Melbourne - India Postgraduate Program (MIPP) & Postgraduate Academy (MIPA)
Message from the Directors

It’s been a privilege to serve as Directors of MIPP/A and academic supervisors of graduate students enrolled in these exemplary international programs. Both programs foster student exchange, internationalisation of UoM’s research and growing UoM’s esteem amongst the best Engineering & Science graduates in the world.

2019 is a very special year, marking 5 years since the MIPP program began and the 2nd year of the MIPA program, which is now growing in esteem and quality. The University of Melbourne’s new ‘India Strategy’ has recognised MIPP and MIPA as capstone programs for the University’s India engagement offering high-level research and training opportunities and various collaborative projects of high impact between UoM and Indian partner institutions. MIPA provides new opportunities to further accelerate and deepen the engagement of students and academics through a growing number of highly collaborative research projects, staff and student exchange and externally funded research grants.

As these programs mature, the quality and impact of the University’s research in India is growing exponentially as evident by several successful projects awarded through the prestigious Indian Government sponsored ‘Scheme for Promotion of Academic and Research Collaboration - SPARC’. These successful grant proposals highlight the significant network that has been developed through MIPP and MIPA. The programs continue to attract outstanding graduate research students to the Melbourne School of Engineering and Faculty of Science, and we are confident that they will go on to forge outstanding academic careers.

In December 2019, the success of both MIPP & MIPA will be celebrated at a special conference to be held at the University of Melbourne. Graduate researchers, academics and all members of the elite MIPP and MIPA research community from Melbourne and India will participate at this conference. This bi-annual conference provides an excellent platform for networking, showcasing and exchange of knowledge in addition to serving as an exemplary platform for student leadership and professional development.

We sincerely acknowledge the generous support provided by the University of Melbourne’s Chancellery Research, Chancellery International, Melbourne School of Engineering and the Faculty of Science. We also thank our Partner Institutions for their involvement and continuing support.

Meenakshi Arora
Muthupandian Ashokkumar
**Messages from Leadership at The University of Melbourne**

**Professor Duncan Maskell**  
Vice Chancellor

> "The University of Melbourne is committed to deepening its relationships in India, and MIPP and MIPA are great examples of people from our two countries working together, learning from each other and helping build partnerships of mutual benefit. Such training programs can and will create lasting and significant friendships among researchers and academics that I believe can be world-changing in their impact."

**Professor James McCluskey**  
Deputy Vice Chancellor, Research

> "Contributing to the next generation of researchers, innovators and entrepreneurs, MIPP and MIPA’s high-level research and training opportunities give students the chance to tackle global environmental, social and technological challenges. The research being conducted is of impressive breadth and depth including evaluations of groundwater systems, analysis of Parkinson’s disease, numerical simulations of natural disasters and studies of human interactions with autonomous vehicles.”

**Professor Muthupandian Ashokkumar**  
Assistant Deputy Vice Chancellor

> "The University of Melbourne’s India engagement strategy focuses on building a Shared Future for the Indian and Australian communities in the areas of Health, Sustainability, Innovation & Technology through MIPP and MIPA. MIPP and MIPA partnerships with Indian academic institutions will also help achieve the goals shaping India’s National Education Policy: Access and Quality."

**Professor Justin Zobel**  
Pro Vice-Chancellor, Graduate and International Research

> "The MIPP and MIPA initiatives has created wonderful opportunities for Melbourne researchers to collaborate with Indian scientists and to supervise Indian PhD candidates of the highest calibre. The joint work that these programs have facilitated between investigators in Melbourne and at India’s leading IITs has led to high-impact discoveries and innovations, and has laid the foundation of enduring research relationships. Both programs have been a model of the internationalisation of our research.”

**Professor Aleks Owczarek**  
Dean, Faculty of Science

> "With the programs now well established, it is exciting to see MIPA and MIPP bearing fruit, with students graduating and going onto successful careers, and research collaborations blossoming from the connections these programs enable. We are thrilled to be on this journey with our friends and colleagues in India.”

**Professor Mark Cassidy**  
Dean, Graduate Programs, Faculty of Science

> "The Melbourne School of Engineering is excited to be part of the MIPP and MIPA programs. The academic relationships seeded through supervisors and students will build strong and engaging partnerships between India and Australia way into the future. We look forward to continuing this important work with our Indian colleagues.”

**Associate Professor Andy Martin**  
Associate Dean, Graduate Programs, Faculty of Science

> "MIPP and MIPA has provided a unique opportunity for the Faculty of Science, at The University of Melbourne, to engage with high quality research institutions in India. This has resulted in high quality Indian students entering graduate courses and the development of new research partnerships. We strongly believe that the continuation of the programme will provide ongoing opportunities for research engagement with IISc, IIT Kanpur, IIT Madras and IIT Kharagpur.”

**Professor James McCluskey**  
Deputy Vice Chancellor, Research

> "In the Melbourne School of Engineering, we seek to attract the best scholars worldwide into our graduate research programs. MIPP and MIPA have been successful in establishing a pathway for top students studying at leading Indian Institutions to undertake graduate research degrees in the five departments of the school. Overall, we have learnt a lot in the initial years of both programs, and will use this knowledge to continually seek to improve the experience for students and to enhance collaboration between the partner institutions."
Messages From Our Partners

“We at IIT Kanpur are thrilled to have been one of the very first Indian universities to engage with University of Melbourne through the MIPP/MIPA. These programs give students and faculty from both universities a chance to work in a world-class research environment, to experience different cultures and to be inspired and mentored by world renowned academics.

I am happy to note that many of our researchers have benefited greatly from the program by developing international research collaborations and by making impactful use of the excellent infrastructure and research facilities at the two institutions. Finally, I hope to welcome more Australian students in the coming years and help them engage in meaningful research with our elite faculty and students.”

Professor Abhay Karandikar
Director, Indian Institute of Technology, Kanpur

“This partnership between top universities in India and Australia is expected to lead to significant benefit to both sides, and to the scientific community as a whole.

The exchange of bright young minds, working on their graduate programs, under the collaborative guidance and mentorship of some of the best faculty in India and Australia, is an exciting new opportunity for furthering cutting edge interdisciplinary research in areas that matter most to humanity.

The young minds so trained will be best positioned to keep our collective and collaborative efforts growing over years to come. The students and associates of the MIPP program are expected to be well positioned to participate in the multicultural, globally connected scientific work-force of the future.”

Professor Anurag Kumar
Director, Indian Institute of Science, Bangalore

“IIT Madras is proud to partner University of Melbourne in this program which brings together faculty members and Ph.D. scholars from the two institutions in a co-supervision mode.

Its success has served as a springboard for the recently launched Joint Doctoral Degree program which will elevate our relationship to a higher orbit.”

Professor Bhaskar Ramamurthi
Director, Indian Institute of Technology, Madras

“IIT Kharagpur values its partnership with The University of Melbourne which has flourished greatly through the MIPA programme.

MIPA has made possible faculty collaborations through joint supervision of student research which is expected to grow stronger in the coming years.”

Professor Sriman Kumar Bhattacharyya
Director, Indian Institute of Technology, Kharagpur
MIPP and MIPA are joint initiatives of The University of Melbourne (UoM) and a select group of India’s finest research institutes including the Indian Institutes of Technology Madras (IITM); Kanpur (IITK); Kharagpur (IITKGP) and the Indian Institute of Science Bangalore (IISC).

MIPP commenced in 2014 with the central aim of developing the next generation of Indian and Australian researchers, innovators and entrepreneurs by providing them access to the best research and training opportunities in both countries. 33 graduate research (GR) students are currently enrolled in the program, and over 100 academics have been involved since inception. Recognising the potential of the program, the University of Melbourne granted AUD $300,000 of strategic funding through the International Research and Research Training Group grant scheme to support the development of the program and provide PhD stipend and fee remission scholarships and associated support for researcher exchanges and cooperation.

On the back of MIPP’s success, MIPA was initiated in 2018 with the aim to further develop UoM’s rich engagement with our Indian partners and foster researcher links via joint-PhD placements, enabling participating GR students to be granted a dual degree accredited both in Australia and India. 12 GR students are currently enrolled in MIPA and are jointly-supervised by 20 academic supervisors at the UoM and in India. In addition, over 30 GRs enrolled in standard PhDs at UoM are part of the MIPP and MIPA community as Associates by virtue of being alumni from the MIPP/MIPA partners.

GR students enrolled in both programs benefit from undertaking an international joint-training experience in an elite research community where they learn to adapt to new cultural and research environments; are mentored and supported by field experts; have access to facilities and equipment at two institutions; and establish strong international networks to promote research exchange and high-quality publications.

Ongoing investment will be critical to sustain the excellence of the programs and achieve these outcomes. To date UoM has contributed in excess of AUD 10 million to provide more than 40 PhD living stipends and fee remission scholarships and associated support for research exchange and cooperation. Our Indian partners have also invested significant resources and talent through their respective PhD scholarship and research support programs.

Returns from our investment in the programs continue to be very positive. Aside from attracting outstanding GR students to UoM and our Indian partners, the volume and quality of UoM’s research engagement with India has significantly increased.

Participating academics are developing and sustaining research collaborations that draw from a pool of complementary skills, world class expertise and infrastructure, enabling them to establish a more competitive and impactful platform from which to address the critical scientific questions and global challenges of our time.
MIPP and MIPA Graduate Research Students

45 graduate research students (GRs) have enrolled in the MIPP/MIPA programs since inception including 33 in MIPP (2014 - 19) and 12 in MIPA (2018 - 19). Currently, 27 students are enrolled in MIPP: 23 in the Melbourne School of Engineering (MSE) and 23 in the Faculty of Science (FoS). 12 are enrolled in MIPA with 9 at MSE and 3 at FoS. See full list of our GRs on pages 14 and 15.

The cohort are primarily Indian citizens, and we are proud to note that they represent 11 states in India as highlighted on the map below. However, as the programs grow, UoM will be focusing on diversifying this cohort as we seek to encourage more of our domestic students to spend time with our Indian partners and enrich their international experiences through unique global knowledge exchange.

Together with our Indian partners, we aim to foster the next generation of Indian and Australian researchers, innovators and entrepreneurs and facilitate access to the best research and training opportunities available in both countries, to contribute to the development of mutually rewarding educational, cultural and industry ties.
MIPP and MIPA Student Profiles
- Graduated Students

Shitanshu Kusmakar
MIPP Graduate
UoM & IIT Madras

Prathap Chandran
MIPP Graduate
UoM & IIT Madras

Gijo Sebastian
MIPP/MIPA Associate
UoM & IIT Madras

Salil Goel
MIPP/MIPA Graduate
UoM & IIT Kanpur

Jithin George
MIPP Graduate
UoM & IIT Kharagpur

Nagesh Panyam
MIPP/MIPA Associate
UoM & IIT Bombay

Dileep Chandran
MIPP Graduate
UoM & IIT Madras

Chinchu Mohan
MIPP Graduate
UoM & IIT Kharagpur

Mukesh Soni
MIPP/MIPA Associate
UoM & IIT Bombay

Gokul S. G. Sankar
MIPP Graduate
UoM & IIT Madras

Naveen Joseph
MIPP/MIPA Associate
UoM & IIT Madras

Punit Rathore
MIPP/MIPA Associate
UoM & IIT Kharagpur

Salil Goel
MIPP/MIPA Graduate
UoM & IIT Kanpur

Chinchu Mohan
MIPP Graduate
UoM & IIT Kharagpur

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UoM & IIT Bombay

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UoM & IIT Madras

Naveen Joseph
MIPP/MIPA Associate
UoM & IIT Madras

Punit Rathore
MIPP/MIPA Associate
UoM & IIT Kharagpur
MIPP and MIPA Create Opportunities for GRs to Excel

Assistant Professor Salil Goel is a great success story of the MIPP and MIPA programs. Our first graduate, Salil commenced in the MIPP program in 2014 and then transferred to MIPA during its formative stages in 2016, as its first joint-PhD student.

He successfully leveraged the resources and expertise of both the institutions and collaborated with leading researchers from across the globe including the United States of America, Austria, Poland, Italy, Greece, India and Australia. His research received multiple ‘Best Paper Awards’ at various prestigious international conferences during his PhD. This international exposure and his well-developed network in the area of Geomatics led to job offers at elite universities and industry in France, Switzerland, India and Australia in advance of the completion of his PhD. In 2018, Salil joined the elite Indian Institute of Technology, Kanpur as ‘Assistant Professor’ and has just finished his first year as a member of faculty.

Salil was recently awarded the Young Geospatial Scientist Award and Rachapudi Kamakshi Memorial Gold Medal at Geosmart India 2019 Conference held in New Delhi, for his work on the development of a unique motion correction technology that allows determining the 3D geometry of moving objects using LiDAR at long distances. He has been awarded about ~$AUD 170 k to fund the development of collaborative navigation solutions, and parking information and management solutions for India.

“MIPP/MIPA are excellent programs designed to help the students get the best of two of the best institutions of the world: UoM and the Indian Institutes of Technology. Enrollment in this program allows better access to the available resources including but not limited to laboratory facilities, and funding options, as well as, opportunities to work in close collaboration with international faculty from both the institutes. This is an excellent opportunity to gain an edge over your peers, both professionally and personally.”

A/ Professor Salil Goel,
first graduate of MIPA
MIPP and MIPA Promote Equal Opportunities for Men and Women in STEM

“I enrolled in MIPA because of the opportunities it presented for me to work with world-class academics in biomechanics at IIT Madras and the University of Melbourne. The joint PhD program encouraged me to interact with people from different parts of the world. Discussing my research and interacting with other researchers has definitely been helping me improve my confidence. I have met people from different fields that gave me a perspective on how I would like my future path to be. I was able to build a bigger network from my research community. Without MIPA this process could not have been any easier.”

“I feel extremely honored to be the recipient of a MIPP scholarship which has been instrumental in providing me with the opportunity to benefit from an experience at UoM, a reputable organisation with a liberal and multi-cultural working environment. The guidance from my academic mentors at UoM and IITKGP is helping me to address the real-life problems which I am finding more rewarding than the degree that will follow. I am indebted to both institutions and encourage more students and academics to get involved in this enriching program.”

“As a woman from a small town in India, MIPA has given me the opportunity to come and study at The University of Melbourne, one of the top institutes in the world in an environment where the professional community does not practice an intentional or unintentional gender bias. The University actively promotes the aspirations of women in STEM to succeed and pursue careers in science, and hosts many networking events to honour female achievers. There still exists a huge gender gap in STEM fields with marked under-representation by women. Being here, I am able to be a part of this celebration of women in science and it makes me optimistic about my path from here on.”

Our GRs represent 8% of the Indian student cohort at UoM (471 as of 2018)

26% of our GRs are women

AUD $10 Million+ has been invested in scholarships and stipends since 2014
MIPP and MIPA
GR Student Profiles

Nitheesh George
MIPP Candidate
UoM & IIT Madras

Chinglen M. Tensubam
MIPA Candidate
UoM & IIT Kharagpur

Nature Poddar
MIPP Candidate
UoM & IIT Kharagpur

Akhil Karazhma
MIPP Candidate
UoM & IIT Madras

Johnson Jacob
MIPP Candidate
UoM & IIT Madras

Aakash Gupta
MIPP Candidate
UoM & IIT Kharagpur

Jithin George
MIPP Candidate
UoM & IIT Kharagpur

Sanjaykumar Patil
MIPP Candidate
UoM & IIT Kharagpur

Vishnu A. V. Mohanan
MIPP Candidate
UoM & IIT Kharagpur

Debjit Dutta
MIPP Candidate
UoM & IIT Kanpur

Nandakishor Desai
MIPP Candidate
UoM & IIT Kharagpur

Shivansh Shrivastava
MIPP Candidate
UoM & IIT Kanpur

MIPP and MIPA Promote Equal Opportunities for Men and Women in STEM

Chinglen M. Tensubam
MIPA Candidate
UoM & IIT Kharagpur
MIPP and MIPA
GR Student Profiles

Bosirul Hoque
MIPP Candidate
UoM & IIT Kanpur

Himanshu Mishra
MIPP Candidate
UoM & IIT Kanpur

Santa Maiti
MIPP Candidate
UoM & IIT Kharagpur

Partha De
MIPP Candidate
UoM & IIT Kharagpur

Surabhi Gupta
MIPP Candidate
UoM & IIT Kanpur

Arunjunai R. S. S. Kumar
MIPA Candidate
UoM & IIT Kharagpur

Pavan Harika Raavi
MIPP Candidate
UoM & IIT Kharagpur

Achyut Mishra
MIPP Candidate
UoM & IIT Madras

Joydip Mondal
MIPA Candidate
UoM & IIT Kharagpur

Nisha Mehta
MIPP Candidate
UoM & IIT Kanpur
MIPP and MIPA
GR Student Profiles

Abhisek Mondal
MIPA Candidate
UoM & IIT Kharagpur

Dinesh Srikar Karra
MIPP Candidate
UoM & IIT Madras

Subhrasankha Dey
MIPP Candidate
UoM & IIT Kharagpur

Snigdha S. Mohapatra
MIPA Candidate
UoM & IIT Kharagpur

Pawan Kumar
MIPA Candidate
UoM & IIT Kharagpur

Noor E. Karishma Shaik
MIPP Candidate
UoM & IIT Kharagpur

Srivathsan P. Sundar
MIPP Candidate
UoM & IIT Madras

Shubham
MIPA Candidate
UoM & IIT Kanpur

Sourav Mondal
MIPP Candidate
UoM & IIT Kharagpur

Shreshtha Kumar Gupta
MIPA Candidate
UoM & IIT Kanpur
MIPP and MIPA Associates
GR Student Profiles

Vijaya Rama Reddy
Gudla
UoM & IIT Madras

Bhanu Devnani
UoM & IIT Kharagpur

Philip Bigi Varghese
UoM & IIT Kharagpur

Ayana Bhaskaran
UoM & IIT Kharagpur

Rajesh Ranjan
UoM & IIT Kanpur

Shashank Rao
UoM & IISc, Bangalore

Rahul Palulli
UoM & IIT Kharagpur

Rohit Tiwari
UoM & IIT Delhi

Rahul Deshpande
UoM & IIT Kanpur

Neeta Lohani
UoM & IIT Kharagpur

Shaktivesh
UoM & IIT Bombay

Tanmay Agrawal
UoM & NIT Hamirpur
MIPP and MIPA Associates
GR Student Profiles

Pramod Kumar Jangir
UoM & IIT Kharagpur

Lubna Meempatta
UoM & IIT Madras

Krishna S. Chandran
UoM & IIT Kharagpur

Unni Krishnan
UoM & IIT Kharagpur

Abdul R. V. Rasheed
UoM & IIT Kharagpur

Siddhesh Godbole
UoM & IIT Madras

Tanweepriya Das
UoM & IIT Kharagpur

Tushar Sikroria
UoM & IIT Kanpur

Other MIPP/MIPA Associates include:

- Deepak Saini - UoM and IIT Madras
- Tanmay Kar - UoM and IIT Kanpur
- Arup Deka - UoM and IIT Guwahati
- Anshul Baral - UoM and IIT Kharagpur
- Arvind George - UoM and IIT Madras
- Avinash Ashok - UoM and IIT Kharagpur
Students enrolled in the MIPP and MIPA programmes benefit from the supervision and mentorship of 50+ academics at the University of Melbourne from the Melbourne School of Engineering and The Faculty of Science and 35 + academic supervisors at our Indian partners. See selected academics below, and full list on pages 14 and 15. Their research spans the STEM disciplines of mechanical, electronic and electrical, chemical and biomolecular and infrastructure engineering as well as chemistry and earth sciences.

“Within the Melbourne School of Engineering, we are fortunate to have a great cohort of MIPP/MIPA PhD students.

My first MIPP student recently submitted his PhD thesis, having done excellent work in developing machine learning approaches for the analysis of functional MRI data in mental health research studies. I look forward to continuing my involvement with the program in the future.”

Leigh Johnston
Associate Professor,
Melbourne School of Engineering

“I have the pleasure and privilege to supervise one of the MIPP PhD students, Achyut Mishra. He is smart, very independent and driven by his curiosity.

He made significant progress during his 6-months research visit at IIT Madras, which also helped me to truly collaborate with colleagues from India. The MIPP program really works very well for the student, his advisor in India and myself.”

Ralf Haese
Professor,
Faculty of Science

“MIPP has assisted me of further developing a promising area of membrane research in collaboration with Dr T.G Gopakumar (IIT Kanpur) with whom I have been co-supervising the PhD project of an excellent IIT Kanpur graduate.

In addition, this project has also resulted in establishing strong collaboration with Sofia University (Bulgaria).”

Spas Kolev
Professor,
Faculty of Science

“MIPP has helped me to attract two outstanding PhD candidates from IITs – these are students that typically go to top US institutions, but were attracted by the spirit of the program. MIPP has also opened new collaborations with IIT academics, who liked the concept of jointly supervising the PhD students – the same students they typically lose to US institutions.”

Stephan Winter
Professor,
Melbourne School of Engineering

MIPP and MIPA Academic Supervisors at UoM
MIPP & MIPA Report

Professor Andrew Western
Melbourne School of Engineering

Dr Robert Gordon
Melbourne School of Engineering

Professor Greg Qiao
Melbourne School of Engineering

Associate Professor Dalton Harvie
Melbourne School of Engineering

Professor Andrew Western
Melbourne School of Engineering

Dr Wenyan Wu
Melbourne School of Engineering

Prof. Marimuthu Palaniswami
Melbourne School of Engineering

Professor Richard Sandberg
Melbourne School of Engineering

Dr Robyn Schofield
Faculty of Science

Dr Lars Goerigk
Faculty of Science

Professor Kenong Xia
Melbourne School of Engineering

Professor Marcus Pandy
Melbourne School of Engineering
## MIPP and MIPA Graduate Research Students and Academic Supervisors

<table>
<thead>
<tr>
<th>MIPP Graduate Research Student</th>
<th>UoM</th>
<th>Academic Supervisor</th>
<th>Indian Partner Academic Supervisor</th>
<th>Commenced</th>
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<tbody>
<tr>
<td>Shitanshu Kusmakar MSE</td>
<td></td>
<td>Prof. Marimuthu Palaniswami</td>
<td>IITM Prof. M Ramanathan</td>
<td>2013</td>
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<td></td>
<td></td>
<td>Dr Jayavardhana Gubbi</td>
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<td>Graduated</td>
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<tr>
<td>Prathap Chandran MSE</td>
<td></td>
<td>Prof. Kenong Xia</td>
<td>IITM Dr. Srinivasa Rao Bakshi</td>
<td>2014</td>
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<td></td>
<td></td>
<td>Dr Jason Monty</td>
<td></td>
<td>Graduated</td>
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<td>Gokul Sivasankar Gowri Sankar</td>
<td>MSE</td>
<td>Dr. Chris Manzie</td>
<td>IITM Dr. Sridharakumar Narasimhan</td>
<td>2014</td>
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<td></td>
<td></td>
<td>Prof. Ivan Marusic</td>
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<td>Graduated</td>
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<td>Dileep Chandran MSE</td>
<td></td>
<td>Dr. Yongping Wei</td>
<td>IITGP Prof. Madan Kumar Jha</td>
<td>2015</td>
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<td></td>
<td></td>
<td>Prof. Andrew Western</td>
<td></td>
<td>Graduated</td>
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<td>Chinchu Mohan MSE</td>
<td>MSE</td>
<td>Dr Daniel Chung</td>
<td>IITM Prof. M. Govardhan</td>
<td>2015</td>
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<td></td>
<td>Prof. Ivan Marusic</td>
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<td>Nitheesh George MSE</td>
<td>MSE</td>
<td>Prof. Kenong Xia</td>
<td>IIT M Dr. Ranjit Bauri</td>
<td>2015</td>
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<td>Dr. Phee Yeoh (UoS)</td>
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<td>Johnson Jacob MSE</td>
<td>MSE</td>
<td>Prof. Gregory Martin</td>
<td>IITGP Prof. Ramakrishna Sen</td>
<td>2015</td>
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<td>Assoc. Andrew Zalesky</td>
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<td>Prof. Leigh Johnston</td>
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<td>Prof. Rao Kotagiri</td>
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<td>Akhil Karazhma MSE</td>
<td>MSE</td>
<td>Assoc. Andrew Zalesky</td>
<td>IIT M Prof. Rintu Banerjee</td>
<td>2015</td>
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<td>Dr. Alex Andrianopoulos</td>
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<td>Aakash Gupta FoS</td>
<td>FoS</td>
<td>Prof. Brian Krongold</td>
<td>IITGP Associate Prof. Gautam Das</td>
<td>2015</td>
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<td>Dr. Phee Yeoh (UoS)</td>
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<td>Jithin George MSE</td>
<td>MSE</td>
<td>Prof. Christian Reichardt</td>
<td>IITGP Dr. Somnath Bharadwaj</td>
<td>2015</td>
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<td>Vishnu Arayamparambil Vinaya Mohanan</td>
<td>MSE</td>
<td>Prof. Iven Mareels</td>
<td>IITGP Prof. Chandan Chakroborty</td>
<td>2015</td>
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<td>Prof. Robin Evans</td>
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<td>Bosire Hoque FoS</td>
<td>FoS</td>
<td>Prof. Spas Kolev</td>
<td>IITK Dr. T. G. Gopakumar</td>
<td>2015</td>
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<tr>
<td>Debajit Dutta FoS</td>
<td>FoS</td>
<td>Prof. Aurole Delaigle</td>
<td>IITK Dr. Subhra Sankar Dhar</td>
<td>2015</td>
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<td>Himanshu Mishra MSE</td>
<td>MSE</td>
<td>Dr. Jimmy Philip</td>
<td>IITK Prof. Debopam Das</td>
<td>2015</td>
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<td>Dr. Jason Monty</td>
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<td>Nandakishor Desai MSE</td>
<td>MSE</td>
<td>Prof. Marimuthu Palaniswami</td>
<td>IITK Prof. Jayanta Mukhopadhyay</td>
<td>2015</td>
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<td>Dr Jason Monty</td>
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<tr>
<td>Santa Maiti MSE</td>
<td>MSE</td>
<td>Prof. Stephan Winter</td>
<td>IITK &amp; IITGP Dr. Amitabha Mukerjee, Prof. Sudeshna Sarkar</td>
<td>2015</td>
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<tr>
<td></td>
<td></td>
<td>Prof. Lars Kulik</td>
<td>Dr. Amitabha Mukerjee, Prof. Sudeshna Sarkar</td>
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<tr>
<td>Shivansh Shrivastava MSE</td>
<td>MSE</td>
<td>Dr. Michael Stewardson</td>
<td>IITK Dr. Vinod Tare</td>
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<td>A/Prof Meenakshhi Arora</td>
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<td>Partha De FoS</td>
<td>FoS</td>
<td>Prof. Udaya Parampalli</td>
<td>IITGP Prof. Chittaranjan Mandal</td>
<td>2016</td>
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<td></td>
<td></td>
<td>Dr. Ranjith R. Unnithan</td>
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<tr>
<td>Surbhi Gupta MSE</td>
<td>MSE</td>
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<td>IITK Dr. Bharat Lohani</td>
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<td></td>
<td></td>
<td>Dr. Maria Vasardani</td>
<td></td>
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<tr>
<td>Sushma Reddy Chen Reddy MSE &amp; FoS</td>
<td></td>
<td>Dr. Robyn Schofield Assoc. Prof. Jason Monty</td>
<td>IITGP Prof. A. N. V. Satyanarayana</td>
<td>2016</td>
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## MIPP and MIPA Graduate Research Students and Academic Supervisors

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<tr>
<th>MIPP Graduate Research Student</th>
<th>UoM</th>
<th>Academic Supervisor</th>
<th>Indian Partner Academic Supervisor</th>
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<tr>
<td>Achyut Mishra</td>
<td>FoS</td>
<td>Prof. Ralf Haese</td>
<td>IITGP Prof. Abhijit Chaudhuri</td>
<td>2016</td>
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<td>Pavan Harika Raavi</td>
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<td>Prof. Kevin Walsh</td>
<td>IITGP Prof. P K Bhaskaran</td>
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<tr>
<td>Sourav Mondal</td>
<td>MSE</td>
<td>Prof. Elaine Wong</td>
<td>IITGP Associate Prof. Goutam Das</td>
<td>2017</td>
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<tr>
<td>Nisha Mehta</td>
<td>FoS</td>
<td>Dr. Lars Goerigk</td>
<td>IIT K Dr. DLVK Prasad</td>
<td>2017</td>
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<tr>
<td>Dinesh Srikar Karra</td>
<td>MSE</td>
<td>Prof. Raymond Dagastine A/Prof. Dalton Harvie</td>
<td>IIT M Associate Prof. Jitendra Sangwai</td>
<td>2018</td>
</tr>
<tr>
<td>Subhrasankha Dey</td>
<td>MSE</td>
<td>Prof. Stephan Winter Prof. Martin Tomko</td>
<td>IITGP Prof. Niloy Ganguly</td>
<td>2018</td>
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<tr>
<td>Noor E Karishma Shaik</td>
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<td>Ranjith R Unnithan</td>
<td>IITGP -</td>
<td>2019</td>
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<tr>
<td>Amrish Kumar Padmakumar</td>
<td>MSE</td>
<td>Prof. Greg Qiao Prof. Muthupandian Ashokkumar</td>
<td>IITGP Prof. Nikhil K. Singha</td>
<td>2019</td>
</tr>
<tr>
<td>Srivathsan Poyyapakkam Sundar</td>
<td>MSE</td>
<td>Dr.Gabriel Da Silva Dr. Alessandro Soncini</td>
<td>IITM Dr. Preeti Aghalayam</td>
<td>2019</td>
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<tr>
<td>Salil Goel</td>
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<td>Dr. Allison Kealy</td>
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<td>Joydip Mondal</td>
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<td>Prof. Muthupandian Ashokkumar</td>
<td>IITGP Dr. Parthasarathi Gosh Dr. Rajaram Lakkaraju</td>
<td>2018</td>
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<tr>
<td>Pooja Pandey</td>
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<td>A/Prof. Greg Martin Prof. Muthupandian Ashokkumar</td>
<td>IITGP Prof. H N Mishra</td>
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<td>Pawan Kumar</td>
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<td>Assoc. Prof. Dalton Harvie</td>
<td>IITGP Prof.Suman Chakraborty</td>
<td>2018</td>
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<tr>
<td>Padma Naveena Ganapam</td>
<td>MSE</td>
<td>Prof. Marcus Pandy</td>
<td>IITM Prof. Sujatha Srinivasan</td>
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<td>Abhisek Mondal</td>
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<td>A/Prof Meenakshi Arora Prof. Alexander Babanin</td>
<td>IITGP Prof. Brajesh K Dubey Assoc. Prof Mihir Kumar Dash</td>
<td>2019</td>
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<td>Chinglen Meetei Tensubam</td>
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<td>IITGP Assoc. Prof Mihir Kumar Dash</td>
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<td>Shreshtha Kumar Gupta</td>
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<td>Dr. Robert Gordon</td>
<td>IITK Assist. Prof. Vaibhav Arghode</td>
<td>2019</td>
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<td>Shubham</td>
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<td>Prof. Richard Sandberg</td>
<td>IITK Professor Abhijit Kushari</td>
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<td>Snigdha Sarita Mohapatra</td>
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<td>A/Prof Meenakshi Arora Prof. Wenyan Wu</td>
<td>IITGP Dr. Manoj Kumar Tiwari</td>
<td>2019</td>
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<td>Arunjunai Raja Shankar Santha Kumar</td>
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<td>Prof. Muthupandian Ashokkumar</td>
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<td>Mayank Bahsin</td>
<td>FoS</td>
<td>Prof. Ken Ghiggino A/Prof. Trevor Smith</td>
<td>IITGP -</td>
<td>2019</td>
</tr>
</tbody>
</table>
**MIPP / MIPA Achievements**

“I thank the MIPP platform for giving me an opportunity to pursue my doctoral research under this program. The program was very helpful and enabled me to have collaboration with IIT Madras and access the facilities from both the institutions. MIPP served as a platform for networking with dynamic researchers and professors across the globe. Overall, it was a great learning experience being a part of this community.”

**Dr Prathap Chandran** is working as Research Assistant and Tutor in the Mechanical Engineering department at UoM.

“I recently completed my PhD as part of the MIPP program at the University of Melbourne. MIPP collaboration helped me in shaping my research ideas with excellent guidance from my supervisors in UoM and IIT Kanpur. MIPP generously supported my travels to IIT for my research work. Constructive and regular feedback on my research work from experts of both institutions helped me in finishing my PhD on time and shape my career goals for the future.”

**Surabhi Gupta** is now working as a computer scientist with Safran Group based in Sydney on autonomous combat management systems.

“As an MIPP student, my association with one of the top universities in the world helped me kick start my research career. The best thing about being in UoM, is that it opened up possibilities for a worldwide collaboration with top researchers from my domain. MIPP also gave me an opportunity to maintain a healthy and professional relationship with my home Institution in India all the while enjoying the perks of the advanced research facilities available with Unimelb. I truly believe that the skills acquired through my research and interaction with the global research community helped me in landing a job with such a prestigious collaboration.”

**Chinchu Mohan** will join Global Institute for Water Security, Canada for a post-doctoral position early next year.

**Nisha Mehta makes MIPP/MIPA proud!**

Nisha Mehta, a PhD student in the Goerigk group under MIPP programme, is a 2019 recipient of the Indian National Award for the Empowerment of Persons with Disabilities—ROLE MODEL, one of India’s highest Presidential honours. Nisha received the award at a Presidential event in New Delhi on 3 December 2019.

**Nisha Mehta** is currently in her 3rd year of PhD and is working on the assessment of density functional theory methods.
Since its inception, MIPP/MIPA has been engaged in various academic and research activities with the partnering institutions. Some of the key activities are as following:

- **2014**: 1st MIPP Workshop at IISc Bangalore
- **2014**: IITK delegation visit
- **2015**: 2nd MIPP Workshop at IITK, Kanpur
- **2015**: AISRF Application with IITK & MIPP Supervisors
- **2015**: 3rd MIPP Workshop at IITM, Chennai
- **2016**: UoM delegation to IITK, IISc delegation visit
- **2016**: GIAN – Lectures by Prof Dhas and Prof Udaya Parampalli
- **2016**: AISRF Application with IISc & MIPP Supervisors
- **2018-Jul**: MIPA MoU signed
- **2018**: Industry collaboration focused visit to 3 industrial giants in India
- **2019-Dec**: 2nd MIPP(A) Conference at UoM, Melbourne
- **2019-Oct**: IITM visit to UoM
- **2013-Nov**: MIPP Launch in Delhi and IITM, Chennai
- **2019-Aug**: India strategy launch by VC in Delhi
Memorandum of Understanding signed between IIT Kanpur and University of Melbourne by the IIT Director Prof. Indranil Manna and Provost of University of Melbourne Prof Margaret Sheil, 2014.

Workshop with staff and PhD students at IIT Kanpur and IISc Bangalore. Multiple sessions on different themes were held in order to provide focused discussion leading to the development of joint research projects.

India Strategy Launch in 2019
MIPP / MIPA Activities

IISc director’s visit to UoM in 2016

Visit to Kolkata wetlands for collaborative research

IITM Dean visit to UoM

MIPP/MIPA visit to IIT Kanpur

MIPA MoU signing with IIT Kharagpur
Outreach: I2G

Indian Institute Graduates (I2G) is a GSA (Melbourne University) affiliated group of post-grad researchers from Indian Institutes (mainly IITs and IISc). I2G was formed in August-2016 to provide the right work-life balance to Indian researchers pursuing PhD.

The core objectives of the I2G group are:

- To enhance the academic and professional life of research graduate students of the University of Melbourne from IITs and IISc.
- To enhance social interaction and promote the welfare of fellow graduate students within the group.
- To act as a university-wide representative group of research graduate students from IITs and IISc.

Since its formation in 2016 with 39 members, I2G has grown to 110 (including ~25% of associate members).

Various social and networking events are organized by I2G throughout the year. Active participation by the group members echo the ‘unity-in-diversity’. Students enjoy the gathering and delicious food in the events like - Diwali Celebration, Cultural Night, Master Chef competition and I2G Annual Sports Day.
Indian Institute of Technology Alumni, Victoria is a formal social gathering of IIT Alumni. IITaV was established in October 2010 as a professional organisation by a group of like-minded IITians with the objectives of promoting the welfare of members and assisting them with professional development while establishing IIT brand equity in Australia.

UoM is a Gold Sponsor for IITaV since 2016 as this collaboration provides MIPP/MIPA students with a platform to interact and network with IIT alumni in Victoria who are making significant contributions to the Australian economy through their work in academic, industrial and government sectors in science and technology domains. IITaV provides support to our students through organising annual PD events and mentoring opportunities.

Interactive workshop on career planning and advancement strategies by Prof. Arun Kumar and senior IITaV members benefitted the students, researchers and recent migrants to Australia through insightful discussions on various topics such as building effective CV and resume, effectively exploring the job opportunities as new graduates and expanding professional network.
MIPP Conference 2017

MIPPC-2017, the student-led conference under Melbourne India Postgraduate Program (MIPP), was held on 30–31 January 2017. The conference showcased MIPP PhD students’ progress in collaborative research in STEM areas to the academic community of MIPP partner institutions and University of Melbourne (UoM).

The conference served as a common interactive platform for MIPP students and their supervisors from UoM and partner institutes in India.

The conference featured oral and poster presentations by 25 MIPP students and keynote talks by invited speakers from UoM and partnering institutions.

MIPP(A) Conference - 2019, the 2nd student-led conference under Melbourne India Postgraduate Program and Academy (MIPP/A), is scheduled on 9-13 December 2019.

MIPPAC comprises a conference for graduate research students alongside an academic workshop. The events will provide the participants an opportunity to meet with academic supervisors and students from all MIPP & MIPA partners, as well as, to explore new opportunities for collaboration with academics from different disciplines of STEM.

**PROGRAMME**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>9-10 December</td>
<td>Conference</td>
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<tr>
<td>11-12 December</td>
<td>Academic Workshop</td>
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<tr>
<td>13 December</td>
<td>Field trip / excursion</td>
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**VENUE**

Theatre 3, Level 1,  
Alan Gilbert Building  
161 Barry Street, Carlton  
VIC 3053

MIPP(A) Conference 2019 organizing committee with Advisory Staff.  
(from left) Amrish Kumar, Mukesh Soni, Prof Udaya Parampalli, Prof Muthupandian Ashokkumar, A/Prof Meenakshi Arora, Joydip Mondal, Pooja Pandey, Abhishek Mondal, Pawan Kumar and Padma Naveena Ganapam.
## MIPP and MIPA Graduate Research Student Publications and Presentations 2014 - 2019

<table>
<thead>
<tr>
<th>GR &amp; Program</th>
<th>Publications</th>
<th>Presentations</th>
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<tr>
<td>MIPP</td>
<td>Aakash Gupta</td>
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<td>GR &amp; Program</td>
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<tr>
<td>MIPP Johnson Jacob</td>
<td>J. Jacob, D. Fraser, S. Gulizia and K. Xia. &quot;Microstructures of gamma-TiAl alloy processed by electron beam melting&quot;. APICAM 2017, International Conference on additive manufacturing, December 4-6, 2017 at RMIT, Melbourne, Australia.</td>
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<tr>
<td>MIPP Nitheesh George</td>
<td>Nitheesh George, “Direct numerical simulations of a turbulent line plume in a confined region”, AFMC Conference (Submitted).</td>
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<td>P. Chandran, A. Zafari, K. Xia, &quot;Phase evolution during mechanical alloying of Al and Nb&quot;, Materials characterisation, 2019 (Submitted)</td>
<td>P. Chandran, A. Zafari, E.W. Lui, K. Xia, &quot;Mechanically alloyed Al-5 at.% Nb consolidated by equal channel angular pressing&quot;, The fifth Conference of the combined Australian Materials Societies (CAMS), Dec 6-8, 2016, Abstract proceedings p.75, Melbourne, Australia.</td>
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<td>MIPP Santa Maiti</td>
<td>A conceptualization of vehicle platoons and platoon operations, S Maiti, S Winter, L Kulik, Transportation Research Part C: Emerging Technologies 80, 1-19</td>
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<td>Partha De, Kunal Banerjee, Chittaranjan Mandal. A BDD based secure hardware design method to guard against power analysis attacks. International Symposium on VLSI Design and Test (VDAT), Coimbatore, India, 2014, pages: 1–2. DOI: 10.1109/ISVDAT.2014.6881088</td>
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<td>Partha De, Kunal Banerjee, Chittaranjan Mandal, Debdeep Mukhopadhyay. Designing DPA resistant circuits using BDD architecture and bottom pre-charge logic. Euromicro Conference on Digital System Design (DSD), Santander, Spain, 2013, pages: 641–644. DOI: 10.1109/DSD.2013.128</td>
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<td>S. Gupta, B. Lohani (2014) “Augmented Reality system for displaying dimensional information of objects in mobile phones”, ISPRS Annals of Photogrammetry, ISPRS Technical Symposium V, Riva Del Garda, Italy</td>
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MIPP & MIPA Report
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Our Partners

**Indian Institute of Technology Madras (IITM)**
IIT-M was formally inaugurated in 1959 in Chennai with the assistance of German Government as the 3rd IIT in India. It is a residential institute with nearly 550 academic staff, 8000 students and 1250 administrative and supporting staff and is a self-contained campus located in a land of about 250 hectares. The Institute has sixteen academic departments and some advanced research centres in various disciplines of engineering and pure sciences, with nearly 100 laboratories. It has strong relationships with industry and its staff and students are of very high quality.

**Indian Institute of Technology Kanpur (IITK)**
IIT-Kanpur was established as the fourth IIT in India in 1959. It is located in 15 km west of Kanpur City in North India and occupies a land close to 420 hectares. It has about 350 faculty members and about 6400 (50% undergraduate and postgraduate each) students. Most research areas in Engineering and Science are represented at IITK. It is known for its research in Engineering and Science.

**Indian Institute of Science Bangalore (IISc)**
Indian Institute of Science is the top ranked research institution in India. It was conceived as a ‘Research Institute’ or ‘University of Researche’ by Jamsetji Nusserwanji Tata in the final years of the 19th century and was established in May 1909. The Institute offers a variety of Mastere’s degree programs in Engineering, an integrated Ph.D. (post-B.Sc.) program in Sciences, and Ph.D. programs in a wide spectrum of disciplines in science and engineering. In addition, many national research facilities are housed at the Institute. The research laboratories at the Institute are extremely well equipped and the library and computational facilities at the Institute are amongst the best in India.

**Indian Institute of Technology Kharagpur (IITKgp)**
IIT Kharagpur is the first Indian Institute of Technology established in India. It was established in 1951 in Kharagpur, in the eastern part of India. IIT Kharagpur has 19 academic departments, 8 multi-disciplinary centres/schools, 13 schools of excellence and central research facilities. IIT Kgp is perhaps the largest and the most diversified among the IITs.