



Indian Institute of Technology Madras
Office of Alumni and Corporate Relations

*Celebrating the Generosity
of*

**Shri D Chandrasekhar
and
Smt. Shanthi Chandrasekhar**



IMPACT OF YOUR GIVING IN 2023

Director's Message

Prof. Kamakoti Veezhinathan

Director, IITM

Greetings!

IIT Madras continues to retain her top position for the eighth consecutive year, in the National Institute Ranking Framework, thanks to the world-class research of its faculty and students. The contribution and support of *Alumni and well-wishers like you* has crucially helped this standing and stature. Our achievements in research, education, innovation and entrepreneurship have also earned us the recognition of an 'Institute of Eminence' as well as the top position in the Atal Innovation Ranking from the Government of India.

The institute is making an indelible mark with her '*research with impact*' in several areas including quantum computing, drinking water technology, industrially relevant mathematical models for governance, rendering cancer-cure more effective. Our centres of excellence, the Center for Innovation, Nirmaan – the pre-incubator, the Incubation Cell, technology centres such as '*IITM-Pravartak*' and others, work in unison for not just our nation's building, but societies *world-wide*. We aspire to be locally impactful and globally relevant through all these efforts.

Towards exploring new research frontiers, a Department of Medical Sciences and Technology has been launched to conjoin medicine and engineering. Similarly, a School of Sustainability is on the horizon to research sustainable practices in the Global South. The campus is moving towards 'carbon-net-zero' goal through water conservation by 100% recycling, efficient garbage disposal, and electrification of vehicles. The traditional education system is undergoing a paradigm shift, with our online Bachelor of Science programme in Data Sciences and the National Program of Technology Enhanced Learning, that have won Gold in the 'Lifelong Learning' category and Silver in the 'Best Online Program' category of the Wharton-QS Reimagine Education Awards 2022 respectively. IIT Madras is leading this revolution from the front.

Such achievements are not possible without the deep-rooted faith and support of alumni and well-wishers such as yourself. We are indebted to you for your generous, bountiful, and impactful contributions. On behalf of IIT Madras, I offer you our deepest gratitude for continuing to strengthen the Institute. Together with your support, we are confident of building an IIT Madras that is more inclusive, diverse, and enabled by an ecosystem to be nationally relevant and globally recognised. Thank you!



Dean's Message

Prof. Mahesh Panchagnula

Dean, Alumni & Corporate Relations, IITM

Greetings!

I express my heartfelt gratitude to you for your generous support to IIT Madras. We appreciate your passion in supporting the causes you do and I assure you that your contributions will be optimally utilized. This report has been compiled to convey how your largesse has touched lives and made a difference at IIT Madras. In keeping with the rapid, contemporary strides in science, technology we have set ambitious goals for ourselves - your continued enthusiasm and support will help us greatly in these endeavors.

IIT Madras is far more diverse in its set of pursuits, more green and more research-focused. And yet, it remains unchanged over these years, it is still the best Institute in the country, and attracts the best students that India has to offer to come and make a mark. I also cordially invite you to visit your campus to see for yourself, the impact of your contribution, and the growth and transformation the Institute has undergone over the years.

We can never express our gratitude enough for all that you have done - Thank You!



Shri D Chandrasekhar

[1970/BT/MT]

Shri D. Chandrasekhar, affectionately known as DC among friends and well-wishers embarked on his entrepreneurial journey in 1974 with no initial capital, he demonstrated a remarkable Midas touch, steering various engineering ventures to success, encompassing machine-building, aluminium foundry, electro-less nickel coating, and light chemicals. Notably, he boasts an unparalleled 51 years as an entrepreneur with zero lost hours due to industrial disputes.

Twice honored with the Regional Export Award from the Government of India's Engineering Export Promotion Council, his business acumen is widely recognized. In the realm of social responsibility, Shri Chandrasekhar has been a benevolent force in education and healthcare. Serving on the managing committee of the Ramakrishna Ashrama for over years and founding member and President of the Madras Dyslexia Association showcase his commitment. His roles as founder-trustee of the Rotary Central TTK-VHS Blood Bank, founder-member of the VHS Institute of Cardiovascular Sciences, and leadership positions in various alumni associations underline his dedication to community welfare.

Shri DC, who has been dedicatedly serving as the Secretary of the IIT Madras Alumni Charitable Trust since its establishment on 23rd January 1993, played a pivotal role in pioneering the first of its kind initiative.

His integral role in the development and growth of IIT Madras is evident through his sincere service, substantial donations, unwavering patronage, and invaluable advice in various fund-raising forums conducted through IIT Madras Charitable Trust. His visionary leadership has significantly contributed to the institute's financial strength, paving the way for sustainable growth and excellence. The impact of Shri D Chandrasekhar's contributions to IIT Madras is profound, touching the lives of many and creating a lasting legacy of excellence.



The report will present a thorough assessment of the impact that your contributions have made towards the causes outlined below:

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S. R. Rajagopalan Institute Chair

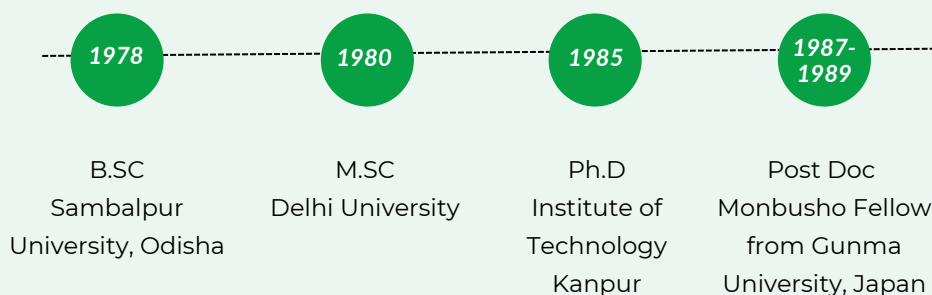
The first occupant of the Chair was **Prof. Sangaranarayanan M V** who has retired. **Prof. Ashok Mishra**, Department of Chemistry is current occupant of the Chair.

Introduction about Dr. S.R. Rajagopalan

Dr. S.R. Rajagopalan received his Ph.D. from IIT, Madras in the year 1970. He was a research scholar in the Chemistry Department of IIT Madras during the years 1964-67, working on the optical properties of electrodeposited films, which culminated in his thesis on this subject and earned him his Ph.D. degree. In 1953 he joined as a laboratory Assistant in CECRI (a CSIR lab) and worked till he joined IIT, Madras in 1964, on various aspects of electro deposition. He published his findings in several International journals. Based on his research records and publications, IIT Madras, admitted him for the Ph.D. program, waiving the requirement of an MSc degree, a rare honour.

Current Chair Occupant

Academic Background:



Research Interests:

- Basic photophysics of organic molecules in solution phase, with particular emphasis on photophysics of extended aromatic systems as well as excited state phototropism.
- Extending the frontiers of analytical fluorimetry involving the integration of novel instrument designs, fluorescence data collection strategies and analytical methodologies.
- Use of novel fluorescent molecular probes as well as novel probe applications of known fluorescent molecules in understanding soft matter systems like lipid bilayer membranes, niosomal membranes, hydrogels etc.



Dr. S.R. Rajagopalan



Prof. Ashok Kumar Mishra
Department of Chemistry

Prof. Ashok Kumar Mishra works in the general areas of Physical Photochemistry and Fluorescence Spectroscopy. After a stint in Sambalpur University as a faculty member, and in Gunma University (Japan) as a Monbusho fellow, he joined IIT Madras in 1992. Prof. Mishra became Associate Professor in 1996 and Professor in 2004. He was the Head of SAIF during 2004-07 and Dean Academic Research during 2015-21.

Prof. Ashok Kumar Mishra works in the general areas of Physical Photochemistry and Fluorescence Spectroscopy. After a stint in Sambalpur University as a faculty member, and in Gunma University (Japan) as a Monbusho fellow, he joined IIT Madras in 1992. Prof. Mishra became Associate Professor in 1996 and Professor in 2004. He was the Head of SAIF during 2004-07 and Dean Academic Research during 2015-21.

His area of research is Photophysical Chemistry and Fluorescence Spectroscopy and its subareas are the development of innovative photophysical concepts, instrumentation and fluorimetry applications, the development of novel fluorescent molecular probes as well as probe concepts, and their applications for the understanding of micro- and nano-scale heterogeneous systems like lipid bilayer membranes, hydrogels, dendrimers and aggregates and Understanding fundamental photophysics of various excited state intra- and inter-molecular processes.

Awards and Recognition:

1987-89	'Monbusho' Fellowship by Govt. of Japan
1997	'Prof RC Tripathy Young Chemist Award', Orissa Chemical Society
2001	CRSI Bronze Medal by Chemical Research Society of India
2002-03	JSPS Invitation Fellowship, Japan
2004	Fellow, National Academy of Sciences India (FNASc)
2012	Acharya PC Ray Memorial Award, Indian Chemical Society
2013	Prof W U Malik Memorial Award, Indian Council of Chemists
2015-till_date	BoG Member, NIT Puducherry
2017	KK Rohatgi Mukherjee Memorial Lecture Award, Indian Photobiology Society
2018-21	Member DST-SERB-PAC(IPC)
2019-22	Member DST-FIST Chemistry
2021	SR Mohanty Memorial Lecture Award, Orissa Chemical Society
2023-onwards	Vice-President, Indian Photobiology Society (IPS)

He is also a Member of Chemical Research Society of India (CRSI); Indian Photobiology Society (IPS); Indian Society for Radiation and Photo Sciences (ISRAPS); Orissa Chemical Society (OCS); Luminescence Society of India (LSI)



S.R. Rajagopalan Institute Chair launch on 19th July 2018

Thank you note from Chair Occupant

I am indeed grateful for the 'S.R. Rajagopalan Institute Chair' position. I have very high regard for Dr Rajagopalan for his remarkable depth of knowledge in Chemistry, and his exceptional ability of translating the knowledge to a variety of diverse applications. I feel fortunate and honored that I was considered worthy of this Chair. My sincere thanks to the Donor, Mr D Chandrasekhar, for instituting the Chair.



M.A. Parameswaran Institute Chair

The first Chair occupant of the Chair is **Prof. A Ramesh**

Introduction about Prof. M.A. Parameswaran

Professor Parameswaran was well-known for his dedication to teaching mechanical design courses. He is also specialized in the area of material handling problems. With his excellent teaching, he endeared himself to many students. He had been a visiting Professor at the University of Technology, Malaysia, and also visited National University, Singapore in 1993. Professor Parameswaran was involved in many consultancy projects with PSUs such as Neiveli Lignite Corporation. He is known among his peers as a designer par excellence. Professor Parameswaran was President of the IIT Madras Alumni Association in the 1990s. He was instrumental in Alumni Silver Unions during that time. He was one of the first trustees for the IIT Madras Alumni Charitable Trust, formed in 1993. Students of Prof. Parameswaran instituted this Chair in his memory.

Current Chair Occupant

Academic Background:

Ph.D. in Internal Combustion Engines (1990) from the Indian Institute of Technology Madras

Broad Areas of Research:

Prof. Ramesh's main areas of research are combustion and emission control in Internal combustion engines, Hybrid electric drives for automotive applications, Alternative fuels and novel combustion systems like reactivity-controlled compression ignition, Gasoline Direct Injection and hot surface ignition. Engine instrumentation and control.



Prof. Parameswaran



Prof. A. Ramesh

**Department of Mechanical
Engineering**

Current projects and those undertaken in 2023:

- Development of a Hot Surface Ignition Engine Running on neat methanol For Automotive Applications.
- A Novel Biofuel Based Twin Injector Multi-mode Genset Engine for High Performance and Low NOx Emissions - Development and Demonstration.
- Development and validation of a cost-effective hybrid electric drive solution for small two wheelers for reducing CO2 emission (HERCET)
- Studies on combustion chamber development for GDI engines.

Current projects and those undertaken in 2023:

- Awarded the Gem of ACCET award in 2017.
- Srimathi Marti Annapurna Gurunath Award for Excellence in Teaching by Indian Institute of Technology Madras, 2017.
- Awarded the Life Time Achievement Award by SAE India Southern Section in 2018.

Plans for the year 2023-24

- Optimization studies on the performance and emissions of a parallel hybrid two wheeler for sizing of the components for a particular operating scheme.
- Development and demonstration of a two-wheeler with control strategy for fuel economy employing a novel two speed automatic gear train.
- Combustion and emission studies on a DME-Biogas RCCI engine along with small amounts of hydrogen for combustion enhancement.
- Further CFD and experimental studies on the use of methanol port injection along with methanol direct hot surface ignition for extended load range.



Alumni Community Institute Chair

Prof. R. Nagarajan is the first occupant of the 'Alumni Community Chair' and he is currently Professor of the Department of Chemical Engineering at IIT Madras. He has been a visible face of IITM, with the alumni and corporate community for about a decade and elevated the institution's presence in the minds of alumni to great heights.

He obtained his B.Tech. in Chemical Engineering in 1981 from IIT Madras, and a Ph.D. in the same field from Yale University. He worked with IBM Storage Systems Development Laboratory in San Jose, and he joined IIT M in 2004. From Feb 2009 - Aug 2012, he served as Advisor, Office of Alumni Affairs at IIT Madras, and From Sep 2012- Sep 2018, as Institute's first-ever Dean of International & Alumni Relations.

Research Priorities:

- Coal beneficiation using the ultra-sonic fields
- Nano emulsions of plant oils used for cancer treatment
- Dust-repellent surfaces and coatings for building exteriors

Doctoral research:

- One Ph.D. thesis defended in Jan2020 (Dr. Srivalli Hariharan)
- 2 Ph.D.'s currently co-Guided with Prof. T Pradeep on an industry-relevant project, and one External Ph.D. from CSIR under solo Guidance

Post-Doctoral Research:

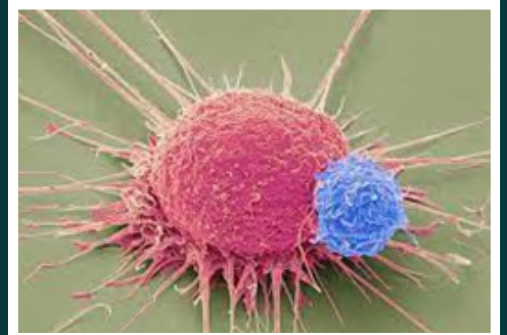
- Three post-doctoral Fellows being mentored currently
- They have developed a nano-scale emulsion of clove bud essential oil. Using a technique with potent anticancer and antibacterial activity

Prof. R Nagarajan and his team of scientists, Dr. M. Joyce Nirmala, Mrs. Latha Durai and Mr. Vineet Gopakumar developed formulation using clove oil to combat cancer. To view the video "IIT Madras researchers mark the dawn of a new age of anticancer medicine".

For more details [CLICK HERE](#)



Prof. R. Nagarajan



Dr. M.N. Dhandapani Institute Merit Prize

Dr. M.N. Dhandapani Institute Merit Prize is awarded to the student with best academic record in 1st and 2nd semesters of M.Tech. programme in the Metallurgical and Materials Engineering Department. A silver medal and cash award of Rs.10,000/- is presented to the student. So far 8 students have received this prize during Institute Day.

Sl.no	Name of the Student	Year Awarded
1	Paturi Sai Teja	2023
2	Suddapalli Sai Rama Krishna Parameswar	2022
3	Pavithra N	2021
4	Supriya Anand	2020
5	Sripooja Mishra	2019
6	Vishwath Ram Amarnath	2018
7	Rajath Alexander	2017
8	Guruprasad Raghavan	2016



"I am writing to express my heartfelt gratitude to you for the Dr. M.N. Dhandapani award and cash prize I received. The award not only recognizes my hard work and dedication but it also boosts my confidence and motivates me to continue pursuing my dreams. Your generosity and kindness have encouraged me to strive for excellence in my field. Thank you once again for your generosity and support."

-Paturi Sai Teja



"I would like to personally thank the donors of the esteemed prize that I have the honor of receiving. Thanks for the recognition you gave me for the work I have put during my M.Tech., and I would like to say that this award meant a lot to me as it would help me work harder in the years to come. Thank you for pushing me to work harder. It's been an absolute honor receiving this prize. Thank you."

*-Suddapalli Sai Rama Krishna
Parameswar*



Dr. M.N. Dhandapani Memorial Convocation Prize

Dr. M.N. Dhandapani Memorial Convocation Prize is awarded to the B.Tech student with the best academic record in Metallurgical & Materials Engineering Department. The winner is presented with a Silver Medal and cash award of Rs. 15,000/-. So far 28 students have received the prize during Convocation.



“Thank you for your unwavering commitment to promoting academic excellence and supporting students like myself in our educational pursuits. Your contribution has left an indelible mark on my life, and I promise to make the most of this incredible opportunity, and I certainly hope to make this the first of many great things to come.”

--Vir Karan

S.No	Recipient Name	Year of Award
1	Vir Karan	2023
2	Venkatramanan Meenakshisundaram	2022
3	Taher Murtaza Poonawala	2021
4	Kumaresh K R	2020
5	Akash Ramdas	2019
6	Naveen S R	2018
7	Rohith Pinnamaraju	2017
8	Kevin Sanghvi	2016
9	Divyasree P K	2015
10	Shahane Ninad Makarand	2014
11	Vrat Pranav Sandeep	2013
12	Kirthi C	2012
13	Sivaraman Ramanathan	2011
14	Aravind K	2010
15	Nikhil D Kamath	2009



"I kindly like to thank the donor for this award presented to me at the convocation. I put all my effort into learning the courses and understanding the concepts taught by the professors. I like to thank the donor for providing an opportunity to appreciate my work."

-- Venkatramanan
Meenakshisundaram

16	Verma Divyanshu Brijmohan	2008
17	Vivek Raghunathan	2007
18	J Karthik	2006
19	Shankar Swaminathan	2005
20	R Arvind Subramaniam	2004
21	Bhavani Shankar S	2003
22	Vignesh Gowrishankar	2002
23	Harsh Anand Verma	2001
24	Rajappa Tadepalli	2000
25	Kamity Kiran	1999
26	Arun Prakash Baskaran	1998
27	Arvind R	1997
28	Balaji C	1996



Dr. M N Dhandapani Merit Cum Means Scholarship Endowment

Till 2015, the Tuition fee for a student was Rs.90,000/- per annum. The Merit-Cum Scholarship fully supported the total cost of tuition fee. In 2016, tuition fee was revised to Rs.2 lakhs per annum. The Govt. provided a scholarship of Rs. 1.33 Lakhs which translates to 2/3rd of the tuition fee. This leaves a sum of Rs. 66,667/- to be borne by the student. This Dr. M N Dhandapani Merit Cum Means Scholarship will provide Rs. 66,667/- per year to the meritorious students identified for the scholarship.

S. No	Name of the Students	Year - Scholarship
1	Abhishek Goyal	2020 - 2023
2	Rohith Srinivaas M	2016 - 2019



I am extremely grateful for this opportunity you have provided me with. This has greatly reduced the financial burden on me and my family. This particular scholarship immensely helped me in focusing on my academics and extracurricular activities. Such generous Alumni is a definite sign of the greatness of this institution and I am proud to be sharing the honour of studying in the same institution as they have. Without this scholarship, my stay here would definitely be questionable unless we took a loan which again comes with countless problems.

I am forever indebted to this favour and vow to do my part when the time comes.

--- Abhishek Goyal



Prof. M. S. Ananth

Endowment Fund



Prof. M. S. Ananth

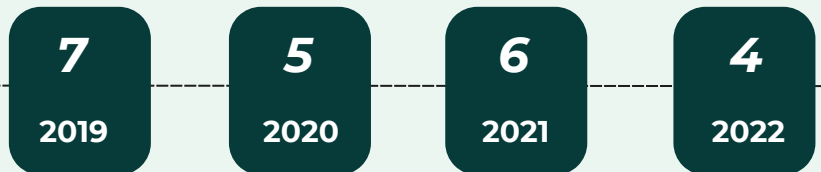
This Endowment Fund was established to honor **Prof. M. S. Ananth**, who served as the Director of IIT Madras from 2001 to 2011. He was well-known for his contributions to science and teaching, as well as his tireless efforts to develop higher education and research in India.

The following activities are supported through this endowment fund:

- To support socially relevant projects.
- To support the educational needs of the children of staff members of self-help organizations who work on the IITM campus.

Socially Relevant Projects:

Total number of projects accomplished over the years.



In 2022 alone, the institute successfully executed four impactful projects.

Project Name:

Construction and Demolition (C&D) Waste Management and the Role of the Informal Unorganized Sector in India: Case of New Delhi

Objective of the project:

Identifying early-stage demolition projects in different parts of the City and various stakeholders involved in the identified projects to understand their roles in an informal/formal C&D waste management system through interviews. Results indicate significant environmental and economic benefits the informal sectors contribute as they engage in deconstruction, salvaging several materials otherwise considered waste and adding value to the formal recycling process through their selective demolition practices.



Prof. Nikhil Bugalia
Department of Civil Engineering

Project Name:

Tracking Beehive Health Using IoT Technology

Objective of the project:

The work aims to build an IoT-based tracking system to monitor the health of a beehive. It helps minimize manual inspection of the beehives so that beekeepers can handle a more significant number of beehives simultaneously, improving their income level.



Prof. Madhu Mutyam
Department of Computer Science and Engineering

Project Name:

Farmer-friendly, point-of-use, portable heavy metal sensors with cell phone interface: A new technical aid for the agricultural sector

Objective of the project:

Analyzing water quality and heavy metal presence in water samples collected from several temple tanks in Rameswaram, Tamil Nadu using the ICP-OES facility at SAIF- IIT Madras. The project is aimed at helping farmers and agricultural cooperatives to decide on soil quality by measuring soil salinity and heavy metal presence detection so that they can sow crops in the right location and maximize crop yields.



Prof. Sreeram K. Kalpathy
Department of Metallurgical and Materials Engineering

Project Name:

Community Screening of “Kasimedu fisherwomen” for cervical cancer using a self-sampling kit and an indigenous innovative detection device.

Objective of the project:

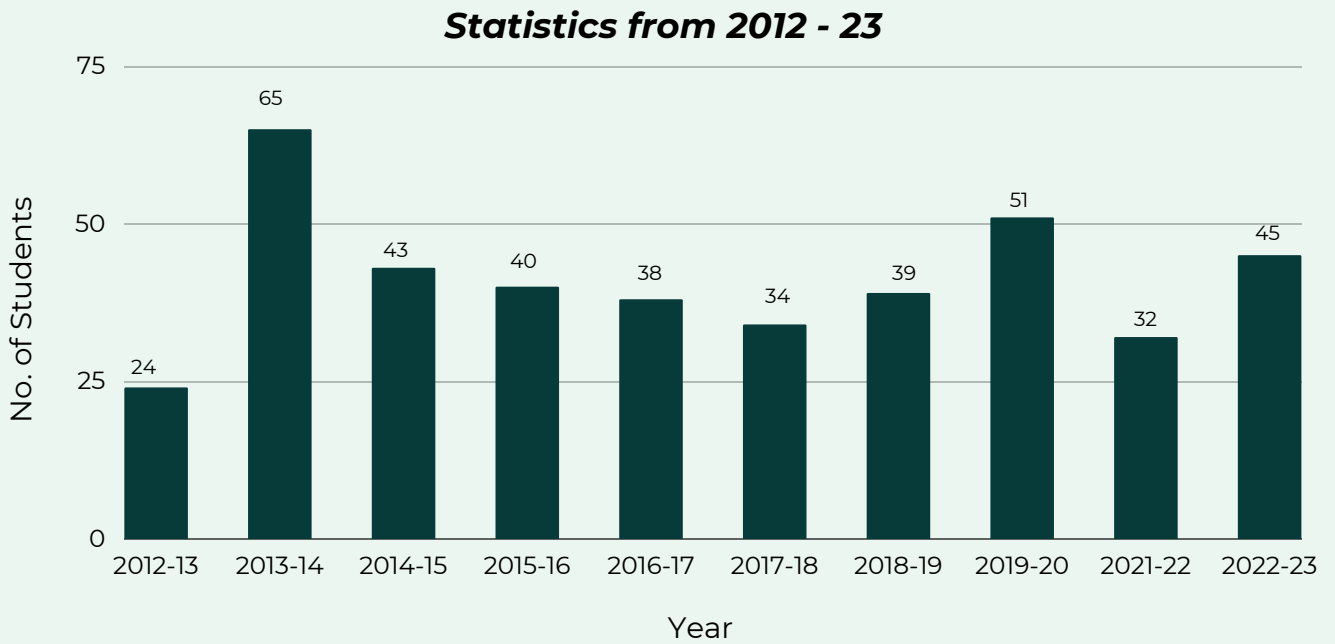
This project is aimed at a community screening of cervical cancer in Kasimedu fisherwomen and detecting an HR-HPV in these women using an indigenous detection device (developed at IITM). Fabrication of point of care device for detection of HR-HPV and continuous field work – community screening by enrolling more women into the cervical cancer screening.



Prof. Suresh Kumar Rayala
Department of Biotechnology

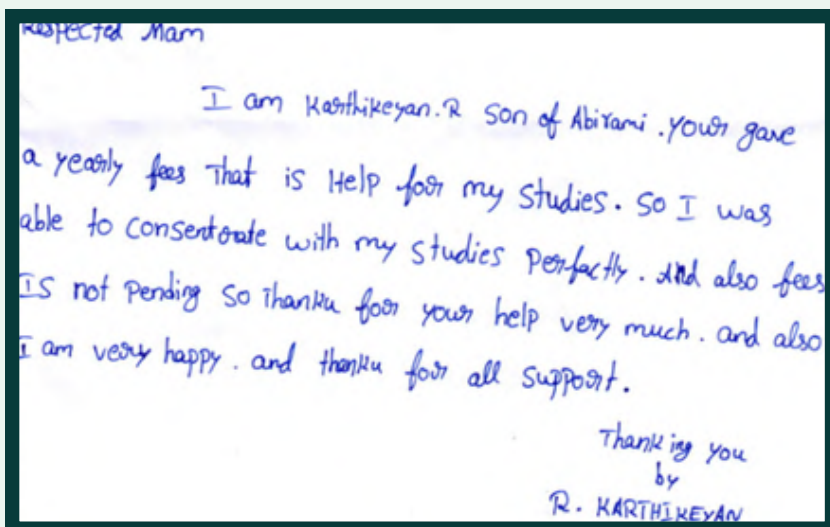
Support to children of staff members of the self-help organization who work in IITM:

The below graph depicts the number of students who have reaped the benefits over the years.



In 2022, 45 children of the IIT Madras campus Self-Help group staff have been given support to their tuition fee through this scheme.

Gratitude Note from some of the beneficiaries:



R Karthikeyan



Nitish and Sharmila

சீமா !
 சூர்யா எழுதி வந்திருப்பது சந்திரமணிநாயகர் சந்திரமணிநாயகர்
 Y. நிதிநிதி VII படித்து வருகிறார். சந்திரமணிநாயகர் மகன்
 சந்திரமணிநாயகர் Y படித்து வருகிறார். சந்திரமணிநாயகர்
 படிக்க வாய்க்கிட்டுவோம். சந்திரமணிநாயகர் சந்திரமணிநாயகர்
 பள்ளி படிப்பதற்கு பில் கொடுக்கப்படுகிறது. மிக்க நன்றியை
 சிம்பிடிக்கு
 Y. Satshya



K. Dhanush Kumar

Good morning maam .
 I am K.channamma's son .
 Thankyou so much maam for giving us money .
 It has helped us .
 We will be always thankful to you maam
 We will never forget this .



K. Vinushiya

Respected madam
 My self K.Vinushya I am studying 10th standard
 My mother name K. Senthil. I wish to thank you for
 the support and help my education. I wish to express
 my heartfelt gratitude for your help in
 financing my studies.



Thank you for your support!

Shri D Chandrasekhar and Smt. Shanthi Chandrasekhar

Thank you for your sustained generosity to IIT Madras over the years. Contributors such as yourself enable our students and Professors to dream big and work towards a better and brighter future. We hope you are proud of your alma mater and how it has remained steadfastly committed to academic and research excellence during and after your time here. You and your family have been instrumental in facilitating this significant growth.

Our efforts to nurture the culture of academic excellence that is the hallmark of IIT Madras - quality education, cutting-edge research, and unfettered creativity - shall continue. We are privileged and humbled to have you and your family walking with us along this trail. We wish you and your family the best always in all walks of life!



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