



RMIT – India Joint  
Research Program  
2020 Annual Report  
STEM College

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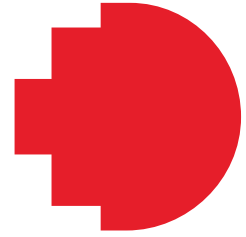
# Our Mission

## **From the Office of the Dean, Research & Innovation (India), STEM College**

The STEM College vision is to enrich the experiences of RMIT University students through our global outreach programs across India and to encourage bilateral networking and collaboration with international research institutes and industries.

Science thrives on innovation through collaboration, which makes international engagement an intrinsic tool for success. To secure Australia's international competitiveness in research and development, we must encourage a global attitude to higher education.

We aim to arm RMIT students with the skills required for immediate employment after graduation – anywhere around the globe. Our programs instill innovation, entrepreneurial thinking, practical problem-solving, and a truly global perspective for all graduates. We deliver innovative solutions to common global challenges and we continue to strive toward research that is internationally significant, relevant, and can be adapted to real-world applications.



## Vice-Chancellor and President

### MESSAGE

2020 was a challenging year around the world, yet while the experience kept us apart it also united us. We continued to stand with our Indian students and partners through this testing time, and our digital celebration of Diwali 2020 was just one of the many ways we connected virtually when we couldn't come together in person.

At RMIT we're known for our diversity, inclusion and multiculturalism. Students from all communities, backgrounds, cultures and religions call RMIT home. We are so much richer for the range of perspectives and histories that we can draw on.

RMIT has always worked collaboratively with India and has developed valuable and strategic partnerships with Indian research institutions and laboratories. We have established strategic partnerships with leading Indian institutions and these partnerships result in valuable scientific outputs, grants and innovative research.

In 2017 RMIT initiated an award-winning joint PhD program with the Academy of Scientific and Innovative Research (AcSIR), the governing academic body for 39 Indian national Council of Scientific Industrial Research (CSIR) laboratories. Programs like this leverage the strength of Indian innovation and extensive capabilities to establish a platform of intellectual infrastructure. On this platform, we jointly provide skill training and supervision to support young Indian students to become graduates equipped with a global passport.

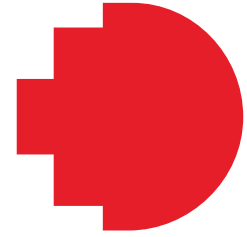
Our research collaborations and partnerships also allow RMIT to harness the best Indian research facilities such as the scale-up and pilot facilities at the Indian Institute of Chemical Technology (IICT) and the expertise at the Indian Institute of Petroleum (IIP). Together we work to innovate new technologies to solve the real-world problems.

Importantly, our relationships have solid foundations, based on mutual trust and respect. RMIT will continue to empower and provide opportunities to the talented people of India and of Indian heritage, and work in strategic partnership with local organisations to our mutual benefit.

Long may our collaborations continue.

#### **Professor Martin Bean CBE**

Vice- Chancellor and President,  
RMIT University



## Deputy Vice-Chancellor STEM College and Vice President Digital Innovation

### MESSAGE

The STEM College is committed to high impact research outcomes that are globally, economically, and socially relevant. The RMIT-CSIR IICT Joint PhD program is enabling the College to realise this strategy. The success of this program stems from active collaboration between our researchers – who co-design and co-deliver research projects with outcomes that have real-world impact. Our programs also nurture graduates who are ready for the future of work and leadership. Our partnership – built on diversity and shared values – provides a strong platform for future growth and success within a changing world.

#### **Professor Aleks Subic**

Deputy Vice- Chancellor of the STEM College,  
and Vice President for Digital Innovation,  
RMIT University



Our programs also nurture  
graduates who are ready for the  
future of work and leadership.



## Dean, Research and Innovation (India) STEM College and Director, Centre for Advanced Materials and Industrial Chemistry

### MESSAGE

United under the one theme – ‘Student success is our success’ – RMIT’s strategic alliance with the Academy of Scientific & Innovative Research (AcSIR) is designed to forge a diverse and extensive education hub. India is the world’s second-fastest growing economy, and AcSIR is the academic organisation behind the CSIR laboratories network of India. This influential partnership achieved remarkable things in 2020 and will continue to empower RMIT in the coming years.

The importance of this trusted partnership can be felt even more today when the geo-political climate is more volatile than ever before, and existing business partnerships are being thwarted. The COVID-19 pandemic has proven to be a nother major disruptor of business as usual and, more importantly, a disruptor of RMIT’s giant leap into the future.

It is therefore of utmost importance that the challenges presented by this unprecedented international climate are approached with great care, thought and judicious planning. The partnership with India is built on trust, respect, cooperation, and ongoing mutual benefits. India has the demographic advantage and RMIT brings established technological capabilities. Together, this makes a real difference.

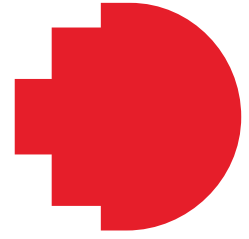
While we celebrate our successes, in these challenging times it is our first responsibility to stand hand-in-hand and shoulder-to-shoulder with our trusted partner. The second wave of the Coronavirus pandemic has taken a heavy toll on all walks of life in India, with so many innocent lives lost – mothers, fathers, sisters, brothers and students.

Our hearts go out to our Indian partners – we feel deeply about your challenges and we are here to support you. We are connected together digitally and continue to engage academically.

RMIT will sustain and uphold its partnership with India through AcSIR and will venture together into the future. Our partnership is not “*Going through challenges*” but “*Growing through these challenges*”. Our award winning RMIT-AcSIR joint PhD program will become a model for tomorrow where a diverse and inclusive workforce will emerge to solve global problems for many years to come.

#### **Distinguished Professor Suresh Bhargava**

Dean, Research & Innovation, STEM College  
Director, Centre for Advanced Materials and Industrial Chemistry,  
RMIT University



Deputy Vice-Chancellor,  
Research and innovation and  
Vice President

**MESSAGE**

Despite the challenges of the COVID-19 pandemic in 2020, RMIT has had an outstanding year in research and innovation, and our ongoing partnership with India has contributed to this achievement.

RMIT delivers a wide range programs through international partnerships including the RMIT CSIR-IICT and the RMIT-AcSIR Partnership. The programs are highly innovative and inclusive, offering students a unique global experience, access to state-of-the-art facilities, and supervisors from both India and Australia.

Our relationships in India are helping students develop research skills that prepare them for the global job market.

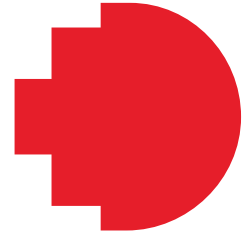
In 2021, we will continue to work together to build on this excellent work, creating enhanced partnerships and impactful research outcomes.

**Professor Calum Drummond AO**

Deputy Vice- Chancellor Research and  
Innovation & Vice President, RMIT University



We offer students a unique global experience, access to state-of-the-art facilities, and supervisors from both India and Australia.



## Chancellor, AcSIR

### MESSAGE

I am very happy to note that RMIT University is bringing out an Annual Report documenting its academic alliance in science and engineering with our Indian institutions. It is a matter of pride for the Academy of Scientific and Innovative Research (AcSIR) that the RMIT-AcSIR Joint PhD Program has progressed so well as to constitute a predominant part of the RMIT-India narrative.

Any academic alliance with AcSIR has inherent attributes of:

- scale (45+ academic centres of AcSIR across India),
- scientific strength (world class infrastructure and mentoring faculty of CSIR), and
- research focus on deep discovery science and technology (in alignment with societal needs and the advancement of knowledge in frontier areas).

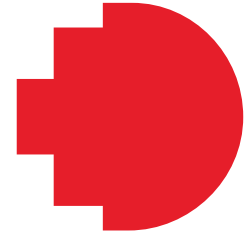
The RMIT-AcSIR Joint PhD program is unique in that it is the first academic alliance of AcSIR internationally. The Joint PhD program, formally signed between RMIT and AcSIR in 2017, forged ahead with the first cohort of the AcSIR-RMIT Joint PhD students admitted in 2018. The program not only brings in the advantage of frontier cross-country and cross-cultural interactions, but also offers a platform of peer-to-peer learning for students. It is commendable that the program has become attractive and competitive for the students, and that the program has, in turn, improved greatly through the sharing of different student perspectives. We have confidence that our strong student numbers will soon lift over 100.

I wish to congratulate the program leaders, nodal officers and all other contributors for their endeavours in initiating and improving the partnership. As always, I wish the program and its students every success.

#### **Professor Chandra Shekhar**

Chancellor, AcSIR (Academy of Scientific and Innovative Research)





## Director/Vice-Chancellor, AcSIR

### MESSAGE

I earnestly believe that a university is a “World University” when it has the “*World working in it*” – and that the “*World working in it*” is the fulcrum of making a university world class. By the “*World*”, I mean not only people (faculty, students, trainees etc.) from across the world, but also serving worldwide shared-interests – whether this be partnered-endeavours, collaboration and creativity in learning, or global discoveries.

Progress on this path requires, besides others, perennial partnership of institutions in the arena of higher education as a platform for cross-institutional mobility, interactions and co-working of students, and collaboration amongst mentors/faculty.

I am happy to say that though AcSIR is yet to complete its first decade as a higher education institution, it made a big journey towards global academic excellence three years ago by operationalising the AcSIR (India) / RMIT University (Australia) Cotutelle PhD program. The first cohort of the students under the program graduated recently.

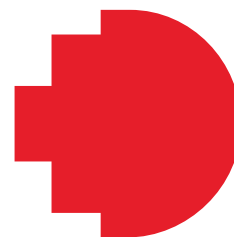
I am pleased to note that RMIT is developing this 2020 Annual Report of its academic alliance with Indian institutions across science and engineering, wherein AcSIR constitutes a cornerstone relationship. The AcSIR-RMIT academic alliance is one of the key symbols of the emerging India-Australia partnership. The scale and extent of the R&D mandate in science and engineering has seen the active academic engagement of young researchers (AcSIR PhD students) as well as approx. 45 AcSIR Academic Centres in more than 25 cities across India. This, combined with the preeminent academic standing of RMIT in Australia, is a great source of pride. We need to continue to nurture and grow this mutually beneficial relationship to the scale it deserves.

While progress of the program is owed to the co-operation and concerted efforts of leadership and faculty of RMIT & AcSIR, I particularly appreciate the commendable contribution of Prof. Suresh Bhargava who has always given his very best effort, even during constraints due to Covid-19 pandemic. I am sure with the enthusiastic endeavours of my team at AcSIR, as well as the team at RMIT, we will have developed a model to follow in the arena of global academic partnerships.

I am committed to give my best to the program and wish it all the success and accolades it deserves.

### **Professor Rajender Singh Sangwan**

Director/Vice-Chancellor, AcSIR (Academy of Scientific and Innovative Research)



## Director, CSIR - IICT

### MESSAGE

I am profoundly happy to report on the success of the joint research and academic collaboration between CSIR-Indian Institute of Chemical Technology, Hyderabad, India, and RMIT, Australia.

The program has so far enrolled 33 research scholars, amongst whom 25 have already been awarded PhDs. The scholars have published more than 100 research papers in high-impact international journals of repute, 50 articles at conferences, with 1 Patent granted.

I am indeed proud to note that the collaboration has seen students receive 17 prestigious awards including – the Gandhian Young Technological Innovation (GYTI) Award; Telangana Young Scientist; and the CSIR Award for Innovations in Science and Technology for Rural Development (CAIRD) from India. This is in addition to the Professor Martin Bennet Research Excellence Award; the Perkin-Elmer Prize; and the Megan Clark Excellence Award from Australia.

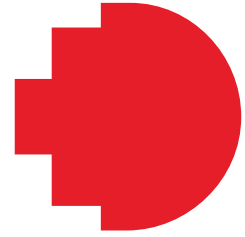
The collaboration has seen exchange visits by faculty from both institutes for joint conferences as well as Research and Development activities, which have further strengthened the relationship between our two great nations. I take this opportunity to thank Prof. Suresh Bhargava, Dean, Research and Innovation, RMIT, for his astute leadership in the implementation of this successful program.

I reiterate my continued support to this joint program and hope to see many more talented and hardworking students benefitting from this endeavour.

I congratulate the supervisors and students from IICT and RMIT and wish them many more laurels. Their collaborative partnership is making a significant contribution to science and technology – for the growth of industry and the welfare of society – an impact which makes both countries incredibly proud.

#### **Dr Srivari Chandrasekhar**

Director, CSIR – IICT  
(Indian Institute of Chemical Technology)



**Director, CSIR - NPL**

## **MESSAGE**

I am pleased to acknowledge that the joint research and academic collaboration between CSIR-National Physical Laboratory (CSIR-NPL), New Delhi, India, and RMIT, Australia has leveraged the great strengths of both organisations to produce PhD students of the highest caliber.

CSIR-NPL is the National Metrology Institute of India and acts as growth engine for Indian industries by providing them accurate and precise measurements, traceable to the SI units of measurement. Students at CSIR-NPL understand the importance of metrology – not only for the knowledge-driven economy – but also for the quality of life of all citizens on the planet. RMIT compliments this technical expertise by imparting skills, innovation, entrepreneurial thinking, practical problem solving, and a global perspective among the students.

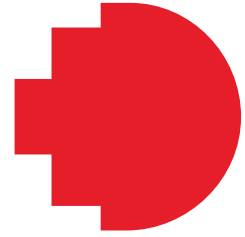
I hope these collaborative programs go from strength to strength in the years to come.

**Dr Dinesh K Aswal**

Director, CSIR – NPL  
(National Physical Laboratory)



**Students at CSIR-NPL understand the importance of metrology – not only for the knowledge-driven economy – but also for the quality of life of all citizens on the planet.**



## Director, CSIR - IIP

### MESSAGE

The visit of the RMIT delegation from Australia to CSIR-Indian Institute of Petroleum, Dehradun, India in Nov. 2019 marks a watershed for the S&T partnership between two countries and two leading organisations.

Under the umbrella of the agreement between RMIT and the Academy of Scientific and Innovative Research (AcSIR), the two day workshop on "Redefining Innovation (Energy & Environment)" took place on Nov 25-26, 2019 at CSIR-India Institute of Petroleum (IIP), Dehradun. A delegation of seven members from RMIT – anchored by Prof. Suresh Bhargava with Prof. Chris McConville, Prof. Calum Drummond, plus other distinguished scholars – interacted with scientists and students of CSIR-IIP. Site visits to research laboratories, as well as a poster session, were also organised by the PhD students at the institute, which helped to enrich the experience for both teams.

AcSIR provides a significant platform to talented young researchers for cutting-edge research across state-of-the-art laboratories of the Council of Scientific Research (CSIR) in India. This pool of talent, oriented to work on S&T mandates and missions of national and global importance, aligns well with the goals and vision of RMIT.

The workshop was highly effective in improving the orientation of research towards technology and innovation. It did so while deepening the underlying science through knowledge exchange and collaboration – setting the stage for a long-term, fruitful, and ongoing partnership between India and Australia.

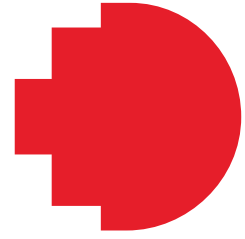
#### **Dr Anjan Ray**

Director, CSIR – IIP (Indian Institute of Petroleum)



**Our partnership has set the stage for a long-term, fruitful, and ongoing partnership between India and Australia.**





**Director, CSIR - IITR**

## **MESSAGE**

It is indeed a pleasure to put forward my deep sense of appreciation for the RMIT- AcSIR joint PhD Program.

This has been a boon for the students at CSIR-Indian Institute of Toxicology Research, Lucknow. Our interaction with the faculty at RMIT has opened new areas of research and innovation at CSIR-IITR.

Two PhD students from CSIR-IITR are currently at RMIT and are exposed to the best that science and technology has to offer. I am sure that their stay, in spite of the COVID-19 lockdown, will be fruitful. RMIT provided extensive help and support to these students which helped to tide them over in these difficult times.

The Deepawali function by RMIT was a perfect demonstration of the rich cultural heritage of both India and Australia. It was indeed a pleasure to participate in the function, live from India. This program is the vision and brainchild of RMIT's Professor Suresh Bhargava, and is perhaps among a very few programs of its kind in the world. I would like to thank and congratulate him, as well as other senior colleagues at RMIT, for and their unwavering support of this joint PhD program and I am sure that many more students from CSIR-IITR will benefit in the years ahead.

### **Professor Alok Dhawan**

Director, CSIR – IITR (Indian Institute of Toxicology Research)



**Our interaction with the faculty  
at RMIT has opened new areas of  
research and innovation at CSIR-IITR.**



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## Supporting our students during COVID-19

From the Office of the Dean, Research & Innovation (India), STEM College

RMIT University's utmost priority is the health and wellbeing of our students, staff, and community.

2020 was a tumultuous year. As nations grappled with the outbreak of COVID-19, national and state borders were closed, and many public spaces also closed – except essential services and food outlets. Most tragically, many lives have been lost with millions more unwell due to COVID-19 and its effects on the healthcare systems.

Following the advice of the Victorian Department of Health and Human Services, RMIT University closed all Victorian university campuses for on-campus studies from March

24, 2020. Our partners in India across the laboratories of CSIR similarly closed their operations on the same day.

It was a difficult time for everyone. Some families have been separated; others could not return home, or to their place of work or study. Students enrolled in our joint India-Australia PhD programs have had to delay or postpone laboratory work, returning home to write up the papers they have pending or review scientific literature published. It is understandable that many students in our community feel stressed, anxious, and worried about the future.





To ensure that each of our students are well supported during these difficult times, RMIT University has launched a fund of up to \$10 million AUD to support students who have been impacted by COVID-19.

All of our students under the joint RMIT-Indian PhD Programs are eligible to apply. Under our support program, students will be able to take a leave of absence, change to part-time study while still having their full PhD stipend paid for. The Office of the Dean, along with our partners at the IICT has negotiated that all RMIT-CSIR-IICT students in India will continue to have their scholarships and accommodation until their thesis submission in August 2020.

**UP TO \$10,000,000**

STUDENT HARDSHIP ASSISTANCE AND EQUITY SCHOLARSHIP FUNDS

The COVID Safe Adaptation fund helped to support the transfer to remote learning, enhanced cleaning of campus, and signage and other activities to promote social distancing.

**60%**

OF STUDENTS EXPRESSED GRATITUDE FOR SUPPORT FROM THE DEAN'S OFFICE DURING COVID-19.

**"The Dean's office has always been very pro-active and helpful for us all"  
- AcSIR Student**

Our supervisors at RMIT and partner organisations are working tirelessly to meet virtually with all students – reviewing chapters, papers, and theses to make the most of the laboratory closures and to stay in touch with every one of our students. The Office of the Dean is preparing plans to expedite our PhD programs to ensure that once this pandemic has come to pass, all of our students will emerge out of this on top, without significant delays to their progression.

We continue to be strong advocates of a global research community that thrives on the strength of its diversity and inclusion. I believe we will get through these difficult times by supporting each other and connecting with our community. Even if we are studying or working remotely, we are still a community.

# Our Numbers

**100%**

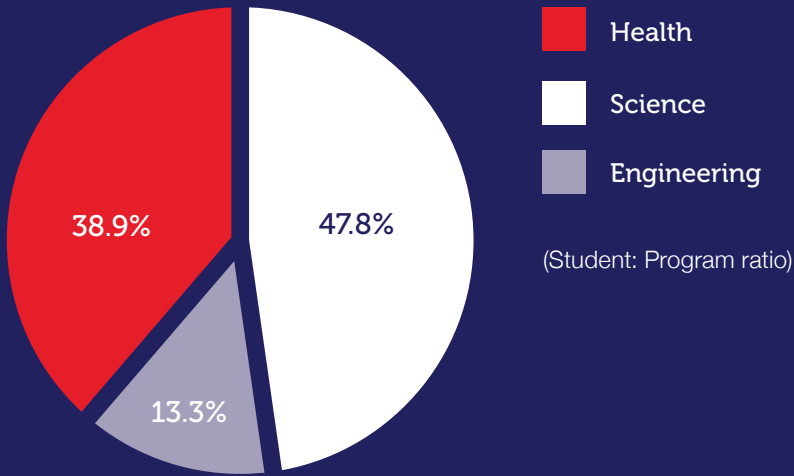
Completion rate  
(IICT Cohorts 1-2)

**54:46**

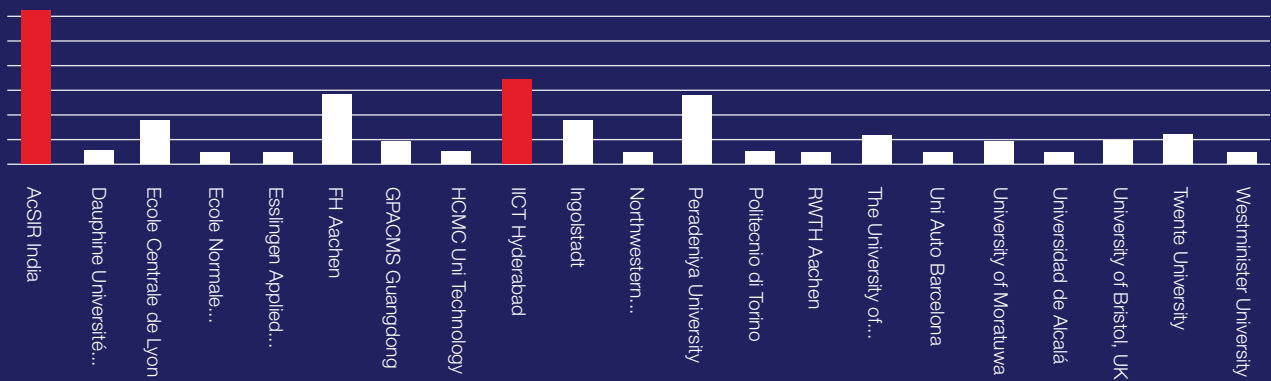
Gender ratio  
(IICT Cohorts 1-2)

**OVER 246**

Papers published  
(Indian collaboration)



## STEM Enrolments - Collaborative PhDs and Cotutelle Agreements



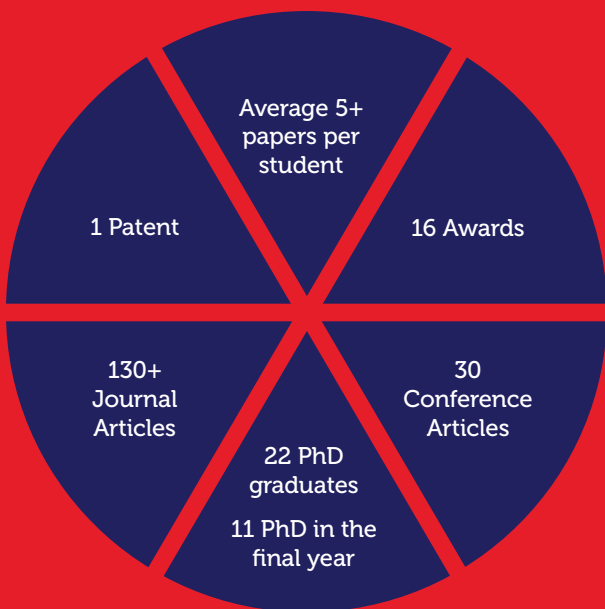
Comparison of graduate programs in the STEM College (Data for 2020)



# RMIT Joint Research Programs with India

## RMIT-IICT (2011-2020)

Global reputation outcome-focused  
aligned with RMIT strategies 2016-2020



## RMIT-AcSIR (2018-2020+)

Connecting whole India by 1 program

**17**

2018-2019  
17 PhD

**5+**

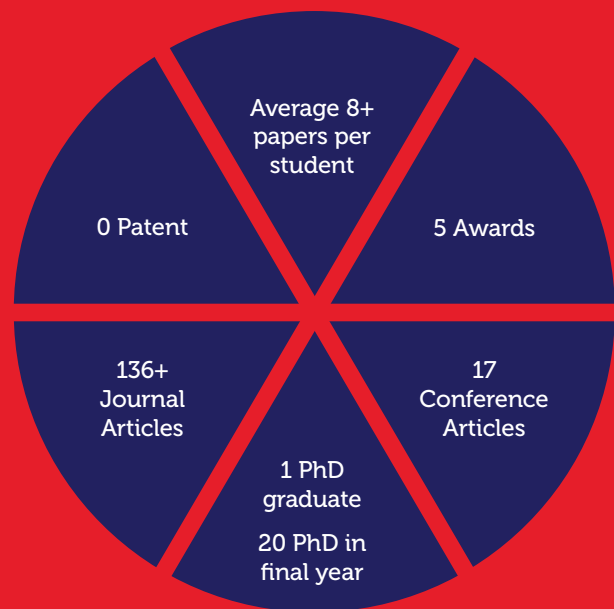
2019-2020  
Over 5 PhD Students  
32 PhD

**35+**

2020-2021  
Over 35 PhD Students  
67 PhD

**35+**

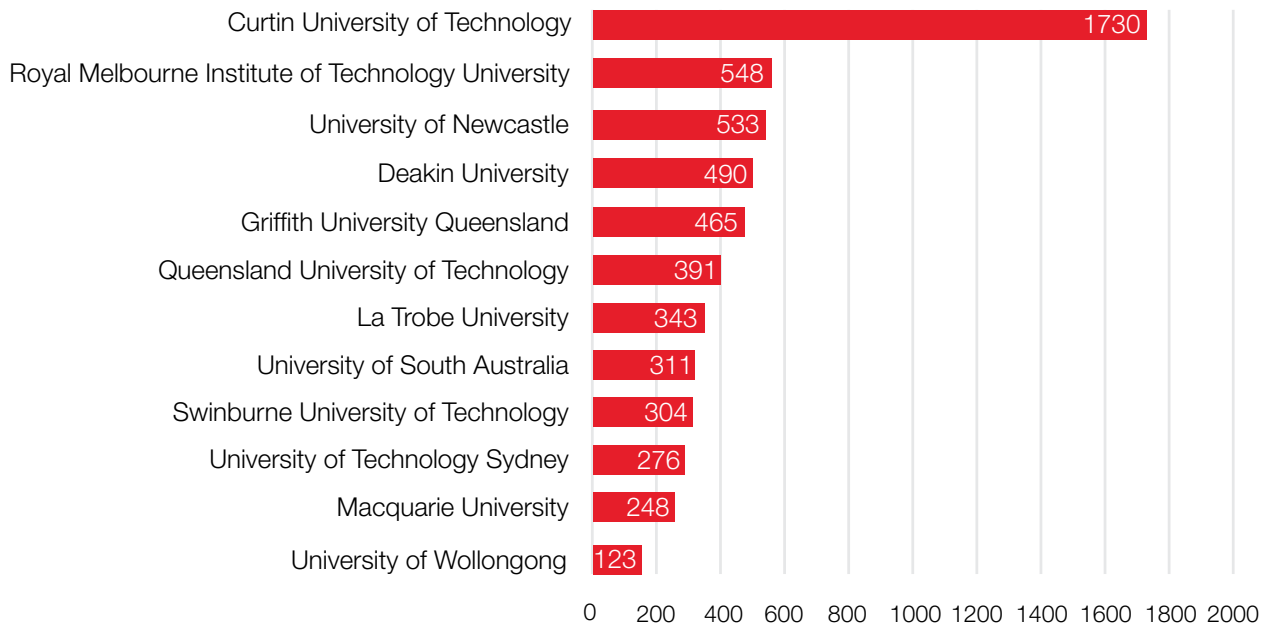
2022+  
Over 35 PhD Students  
102 PhD



# RMIT Standing

## Co-authorships in India

**Australian university (ATN and comparators)  
co-authorships in India 2015-2019**



### 1/2 of all STEM Joint PhD programs

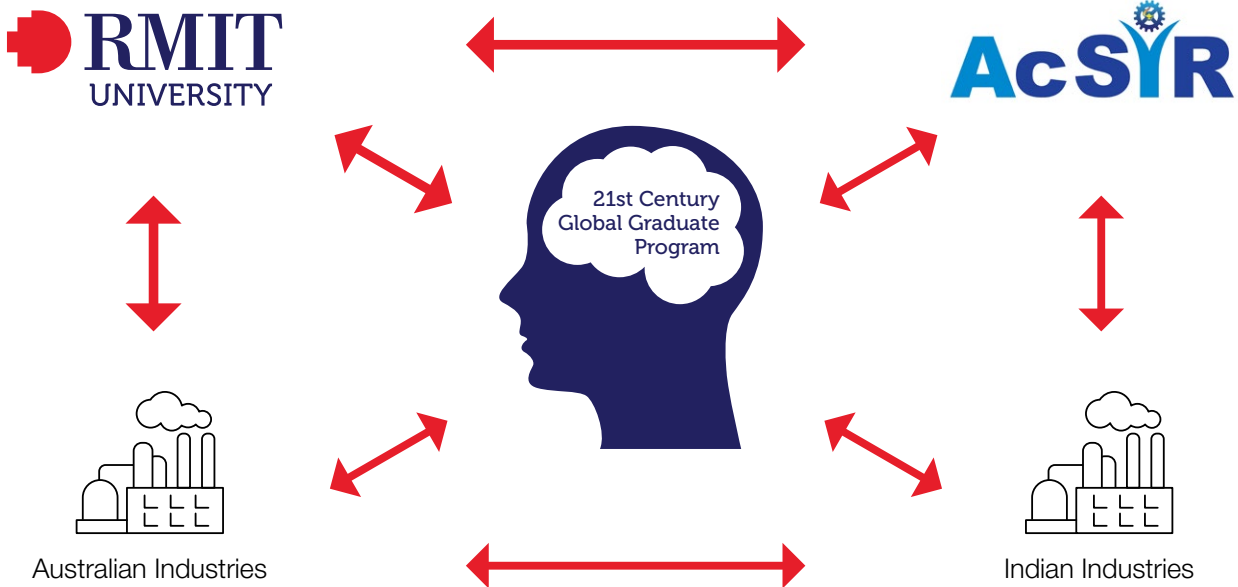
From 2015, over 90% of RMIT's co-authored publications in India are in from the STEM College including, chemistry

(128); chemical engineering (99); materials science (71); engineering (55) and physics and astronomy (36)

## Research Income

### from Indian Partnerships

Funder	Total project value
AISRF Grants Joint Collaborative Grant	2 grand challenge grants (Total ~ \$12M RMIT share ~ 1.2M)
Australian Academy of Science fellowships	Total 5 fellowships (3 Senior and 2 Junior Fellowships) ~ \$110k (Highest in Australia)
Indian National overseas fellowship	~ \$135K (By Indian Govt, only one in Victoria)
Endeavour Awards from India	The Highest number in Australia = ~ \$675K
ARC - Discovery (with IICT) = \$320 K, Category 1	\$320ARC - Discovery
Victoria-India PhD scholarships	2 (~ \$95 K each) = \$190K
ABB partnership	~ 3 million



**AcSIR RMIT- relies on a four-pronged approach with industry collaborations across India and Australia**

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## RMIT AcSIR Joint Program

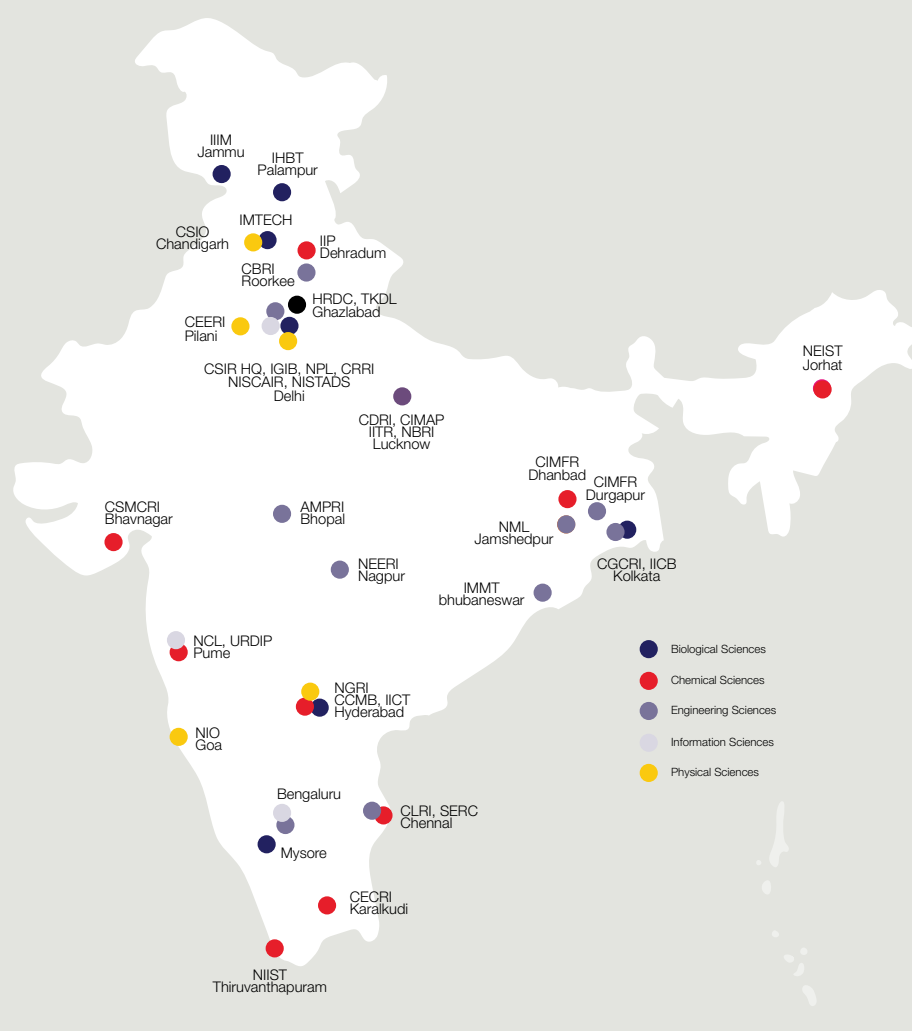
RMIT University and the Academy of Scientific and Innovative Research signed on to a jointly badged PhD agreement during a formal ceremony in Melbourne on the 27th of July 2017.

Under the joint PhD program, the students will be enrolled at both institutions, spending the majority of their program at the AcSIR host institute, and coming onshore to RMIT for up to 12 months at the latter stages of their program.

The first cohort of 17 candidates enrolled under the new joint program in August 2018, but their journey has only begun. We now look to the future, and how to capture the next brilliant minds from India through research and innovation partnerships with this rapidly modernising country. At the successful completion of their degrees, the students will be awarded PhDs from both AcSIR and RMIT University. This is a disruptively innovative program,

with new challenges that come with uncharted progress. The program will illuminate RMIT in the Indian education system and holds the potential for enormous change.

Students in the AcSIR programs are the top performing HDR candidates producing excellent publication rates, completion rates, and graduate outcomes. Admission to AcSIR is highly competitive, with roughly an 0.1% success rate; 500-600 candidates accepted from some 500,000 who sit the entrance exam each year.



## Who are AcSIR?

India's Council of Scientific and Industrial Research (CSIR), India's largest research and development organisation. Deemed as an 'Institution of National Importance' by the Indian Parliament in 2011, it is an autonomous governing body that has the authority to award doctoral and post-doctoral degrees throughout India's top research institutes.

Unlike many educational organisations, AcSIR does not have one central campus. Instead, students are hosted and complete their doctoral training through one of CSIR's 39 research centres, laboratories, and institutes across India. Candidates are usually jointly enrolled and supervised with another university.

AcSIR has over 2,400 faculty and 4,500 graduate researchers located across research centres, one of which is the Indian Institute of Chemical Technology (IICT). The CSIR files approximately 450 patents per year and accounts for 10% of India's scientific outputs and employs between 3 and 4% of the scientific workforce.





## RMIT AcSIR Partners

RMIT can partner with any of the leading CSIR national laboratories where AcSIR is run, making the RMIT-AcSIR Program the most expansive joint Indian-Australian in Australia. Since the initiation of the RMIT-AcSIR agreement, RMIT has partnered with 8 CSIR laboratories:

### National Geophysical Research Institute (NGRI)

Through research and innovation, NGRI enables government agencies and other stakeholders to make informed decisions about the sustainable use of geo-resources. Its work improves preparedness and resilience to natural disasters.

### Central Electrochemical Research Institute (CECRI)

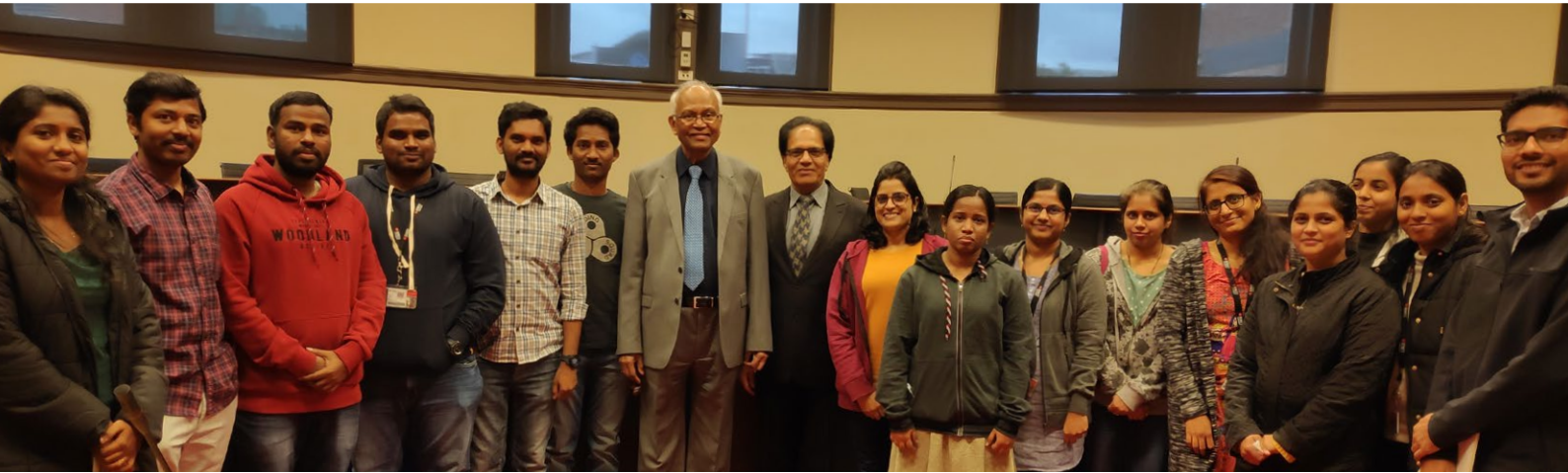
CECRI is the largest research establishment for electrochemistry in South Asia. It serves as a launching pad for technologies in the Indian electrochemical industry. Its partners include government agencies and commercial industries.

### Indian Institute of Chemical Technology (IICT)

The IICT is a long-term partner of RMIT through the RMIT-CSIR-IICT Joint Research Program.

### Indian Institute of Petroleum (IIP)

The IIP develops globally competitive solutions for sustainable energy. It has developed and commercialised technologies in the areas of petroleum refining, natural gas, and petrochemicals and their applications.




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### National Chemical Laboratory (NCL)

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The NCL is internationally known for its excellence in scientific research in chemistry and chemical engineering. It has an outstanding track record of industrial partnerships, which are taken from concept to commercialisation.

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### National Physical Laboratory (NPL)

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The NPL is the foremost laboratory for physical sciences in India. As the National Measurement Institute of India, the NPL ensures accurate and precise measurements to drive the growth of Indian science and industry.

#### Images:

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*AcSIR Director Rajender Sangwan and Dean of Research and Innovation (India), Professor Suresh Bhargava discussing RMIT Joint Research Program in Science and Engineering*

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### Indian Institute of Toxicology Research (IITR)

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The IITR is the premier toxicology research centre in India. Its interdisciplinary research activities encompass chemistry, biology, mathematics and physics. Innovations produced at IITR ensure the health and safety of communities in India.

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### Structural Engineering Research Centre (SERC)

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SERC hosts extensive facilities and expertise for the analysis, design and testing of structures and structural components. It undertakes application-oriented inter- and transdisciplinary research in all aspects of structural engineering.

#### Images:

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*Dr Raghunath Anant Mashelkar, FRS, Former DG of CSIR, the founding Chancellor of AcSIR and the founder of RMIT- AcSIR partnership meeting with Distinguished Professor Bhargava and Indian students at RMIT University*



# RMIT-India

## Workshops in India

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### Connecting supervisors and scientists

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- Workshops across India and Australia
- Connect and expand partnerships between Australia-RMIT & India-AcSIR scientists
- Develop existing research projects
- Initiate new research projects
- Develop intellectual infrastructure



#### Images:

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*Prof. Calum Drummond, Prof. Suresh Bhargava and VC of AcSIR Prof. Rajender Sagwan along with some RMIT and Indian scientists at the Institute of Genomics and Integrative Biology (IGIB), Delhi.*

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# Supervisor Comments



**Associate Professor  
Sumeet Walia,  
School of Engineering**

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...Tremendous linkages have been developed in a very short period of time since our visit to India to the CSIR labs. Personally, my research team has kickstarted several collaborative projects. I have advertised four joint projects with CSIR IIP Dehradun and NPL Delhi on the RMIT online system. Despite the lockdowns in both countries for the last few months, it is extraordinary to see that we already have a joint publication that is under review after revisions and is expected to be published in a Q1 journal within the next few weeks. This shows tremendous value for investment and the extraordinary untapped opportunity that we have.



**Associate Professor  
Charlotte Conn,  
School of Science**

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We have had some excellent outcomes from the visit to India in November 2019.

I have already advertised six joint projects for AcSIR students on the RMIT online system. In addition, we have identified several potential collaborators from CSIR- Institute of Genomics and Integrative Biology, New Delhi, and National Chemical Laboratory, Pune, and are actively planning to initiate joint projects and/or PhD students with potential collaborators from this institute.





## Victorian Award Winner

RMIT University was awarded the Victorian International Education Award for 'Excellence in Innovation in Partnership & International Engagement' for the RMIT-AcSIR program in 2018. The program was highly praised by a distinguished group of Australian scientists and entrepreneurs.

The Victorian International Education Awards were presented by Study Melbourne and are an initiative of the Victorian Government to support the international education sector.

**"This is a wonderful achievement and will make such a difference for the future"**

– Dr Megan Clark, Head of the Australian Space Agency

**"Very few of us have the opportunity to do something that is a) first in the world and b) worthwhile. One without the other is common. Both together is ground-breaking"**

– Dr Alan Finkel AO, Australia's Chief Scientist

**"..congratulations on the RMIT-AcSIR program which looks very impressive indeed and is exactly the sort of program I have emphasised in the India Economic Strategy."**

– Mr Peter Varghese AO, Chancellor of University of Queensland, author of India Economic Strategy to 2035 and former Secretary of the Department of Foreign Affairs and Trade and High Commissioner to India (2009-2012).

**"Fascinating and indeed very impressive! RMIT is on a great path in India"**

– Simon McKeon AO, Chancellor of Monash University

VICTORIAN  
INTERNATIONAL  
EDUCATION  
AWARDS  
2018

**WINNER**  
RMIT UNIVERSITY  
Excellence in Innovation  
in Partnership and  
International Engagement

**STUDY MELBOURNE**  
Victoria  
Australia



Students discuss their new-found Australian WorkLife, their travels and research.

# RMIT-AcSIR

# Student Experiences



**Yogalakshmi Jayakumar  
(AcSIR Cohort 1)**

CSIR Laboratory: Structural Engineering Research Center  
RMIT Senior Supervisor: Professor Chun Qing Li  
AcSIR Senior Supervisor: Dr. Balaji Rao

This opportunity for me was a pure blessing. The best part of it was my stay in Australia and the knowledge that I gained there over seven months.





Before that I was doing my research at CSIR - Structural Engineering Research Center, Chennai. When I came to RMIT, I was not sure whether my work will be accepted on a global platform. AcSIR and Dr. Balaji Rao – my supervisor in India – taught me what research is and how to do it, then how to report on it through writing papers.

RMIT has taught me how to effectively communicate the research that I am doing through presentations.

I have always been an aspirational person aiming to become an entrepreneur and RMIT proved to be the best career counsellor for that approach.

I sincerely thank my RMIT supervisor Professor Chun for all his guidance and feedback during our weekly presentation and group meetings, which infused me with great confidence.



**I had awesome work experience and a fantastic work life balance. I enjoyed my student life and participated in events which enriched my life in Melbourne.**

Living 'like an Aussie' – having brunch, learning swimming, enjoying the weekend – was a lot of fun, and I just loved them all. I was also able to see the beauty of Australia through RMIT trips further afield.

I thank Professor Suresh Bhargava, for his continuing support and care. He has always been a continuous motivator and a mentor at every phase of this journey. I am also grateful to RMIT for extending its full support and thank my country, AcSIR, and my laboratory for giving me this wonderful opportunity. I wish and hope that I transform into a global leader tomorrow".

**Images:**

*Page 26: Yogalaskmi at The Sydney Opera House, NSW, the first destination on her Australia's bucket list*

*Page 27\_1: Yogalaskmi hiking the Blue Mountains*

*Page 27\_2: Yogalaskmi with RMIT Vice-Chancellor Professor Martin Bean at "In RMIT Hands Presentation"*

*Page 27\_3: Yogalaskmi having her first visit to the snow at Mt. Buller, Victoria.*

*Page 27\_4: Yogalaskmi watching an Australian Rules Football match at the Melbourne Cricket Ground*



**Shubhendra Kumar Jain  
(AcSIR Cohort 1)**

CSIR Laboratory:  
National Physical Laboratory  
RMIT Senior Supervisor:  
Professor Madhu Bhaskaran  
AcSIR Senior Supervisor: Dr. Govind

My research field is the fabrication of III-Nitrides and 2-dimensional materials based sensing devices. This program provided me a vista to explore the world class research facilities.

My supervisors have provided me all the possible support to carry out experimental work and the understanding of the physical methodologies.



I have been amazed by visiting beautiful places in Australia including Melbourne and Sydney. I am thankful to Professor Suresh Bhargava for providing this great platform.

**Images:**

*Page 28\_1: Portrait of Shubhendra*

*Page 28\_2: Shubhendra with the Functional Materials and Microsystems Research Group at RMIT University*

*Page 28\_3: Shubhendra at NASA's Deep Space Communication Complex in Canberra*

*Page 28\_4: Shubhendra on an RMIT Student Cycling Tour of Melbourne*



**Poonam Yadav  
(AcSIR Cohort 1)**

CSIR Laboratory:  
National Chemical Laboratory RMIT  
Senior Supervisor: Dr Lathe Jones  
AcSIR Senior Supervisor:  
Dr Manjusha V. Shelke

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I had a really good learning experience at RMIT. I learned various characterisation techniques, instruments and experimental measurement techniques. The environment at RMIT is great for scientific discussion, developing knowledge and learning new things.

**Images:**

*Page 29\_1: Poonam presenting with eminent chemical engineering Professor Raghunath Anant Mashelkar at an RMIT conference*

*Page 29\_2: Poonam on a RMIT International Science Perspectives Europe Study Tour visiting Camp Nou, Barcelona, Spain*

*Page 29\_3: Poonam at RMIT City Campus*





**Saurabh Pathak  
(AcSIR Cohort 1)**

CSIR Laboratory:  
National Physical Laboratory

RMIT Senior Supervisor:  
Professor Xu Wang

AcSIR Senior Supervisor: Dr R. P. Pant

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**Increased Employment Opportunities:**

Even before graduation, Saurabh secured a research position at The University of Melbourne's Department of Mechanical Engineering which he hopes to convert into a Postdoctoral fellowship after his PhD submission. Saurabh arrived in Australia with his wife who also received a McKenzie Postdoctoral Fellowship at The University of Melbourne.



As a result of my work with RMIT and AcSIR, I am lucky to be going on to a research position at the University of Melbourne (UoM) in the Department of Mechanical Engineering. I will join UoM after the submission of my thesis, and am grateful for the platform the RMIT-AcSIR program has provided to us.

**Images:**

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*Page 30\_1: Saurabh at Port Jackson Bay across from The Sydney Opera House*



**Shweta Kaushal  
(AcSIR Cohort 1)**

CSIR Laboratory: National Physical  
Laboratory

RMIT Senior Supervisor:  
Professor John Andrews

AcSIR Senior Supervisor:  
Dr S. R. Dhakate

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My journey here in RMIT been delightful. I have developed the skills of doing Australian research and have learned an approach which puts the safety of researchers first.

Being a PhD student, mental stress and complexity always been there, but here at RMIT I have been working under less pressure, yet my productivity has increased. With this in particular, I would like to thank my supervisor Professor John Andrews who always been supported and guided me.

**Images:**

*Page 31\_1: Shweta enjoying RMIT Dance event on Bowen street at RMIT City Campus*

*Page 31\_2: Shweta in her RMIT laboratory uniform*

*Page 31\_3: Shweta with her RMIT PhD Supervisor Prof. John Andrews, Christmas Eve at RMIT Bundoora campus*

*Page 31\_4: Shweta enjoys dinner at the Marriott Hotel after CAMIC Day conference*





**Sangita Kumari (AcSIR Cohort 1)**

CSIR Laboratory:  
Indian Institute of Petroleum  
RMIT Senior Supervisors: Professor  
Suresh Bhargava and Associate  
Professor Sumeet Walia  
AcSIR Senior Supervisor:  
Dr Om P. Khatri

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RMIT is a global university of engineering, science, technology, design and enterprise. It has been a golden opportunity for me to be a student of the RMIT-AcSIR Joint PhD Program.

It is an outstanding platform to learn and enrich our knowledge, as well as being able to discuss the research with world leading scientific communities. I am looking forward to working as a postdoctoral fellow, scientist and professor to further empower the younger generation to pursue science and technology. The knowledge gained through this program will be really helpful in fulfilling this purpose.

**Images**

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*Page 32\_1: portrait of Sangita*









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## Beating the COVID challenges

In spite of challenges with the closure of campus, the Deputy Vice-Chancellor STEM College was keen to meet and speak with a student from the RMIT-AcSIR Program to check in with how they were going.

Professor Subic would have most liked to meet AcSIR students in person but given the COVID-19 restrictions, this was not possible. Instead, they met virtually rather than wait for restrictions to ease. He explained that he had been at RMIT for 18 years before moving to Swinburne University to be Deputy Vice-Chancellor (Research and Development), where he set up joint research centres with the Indian Institute of Technology (IIT) Madras and Institute of Technology (IIT Hyderabad). There he oversaw 50+ PhD students, and only returned to RMIT in March this year. He keenly follows the “wonderful” scientific developments and academic excellence in India through his work and his three decades of experience as an academic – where he has supervised many students from India.

Professor Subic sympathised with students, remarking that he knows what the PhD journey is like: full of unexpected events, surprises and problems to solve, to eventually become experts after ‘living’ with their research project for many years. As well as the science, he believes the PhD experience should hopefully incorporate more holistic elements, such as one’s relationships with the university, supervisors, peers and industry, all of which can contribute greatly to one’s growth. He hoped the Digital Innovation online meeting was a part of this holistic aspect and enjoyed hearing from students how they’re tackling the challenges of their research, as well as COVID-19 and the challenges currently facing India. He was very interested to hear about new scientific discoveries and partnerships, and asked students to tell him the top three things at RMIT-AcSIR Program.

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### Image

*Digital meet of student, Shubhendra Kumar Jain (AcSIR Cohort 1) and Prof Aleks Subic, Deputy Vice Chancellor STEM College and Vice President Digital Innovation*



RMIT and Indian

Institute of Chemical

Technology (IICT)

Joint Research

Program

# Our Numbers

## 2011

Cohort 1 – 7 PhDs students enrolled.

## 2012

Cohort 2 - 4 new students joined program. Total of 11 students

## 2013

Cohort 3 - 8 new student joined program. Total of 19 students

## 2016

Cohort 4 - IICT agreement extended to 2020. 14 additional students enrolled. Total 33 students.

## 2019

Cohort 4 students transfer RMIT, Melbourne.

## 2020

Cohort 4 set to graduate with PhDs.

### RMIT- IICT Joint Program

The RMIT-CSIR-IICT Joint PhD Program was co-founded in 2011 by Distinguished Professor Suresh Bhargava and Dr. J. S. Yadav, then Director of CSIR-IICT. Designed to foster international research collaborations between India and Australia, the program is highly acclaimed across the education sector and has been featured in the Australian Academy Newsletter.

The program expands global research and industry alliances through the joint training of young high-performing Indian students across Indian and Australian research platforms and builds on a diverse student population to reach out to those in disadvantaged circumstances.

Prospective PhD candidates study for at least 2.5 years in IICT, India before transferring to RMIT University, Melbourne for the final 12 months of their program. Graduates are highly-prized for their interdisciplinary approach, industry experience and entrepreneurship. To date, over 200 peer-reviewed publications have been authored through the RMIT-CSIR-IICT partnership between Indian and Australian supervisors, industry, and students – with 22 PhD graduates. There is a 100% Completion rate for cohort 1-3.

Its success has led to it becoming a model for research partnerships around the world, including RMIT's partnership with IICT's umbrella organization: India's Academy of Scientific and Innovative Research (AcSIR).

### Who are the Indian Institute of Chemical Technology (IICT)?

The Indian Institute of Chemical Technology (IICT) is a nationally recognized research centre located in Hyderabad, India, and is part of a network of the state-of-the-art research laboratories throughout India connected under the umbrella of the Council of Scientific and Industrial Research (CSIR).







Former Deputy Vice Chancellor (SEH) Peter Coloe, Dr S. Chandrasekhar and Professor Suresh Bhargava with the third cohort of IICT students

## RMIT- IICT Cohorts 1-3

A total number of 19 students have successfully completed the PhD program with RMIT.

We have received a range of positive feedback from our graduates, who are now forging successful careers in their field.

**102**

Journal articles

**16**

Student awards

**19**

PhD graduates

**100%**

Completion rate





RMIT-IICT Cohort 4 students, with IICT Director and Prof Suresh Bhargava outside Building 3 at RMIT University

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## RMIT- IICT Cohort 4

The fourth cohort RMIT-CSIR-IICT enrolled at RMIT in 2016 and arrived at RMIT in Melbourne beginning 2019, where a total 14 students were accepted. In spite of the challenge of having laboratories, research facilities, and universities closed for some time during their final year, students in cohort 4 have worked diligently and three students graduated in late 2020.

**45+**

Journal articles

**39**

Conference articles

**17**

Book chapters

**7**

Awards



# RMIT-IICT Student Experiences





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## Paramita Koley (IICT Cohort 4)

**RMIT Senior Supervisor:**  
Dr. James Tardio

**IICT Senior Supervisor:**  
Dr. Lingaiah Nakka

Being a part of IICT-RMIT joint PhD program has been a wonderful experience for me. The expertise I gained to operate a wide range of instruments at the RMIT Microscopy and Microanalysis Facility (RMMF) was particularly rewarding. Access to this equipment has been highly beneficial in improving my research skills. My supervisors assisted and encouraged me throughout my candidature and, with their guidance and support, I successfully completed my PhD research project and developed an independent and innovative approach to solve real-world scientific problems.



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### Images:

*Page 40\_1: Paramita with other RMIT students on a RMIT International Science Perspectives Europe Study Tour*

*Page 40\_2: at Dam Square, Amsterdam, Netherlands as part of the European study tour*



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## Ranjith Kumar Jakku (IICT Cohort 4)

**RMIT Senior Supervisors:**  
Professor Suresh Bhargava and  
Dr Neda Mirzadeh

**IICT Supervisor:** Dr Rajiv Trivedi

The IICT-RMIT program has been the most significant opportunity I've ever had, as RMIT University has an international reputation for excellence in professional education, applied research, and engagement with the needs of both industry and the community. I have received innovative, multidisciplinary training that has allowed me to take my research to the next level and helped me to discover the societal impact of our research. Plus RMIT's well-equipped, optimally functioning laboratories enabled me to learn new characterisation techniques.

I was fortunate to attend the inspiring and highly valuable European Study Tour, where I had the opportunity to develop an international perspective on scientific research. The tour visited a range of renowned research institutes, which gave me a better understanding of the European research environment and potential future career opportunities.



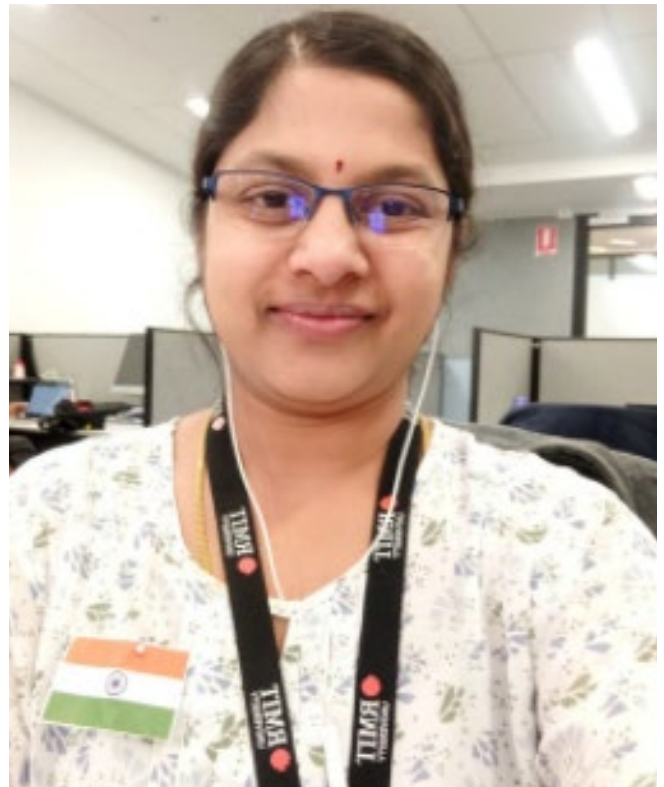
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### Images:

*Page 41\_1: Ranjith Jakku outside Building 13 at RMIT University*

*Page 41\_2: on a RMIT International Science Perspectives Europe Study Tour visiting Camp Nou, Barcelona, Spain*





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## Umadevi Kizhakke Purakkel (IICT Cohort 4)

**RMIT Senior Supervisor:**  
Professor Ewan Blanch and  
Associate Professor Ravi Shukla

**IICT Senior Supervisor:**  
Dr Prathama S. Mainkar

The RMIT-IICT joint PhD program was a great opportunity for me that I am proud to have been a part of, and I thank all of the distinguished people behind this program. The opportunity for international exposure is something I greatly value and has helped me understand different working environments and cultures. I was able to develop the language and soft skills to confidently present to an audience from different backgrounds, rather than just to those from same field of work. The European Study Tour organised by the School of Graduate Research was insightful in gaining an understanding of different research institutes and universities in Europe.

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**Images:**

*Page 42\_1: Umadevi with her research group on a social outing in Melbourne, Australia*

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## Lakshmi Tunki (IICT Cohort 4)

**RMIT Senior Supervisor:**  
Professor Suresh Bhargava

**IICT Senior Supervisor:**  
Dr. Ramakrishna Sistla

This program was perfect for transforming a student into a potent researcher. Each student is emersed into the innovative environment at the research facilities in both countries. This program was both life-challenging and life-changing for me. It paved the way to learn new hands-on skills in my field of research and also gave me global research exposure that will definitely help me in my future endeavours. Most rewarding was the access to the state-of-the-art MNRF (Micro-Nano Research Facility) where I learnt and performed many studies related to cell culture techniques. My supervisors both at RMIT and IICT showed immense confidence in me and gave encouragement that empowered me to work with full force and interest. It was a great opportunity to do my PhD research under RMIT-IICT and I am now confident to explore and work anywhere in the world.

*Page 42\_2: Lakshmi in her RMIT office*



## Aparna Kayathi (IICT Cohort 4)

**RMIT Senior Supervisor:**  
Professor Jega Jegatheesan

**IICT Supervisor:**  
Dr Pradosh Prasad Chakrabarti

It was an immense pleasure to be enrolled in this program. Pursuing PhD in a collaborative program itself is an incredible opportunity where we can gather expertise from various institutions. I am very proud to be one of the PhD students from the RMIT-IICT program, which enabled me to gain expertise in conducting research and learning new skills. My thanks to the team for mentoring us throughout the curriculum. I will cherish all the activities organised during our stay to help us feel welcome and comfortability during our PhD journey.



**Images:**

Page 43\_1: Aparna celebrating India's Independence Day at RMIT

Page 43\_2: Aprana with Yogalakshmi Jayakumar at Diwali celebrations at RMIT.

Page 43\_3: Aparna at Mt Buller, Victoria.





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## Govind Reddy (IICT Cohort 4)

**RMIT Senior Supervisor:**  
Dr Lathe Jones

**IICT Supervisor:**  
Dr Giribabu Lingamallu

This is one of the most prestigious platforms for pursuing a PhD by international research exposure. In this program, I have developed the ability to undertake independent scientific research not only in India but also in Australia (notably contrasting research cultures).

RMIT University Australia has world-class facilities for undertaking energy and bio-material research. The training and access to all equipment was extremely advantageous and enabled me to improve my research skills through hands-on experience.

My supervisory team inspired me throughout my candidature. With their guidance and support, I successfully developed a world-class research project based on energy materials.

I am now very confident to extend my research career anywhere in the world. I would definitely recommend this program to candidates who might be considering pursuing their studies at RMIT University.



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### Images:

*Page 44\_1: Clockwise from Top: Govind demonstrating in laboratory; with friends celebrating India's Independence Day at RMIT; presenting his PhD thesis*

*Page 44\_2: Portrait of Govind*





## Dr Shravanti Joshi (IICT Cohort 3)

**RMIT Senior Supervisor:**  
Dr Samuel Ippolito

**IICT Supervisor:**  
Dr Sunkara V Manorama

During the RMIT-IICT PhD program, I worked under the supervision of leading material scientists and engineers from two different institutions that gave me an opportunity to build positive relationships with researchers of global repute. It helped me to broaden my research context and skills, and helped me to foster a professional attitude in a collaborative environment. I was involved in many activities held during this period, through which I gathered rich experience in networking with academic partners. I learned how to operate high end instruments, participated in prestigious conferences, and had interactions with esteemed scientists visiting the labs.

The research facilities and collaboration with scientists and colleagues from two different research centers provided a platform to improve my communication and organisational skills. From day one, my supervisors treated me as “scientist in making” and never as their student, which accelerated my confidence and helped me develop innovative ideas as a researcher, evident from high impact journal articles, grants and awards. I remain in close contact with them and we continue to publish and collaborate for research grants.



### Images:

*Page 45\_1: Shravanti felicitation at NPTEL*

*Page 45\_2: Shravanti received the “Excellence in Engineering Teaching” prize jointly awarded by Lion’s Club and Woman Doctor’s Wing, Indian Medical Association, Aurangabad*



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## Ramesh Tangirala (IICT Cohort 4)

**RMIT Senior Supervisor:**  
Professor Srinivasan Madapusi

**IICT Supervisor:** Dr B. Satyavathi

The RMIT-IICT PhD program helped me considerably with my research career. I had the opportunity to gain international research experience, and coming to RMIT University was a revolutionary experience in my life. The training and confidence I developed was beyond my dreams. The exposure to the state-of-the-art analytical laboratories at the RMIT and CSIRO gave me hands-on experience to help improve my research skills. My supervisors inspired me throughout my candidature. With their guidance and support, I am planning to submit my thesis in 2020.



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### Images:

*Page 46\_1: Ramesh at work inside RMIT laboratory*

*Page 46\_2: Ramesh at 2019 CHEMECA conference with Nazia Shaik and Professor Suresh Bhargava*

*Page 46\_3: Ramesh at the Speakers' preparation area in 2019 CHEMECA conference*





# Increased Employability – RMIT-IICT PhD Cohorts 1-4



**Dr Shanthi Priya Samudrala**  
(IICT Cohort 2)

Coming to RMIT University was a life-changing experience for me. The training and confidence I developed was beyond what I could have imagined. I'm now a confident young female scientist who can pursue a job anywhere in the world. I was able to undertake much of my work at the state-of-the-art analytical laboratories at the RMIT Microscopy and Microanalysis Facility (RMMF). Access to this equipment was highly beneficial and enabled me to accelerate my research skills through hands-on experience. My inspiring supervisors gave incredible guidance and support – through which I successfully developed a world-class research project.

**Employability:**

Soon after her graduation in 2016, Dr Samudrala secured a position as a Postdoctoral Research Fellow in the Department of Chemical Engineering at Monash University, Melbourne. She was then promoted to Assistant Lecturer, a teaching and research position, where she co-lectures undergraduate and postgraduate students in Advanced Reaction Engineering and Chemical Reaction Engineering and supervises PhD and undergraduate students.

Currently she is a pre-service teacher at Monash University working in association with the Department of Education and Training Victoria, specialised in primary and secondary education.

**Image:**

*Dr Shanthi Priya Samudrala*



**Dr Praveen Chintakunta**  
(IICT Cohort1)

**Employability:**

Dr Chintakunta has moved to the United States and has taken up a postdoctoral position with the University of Kentucky in the Department of Entomology. After his postdoctoral studies, he moved to Baylor College of Medicine (BCM), Houston, Texas, USA - as a post-doctoral associate.

He associated for two years with BCM researching on the development of probes for early diagnosis of Alzheimer's and other neurodegenerative diseases.

Presently, he is working as a Scientist in 'Sai Life-sciences' - a pharma company in Hyderabad, India. He is also looking for research opportunities overseas in academia to pursue further research interests.

**Image:**

*Dr Praveen Chintakunta*





**Dr Srinivasareddy  
Telukutla  
(IICT Cohort 1)**

During my PhD at the RMIT-IICT research centre, I received innovative, multidisciplinary training that has allowed me to take my research to the next level. It has also helped me realise the impact my research could have on real-world applications. The exposure to the state-of-the-art synthesis, analytical and cell culture laboratories was highly beneficial and enabled me to improve my skills through hands-on experience.

**Employability:**

In 2015, Dr Telukutla began working as a Postdoctoral Research Fellow within the School of Science, RMIT University, Melbourne. He works closely with Professor Suresh Bhargava on the design, synthesis and biological evaluation of bioactive gold and platinum metal complexes as potential cancer therapeutics.

**Image:**

*Dr Srinivasareddy Telukutla*



**Dr Vijay Kumar Velisoju  
(IICT Cohort 2)**

It was a really great opportunity to complete my PhD under the RMIT-IICT joint program, as it allowed me to solve research questions independently. I am fully satisfied with this program and I definitely recommend the PhD program at RMIT University to any aspirants who want to pursue their studies in this field.

**Employability:**

Dr. Velisoju graduated from RMIT University in December 2016. Soon after he began his career as a Research Associate in CSIR-IICT, Hyderabad, India. He then moved to LIKAT, University of Rostock, Germany with the prestigious Leibniz-DAAD-Research Fellowship where he worked for one year with Prof. Angelika Brueckner.

Since 2019, he has been working as a postdoctoral fellow at King Abdullah University of Science and Technology (KAUST), Saudi Arabia in Multiscale Reaction Engineering group led by Prof. Pedro Castano.

**Image:**

*Dr Vijay Kumar Velisoju*



**Dr Praneeth Koppineni  
(IICT Cohort 1)**

**Employability:**

Dr Praneeth Koppineni is now Head of Engineering Process at Water Health International, Hyderabad, India. He provides information throughout the various proposal, engineering and construction phases to the proposal and project teams with regard to all aspects of Process Engineering. He also performs process simulations and develops Process Flow Diagrams (PFDs) and material balances.

Now he owns the company "Iconic Technologies Pvt Ltd" ([www.iconictech.in](http://www.iconictech.in)), with a team of 25 people on-roll and 14 people off-role working in his company. The company provides complete water treatment solutions and also designs and develops water purification and wastewater treatment systems.

**Image:**

*Dr Praneeth Koppineni*



### Dr Ram Kumar CB (IICT COHORT 3)

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Since completing the RMIT-IICT Joint Research Program in 2017 under the guidance of Dr Samuel Ippolito (RMIT), Dr Ramanuj Narayan (IICT), and Dr Selvakannan Periasamy, I joined the Institute of Condensed Matter Chemistry Bordeaux (ICMCB), CNRS, France, as a Postdoctoral Researcher (April 2018-May 2020). I worked on Organic electronics for Ferroelectric applications. Afterwards, I came back to India and joined the Solid State and Structural Chemistry Unit (SSCU), Indian Institute of Science (IISc), Bengaluru as an Early Career Researcher. I recently secured (February 2021) the prestigious Dr. C.V. Raman Research Fellowship under the Institute of Eminence scheme, to carry out my research on Organic redox flow batteries for Energy Storage. My research interests include Organic electrochemical/ionic devices for energy storage, chemical/ion sensing, and neuromorphic computing applications.

#### **Employability:**

Dr Ram Kumar is currently working in Solid State and Structural Chemistry Unit (SSCU), Indian Institute of Science (IISc), Bengaluru as a C.V. Raman Research Fellow.

#### **Image:**

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*Dr Ram Kumar CB*



### Dr Jampaiah Deshetti (IICT Cohort 1)

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The RMIT-IICT PhD program helped me substantially with my research career and it was rewarding to have the opportunity to experience international research.

#### **Employability:**

Dr Deshetti is currently working as a Postdoctoral Research Fellow at the School of Science, RMIT University, Melbourne. He works on the synthesis of 1D and 2D materials for photocatalysis and biosensing applications.

#### **Image:**

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*Dr Deshetti receiving Dr Megan Clark Excellence Award at 2015 School of Applied Sciences Awards ceremony. Dr Deshetti received this award as the best postgraduate student in the field of Australian minerals and resources science and technology*



### Dr Sameena Begum (IICT Cohort 4)

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During my one-year stay at RMIT University, I have had the opportunity to improve my overall research skills, be it writing quality scientific papers or presenting my research outputs to peers and professionals via conferences and seminars. I was trained and exposed to operating critical equipment and pilot plant (Anaerobic Digesters) on my own which is one of the best things I enjoyed at RMIT. Access to unlimited literature is another great offer at RMIT which helped me in keeping myself updated with the latest state-of-the-art in my area of research. Overall, pursuing research at RMIT under the supervision and mentorship of Professors contributed to the overall development of my personality as a researcher. My special mention of thanks to Prof. Suresh Bhargava who had extended his unconditional support throughout my stay at RMIT.

#### **Employability:**

She graduated from RMIT in August 2020 and is currently working as a research fellow at CSIR-IICT. She is also looking forward to opportunities to pursue post-doctoral research to take her research to next level.

#### **Image:**

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*Dr Sameena Begum*




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## RACI-NOST Conference

From the Office of the Dean, Research & Innovation (India), STEM College.

*Create and distribute an interactive ESL learning app for younger learners.*

The NOST-RACI-RMIT Organic & Biomolecular Chemistry Conference, hosted by RMIT Australia, was co-organised by the National Organic Symposium Trust (NOST), The Royal Australian Chemical Institute (RACI), and Royal Melbourne Institute of Technology (RMIT) Australia. The conference featured heavyweights in Australian and Indian organic chemistry with the aim of facilitating closer working relationships and innovative research collaborations from India and Australia, among other countries. The NOST Organic Chemistry Conference is the leading Indian conference in organic chemistry and related interdisciplinary areas. NOST was established in 1983 as a platform for young and established Indian organic chemists to promote their research, teaching, and foster linkages with industry and each other.

Having cultivated numerous linkages and shaped the organic chemistry landscape within India, NOST has expanded its scope to cultivate research and industry collaborations worldwide. This year's conference included 66 guests from five countries including India, Japan, France, and New Zealand. Key themes included Total Synthesis, Synthetic methodologies, Bioorganic Chemistry, Physical Organic Chemistry Chemical Biology, and Computational Organic Chemistry. The conference provided graduate research students, early career researchers, and eminent organic chemists alike with the opportunity to present an exposition of their research and mix socially with those in their field.





# Celebrating Diwali 2020

**Please search for:** 2020 Diwali Celebrations RMIT University on Youtube or Google.  
<https://www.youtube.com/watch?v=pSzjVpad1UQ&t=875s>

From the Office of the Dean, Research & Innovation (India), STEM College

A joint online event of RMIT University (Australia) and AcSIR (India) of "Celebration of Diwali – Festival of Light and Hope" held on Nov 12, 2020. Dr Ziggy Switkowski AO (Chancellor, RMIT), Martin Bean CBE (Vice-Chancellor, RMIT), Distinguished Prof. Suresh Bhargava (Dean, Research and Innovation, India, RMIT), Prof Aleks Subic (DVC STEM & VP Digital Innovation), Prof Sujeeva Setunge (Associate DVC Research and Innovation, RMIT), Prof.

R.A. Mashelkar FRS (Academic Professor and former founding Chairman of AcSIR), Dr Ajit Sapra, President (R & D), Reliance Industries, India, Prof. Chandra Shekhar (Chancellor, AcSIR), Prof. Rajender S. Sangwan (Director, AcSIR) besides other well-known Academicians of Australia and India have joined the event to celebrate the Diwali festival.

Images:

2020 Diwali Celebrations | RMIT University





## Contact us

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