Single Reference (SR) Coupled Cluster (CC) theories for strongly correlated molecular systems</li> </ul>
<p><b>Prof. Ishita Sengupta</b>  Room 4ZZ, Chemistry Bldg., 3rd floor Annex  <a href="mailto:ishita@chem.iitb.ac.in">ishita@chem.iitb.ac.in</a>  +91 22 2576 7167  <a href="https://www.iitk.ac.in/new/ishita-sengupta">https://www.iitk.ac.in/new/ishita-sengupta</a></p>		<ul style="list-style-type: none"> <li>Protein Structure and dynamics</li> <li>Biomolecular NMR spectroscopy</li> <li>Protein biophysics</li> </ul>

# Research Facilities Available

The department of chemistry IIT Bombay boasts well equipped laboratories with ongoing research in the fields of Organometallic chemistry, Nanomaterials and Polymers, Spectroscopy, Physical chemistry, Inorganic chemistry, Catalysis, Biochemistry and Synthetic Organic Chemistry. The department provides core central facilities housing several modern instruments necessary for present day research.

- Single Crystal X-ray Diffractometer
- Differential Scanning Calorimeter
- Fluorescence Spectrophotometer
- Gas Chromatography-Mass Spectrometry (GCMS)
- Circular Dichroism Spectrophotometer
- Thermo gravimetric Differential Thermal Analyser
- Elemental Analyser (C, H, N and S)
- Nanosecond Laser Facility
- Atomic Force Microscopy (AFM)
- HPLC
- ATR-IR Spectrometer
- NMR Spectrometer (500 MHz)
- NMR Spectrometer (400 MHz)
- Electron Paramagnetic Resonance (EPR) (X-band and Q-band)
- Superconducting Quantum Interference Device (SQUID) and iHelium3 setup
- High Performance Computing (HPC) Cluster
- High Resolution Mass Spectrometry
- Surface Area Analyzer
- UV-Vis-NIR Spectrophotometer
- Single crystal X-ray diffraction for Macro Molecules



**Circular Dichroism spectrophotometer**



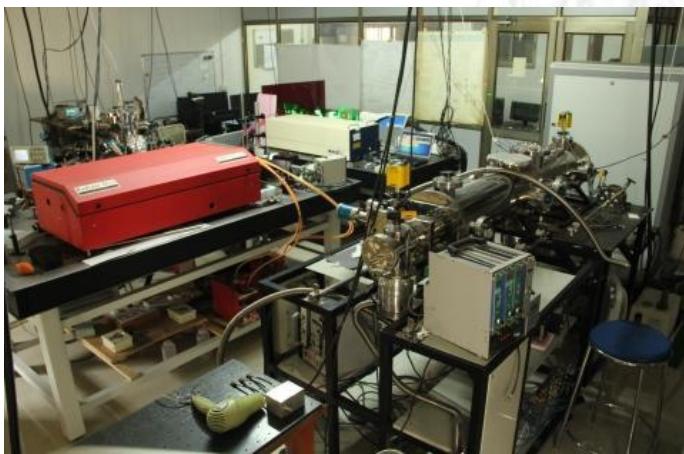
**Single Crystal X-ray Diffractometer**



**Surface Area Analyser**



**Elemental Analyser (C, H, N and S)**



**Nanosecond Laser Facility**



**Superconducting Quantum  
Interference Device (SQUID) and  
iHelium3 setup**

# Course Structure and Grading Policy

IITs follow a totally different pattern of examination and grading. In first and second semester, students have 5 theory courses including one programming course (in first semester only) and 3 labs, with a total of about 40 credits per semester. All courses are compulsory for every student. In third and fourth semester, students have to take 8 courses (4 compulsory+ 4 departmental electives) along with master year project in both semesters.

## Grading Policy

For every course taken by a student he/she is assigned a grade based on his/her combined performance over the semester in all the assessments in that course. These grades are described by the letters AP, AA, AB, BB, BC, CC, CD, DD, FF, FR and XX, each of which not only indicates a qualitative assessment of the student's performance but also carries a quantitative (numeric) equivalent called the grade point as given below.

AP	10
AA	10
AB	9
BB	8
BC	7
CC	6
CD	5
DD**	4
FF**	0 Fail (Eligible for one re-exam)
FR**	0 Fail (Repeat the course)
DX***	Fail (Lack of attendance - Repeat the course)
II#	Incomplete (on health grounds)
DR	Dropped
PP	Passed
NP	Not Passed
AU	Audit

\*DD Grade Minimum passing grade in a course is DD

## \*\*FR and FF Grade

The letter grades FF and FR shall be treated as failure grades. FR grade will be awarded in cases where in the opinion of the instructor, the student hasn't had adequate academic exposure to the course and should therefore repeat the course. FR grade may also be awarded in cases of minor malpractice in examinations/assessments. A student, whose in-semester performance is very poor, may be awarded the 'FR' grade by the instructors, even if he/she had missed the end-semester examination due to any reasons. If a student either does not submit his seminar report by the prescribed date or he/she is absent for presentation on the scheduled date he/she shall be awarded FF grade unless he/she is given extension by the coordinator under exceptional circumstances. Re-examination may be permitted for a course if he/she obtains FF grade. After such re-examination if the student passes in that course, he/she will be awarded the maximum grade of DD in that course. If a student does not take or fails in the re-examination, he/she will be awarded the grade FR. A student getting a FR grade has to re-register for the same course if it is a core subject. If this course is an elective course, he/she may register for an alternative course as prescribed by the DPGC/IDPC/SPGC, without this being counted as an additional course.

## \*\*\*DX Grade

The grade DX in a course is awarded if a student does not maintain the attendance requirement in the Lecture/Tutorial classes. The DX grades may also be awarded to the students having bad or incomplete in-semester records on non-medical reasons. The DX grade will be declared in the first week of November for the Autumn Semester Courses and in the first week of April for Spring Semester Courses (in general one week before the semester end exams). A student with DX grade in a given course is not permitted to take the semester-end examination in that course. She/he is also not eligible for 50% marks re-examination in that course. Such a student has to re-register for the same course whenever offered. DX Given to students with attendance shortage. This does not count in the SPI / CPI. However, it will be counted as a backlog.

## # Incomplete Grade (II)

Grade 'II' is awarded in a lecture/lab course if a student has satisfactory in-semester performance but has not appeared for the end-semester examination on medical grounds. The student is entitled for 50 marks re-examination given at the end of the particular semester. 'II' grade will be converted into a performance grade (depending on the overall performance in the course) after the re-examination.

## ##Audit Grade (AU)

The student registered for a course as audit shall be awarded the grade AU if they fulfill the requirement of minimum of 80% attendance and duly satisfactory in-semester performance as prescribed by the Instructor. The Instructor shall include such AU grades in the final grade report for that course. If the student does not qualify for the grade AU, it will be assumed that the course has been dropped by that student.

## Dropping of course(s)

If any student finds his course load to be too heavy then he can drop one or more of his/her courses within a stipulated time. Even the core courses can also be dropped in condition of that he she/he will complete the dropped course(s) within his degree tenure. In case of electives the students need not to take the same courses, she/he can select any other elective(s) as well. Such courses will appear in the transcripts and final grade card with a 'W' grade (withdrawn grade). These courses will have no impact on SPI/CPI. The last date for dropping a course by the student will be two weeks after the mid semester examination for the semester-long courses and one week after the mid-semester examination for the half-semester courses. The last date for course drop will be included in the Academic Calendar.

## Grade Improvement

1. A student in a PG Programme, where minimum CPI for coursework is 6.0, will be eligible for repeating a course for grade improvement if he/ she has a CPI less than 6.0 and has been permitted by PGAPEC to continue in the Programme on Academic Probation.
2. For Grade improvement, a student has to re-register in the course in a subsequent semester if the course is offered. The grade obtained in the re-registered course will supersede the earlier grade and the same will be reflected in the Semester Grade Card and in the Final Transcript.
3. The student can avail this option only for TWO courses in the entire programme and only

## Attendance:

Attendance in classes is compulsory and will be monitored. A student not having 80 per cent attendance may be debarred from appearing in the semester-end examination and given XX grade and such student has to re-register for the same course. In general, the institute expects 100% attendance. The 80% attendance is permitted only for health or another emergency situation. A medical certificate from IITB hospital or Government hospital is necessary for getting leave on health grounds. The mode of taking attendance for every class in a course is decided by the course instructor and can be either manual or bio-metric.

Link for Course Curriculum: <https://www.chem.iitb.ac.in/2msc-courses-new>



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\*\*Internships were not completed due to COVID19 Outbreak.

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Naincy Singh	9149037465	<a href="mailto:naincysingh10@gmail.com">naincysingh10@gmail.com</a>	Prof. M. Ravikanth
Sachin Jaiswal	7275065036	<a href="mailto:mr.schin2806@gmail.com">mr.schin2806@gmail.com</a>	Prof. Amber Jain
Rajesh Kushwaha	7379758457	<a href="mailto:rajeshkush121@gmail.com">rajeshkush121@gmail.com</a>	Prof. Nandita Madhavan
Sachchidanand Vishvakarma	8828453662	<a href="mailto:sngzp00@gmail.com">sngzp00@gmail.com</a>	Prof. G.K. Lahiri
Ravi Kumar Maurya	8090576460	<a href="mailto:195030031@iitb.ac.in">195030031@iitb.ac.in</a>	Prof. Raghavan B. Sunoj
Sagar Dhanraj	9455053660	<a href="mailto:sagardhanraj7278@gmail.com">sagardhanraj7278@gmail.com</a>	Prof. Chandramouli Subramaniam
Vijay Kumar Patel	7084709205	<a href="mailto:vdcvns221005@gmail.com">vdcvns221005@gmail.com</a>	Prof. Ishita Sengupta
Ajit Yadav	8417851339	<a href="mailto:ajit.cni@gmail.com">ajit.cni@gmail.com</a>	Prof. Ruchi Anand
Kailash Sahu	8757591830	<a href="mailto:ksahu6430@gmail.com">ksahu6430@gmail.com</a>	Prof. Rajarshi Chakrabarti
Deepak Kumar Sahoo	7381256268	<a href="mailto:d.k.sahoo.chem@gmail.com">d.k.sahoo.chem@gmail.com</a>	Prof. Maheswaran S.

Malaya Ranjan Patra	8249335776	<a href="mailto:exploremalaya@gmail.com">exploremalaya@gmail.com</a>	Prof. Pradeepkumar P. I.
Samyadev Giri	7427933020	<a href="mailto:samyadevgiri1998@gmail.com">samyadevgiri1998@gmail.com</a>	Prof. Chandra M. R. Volla
Somnath Guria	9933627590	<a href="mailto:somnathguria64@gmail.com">somnathguria64@gmail.com</a>	Prof. Arnab Dutta
Debasree Mandal	9679610912	<a href="mailto:debarsree.mandal99@gmail.com">debarsree.mandal99@gmail.com</a>	Prof. Chandramouli Subramaniam
Kalyan Patra	8512905678	<a href="mailto:rkmrcstudentkalyan@gmail.com">rkmrcstudentkalyan@gmail.com</a>	Prof. Gopalan Rajaraman
Arnab Sadhukhan	8372815775	<a href="mailto:sadhukhanarnab267@gmail.com">sadhukhanarnab267@gmail.com</a>	Prof. Chandra M. R. Volla
Saikat Pandit	8116662765	<a href="mailto:saikatpandit41@gmail.com">saikatpandit41@gmail.com</a>	Prof. Debabrata Maiti
Tapas Jana	7407313618	<a href="mailto:tapasjana0.1997@gmail.com">tapasjana0.1997@gmail.com</a>	Prof. M.S. Balakrishna



**Picture Taken From Freshmen Orientation 2019-20**



## CHEMISTRY IN ACTION

Being the best institute in India, our campus is enriched with best of sports facilities. The Department not only stands out in research but also in sports. Our Department is full of sports enthusiasts. We were in top 10 out of 21 departments in PGGC .On the other hand we also organize intra-department competitions where the entire department comes under one roof to participate. Through these competitions, we aim to promote interaction among faculty members and students to reduce the communication gap. IITB also organizes camps for beginners where your interest is the only prerequisite. So you are always welcome to pursue the sport, you always wanted to give a try.

### **MESSAGE TO FRESHERS**

#### **Sourav Mondal - Dept. Sports Secretary**

*IIT-B is the prime institute in India. Beside its high class academic reputation it also prioritizes sports and health of students which mesmerize me a lot. I would request all the students to be involved in sports which surely will make you physically as well as mentally healthy.*

#### **Ajit Yadav- Inter IIT CRICKET**

*It was a very good experience for me that I played a lot of indoor and outdoor matches in the institute for preparation of INTER-IIT 2019, the most interesting fact about sports in our institute is that it provides experienced coaches for every game so that we can ace techniques as well. You are going to find top class facility in every sport so enjoy your time here and participate enthusiastically.*

#### **Debasree Mondal- Climbathon 2019 Winner**

*I have participated in most of the PGGC events. Excellent sports facilities and enthusiastic teammates always encouraged me to give my best. The level of competition is very challenging over here but the good thing is that if you are passionate enough and practice regularly, it's very exciting and fun.*

#### **Arnab Sadhukan**

*Institute is loaded with top notch sports facilities. I have seen great enthusiasm in students for sports here. I just want to say that “juniors do take part in all kinds of sports in IITB when you get the chance and do not hesitate to play”. That is the only way to keep yourself healthy and your mind fresh.*

#### **Simran- PG Sports Events Coordinator**

*In IIT-B, the whole semester is enriched with different sports activities and getting involved in them gives a burst of happiness and relaxation. I have participated in many sports activities that kept me both physically and socially active. The distinguished sports facilities and the enthusiastic PG-Sports council cheered me a lot to participate in PG-GC and other sports events.*

## Satyabrata - Inter IIT VOLLEYBALL

The sports facilities at IIT-B are excellent. It encouraged me to play regularly which improved my skills under the guidance of trained coaches. PG-GC was a great platform where I participated in various sports competitions. It was a great feeling to play for my department. Sport is the best getaway from the hectic life of IIT.

## PARTICIPATION IN SPORTS

### Intra-Department Tournament

SPORT	WINNER	RUNNER UP
BADMINTON (men's single)	Prof. Anil Kumar	Prof. Sandip Kar
BADMINTON (men's double)	Pankaj & Deepak	Prof. Sandip Kar & Maheshwaran
BADMINTON (women's single)	Poulomi Nandi	Aarti Sindhu
CARROM (men's)	Priyam Kumar De	Rohit Oraon
CARROM (women's)	Debasree Mandal	Sharddha
CHESS (men's)	Prof. Amber Jain	Prof. Sandip Kar
FOOSBALL (men's )	Rishi & Abhinav	----
TABLE TENNIS (men's single)	Priyam Kumar De	Sourav Mondal
TABLE TENNIS (men's double)	Priyam Kumar De & Saikat	Mahesh Yadav & Sourav
TABLE TENNIS (women's single)	Debasree Mandal	Nishu

### Miscellaneous Competitions

SPORT	POSITION	Medal Winners
KHO-KHO (PGGC)	II	Saurav, Shiv Kumar, Rahul, Amit, Sachin, Vinod, Aakash, Vikas, Hansraj, Rakesh, Ankush
CLIMBATHON	I	Debasree Mandal
BIATHLON	II	Simran

# Important Information You Should Know

**1. LDAP ID:** It is the unique identification of each individual in IIT Bombay. By default the LDAP ID assigned to you will be your roll number and the associated password will be generated after you have come to the institute and the requisite registration processes are completed.

**2. Moodle:** It is the website which provides for academic interactions between faculty and students in IIT Bombay. From Moodle, you can download all the course materials uploaded by the Course Instructor for the course you have registered for and also interact with the faculty and it is a forum for academic discussions.

Link: <http://moodle.iitb.ac.in>

**3. Webmail:** This is your personalized email in IIT B. You will get your Id when you get enrolled in IITB.

Link: <https://webmail.iitb.ac.in>

**4. ASC:** This is the main website for all your administrative needs. You can pay your fees, register for courses, check syllabi of various courses and also check your own academic performance and many other things.

Link: <http://asc.iitb.ac.in>

**5. CAMP:** The following things will be available in CAMP Website

- Changing Password
- Changing UserID (Only Once)
- Modifying Personal Details
- Set / Reset mail Auto Reply Text
- Set / Reset mail Forwarding Address
- Department Sys-Ads List
- Hostel Sys-Ads List
- Find your UserID from Roll number / Employee Number

Link: <https://camp.iitb.ac.in/>

## Links for other miscellaneous purposes

### 1. Accessing IITB Internal Sites with VPN

<https://www.cc.iitb.ac.in/page/services-vpnssh>

### 2. Configuring IITB-Wireless in laptop/android/desktop:

<https://www.cc.iitb.ac.in/page/configurewireless>

### 3. Access GPO mail on mobile mail:

<http://homepages.iitb.ac.in/~yatindestel/docs/GPO%20in%20Gmail.pdf>

### 4. Free Licensed Software

<https://www.cc.iitb.ac.in/page/services-software>

### 5. How to forward GPO mail to Gmail

<http://camp.iitb.ac.in/cgi-bin/index.cgi>

### 6. Rules and Regulations for M.Sc.

<http://www.iitb.ac.in/newacadhome/rulesPG.jsp>

### 7. Link for External ASC site

<https://portal.iitb.ac.in/asc/Login>

### 8. Link for Central Library

<https://www.library.iitb.ac.in/>

### 9. Link for Internship Portal

<http://placements.iitb.ac.in/internship/login.jsp>

### 10. Link for placement portal

<http://placements.iitb.ac.in/placements/login.jsp>

### 11. Link for academic calendar

<http://www.iitb.ac.in/newacadhome/toacadcalender.jsp>

### 12. Link for academic timetable

<http://www.iitb.ac.in/newacadhome/timetable.jsp>

### 13. Link for IITB Holiday List

<http://www.iitb.ac.in/en/about-iit-bombay/iit-bombay-holidays-list>

### 14. Link for circulars

<http://www.iitb.ac.in/newacadhome/circular.jsp>

# Some Useful Apps

- **InstiApp**

InstiApp is an Android App that helps you navigate through the IIT Bombay Campus. It is a one stop solution for all the queries above and beyond. An app of the insti, for the insti, and by the insti, it connects all the aspects of one's insti life, weaving around hostels, academics, co-curricular activities and recreation.

**Download Link:** [https://play.google.com/store/apps/details?id=app.insti&hl=en\\_IN](https://play.google.com/store/apps/details?id=app.insti&hl=en_IN)

- **Instimap**

InstiMap is a searchable map of the campus, specially designed for first time visitors and new entrants, to find their way around IIT Bombay with ease. It is available on instiApp - an Android App that helps you navigate through the various events on IIT Bombay Campus.

It is available at: <https://insti.app/map>

- **m-Indicator**

This app contains the Local Train Timings of Mumbai and also details the local train routes for IIT Bombay. One can also find the various bus routes and the bus numbers on this app.

**Download Link:** <https://play.google.com/store/apps/details?id=com.mobond.mindicator>

- **OpenVPN Connect App**

OpenVPN Connect is the official VPN application for Android developed by OpenVPN, Inc. It is a universal client serving the following OpenVPN products:

- ⇒ Access Server – server solution for businesses
- ⇒ OpenVPN Compatible Server – solution for self-hosted servers

It can be used for connecting with IITB Internal sites using VPN. Detailed instructions are in page 30.

**Download Link:** [https://play.google.com/store/apps/details?id=net.openvpn.openvpn&hl=en\\_IN](https://play.google.com/store/apps/details?id=net.openvpn.openvpn&hl=en_IN)

- **MYBYK App**

Whether you want to ride a cycle at home or use it to commute within your campus, whenever you need a cycle, find a MYBYK near you. Unlock using your smartphone and pedal your way to a healthy life.

**Download Link:** <https://play.google.com/store/apps/details?id=in.greenpedia.mybyk>

- **SHIRU CAFÉ:**

Order your free drink in the app.

Simply launch the app and tap the drink you would like to order.

**Download Link:** <https://play.google.com/store/apps/details?id=jp.co.enriission.shirucafe>

- **Aarogya Setu**

Aarogya Setu is a mobile application developed by the Government of India to connect essential health services with the people of India in our combined fight against COVID-19. The App is aimed at augmenting the initiatives of the Government of India, particularly the Department of Health, in proactively reaching out to and informing the users of the app regarding risks, best practices and relevant advisories pertaining to the containment of COVID-19.

**Download Link:** <https://play.google.com/store/apps/details?id=nic.goि.aarogyasetu>

## Reminder of things before coming to IIT Bombay

1. The following documents are necessary for completion of the admission process

- Gate/JAM/CEED scorecard
- 10th and 12th mark sheet
- Semester wise grade sheet or mark-sheet / Final transcript
- Provisional Degree Certificate / Degree Certificate
- Migration / Transfer Certificate
- Passport size photograph (at least 12).
- ID and Address proof (PAN card, Driving License, Passport, Voter ID)
- Category Certificate (if applicable)

Also bring at least two photocopied of each of the documents and bring at least 12 copies of your passport size photograph.

Note: Moreover, if you are unable to produce the final transcripts, you can submit them till September by producing an undertaking.

2. Room allotment process in the hostel starts 1-2 days before the orientation. This is on first come first serve basis. If you come early, you will have more room options to choose from.

3. Definitely bring umbrella or raincoat with you even though they are available in campus shops, it's raining continuously in Mumbai. Make your luggage light. Campus has variety of shops (like Y-point or IIT Market) where you can purchase all the basic required things. Each hostel has a general store for other essentials. There are couples of supermarkets (D-Mart, Haiko) within a 1 km from main gate. Try to avoid bringing things like mattress, pillow, buckets, etc. small shops with these things will be put up in the campus itself during few initial days. Bed dimensions are 6ft \* 3ft. So, you can bring bed sheets accordingly, otherwise you can buy here its easily available

## Reaching IIT Bombay

IIT Bombay is located at Powai, which is in the North-Eastern part of Mumbai. One can travel by auto-rickshaws or taxis to reach IIT from the nearest stations. The nearest stations for Central Railway are Kanjur Marg or Vikhroli. The nearest station for Western Railway is Andheri. International flights land at Sahar Airport which is about 7kms from IIT. The Domestic Airport Santa Cruz is about 11kms from IIT Bombay and autorickshaws/prepaid cabs are easily available from there for IIT.

### From the Airport

Those traveling by air can take **taxis/auto rickshaws** from the domestic (**40-60 min travel time**)/international (**20-40 min travel time**) airport to reach IIT Bombay.

### From Central Railway

If traveling by the central railway line [**with tickets to Kalyan/Thane/Kurla/Dadar/CST**, get down at **Kalyan/Thane/Dadar** and take a local train to **Kanjur Marg/Vikhroli**, which are the **nearest stations to IIT Bombay**. Come out through the western-side gate and **take a bus or, auto rickshaw to IIT main gate**.

### From Western Railway

If you are coming by the western railway line, get down preferably at **Borivali/Bandra/Andheri**. From **Bandra** (local railway station) west, you can **take the 422 bus to IIT Bombay main gate**. From **Borivali East** and **Andheri East**, there are a number of buses which come to **IIT main gate**. Alternatively, you can take a three-wheeler or taxi from these stations. If you get down at **Mumbai Central**, then travel in reverse direction to **Dadar** (Western Railway). From **Dadar Western Railway**, you will have to change to **Dadar Central Railway**. To reach IIT Bombay from Dadar Central Railway, follow the instructions given under Central Railway.

## Reaching IIT Bombay Guest House (Van Vihar/Jal Vihar)

There are **three gates** to IIT Bombay. It is advised to enter through the **main gate**. If you are coming by an auto rickshaw/taxi, enquire from the security at the main gate for the directions to IIT B Guest House (Van Vihar/Jal Vihar Guest House).

## Reaching IIT B Hostels

There are **three gates** to IIT Bombay. It is advised to enter through the **main gate**. If you are coming by an auto rickshaw/taxi, enquire from the security at the main gate for the direction.



**Link to this map:** [http://www.iitb.ac.in/sites/default/files/article/images/IITB-Map---2D\\_ENG-PRINT.jpg](http://www.iitb.ac.in/sites/default/files/article/images/IITB-Map---2D_ENG-PRINT.jpg)

## A FEW ACCOMPLISHMENTS BY FACULTY & STUDENTS IN THE LAST ACADEMIC SESSION

- ❖ Prof. Rajarshi Chakrabarti has been appointed as an Associate Editor of International Journal of Chemical Kinetics, published by Wiley, for a period of three years.
- ❖ Prof. Rodney A. Fernandes recognized as an Outstanding Reviewer for ChemComm.
- ❖ Prof. Pradeepkumar P.I, Prof. Anil Kumar and Prof. Kamendra Sharma are the recipient of the IIT Bombay Research Awards-2018.
- ❖ Prof. Ruchi Anand awarded Senior (Basic) Fellowship of The Wellcome Trust/DBT India Alliance, for 60 months.
- ❖ Prof. Santosh J. Gharpure, joins the International Advisory Board of the European Journal of Organic Chemistry, EurJOC
- ❖ Research from Prof. Sunoj group published in PNAS (Proceedings of the National Academy of Sciences, USA). More here.  
<https://www.pnas.org/content/early/2020/01/07/1916392117>
- ❖ Prof. Irishi N. N. Namboothiri inducted into the Fellowship of Indian Academy of Science.
- ❖ Prof. Rajaraman selected for the prestigious SwarnaJayanti Fellowships Award for the year 2018-19 in Chemical Sciences
- ❖ Prof. Debabrata Maiti awarded the Humboldt Research Fellowship for Experienced Researchers.
- ❖ Prof. Debabrata Maiti, invited to join the Editorial Board of Chemistry - A European Journal
- ❖ Prof. Anindya Datta nominated for membership to the 2020 Journal of Physical Chemistry Editorial Advisory Board for 3 years, starting from January 2020.
- ❖ Prof. Rodney Fernandes and Prof. Santosh Gharpure are awarded the Excellence in Teaching award for the year 2019-2020
- ❖ Prof. D. Maiti, selected winner of NASI Scopus Young Scientist Awards 2019 – Innovation in Engineering and Physical Sciences
- ❖ Prof. R. B. Sunoj awarded the most prestigious Shanti Swarup Bhatnagar prize in Chemical Science this year.

- ❖ Prof. Rajarshi Chakrabarti, awarded an IOP Publishing Top Cited Author Award (India) in mathematical sciences for the article "Chain reconfiguration in active noise",  
<https://ioppublishing.org/india-top-cited-author-award/top-articles-math...>
- ❖ Prof. G. Rajaraman, received Dr. A.P.J Abdul Kalam HPC Award – 2019 (under researcher category from Dr. Madhavan Nair Rajeevan, Secretary, MOES & Dr. Shekhar C Mande, Secretary, DSIR and DGCSIR) at IITM Pune
- ❖ Prof. Sunoj, invited to join the editorial advisory board of "Chemical Science", the flagship journal of the Royal Society of Chemistry (London) for a period of 2 years starting from June 2019
- ❖ Prof. Sunoj, invited to join the editorial advisory board of "Chemical Science", the flagship journal of the Royal Society of Chemistry (London) for a period of 2 years starting from June 2019
- ❖ A paper by Sayan, Sreenithya and Prof. Sunoj, one of their first on Machine Learning, selected as a Hot article in Phys. Chem. Chem. Phys
- ❖ Prof. M. Ravikanth awarded the prestigious Prof. S.C. Bhattacharya Award for Excellence in Pure Sciences.
- ❖ Prof. Lahiri, conferred the highly prestigious J C Bose Fellowship by SERB, DST, Government of India
- ❖ Prof. Ruchi Anand received National Women Bioscientists Award of Department of Biotechnology, Government of India
- ❖ Prof. Murugavel selected for the SASTRA-CNR Rao Award in Chemistry & Materials Science for the year 2019.
- ❖ Prof. Sambasivarao Kotha , conferred Prof. Sethna memorial lecture award for the year 2016-17
- ❖ Prof. Chandra M. R. Volla receives IIT Bombay "Early Research Achiever Award" for the year 2017
- ❖ Prof. Chandramouli Subramaniam receives IIT Bombay "Impactful Research Award" for the year 2017
- ❖ Prof. Gopalan Rajaraman receives IIT Bombay "Research Publication Award" for the year 2017
- ❖ Prof. M. Ravikanth selected for Fellowship of National Academy of Science, India

- ❖ Prof. Chandra M.R. Volla selected for the Alkyl Amines Young Scientist Award - 2018.
- ❖ Prof. Pradeepkumar P. I. and Prof. Arindam Chowdhury received the "Excellence in Teaching Awards" for the year 2018, selected by students.
- ❖ Prof. Chandra M.R. Volla chosen for NASI-Young Scientist Platinum Jubilee Award-2018.
- ❖ Prof. Santosh J. Gharpure has been chosen to receive the CRSI (Chemical Research Society of India) bronze medal for the year 2019.
- ❖ Prof. Anindya Datta selected by students to receive the "Excellence in Teaching Awards" for the year 2017.
- ❖ Ms. Ananya Sha for being awarded the Best poster award at the Bengaluru India Nano 2020 for her research on nanostructured carbon for heavy metal scavenging.
- ❖ Ms. Jayeeta Saha, Ph. D. student of Prof. C. Subramaniam, has been selected to attend Lindau Nobel Laureates meeting in Germany 2020.
- ❖ Shri Sivasankara C., of Prof. I. N. N. Namboothiri's research group, for having received CRSI-ACS-best poster award in 26th-CRSI symposium in VIT Vellore.
- ❖ Ms. Ritutama Ghosh, Ph. D. student of Prof. Nand Kishore, for having received best poster prize in 22nd DAE-BRNS Workshop and Symposium on Thermal Analysis (THERMANS-2020) held during 28th January- 1st February, 2020 at BARC Mumbai.
- ❖ Ms. Namitha Brijit Bejoy (PhD student of Prof. G. Naresh Patwari) has been selected as the recipient of the Prestigious SPM Fellowship of CSIR, India, 2019 in the field of Chemical Sciences.
- ❖ Shri S. Jagadeesan, Ph. D. student of Prof. Santosh J. Gharpure, has received the Certificate for best Poster presentation in XV J-NOST 2019 for Research Scholars, held in University of Delhi
- ❖ Ms. Shalini Tripathi, Ph. D. student with Prof. Maheshwaran Shanmugam, has been awarded a best poster prize in "Modern Trends in Molecular Magnetism" held in IISER Bhopal from Nov 27 to 30, 2019.

# Gallería de fotos

## In-House Symposium





Convocation

## Dept Open Day



