



# PONDICHERRY UNIVERSITY

(A Central University established by an Act of Parliament No. 53 of 1985)

ACCREDITED WITH "A" GRADE BY NAAC

## INFORMATION BROCHURE

*(Updated as on 14.10.2022)*

### Admissions 2022-23 - CUET 2022

**(for Integrated PG Programmes)**



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## From the Vice-Chancellor's Desk

It is a matter of great pride and privilege to be a part of Pondicherry University fraternity as its Vice-Chancellor. I consider that students are fortunate to get a quality education under the mentorship of worthy teachers at Pondicherry University, where the curriculum is regularly upgraded to meet the challenges of the 21st century. I am happy to welcome all the students joining this University for various Post-Graduate and Doctoral programmes for the academic year 2022-2023.

My vision is to encourage a transparent culture in all fields that will enthuse in teamwork amongst all the members of the University and bring out the best out of faculty and students. The aim is to reinforce the vein for exploration to achieve global distinction and excellence. The quality of education disseminated in the University churns the vibrant young minds with the major skill-sets required for the industry. The courses offered are very carefully designed keeping the functionality of output to bridge the gap between higher education and employment. We kindle the passion in students and churn them out as a brigade of enterprising leaders.

The publication of our in-house research journals with high academic visibility and impact factor, various Memorandums of Understanding and collaboration with International and National Universities for various programmes, research projects and conferences, specially designated 'Chairs', for academic excellence, distinguished faculty, and enthusiastic students are taking our university to incredible heights.

In addition to the green campus, excellent architecture, state-of-the-art infrastructure, well-equipped laboratories, cosy workrooms for research and teaching, facility of online admissions, Credit-Based Evaluation System, more than twenty thousand learners in various disciplines, two off-campus, one located in Port Blair (Andamans) and another at Karaikal, with two Constituent Colleges, one at Puducherry and another at Mahe add credit to Pondicherry University. Further, the campuses off the University are ICT enabled and provide an e-learning and e-connect environment, along with class coordination system, document management system as well as virtual class rooms.

I am confident that the Pondicherry University fraternity will produce excellent scientists, technocrats, visionary leaders, competent researchers and teachers in the fields of science, engineering, humanities, management and social sciences, who will not only bring laurels to the university but also make the nation proud.

**PROF. GURMEET SINGH**  
VICE-CHANCELLOR

VISITOR	<b>Smt. DROUPADI MURMU</b> Her Excellency, the President of India
CHANCELLOR	<b>Shri. JAGDEEP DHANKHAR</b> Hon'ble Vice-President of India
CHIEF RECTOR	<b>Dr. TAMILISAI SOUNDARARAJAN</b> Her Excellency, the Lt. Governor of Puducherry
VICE-CHANCELLOR	<b>Prof. GURMEET SINGH</b>

Director (i/c) (Studies, Educational Innovation & Rural Reconstruction)  
**Prof. K. THARANIKKARASU**

O.S.D. (Culture & Cultural Relations)  
**Prof. RAJEEV JAIN**

Registrar (i/c)  
**Prof. AMARESH SAMANTARAYA**

Finance Officer (i/c)  
**Prof. D. LAZAR**

Controller of Examinations  
**Shri. SADANAND G. SWAMI**

Librarian  
**Dr. M. VIJAYAKUMAR**

## DEANS OF SCHOOLS

Prof. G. CHANDHRIKA	: Sri Subramania Bharathi School of Tamil Language & Literature (i/c)
Prof. MALABIKA DEO	: School of Management
Prof. P. TIRUPATHI RAO	: Ramanujan School of Mathematical Sciences
Prof. M.S. PANDIAN	: School of Physical, Chemical & Applied Sciences
Prof. H. PRATHAP KUMAR SHETTY	: School of Life Sciences
Prof. CLEMENT SAGAYARADJA LOURDES	: School of Humanities
Prof. B.B. MOHANTY	: School of Social Sciences & International Studies
Prof. T. CHITHRALEKHA	: School of Engineering & Technology
Prof. K. CHELLAMANI	: School of Education
Prof. PANKAJ KUNDRA	: School of Medical Sciences (i/c)
Prof. P. SRIDHARAN	: School of Performing Arts
Prof. S. VICTOR ANANDKUMAR	: School of Law (i/c)
Prof. C. K. RAMAIAH	: School of Media & Communication
Prof. K. THARANIKKARASU	: Madanjeet School of Green Energy Technologies

<b>SCHOOLS, DEPARTMENTS / CENTRES &amp; RESPECTIVE HEADS / COORDINATORS</b>			
<b>Sri Subramanla Bharathi School of Tamil Language &amp; Literature</b>		<b>School of Social Sciences and International Studies</b>	
	Dr. G. Chandhrika	Department of Anthropology	Dr. Jesurathnam Devarapalli
<b>School of Management</b>		Department of Sociology	Dr. C. Aruna
Department of Management Studies	Dr. B. Charumathi	Department of History	Dr. N. Chandramouli
Department of Management (Karaikal Campus)	Dr. S.A. Senthil Kumar	Department of Social Work (i/c)	Dr. K. Anbu
Department of Commerce	Dr. P. Natarajan	Department of Politics & International Studies (i/c)	Dr. N.K. Kumaresan Raja
Department of Commerce (Karaikal Campus)	Dr. S. Amilan	Centre for European Studies	Dr. G. Chandhrika
Department of Economics	Dr. Prasant Kumar Panda	UNESCO-Madanjeet Singh Institute of South Asia Regional Cooperation (UMISARC) & Centre for South Asian Studies	Dr. A. Subramanyam Raju
Department of Tourism Studies	Dr. R. C. Anu Chandran	UGC Centre for Maritime Studies (Coordinator)	Dr. A. Subramanyam Raju
Department of Banking Technology	Dr. V. Mariappan	UGC Centre for Southern Asia Studies (Centre Head)	Dr. N.K.Kumaresan Raja
Department of International Business	Dr. P. G. Arul	Centre for Women's Studies (Centre Head i/c)	Dr. C. Aruna
<b>Ramanujan School of Mathematical Sciences</b>		Centre for Study of Social Exclusion and Inclusive Policy( Centre Head i/c)	Dr. M. Thanuja
Department of Mathematics	Dr. Rajeswari Seshadri	<b>School of Engineering &amp; Technology</b>	
Department of Statistics	Dr. Kiruthika	Department of Computer Science	Dr. S. Siva Sathya
<b>School of Physical, Chemical and Applied Sciences</b>		Department of Computer Science (Karaikal Campus)	Dr. S. Bhuvaneswari
Department of Physics	Dr. R. Sivakumar	Department of Electronics Engineering	Dr. T. Shanmuganantham
Department of Chemistry	Dr. Bala. Manimaran	Centre for Pollution Control and Environmental Engineering	Dr. S. Gajalakshmi
Department of Earth Sciences	Dr. Rajneesh Bhutani	<b>School of Education</b>	
Department of Applied Psychology	Dr. B.Rangaiah	Dean	Dr. K. Chellamani
Department of Coastal Disaster Management (i/c)	Dr. K. Dharanirajan	Centre for Adult & Continuing Education	
<b>School of Life Sciences</b>		<b>School of Medical Sciences</b>	
Department of Biochemistry & Molecular Biology (i/c)	Dr. R. Rukkumani	<b>School of Performing Arts</b>	
Department of Biotechnology	Dr. A.Hannah Rachel Vasanthi	Department of Performing Arts (i/c)	Dr. K.R. Rajaravivarma
Department of Microbiology	Dr. Joseph Selvin	<b>School of Media &amp; Communication</b>	
Department of Food Science and Technology	Dr. S. Haripriya	Department of Electronic Media & Mass Communication (i/c)	Dr. Radhika Khanna
Department of Ecology & Environmental Sciences	Dr. D. Ramamoorthy	Department of Library and Information Science (i/c)	Dr. Rekha Rani Varghese
Department of Ocean Studies & Marine Biology	Dr. R. Mohanraju	<b>Madanjeet School of Green Energy Technologies</b>	
Department of Bioinformatics	Dr. P. T. V. Lakshmi	Department of Green Energy Technology	Dr. P. Elumalai
<b>School of Humanities</b>		Centre for Nanoscience & Technology (i/c)	Dr. K. Suresh Babu
Department of English	Dr. T. Marx	<b>School of Law</b>	
Department of French	Dr. C. Thirumurugan	Head	Dr. D. Kannan
Department of Hindi (i/c)	Dr. C. Jaya Sankar Babu		
Department of Sanskrit	Dr. J. Krishnan		
Department of Philosophy	Dr. B.R. Shantha Kumari		
Department of Physical Education and Sports	Dr. G. Vasanthi		
Centre for Foreign Languages (i/c)	Dr. C. Thirumurugan		
Escande Chair in Asian Christian Studies (Coordinator)	Dr. N. Jonas		



OSD, College Development Council	Dr. K. Chandrasekhara Rao
Dean, Students' Welfare	Dr. Yedla Venkata Rao
Deputy Dean, Students' Welfare	Dr. Sibi P.S.
Dean, International Relations	Dr. A. Subramanyam Raju
Dean, Research	Dr. Basant Kumar Tiwary
Director, Directorate of Distance Education	Dr. C.K. Ramaiah
Director (i/c), Directorate of Physical Education & Sports	Dr. G. Vasanthi
Director, UGC - Human Resource Development Centre	Dr. Rajneesh Bhutani
Principal(i/c), Community College, Puducherry Campus	Dr. Lalitha Ramakrishnan
Community College, Mahe Centre	Dr. M.P. Rajan
Central Instrumentation Facility (i/c)	Dr. C. Sivasankar
Central Maintenance Workshop	Dr. C. Sivasankar
Centre Head, Karaikal Campus	Dr. S.Bhuvaneswari
Educational Multi-media Research Centre (Head i/c)	Dr. Radhika Khanna
Puduvaivaani - Community Radio Station	Dr. V. Santhi Siri

## ADMINISTRATIVE OFFICERS

<b>VICE-CHANCELLOR'S SECRETARIAT</b>		Assistant Registrar (Public Relations)	K. Mahesh
Deputy Registrar	M.P.T. Sagayaraja	Assistant Registrar ('Transport)	D. Venkataramanamurthy
Assistant Registrar	S. Raj Kumar	Assistant Registrar (Project Cell)	K. Rajalakshmi
<b>DIRECTORATE OF SEI&amp;RR</b>		Assistant Registrar (Special Reservation Cell)	Dr. S. Murugaiyan
Assistant Registrar	D. Venkataramanamurthy	Assistant Registrar (IQAC)	D. Venkataramanamurthy
<b>REGISTRAR'S SECRETARIAT</b>		Deputy Registrar (Services & Hostel)	Moti Chand Prasad
Assistant Registrar	Dr. S. Murugaiyan	Assistant Registrar (Services & Hostel)	Pushkar Singh
<b>OFFICE OF THE REGISTRAR</b>		<b>Affiliation Wing</b>	
Deputy Registrar (Administration- Teaching & Non-Teaching)	M.P.T. Sagayaraja	Assistant Registrar	K. Murugan
Assistant Registrar (Admn)-I	N. Giridharan	<b>Office of the Controller of Examinations</b>	
Assistant Registrar (Admn)-II	P. Mourougappane	Deputy Registrar (Exams)	Dr. A. Saravanan
Assistant Registrar (Teaching) - I	K. Mahesh	Assistant Registrar (Exams)	P. Rajasekaran
Assistant Registrar (Teaching) - II	D. Nandagopal	Assistant Registrar (Exams)	K. Sivagurunathan
Deputy Registrar (i/c) (Recruitment Cell)	N. Giridharan	Assistant Registrar (Exams)	D. Noble Raj
Deputy Registrar (Academic)	P. Ajai Babu	Assistant Registrar (Exams)	V. Gomathi
Assistant Registrar (Academic)	Birinder Singh	<b>Office of the Finance Officer</b>	
Deputy Registrar (Planning & Development)	P. Ajai Babu	Deputy Registrar (F&A)	R. Segar
Assistant Registrar (Planning & Development)	Pushkar Singh	Deputy Registrar (F&A)	Gautam Kumawat
Deputy Registrar (Purchase & Stores) & (DDE)	Lt. Cdr. Raj Kumar	Assistant Registrar (F&A)	S. Uthradevi
Assistant Registrar (Purchase & Stores)	D. Nandagopal	Assistant Registrar (F&A)	K. Rajalakshmi
Assistant Registrar (CPP Portal & Gem Portal)	Pushkar Singh	Assistant Registrar (i/c) (F&A)	K. Mayavan
Assistant Registrar (Legal Cell)	K. Murugan	Systems Analyst	Dr. R. Ramesh

Engineering Wing		Vigilance and Security Wing	
Assistant Engineer (Electrical)/ Head	V. Mourougavelou	Officer on Special Duty	Nallam Krishnaraya Babu
Assistant Engineer (Civil)	G. Raghupathi	<b>PU Port Blair Campus &amp; Lakshadweep Campuses</b>	
Assistant Engineer (Civil)	S. Venkatesan	Nodal Officer	S. Raj Kumar

## OTHER OFFICERS

Ananda Rangapillai Library		Deputy Chief Warden (Boys)	Dr. Suresh Joseph
Assistant Librarian	Dr. M. Baskar	Deputy Registrar	Moti Chand Prasad
Assistant Librarian	Dr. G. Sivasubramanian	<b>Wardens: Boys' Hostels</b>	
Assistant Librarian	Dr. K.M. Shibu	Bharathidasan	Dr. Pramod Kumar
Assistant Librarian	Dr. P. Vijayakumar	Kabirdas	Dr. Krishna Kumar Jaiswal
Systems Analyst	K. Palanivel	Ilango Adigal Hostel & Mess	Dr. Kubendran
Computer Centre		C. V. Raman	Dr. C. Satheesh Kumar
Systems Manager	Marie Stanislas Ashok	Subramania Bharathi	Dr. K. Suresh Joseph
Information Officer	M. Sundara Mohan	Tagore	Mr. Iftekhhar Alam
Programmer	W. J. Kalesha	Kalidas	Dr. Santhosh Mathew
Placement Cell		Kannadasan	Dr. K.R. Rajaravivarma
Placement Officer	Dr. S.K.V. Jayakumar	Kamban	Dr. Yugeswaran Subramaniam
Horticulture		Foreign Students	Dr. C. Satheesh Kumar
Deputy Registrar	Moti Chand Prasad	Sarvapalli Radhakrishnan	Dr. A. Praveen
Health Centre		Moulana Abul Kalam Azad	Dr. S.I. Humayun
Chief Medical Officer	Dr. Sheela Das	Sri Aurobindo	Dr. C. P. Abdul Gafoor
Directorate of Physical Education & Sports		Old ASC Hostel	Dr. Dilshith A Kabeer
Director(i/c)	Dr. G. Vasanthi	New Mega Mess	Dr. Sangmesh
Department of Bioinformatics		Karaikal (Boys - I)	Dr. G. Kumaravelan
Computer/Information Scientist (SS)	Z. Olirvel	Karaikal (Boys - II)	Dr. V. Arulmurugan
Pondicherry University Community College, Puducherry Campus		Boys' Hostel, Port Blair	Dr. P. M. Mohan
Joint Registrar	Dr. B. Chithra	<b>Wardens : Girls' Hostels</b>	
Nodal Officer	Dr. M. Subbiah	Madame Curie, Madame Curie Annexe & Mess	Dr. Gurminder Kaur
Assistant Registrar	Dr. N. Ravi	Ganga	Dr. Sibi P.S.
Pondicherry University Community College, Mahe Campus		Yamuna	Dr. Manisha Kumari
Assistant Registrar	C.M. Srikala	Womens Studies	Dr. Gurminder Kaur
Hostels		Saraswathy	Dr. Narayanasamy Sangeetha
Chief Warden (Boys)	Dr. Alok Sharan	Cauvery	Dr. S. Lasitha
Chief Warden (Girls)	Dr. Sudesh Pundir	Narmatha	Dr. Gurminder Kaur
Chief Warden (Karaikal)	Dr. S. Bhuvaneswari	Kalpna Chawla	Dr. Archana Pan
Deputy Chief Warden - PG Hostels (Girls)	Dr. Manisha Kumari	Foreign Students	Dr. Sudesh Pundir
Deputy Chief Warden - Ph.D. Hostel (Boys)	Dr. C. Satheesh Kumar	Mother Teresa Mess	Dr. S.N. Fathima
Deputy Chief Warden (Boys)	Dr. A. Ramesh Naidu	Valmiki	Dr. Tenzin Jangchup Khampa
		Karaikal (Girls)	Dr. D.H. Malini
		Girls' Hostel, Port Blair	Dr. P. M. Mohan



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## PUDUCHERRY

Puducherry is situated on the Coromandal Coast, 160 kms. south of Chennai. It is now a growing city and the capital of the Union Territory bearing the same name.

Puducherry, which attracted the French to settle here two centuries ago still carries several marks of French culture and heritage. It is also the place where the national poet Shri Subramania Bharathiar wrote several of his masterpieces that fanned the flames of freedom and also enriched modern Tamil literature. Bharathidasan, a staunch disciple of Subramania Bharathiar, whose poems stressed upon social revolution and emancipation of women, was also an eminent son of Puducherry.

Several intellectual activities are fostered in many institutions like the Sri Aurobindo Ashram and the French Institute which caters to research needs in Science, Indology and Culture. The Romain Rolland Library which is more than 150 years old and preserves a rich collection of several rare French and Tamil manuscripts, is a veritable repository of treasures.

The Puducherry Museum houses rare kinds of pottery from the Arikkamedu site which was a bustling port city in the first century A.D. where Roman ships called in for trade and friendship.

Some of the other places worth seeing are Auroville, the different beaches and backwaters, lakes and gardens, temples, churches and mosques and other heritage buildings and monuments. Puducherry Tourism provides more detailed information in this regard.



## THE UNIVERSITY



Pondicherry University is a Central University established by an Act of Parliament in October 1985. The University is located at Kalapet, 10 kms from the town of Puducherry, in a serene and beautiful campus of 800 acres adjoining the scenic Bay of Bengal. It is an affiliating University with a jurisdiction spread over the Union Territory of Puducherry, Lakshwadeep and Andaman and Nicobar Islands, and has satellite campuses at Karaikal and Port Blair.

The University's objectives are to disseminate and advance knowledge by offering teaching and research facilities, to make provisions for studies in French and integrated courses in Humanities and the Sciences, and to promote interdisciplinary studies and research. The University's motto is 'Vers la lumière' meaning 'towards the light'.

### Vision

- \* To serve as an enabler of societal transformation through state-of-the art higher education and research that match global benchmarks by providing access, resources and opportunities.
- \* To become an institution of global eminence.
- \* To adapt to ever-changing needs of the society and industries.

### Mission

To deploy globally competent resources in terms of people, infrastructure and partners through development of trained human resources, who will serve as agents of value-based societal transformation in various spheres of life enriched with technology-assisted education, research, training and cultural integration. The University has entered into MoUs with a good number of reputed international institutions in India and abroad for collaboration and faculty development.

The salient features of the University include:

- ❑ Add-On Courses.
- ❑ Remedial coaching for weaker section students.
- ❑ Fee waiver for differently-abled students.



## QUALITY LIVING

### Unique features of Pondicherry University

- 100% Wi-Fi enabled campus
- 100% power backup
- 100% network of campus
- Library with remote access
- Sophisticated laboratories & instrumentation facilities
- Buildings with ramps & lifts
- Solar lights
- Free state-of-the-art Day Care Centre & Pre- Primary School
- 24 hours Health Centre & ambulance facility
- State-of-the-art sports facilities
- Free education and lodging to differently-abled students



## COMMON FACILITIES

### ANANDA RANGAPILLAI LIBRARY

The Pondicherry University Central Library is named after Sri Ananda Rangapillai, who was the Dubash of Lord Dupleix, a Governor of Pondicherry during the French rule. Established in 1986, it has transformed through the past two decades into a Knowledge Resource Centre catering specially to the information needs of students, research scholars and faculty. The mission of the Library is to enhance learning and facilitating research. In tune with its mission, it is in the process of a major expansion in its infrastructure and information services.

#### Working Hours

The Central Library functions from 8.30 a.m. to 08.30 p.m. on week days and 9.30 a.m. to 5.30 p.m. on weekends. The Library Annexe Reading Hall from 8.30 a.m. – 12.00 midnight on week days and 9.30 a.m. to 12.00 midnight on week-ends, vacations and holidays.

#### Membership

The Library has 7149 members comprising of faculty, students, research scholars and non-teaching staff. Besides these members, the Library also attracts a lot of scholars and visitors from other academic institutions and research organizations in pursuit of information and research tools.

#### Collection

The University Library collection is hybrid with its traditional information resources being gradually supplemented by electronic resources. **The size of Total Library Collection is 5,82,399 of which 2,47,360 is Print and 3,35,039 is Electronic.**

#### Details of Printed Resources

Books (Print) – 2,73,718, Theses – 779, Dissertations – 4,962, Journal back volumes – 13,110, UN Documents – 2,858 and Current Journals – 69.

#### Details of E-resources

E-Journals – 20,650, E-Databases – 19, ETheses – 1805, E-Books – 2,39,110, and Academic Videos – 73,455.

Exclusive collection for Competitive Examinations is a popularly sought after one.

#### Available E-Resources in the Central Library

**E-Journals:** Science Direct (10 Subject Collections), Emerald, Institute of Physics, Royal Society of Chemistry (RSC) Journals, SAGE Management and Organization Studies Subject Collection Journals, SAGE Research Methods

**E-Books:** EBSCO eBook Academic Collection, Credo Reference and World eBook Digital Library.

**E-Databases:** Academic Video Online, Bloomberg, EBSCO Academic Search Complete, EBSCO Food Science Source, Emerald Emerging Market Case Studies, EPWRF India Time Series, Turnitin, Grammarly Premium, IEEE Xplore Digital Library, India Business Insight (IBI), Indiatat, ProQuest Dissertations & Theses Global, ProQuest One Literature (Literature Online Premium), SCOPUS, Web of Science, Institute for Studies in Industrial Development (ISID), MathSciNet, South Asia Archive.

#### Services

In addition to the traditional library services, the following facilities are also provided:

- \* OPAC (Online Public Access Catalogue)
- \* Remote login facility for 24x7 access to all the e-resources
- \* Books Issue/ Return facility through RFID self-check in/out
- \* Webinars regularly conducted for the benefit of library users
- \* Wi-Fi Facility
- \* Plagiarism check through Turnitin Software
- \* Providing Grammarly premium account to all library users
- \* Institutional Repository (IR)
- \* Document Delivery Services
- \* Inter-Library Loan Facilities
- \* Dedicated E-Resource Zone
- \* Discussion Rooms
- \* E-Alerts
- \* Library Liaison Officers
- \* Book Launching Ceremony

#### Facilities for Differently Abled Persons

- \* Computer Systems with Head Phone
- \* Windows Talking Software
- \* Braille Refreshable Display
- \* Scanners and OCR Softwares

Information access facility made possible to the Visually Challenged was one of the facets contributing to winning a **National Award by the University in 2011.**

#### E-Shodhsindhu Consortium Service (ESS)

Pondicherry University Library is a member of the E-ShodhSindhu Consortium and has access to more than 7090+ e-journals and four e-databases. Access being IP-based, e-resources are accessible in the University network. Pondicherry University Library is identified as one of the 21 Document Delivery University Libraries in India under the E-ShodhSindhu Consortium to cater to the journal article requests of all the universities in the country.

#### U.N. Depository

The Dag Hammarskjöld Library of the U.N. Secretariat in New York has arranged for the distribution of U.N. Documents and publications to users and research scholars around the world through its depository libraries since 1946. There are about 405 Depository Libraries in 145 countries and 16 of them are in 13 cities of India. Pondicherry University Library has the honour of being one of the 16 U.N. Depository libraries in India.

#### Infrastructure

An independent library building with a beautiful inspiring ambience of greenery around is focused on development with technology. The spaces have been revamped and modernized with modular furniture and a large number of computers to access e-resources with high speed bandwidth facility, comparable to any world class library. An additional new building with 50,000 sq. ft. namely the Library Annexe offers 24 hour reading facility, Scholars Hub, Competitive Exam Book Section, a special laboratory for the Visually Challenged (Louis Braille Center), multimedia lecture hall, auditorium, cafeteria, etc. Five School Libraries as Reference Libraries manned



by qualified library professionals were established in 2011 to cater to the immediate reference needs of the departments of each respective school of different disciplines. Exclusive campus libraries have been established at Karaikal and Port Blair. Pondicherry University has the credit of being the third university in the country which established the surveillance system with Radio Frequency and Identification (RFID) and Closed Circuit Television (CCTV) function in 2012.

#### **Personnel**

The Library has a team of highly qualified information professionals with the potential and drive to facilitate the best possible library services to information seekers.

#### **University Librarian**

Dr. M. Vijayakumar

#### **Deputy Librarian**

Dr. U. Nagalingam

#### **Assistant Librarians**

Dr. M. Baskar

Dr. G. Sivasubramanian

Dr. K.M. Shibu

Dr. P. Vijayakumar

#### **System Analyst**

Shri. K. Palanivel

## COMPUTER CENTRE

The Computer Centre was established under a sanction by the UGC in the year 1992. A full-fledged and well-equipped Computer Centre is available for the use of students, research scholars, faculty and non-teaching staff of the University. The Centre functions between 9.30 a.m. and 5.30 p.m. on all working days. However, some of the services are rendered on 24x7 basis.

### Academic

The Academic staff of the Computer Centre offer regular theory laboratory and project guidance courses to students of the University for

- M.Tech. (Computer Science & Engineering)
- M.Tech. (Network & Internet Engineering)
- M.C.A.
- M.Sc. (Computer Science)

### A. INFRASTRUCTURE & SERVICES

The Computer Centre plays a prominent role in planning, execution and supporting/monitoring the establishment of various Information and Communication Technology (ICT) systems/projects/services/infrastructure in the University main campus at Kalapet and its off-campus Centres at Karaikal (160 Kms. from Puducherry), Port Blair (Andaman & Nicobar Islands), Community College, Lawspet (Puducherry) and Community College, Mahe (Kerala).

#### i. Campus Network

All the buildings on the main campus of the University are connected to the campus network through Optic Fiber Cable (OFC) between buildings, UTP cable or wireless within buildings. All Class Rooms, Laboratories, Faculty/Officers/Staff Rooms, Offices, Sections, Library, Hostels, Guest Houses, Staff Quarters (partly), etc, are connected to the Campus Network.

Services such as web, e-mail, internet, voice, wireless, biometric attendance, electronic surveillance, online software applications, access to educational software, e-resources of the Library, etc are offered on this platform. This network serves as the Digital Highway of the University. The network is well secured.

#### ii. Internet Leased Lines (ILLs)

The 1 Gbps link from National Knowledge Network (NKN) under NMEICT scheme of MoE provides internet services on the main campus.

The Centre, in particular, provides backbone IT services to the Central Library, Bioinformatics Department, Electronic Media Centre and Examination Wing.

At Port Blair Campus, the Computer Centre facilitated establishment of 20 Mbps leased internet line (through submarine cable established between Chennai & Port Blair) by M/s BSNL

The Computer Centre also facilitated to establish

- 10 Mbps Internet Access through NMEICT scheme at Pondicherry University Community College, Lawspet campus
- 10 Mbps Internet Access through NMEICT scheme at Pondicherry University Community College, Mahe campus.

#### iii. National Knowledge Network (NKN)

Pondicherry University is one among the few institutions in the country to be provided 1 Gbps connectivity to the National Knowledge Network (NKN) which is an ambitious project of the Government of India to connect all Universities and colleges in the country. Computer Centre is responsible for its operations and maintenance on the campus.

Access to online journals provided are available on this NKN platform. Besides access to internet, NKN serves as a platform to share knowledge among the educational institutions across our country.

#### iv. Web Services

The University web portal caters to the dissemination of information of the various programmes, functions and announcements (circulars, notices, etc.,) for its stakeholders. E-circulars, e-mail and other notices published on the web portal help the University to implement green practices, enhance transparency, provide reachability and augment efficiency in its functioning.

A new secure and device responsive web portal was launched, in the year 2020. This new portal was designed and developed, in house, by the Centre for Bioinformatics.

#### v. e-Mail Services

The Centre provides e-mail facility to all teachers, officers and research scholars of the University under the domain @pondiuni.edu.in. This is being availed from the National Informatics Centre (NIC) cloud. In the month of October 2021, the Centre has introduced another email system under a new domain @pondiuni.ac.in to promote Online Teaching/Learning and email IDs to all students, scholars and employees of the University.

#### vi. VoIP Intercom

Intercom facility for the campus users of the University is provided using Voice over IP (VoIP) technology on the campus network thereby saving establishment/maintenance of a parallel dedicated voice cable network. Avaya IP Office R630 server with 715 nos. of Avaya 1603 IP phones are provided to the users.

#### vii. Electronic Surveillance System

Electronic Surveillance facility is provided on the campus at the Main Gates Administrative Building, Hostels and Messes, etc, buildings have their own Surveillance Systems.

Controller of Examinations building and strengthen the existing Surveillance System inside the Administrative building.

#### viii. Biometric Attendance System

The Computer Centre facilitated installation and integration of

the Biometric Attendance System (BAS) on the Main campus and Pondicherry University Community College at Lawspet, Puducherry. At present attendance of all Contract Employees, Outsourced Personnel and Security Personnel is handled through BAS.

#### ix. Online Teaching/Learning and Meeting

During the pandemic period the Centre established state-of-the-art online teaching/learning facilities on the campus for the conduct of teaching/learning programmes. Online Meeting facilities have been established at three different locations in the Administrative buildings.

The Centre supports Live Webcast and Online Video Conferencing requirements of the University for the conduct of official Meetings, Annual Convocation, Workshops, Lectures, Seminars, Recruitment Tests/Interviews, etc using PC-based Conferencing System.

New domain under the name pondiuni.ac.in was created and email (Gmail based) accounts were created for all students, scholars, teachers and staff. Access to online learning platforms such as Google Suite, MS Teams and Cisco WebEx (for a short period) has been provided to enable online teaching/learning and meeting.

All recruitment interviews/staff training are being handled online since February 2021. Work is in Progress to establish Smart Class facilities in the Classroom of the University.

#### x. Software Development/Support

The Computer Centre with its meagre available human resources (constantly supports the University community in computerization of various functions.

Consciously the Centre uses only FOSS for design, development and implementation of all software applications thereby saving significant capital cost and recurring upgradation and maintenance costs. All the applications deployed are working satisfactorily and help to bring in transparency, efficiency, accuracy and ease of governance.

End-to-end Online Admissions for PG/Research Programmes offered by the university has become a reality largely due to the pioneering efforts made by the Computer Centre. Employee Management System (EMS), Leave Management System (LMS) and Complaint Management System (CMS) are handled through applications developed by the Centre.

#### xi. Online Application for Admissions

The Computer Centre Play a vital role in the entire Admissions process – Selection of Service Provider assisting in design/testing/launch of Online Applications for Admission, Online Application Fee collection/settlement, Conduct of Entrance

Exams, Publication of Results, Online Counselling for Admissions including Fee collections, etc.

Admissions to University Hostels were also carried out online including Fee payment.

#### In-house Training

In-house training on creating awareness and usage of various ICT system and tools are regularly imparted to the employees, research scholars and students.

Online Meeting facilities have been established at three different locations in the Administrative building.

### B. Best Practices

#### i. Promotion of FOSS & licensed Software

The Computer Centre always promotes use of only licensed software wherever required and simultaneously encourages use of Free and Open Source Software (FOSS) in the University.

Microsoft Campus Agreement covers licensed use of Microsoft products such as Windows Operating System for desktops/laptops/servers and MS Office. Special educational software - SPSS, SYSTAT, QUALCOM Simulator, etc. are recommended and procured based on the requirements.

Use of FOSS is vigorously promoted on the Campus both for Operating System and Application needs. Several hundred PCs run on Linux OS and the servers - Web, Mail, LDAP, etc., run on FOSS Operating Systems & Tools.

#### ii. Use of Social Media

In line with the policy of the University to make the best use of Social Media for the development and benefit of University, the Computer Centre opened and operates two Twitter Accounts

PondicherryUniversityVC and GurmeetSinghVC. This has received good response and following. Use of Facebook and other Social Media network is on the anvil.

### Details of Academic/ Technical/ ICT Staff

**Marie Stanislas Ashok, M.E.**, Systems Manager & Head  
**M. Sundaramohan, M.S.**, Information Officer  
**W.J. Kalesha, M.Tech.**, Programmer  
**E. Malanco, B.Tech.**, Senior Technical Assistant  
**S.Balan, B.Tech.**, Senior Technical Assistant  
**A.Ganabathi, B.E.**, Technical Assistant  
**B. Chithra, M.Sc.**, Lab Assistant

## CENTRAL INSTRUMENTATION FACILITY

Excellence in teaching and research of Science Schools need state-of-the-art sophisticated equipment, various workshops and support facilities. These equipment and facilities help the faculty, research scholar and students to carry out globally competitive R&D in basic and applied sciences. Since individual researchers may not be able to generate huge research funds for these research instruments, Pondicherry University has established the Central Instrumentation Facility (CIF) with a mission to enrich the resources on a shared basis for promoting R & D with the following objectives.

- To strengthen technological infrastructure to carry out advanced research in various Science disciplines under one roof and make their services available to academic Departments and Schools.
- To provide guidance in acquisition of data and to train personnel in operation and maintenance of Sophisticated Instruments.
- To organize short-term courses / workshops on the use and application of various spectroscopic and analytical techniques for students, teachers and technical personnel from our University, affiliated Institutions, Universities in the region and industry.

It is governed by the Management Advisory Committee consisting of Vice-Chancellor as Chairman, Deans of Science Schools, Heads of Science Departments, Outside Experts and Centre Head as Member Secretary. CIF is also supported by the Department of Science and Technology (DST) under the PURSE - Promotion of University Research and Scientific Excellence - Project

CIF takes care of the operation and maintenance of the analytical instruments and caters to the analytical needs of all the science departments and affiliated institutions of the University. Analysis of samples from other educational & research institutions in the region and from industries is also carried out.

CIF also has a Mechanical section with facilities to fabricate mechanical components such as sample mounts / cells / adapters etc., required for scientific research needs and also to repair and maintain accessories such as hydraulic press, compressors, pumps, cold water circulators etc., of the analytical instruments.

### Faculty :

**Dr. Bala. Manimaran. Ph.D.**

**Professor & Head (i/c)**

Specialisation: Organometallics, Nanoscale Materials and Supramolecular Chemistry

### Technical officer:

**Er. S. Ramasamy, M.Tech.**

Technical officer (on contract)

Specialisation: Electronic Design & Technology, Analytical Instrumentation

### Details of Major Research Equipment Available

Sl.No	Name of the Instrument	Make	Model
<b>I. Spectroscopy Systems</b>			
1.	UV-VIS-NIR Spectrophotometer	Shimadzu-Japan	UV 3600 Plus
2.	FT-IR Spectrometer	Thermo-USA	Nicolet-6700
3.	Spectrofluorimeter	Horiba Jobin Yvon, USA	Fluorolog-F3-111
4.	400 MHz FT-NMR	Bruker- Biospin	Avance II
5.	Wavelength Dispersive X-ray Fluorescence Spectrometer	Burker-AXS, Germany	S4 Pioneer
6.	Broad Band Dielectric Spectrometer	Novo control-GmBh, Germany	Concept 80
7.	Circular Dichroism Spectrometer	Jasco, Japan	J815
8.	Laser Confocal Raman Microscope with spectrometer attachment	Renishaw, UK	Invia Raman
9.	Isotope Ratio Mass Spectrometer	Isoprime Ltd, UK	Isoprime 100
10.	X-ray Photoelectron Spectrometer (XPS)	Thermo Scientific	K-Alpha-KAN9954133



Sl.No	Name of the Instrument	Make	Model
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## II. Chromatography Systems

10.	High Performance Liquid-Chromatography	Shimadzu, Japan	LA20
11.	High Performance Thin Layer Chromatography System	CAMAG, USA	Sampler-ARS4 Developer- ADC2 Scanner- TLC4 & Visualizer-TLC2
12.	Ion Chromatography System	Thermo Scientific, USA	ICS-1100
13.	Fast Protein Liquid Chromatography	GE Health Care Life Sciences, USA	AKTA pure

## III. Microscopy Systems

14.	High Resolution Transmission Electron Microscope.	FEI-USA	Tecnai G2 F30 S-Twin
15.	Electron Probe Micro Analyzer	CAMECA, France	SX100
16.	Scanning Electron Microscope with EDX and Cathode-luminescence detector	Hitachi, Japan	S 3400N

## IV Physical Property Determination Systems

17.	Thermal Analysis System	Water-TA instruments, Austria	TG-DTA-SDT600 and DSC- Q20
18.	Vibrating Sample Magnetometer with High & Low Temperature attachments	Lakeshore, USA	7404
19.	Particle Size Analyzer-Zeta sizer	Malvern, UK	Nano S
20.	Surface Area Analyzer(BET System)	Miromeritics, USA	Gemini VII 2390t
21.	Physical Property Measurement System	Quantum Design, USA	PPMS-II/ Evercool-II

## V Others

22.	Femto Second Laser System	New Port Corporation/ Spectra Lab- USA	Mai-Tai-HP 1050 as Main Laser
23.	Semi-Macro Elemental Analyser (CHNS-O)	Elementar-UK	Vario EL cube
24.	Fluorescence Assisted Cell Sorter	BD-Bio Sciences-USA	FACS Aria III
25.	Planetary Micromill	Fritsch, Germany	Pulverisette-7
26.	Gamma Ray Chamber	BRIT, India	GC 5000 (Co-60 source)

## **CENTRAL MAINTENANCE WORKSHOP**

The Central Maintenance Workshop is a core support facility to carry out all engineering works related to civil, electrical, mechanical and electronics and to support the scientific research of the departments and centres of the University. The minutiae about the service shops which are currently offering service support to the academic community and facilities being developed are as under.

### **Electronics Shop**

The electronics shop offer the services of repairing, servicing and upkeep of instruments, equipment and appliances available in the University. The electronics shop also offers design and fabrication of electronic modules required for the research works of the students and faculty including fabrication of Printed Circuit Boards in accordance with the requirement of Users from initial design to final stage ensuring quality and consistency. The transfer of electronics shop and acquisition of varieties of test and measuring instruments and PCB making facility is in progress.

### **Mechanical Shop**

The mechanical shop offers service support in the fabrication of mechanical modules required for advanced scientific and engineering research. The mechanical shop also offers service support in the reconditioning and upkeep of all kind of instruments, equipment and appliances available in the University. The mechanical shop is equipped with precision milling machine, high speed drilling machine and portable welding machine. The progress of strengthening the mechanical shop is underway by adding multifarious machineries like radial drilling machine, shaping machine, sheet folding machine, hydraulic pipe bending machine and varieties of portable machineries. The mechanical shop has recently acquired hi speed precision mini metal working lathe and mini milling machine.

### **Welding Shop**

The welding shop offers welding of metal items both small and large in size according to the user's specifications. The Central Maintenance Workshop is equipped with gas and arc welding facility and recently augmented spot welding (heavy and portable) for making quick, strong spot welds in a wide range of uncoated mild, galvanized ferrous sheet metals.

### **Additional service shops under development:**

The development of the following additional service shops is under progress for achieving goals & objectives of CMW with the support of the University.

### **Advanced Glass blowing and Glassware fabrication shop**

The establishment of an advanced glass blowing shop is in progress considering the expanding volume of works and in proportion to the creation of new science and engineering departments and increase in student strength. The advanced glass blowing shop offers service support to all the science and engineering departments of the University in the repairing and fabrication of advanced laboratory glasswares and fabrication of special glassware of the highest quality and purity for advanced scientific research works. The advanced glass blowing shop fabricates simple glassware to complex quartz laboratory apparatus which finds application in the semiconductor, optical fibre, photovoltaic, chemical and applied sciences research with fabulous craftsmanship by utilizing state-of-the-art facilities and technology.

### **Fitting Shop**

The acquisition of radial drilling machine, surface plates, and work benches with bench vices, precision digital measuring instruments and cutting tools is in progress for carrying out advanced fitting works with high accuracy and precision. The fitting and bench work facility offers

fixing of material in the engraved piece made with very accurate dimensions.

### **Carpentry Shop**

The key function of the carpentry shop is to repair and replace damaged wood surfaces, repair desk and other classroom furnishings, repair of windows, doors, broken window glasses and blinds. The carpentry shop offers repair service for classrooms, offices, and also provides special service to classrooms during semester breaks.

### **Painting Shop**

The painting shop offers cleaning and painting of aged instruments and equipment including full bodywork and dent repairs.

### **CAD Shop**

#### **(Computer Aided Design Shop)**

The CAD shop will be offering drafting of Electrical, Electronic and Mechanical engineering drawings to the users. The CAD working stations, software and plotter are in the process of being acquired.

### **Electrical Repair and Service Shop**

The electrical shop offers service support in the repair and recondition of motors, pumps, panel boards, testing of electrical equipment, etc. The acquisition of facilities required for the repair and testing of electrical equipment's and gadgets is in progress.

### **Plastic Shop**

The plastic shop offers injection moulding facility for the moulding and fabrication of plastic parts for user specific requirement for conducting scientific research and experiments. The plastic shop also offers plastic welding facility for welding similar and dissimilar plastic parts. The acquisition of various hand working tools, hand extruders, welding machines for injection welding, ultrasonic welding, hot gas welding and hot seal welding are being acquired.

### Testing and Calibration Shop

The testing and calibration facility calibrates the measuring instruments and tests the power conditioning devices viz., UPS & Inverters and a variety of batteries. It also certifies whether the products comply with the approved standards and specifications. The measuring equipment and testing tools required for testing and calibration are being acquired.

### Technical Staff of Central Maintenance Workshop:

**R.Jeyanthi, DECE,**

Technician Gr-II

Specialization: Electronics & Communication Engineering

**P.Vikkaraman, M.A.,**

Technician Gr-II

Specialization: Engineering Fitting Works



### HEALTH CENTRE

The Health Centre of Pondicherry University functions round the clock in association with Pondicherry Institute of Medical Sciences with basic facilities for the benefit of students and staff. An ambulance is also available for emergency medical care.

### BANK

Indian Bank operates a branch with all services in the University campus. ATM facility is also available in the campus.

### CANTEEN

Four canteens are available on the campus.



### POST OFFICE

A post office functions on the campus where all postal services including savings bank facilities are available.

### SHOPPING COMPLEX

A Shopping Complex is also available on the campus to facilitate essential services for students, faculty and staff of the University.



## FINANCIAL ASSISTANCE

### FELLOWSHIPS/SCHOLARSHIPS OFFERED

#### BY UNIVERSITY:

##### Ph.D. Non-Net Fellowship-UGC\*

All full time scholars admitted to Ph.D. programmes in the Schools/Departments/Centres of the University campus alone will be eligible for a fellowship of ₹ 8000/- p.m. and a contingency grant per year.

##### Scholarship for PG courses (Two and 3 years programs only)/ M.Sc and M.A Integrated courses:

##### Merit Scholarship\*

(i) The first three candidates who secure the highest percentage of marks in P.G. admission entrance examination shall be eligible for the award of Merit Scholarship @ ₹2,000, ₹1,500 & ₹1,000 p.m. respectively for the first semester. Scholarship is sanctioned on the basis of entrance examination marks(#).

(ii) For the subsequent semesters the Merit scholarship at the same rate of ₹2,000, ₹1,500 & ₹1,000 p.m shall be awarded to the first three candidates who secure highest marks in the previous semester(SGPA).

##### Merit-cum-Means Scholarship(MCM)\*

20% of the students in each P.G. degree programme are eligible for the award of MCM Scholarship of the University. The scholarship is based both on the merit in each semester(SGPA) and the parental income of the student. The annual income of the parents should not exceed ₹2,50,000/- (Rupees two lakh fifty thousand only). The amount of scholarship is ₹750/- p.m. For the 1<sup>st</sup> semester, scholarship is sanctioned on the basis of entrance exam marks.

Besides, for the award of scholarship, the candidates should also fulfill the following conditions:

- (i) secure at least 70% attendance every month.
- (ii) pass in all papers registered for each semester.
- (iii) the Head of the Department concerned shall certify fulfillment of conditions i and ii.

##### Scholarships for M.Sc. Marine Biology & Disaster Management\*

All selected candidates will be awarded a scholarship of ₹ 1000/- p.m. to study these courses at Port Blair, Andamans.

\* An Undertaking should be given by the scholar/student saying that in case he/she leaves the Ph.D/PG programme in between before submission of the thesis/before the course completion, he/she will reimburse the entire amount to the University.

# Conditions apply

#### Note:

- i. The students are eligible for only one scholarship.
- ii. The award/continuance of any scholarship is subject to satisfactory progress and performance, proper conduct, fulfillment of attendance criteria, etc.

### FELLOWSHIPS / SCHOLARSHIPS / OFFERED

#### BY OTHER AGENCIES:

##### Junior Research Fellowship

UGC / CSIR NET qualified JRFs are eligible to receive fellowships. They are also eligible for a contingent grant as per UGC rate. The award of fellowship and contingency grants are subject to approval by the UGC / CSIR.

##### N.B.H.M. Scholarship

The National Board for Higher Mathematics, Mumbai (Department of Atomic Energy) provides scholarships for those students who clear the NBHM examination.

##### Government of India SC/ST/OBC Scholarship

The governments of various states provide Government of India Scholarship to candidates belonging to the SC/ST/OBC communities.

##### Rajiv Gandhi National Fellowship / Maulana Azad National Fellowship

The UGC provides Rajiv Gandhi National Fellowship for SC/ ST & OBC scholars and Maulana Azad National fellowship for minority scholars who pursue Ph.D. programmes. Every year, the UGC notifies the eligibility and other conditions for the award of the said fellowships.

##### Indira Gandhi Scholarship for Single Girl Child

The UGC provides Indira Gandhi scholarship for Single Girl Child for eligible students pursuing PG programmes.

##### PG Merit Scholarship for University Rank Holders\*

The undergraduate level rank holders of different universities are eligible for this Scholarship to pursue their Master's Degree.

##### Government of Puducherry Fellowship / Scholarship Merit and Merit-cum-Means Scholarship

The Government of Puducherry awards Merit and Merit-cum-means scholarships for students belonging to the U.T. of Puducherry enrolled in various courses of the University.

The Government of Puducherry provides ten fellowships to residents/

natives of Puducherry @ ₹3,000/- per month to ten students admitted to the M.Sc. Biotechnology programme in the Department of Biotechnology through GAT-B score.

##### Madanjeet Singh Group Scholarship

Full scholarships are given to 16 students per annum to pursue M.Tech (Green Energy Technology) and 16 students per annum to pursue M.A(South Asian Studies) from the member states of SAARC countries covering living expenses (₹12,500 p.m), annual contingency of ₹10,000/- free hostel accommodation in campus and tuition fees.

##### GATE Scholarship

The UGC provides scholarship for GATE qualified M.Tech students.

##### DBT Fellowship

Students admitted to the following programmes through GAT-B score are eligible to get DBT Fellowship:

M.Tech. Computational Biology - Rs.12,000/- PM

M.Sc. BioTechnology - Rs. 5,000/- PM.



## GENERAL CONDITIONS OF ADMISSION

- Admission to the various courses of the University is open to all those who have the prescribed qualifications without any discrimination of race, caste, creed, language or sex.
- The minimum eligibility criteria for different courses are as prescribed in the appropriate sections. Candidates qualified through other system of studies should obtain eligibility certificate from the University before admission.
- The students will be required to take up a group health insurance (for hospitalization, etc.) through the University.
- Admitted students are required to carry the University Identity Card at all times while they are inside the campus.
- Students are instructed not to miss classes, since 70% of attendance is required to appear for the examination. Those who need accommodation in the hostels must report to their departments prior to registration and counselling.
- The University reserves its right not to offer a course advertised, for any administrative or other reasons.

## PONDICHERRY UNIVERSITY - STUDENTS ACADEMIC ACTIVITY MANAGEMENT SYSTEMS (PU-SAMS)

Innovative methods of management of academic progression of students from the time of their admission to course completion in institutions of higher learning is both a challenge and an opportunity. The challenge comes from managing a large number of students, faculty, departments, programs and courses in such a way that maximal knowledge transfer, optimal utilization infrastructure and best offer of services can be effected. The opportunity comes from the possibilities of innovations in accountability, accreditation and enhancement of learning experience. Towards this end, Pondicherry University has developed the Student Academic Activity Management System (PU-SAMS).

The software PU-SAMS is an online-platform that is meant to manage the entire range of CBCS – from admission, online payment of tuition fees, registration of courses, approval of registration by the faculty, allocation of courses to the faculty, time-table, student attendance, internal assessment, online payment of examination fee, end-semester assessment, conversion of marks to grades, declaration of results, grade card generation and distribution. The software works on the principle of differential access and need-to-know basis.

PUSAMS is tuned to help all the stake holders that include students, teachers, HoDs, Deans, Administrators and the Vice-Chancellor to monitor academic activities across Pondicherry University on real time basis.

## RESERVATION

### SC/ST Candidates

In accordance with the policy of the Government of India and the guidelines of the University Grants Commission, the University has reserved 15% of seats in each course for candidates belonging to the Scheduled Castes and 7.5% seats for those belonging to the Scheduled Tribes with a provision for inter-changeability between these categories, wherever necessary. All SC/ST candidates who have passed the qualifying examination are eligible to apply for PG admission irrespective of the percentage of marks obtained in the qualifying examination except otherwise specified. Candidates should submit a certificate about their caste from a Revenue Officer not below the rank of the Tahsildar at the time of admission.

### OBC Candidates

27% reservation for OBC category (Non-Creamy Layer) is implemented by the University as per Government of India instructions.

### EWS Candidates

In accordance with the policy of the Government of India, the University implements 10% reservation in admission for Economically Weaker Section (EWS) candidates in each course. The candidates have to produce the necessary certificate from the Revenue Department, in the format prescribed by Government of India.

### Differently abled Candidates

5% of seats in each course are reserved for differently abled candidates. Each differently abled candidate shall be required to submit a certificate from a government hospital indicating the extent of physical disability and also the extent to which the disability hampers the candidate in pursuing his/her studies. The candidates may have to undergo a fresh medical examination if required by the University before being admitted. All differently abled candidates who have passed the qualifying examination are eligible to apply for PG admission irrespective of the percentage of marks obtained in the qualifying examination except otherwise specified.

## ADMISSION REQUIREMENTS

Course Code	Title of P.G. course and Subject		Intake	Eligibility criteria for admission	CUET-2022 (UG) Domain subjects
● Five Year Integrated M.Sc. Programme for +2 Students in the School of Physical, Chemical and Applied Sciences					
3801	M.Sc.	Applied Geology	39	Pass in +2 with 50% of marks and should have studied Physics, Chemistry and Mathematics	Physics, Chemistry & Mathematics
3802	M.Sc.	Chemistry	39		
3803	M.Sc.	Physics	39		
● Five Year Integrated M.Sc. Programme for +2 Students in the Ramanujan School of Mathematical Sciences					
3841	M.Sc.	Mathematics	25	Pass in +2 with a minimum of 50% of marks with Mathematics, Physics and Chemistry as subjects of study (Candidates with other branches in +2 are not eligible for this programme)	Physics, Chemistry & Mathematics
3842	M.Sc.	Computer Science	25		
3843	M.Sc.	Statistics	25		
● Five Year Integrated M.A. Programme for +2 Students in the School of Social Sciences and International Studies					
3151	M.A.	History	25	Pass in +2 with a minimum of 50% of marks	General Test
3152	M.A.	Political Science	25		
3153	M.A.	Sociology	25		
● Five Year Integrated M.A.(SEAL) Programme for +2 Students in the Social & Economic Administration and Law					
413	M.A.	Social & Economic Administration and Law (SEAL)	20	Candidates seeking admission for the M.A (SEAL) (Five Year Integrated Programme) Course are required to pass : i) The Higher Secondary, Intermediate or Senior Secondary School Certificate Exam, conducted by the Centre or State Government Board OR ii) The Pre- University or Pre-Degree Examination of a recognized university OR iii) The French Baccalaureate or any other qualification equivalent to the above mentioned qualifications approved by the Academic Council of the University. iv) The candidate should have a minimum score of 50% in the qualifying examination.	General Test

## Payment of Fees

Students shall pay all the fees to the University at the time of admission. For the subsequent semesters, the fees should be paid within ten days from the beginning of each semester. Examination fees shall be payable on or before the last date prescribed in this regard. If the above dates fall on Saturdays or Sundays or any other holidays, the last date for payment of the above fees will be the preceding working day.

Differently abled students are exempted from payment of all fees, including examination fees. They should pay only the prescribed refundable caution deposits and Group Medical Insurance premium. However if they avail any scholarship from Government/ other agencies, they are not entitled from exemption of fees

SC/ST students who are eligible for Post-matric scholarships/Top class scholarships are permitted to pay the fees as soon as they receive the scholarship amount by submission of an undertaking to this effect at the time of admission. In any case, such SC/ST students should pay the fees within 90 days from the date of admission through the said scholarships failing which they have to pay the fees on their own or otherwise their admission stands cancelled.

The Account Number in which various kinds of fees/funds/deposits are to be remitted in the Indian Bank branch at the University campus is indicated against each. The facility of online payment is available. If a student does not pay the fee on time, late payment fine, shall be levied as follows at the time of payment:

- (i) 5.00 rupees per day for the first 10 days
- (ii) 10.00 rupees per day thereafter upto the last day of the month in which the fees is due.

The Vice-Chancellor, or any other officer on his behalf, to whom this power has been delegated, may relax any of the conditions for payment of fees in special cases, on recommendation of the Academic Advisory Committee. The names of defaulters shall be removed from the rolls of the University with effect from the first day of the following month. A student whose name has been struck off from the rolls of the University, under the above clause, may be re-admitted on the recommendation of the Dean/ HOD/ Coordinator of the Dept./Centre concerned and on payment of arrears of fees in full and other dues, together with a re-admission fee of ₹1000/- plus University Development Fund of ₹ 500/-.

### Refund of fees, caution deposits, etc.

Caution deposit money is refundable, on an application from the student on his/her leaving the University, after deducting all dues against him/her.

If any student does not claim the refund of any amount lying to his/her credit within one calendar year of his/ her leaving the University, it shall be deemed to have been donated by him/ her to the Students' Aid Fund. The period of one year shall be reckoned from the date of announcement of the result of the examination taken by the student or the date from which his/her name is struck off from the rolls of the University whichever is earlier.

If, after having paid the fees, a candidate desires to discontinue he/ she shall be refunded all fees after deducting ₹1000/- provided he/she discontinues **on or before the date notified by the university.**

If a student owes any money to the University on account of any damage he/she may have caused to the University property, it shall along with outstanding tuition fees and fines, if any, be deducted from the security deposit due to him/her. These provisions shall not apply to students in the affiliated colleges.

Students shall not be issued hall tickets or allowed to appear for examination unless they have cleared their dues, paid the prescribed examination fee and produced a "No-dues" certificates.

● Fee Table: 9 - ALL FIVE YEAR INTEGRATED P.G Programmes					(in ₹)
Sl. No	Item	Semester			Account No.
		I	II/ IV/ VI/ VIII*/ X*	III/ V/ VII*/ IX*	
	Tuition Fee	3000	3000	3000	6659344508
1.	For Foreign Nationals/ SAARC / Developing Countries	US \$ 350	US \$ 350	US \$ 350	
	Developed Countries & NRIs	US \$ 500	US \$ 500	US \$ 500	
2.	Registration Fee	300			
3.	Matriculation Fee	100			
4.	Recognition Fee	400			
5.	Sports Fund	500		500	6659345681
6.	Medical Examination / Facilities Fund	600		600	
7.	Library Fund	1500		1500	
8.	Laboratory Fund/Computer Lab Fund/Wet Lab Fund	2000		2000	
9.	Amenities Development Fund	6000			
10.	Students' Welfare Fund	400		400	
11.	Alumni Association Fund	200			
	Caution Deposit (Refundable)				
12.	Science Courses	2000			
	Other Courses	1000			
13.	Advanced Lab Facility Fund (only for Science Departments)	1000		1000	
14.	Placement Activity Fund	200	200	200	
15.	Academic Activity Fund	1000		1000	
16.	Digital Activity Fund	2000		2000	
17.	Group Medical Insurance	378			845872540
18.	University Development Fund	1200			6659355859
	TOTAL (Sciences)	22778	3200	12200	
	TOTAL (Humanities)	20778		11200	

\* In respect of 5 Years Intg. M.Sc Computer Science,

(i) fee to be paid for VII and IX semester will be as paid by 2 Year M.Sc Computer Science for III semester.\*\*

(ii) fee to be paid for VIII and X semester will be as paid by 2 Year M.Sc Computer Science for IV semester.\*\*

\*\*Please refer Table 6 .

# HOSTELS

At present, Pondicherry University has twenty one hostels in the campus, of which, thirteen are for boys and eight for girls. Out of the thirteen boys' hostels, nine are for PG students and four for research scholars. Out of the eight girls' hostels, seven are for PG students and one is for research scholars. The Karaikal campus has three hostels two for boys and one for girls. One boys hostel and one girls hostel is available at the Port Blair campus also.

## Hostel Admission

Since limited hostel facility is available, hostel accommodation will be given to one third of the students admitted in each course. Hostel admission will be given on merit basis, based on the recommendations of Head of the Department, subject approval of the Chief Warden and availability of rooms. Preference will be given to students coming from distant places.

## Hostel fees

**Refundable:** A caution deposit of Rs.3,000/- (for Indian nationals) is to be paid while joining the hostels. This will be refunded after the inmate vacates the hostel by means of account transfer/ account payee cheque, subject to surrender of the original challan after deducting dues, if any. Open cheque will not be issued under any circumstances. Therefore, students must necessarily open their bank accounts in Indian Bank, Pondicherry University Branch.

**Non - Refundable:** The hostel fees is to be paid every year at the beginning of the academic year in June/ July as follows(Subject to revision):

- P.G students - ₹ 1000/- p.a.
- Ph.D - ₹ 2000/- p.a.
- General Amenities Fund - ₹ 700/- p.a.
- Establishment Charges - ₹ 300/- p.a.
- Application Fees (at the time of admission only) - ₹ 75/-

**No room rent is charged by Pondicherry University for SC/ ST students (copy of community certificate duly attested by a Gazetted Officer is to be produced). Rent free accommodation is provided to differently-abled students. Differently-abled Students have to pay their Mess Fees and then claim for subsidy from the University hostels (copy of Disability Certificate duly attested by a Gazetted Officer is to be produced to avail this facility).**

However, they have to pay all other fees like Application for admission, General Amenities Fund, Establishment charges, Caution Deposit.

## Duration of Stay

PG – 2 years, Ph.D-4 years, Integrated - 5 years from the date of admission to the hostel.

**Note:** Except research scholars, all students must vacate the hostel during summer and winter vacation. Disciplinary action will be taken against those hostellers who do not pay their dues on time. Students must obtain No Dues certificate for Mess & Room Rent from the Hostel Office before writing their semester exams, producing challans for payment of Hostel fees and dues. Those who avail bank loan must keep their original challans of caution deposit for claiming refund while vacating the hostel, and photo copies of other challans with bank seal.

## Discipline

All hostel-related communications from the hostel inmates to the University authorities shall be routed through the proper channel, i.e. through the wardens of the respective hostels and Chief Warden. Any subversive activity, misdemeanor, obnoxious behaviour, flouting of hostel rules & regulation, misconduct, disobedience, ragging, failure to clear dues, etc. shall be severely punished, and even result in dismissal from the hostel as well as from the department by the University authority whose interpretation of the rules shall be final.

A set of rules and regulations applicable to the inmates of the hostels will be given to each student at the time of admission into hostel.

Consumption of alcohol and narcotics is considered as a serious offence. Therefore, intoxicating drugs or liquor should not be consumed in the campus. Smoking in the hostel premises is prohibited. Fire-arms should not be brought to the hostel in any case. Such acts will mean immediate expulsion of the resident from the hostel. Accommodating outsiders/passed out students in the hostel leads to trespassing and such students will be handed over to the police for prosecution. Therefore inmates must be careful before entertaining outsiders.

As per the University hostel rules & regulations under clause 10.24, damaging University / public property is illegal. It will be considered as an act of indiscipline and misconduct, and will be punished under Prevention of Damage to Public Property Act, 1984

## Mess

Dining in the hostel mess is compulsory for hostel students. No permission will be granted for dining outside the hostel mess under any circumstances. Subramania Bharathi Hostel and Bharathidasan Hostel are managed by the research scholars and the rest of the mess are outsourced. Five well-equipped mega mess (three for boys & two for girls) are available for dining by Hostel residents the use of the University. The hostel mess are run

by experienced and qualified caterers. The mess offer meals at reasonable rates.

## Mess Fees

The mess fee is to be paid in two instalments at the beginning of each semester in a year i.e. June and January. The mess fees

### for Girls (per day per head)

- PG Students : Rs. 74
- Ph.D. Scholars : Rs.76

### for Boys (Per day per head)

- PG Students : Rs. 74
- Ph.D. Scholars : Rs. 76

If Ph.D scholars fail to pay the hostel mess fee within the stipulated time, the fees may be recovered/deducted directly from the scholar's stipend / fellowship /JRF/SRF. They also will be evicted from the University hostel,

## Ragging

Ragging or teasing in any form is strictly prohibited in the University. Students are therefore, forbidden from indulging in such activities within the hostel premises. Ragging will invite very severe punishment including expulsion from the University. It is also punishable under law. No introductory meeting of the students is to be held in the hostels by the senior students.

## General facilities

The University Health Centre offers medical facilities round-the-clock to the students residing in the hostels. For the mobility of the students from hostels to departments, Library, Computer Centre, etc., bus facility is provided within the campus. Wifi connectivity is also provided to all the hostels to enable the students to have internet access.

**\* Detailed Pondicherry University Hostel rules & regulations are available in the hostel office and in the University website.**



# CONDUCT & DISCIPLINE

**Pondicherry University has zero tolerance towards**

**(a) Ragging**

**(b) Sexual Harrasment**

Students enrolled in Pondicherry University must abide by their duties and responsibilities to the University, to faculty and to other students. Failure to maintain appropriate standards of conduct will attract disciplinary action.

Students should not bring mobile phones to the Seminar Halls, Research Labs and Examination Halls and should not use mobile phones in the classroom.

## **Misconduct**

Students' misconduct includes but is not limited to the following:

- a) disruption of classroom activity or hindering the learning of other students anywhere in the University;
- b) copying / cheating in examinations and assignments;
- c) behaviour which interferes functioning of the University, disrupts education, endangers the health or safety of staff or students, or damages any property within the campus including University property;
- d) pasting posters or conducting students' meetings / protests / processions within the campus without prior permission of the University authorities;
- e) the possession or use of intoxicating beverages inside the campus;
- f) the possession or use of illicit drugs inside the campus;
- g) the falsification of documents or providing false information in order to obtain admission to classes;
- h) the possession of weapons; and
- i) the failure to return loaned materials or settle dues to the University

## **Disciplinary Measures**

**Disciplinary action may include:**

- a) Reprimand or warning;
- b) fail mark for an assignment or course;
- c) suspension for a semester or more
- d) withholding of official transcripts;
- e) suspension of campus privileges including hostel accommodation;
- f) suspension or expulsion from the University;
- g) any other disciplinary action which the University authorities deem appropriate in the circumstances.

## **Prohibition of Ragging**

Ragging in any form is strictly prohibited.

Senior students are not permitted to invite their juniors to their rooms for any introduction meetings.

In the past, six students (hostellers) who were involved in ragging were expelled from the hostel for a period of one year.

## **Redressal Mechanisms**

The Anti - Ragging committee of the University consists of all Deans. The list of members with their contact numbers is available on the University website

### **1) Anti-Ragging Committee**

Students can report any incident of ragging to the Registrar/Deans of respective Schools/Dean of Students' Welfare/ Chief Wardens (Boys & Girls) directly for remedial action

### **2) Students' Grievances Redressal Cell**

Students can report any grievances directly to the Dean, Students' Welfare for redressal.

### **3) Sexual Harassment Prevention Committee (SHPC)**

The University has an SHPC and the list of members with their contact phone numbers is available on the University website. Any sexual harassment complaint can be reported to the Chairperson or any member of SHPC for redressal or can be recorded in the register kept for this purpose in the Registrar's office

### **4) Women's Cell**

Grievances relating to gender bias and discrimination affecting women in the campus can be reported to the Head of Women's Cell and the list of members of the cell with their contact phone numbers are available on the University website.

### **5) Legal Services Clinic**

'Legal services clinic' is setup in Pondicherry University for the students of the institution and especially for the students hailing from North Eastern states

# DEPARTMENT OF PHYSICS

School of Physical, Chemical and Applied Sciences



The Department of Physics was established in June 1987. The Department offers integrated master's, traditional 2-year master's, and doctoral programs in Physics. The Department has been recognized for special funding by DST under the Fund for Improvement of Science and Technology Infrastructure (FIST-Level II) and UGC-SAP DRS-II Programmes. The faculty members have obtained major research grants exceeding Rs 26 crores from different funding agencies such as DST, AICTE, UGC, IFCPAR, NBHM, DRDO, DAE, INSA, CSIR, and NAB. The research activities have resulted in more than 800 research papers published in peer-reviewed journals, including nine patents. The faculty members have received national and international awards and are fellows of the national academies. In addition, they are members of the national and international scientific advisory committees and referees of national and international journals. Our faculty members are involved in collaborative research projects with leading scientists in various laboratories and industries in India and abroad. All faculty members are recognized supervisors for guiding PhD candidates. Please refer to the website for more information. <https://www.pondiuni.edu.in/departments/departments-of-physics/>

## ● PROGRAMMES OF STUDY

**1. MSc (Physics)** - 2 years duration, with following specializations: -

- (a) Condensed matter physics
- (b) Electronics
- (c) Laser Physics
- (d) Astrophysics (in collaboration with Indian Institute of Astrophysics)

Eligibility: BSc degree in Physics with Mathematics and Chemistry as ancillaries and a minimum of 55% of marks is required.

**2. Five-year Integrated MSc (Physics)**

Eligibility: 10+2 school completion certificate from any central/state board with mathematics, physics, and chemistry as the main subjects with a minimum of 50% of marks is required.

**3. PhD (Physics) - Full-time**

Eligibility: MSc degree in Physics / Materials Science & Technology with a minimum of 55% marks is required.

We follow the choice-based credit system (CBCS). The course curriculum aligns with the national-level examinations such as GATE and CSIR-NET. Hence, it is comfortable for students to clear national-level tests and gain admission to doctoral programs. An extensive collection of textbooks and reference books in Physics is available in the central library. In addition, several research journals in Physics are available through the library's online access. Please visit the web pages for more details on CBCS rules, course curriculum (syllabus), and library. <https://www.pondiuni.edu.in/pu-syllabus/>  
<https://www.pondiuni.edu.in/regulations/>,  
<http://lib.pondiuni.edu.in/>

## ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

## RESEARCH AREAS

### Experimental Physics

Materials for high energy density battery, Solid-state ionics  
Glass-ceramics & Spectroscopy, Fuel cells, Nonlinear optical materials, Magnetism and magnetic materials, Nanomaterials, Plasma physics and Nonlinear dynamics, Thin films and Plasmonics, Spintronics, multiferroics & photovoltaics, Thermal plasma materials processing, Plasma arc gasification

### Theoretical Physics

Nonlinear optics, Laser dynamics, Computational fluid dynamics, Computational biophysics, Statistical mechanics, Quantum information science, Atomic physics, Ab-initio DFT simulations of materials, Quantum mechanics and Field theory.

## INFRASTRUCTURE FACILITIES

Powder XRD, Glancing incidence XRD, Atomic force microscope / STM, Differential scanning calorimeter, Vibrating sample magnetometer, Susceptibility meter, FT-IR spectrophotometer, DC magnetron sputtering system, Impedance analyzer (40 MHz), LCR meter with a cryostat (80 K), Particle size analyzer, Surface area analyzer, Glove box, Battery cycle tester, High-temperature furnaces, Spinner magnetometer, Multifrequency ultrasonic interferometer, Nd-YAG laser, Titanium Sapphire laser, Computing cluster (4 nodes), Quantum ATK atomic-scale modeling software, VASP software for ab-initio DFT calculations, MATLAB for numerical computations, MAPLE for analytical calculations.

In addition, advanced research facilities accessible to the Department of Physics are available in the Central Instrumentation Facility. For more details, visit : <https://www.pondiuni.edu.in/department/central-instrumentation-facility/>

## FACULTY

### Professor & Head

**R Sivakumar, PhD** (IIT Madras)

Specialization: Theoretical nonlinear optics, Computational fluid dynamics, Hydrogen storage and Fuel cells

### Professors

**Ramaswamy Murugan, PhD.,** FASCh (Pondicherry University) [on EOL]

Specialization: Materials for lithium batteries, Spintronic and multiferroic materials

**V V Ravi Kanth Kumar, PhD** (S V University, Tirupati)

Specialization: Photonic crystal fibers, Glass / glass-ceramics, Spectroscopy, Experimental condensed matter physics

**S Sivaprakasam, PhD** (University of Hyderabad)

Specialization: Laser Dynamics

### Associate Professors

**A Ramesh Naidu, MPhil., PhD** (University of Hyderabad)

Specialization: Computational neuroscience, Theoretical and computational physics

**S V M Satyanarayana, PhD** (IGCAR Kalpakkam)

Specialization: Computational biophysics, Statistical mechanics, Nonlinear dynamics, Quantum information science

**Alok Sharan, PhD** (IIT Kanpur)

Specialization: Experimental Nonlinear Optics, Computational Electromagnetics

**Rabindra Nath Bhowmik, PhD** (Jadavpur University / Saha Institute of Nuclear Physics)

Specialization: Magnetism and magneto-transport phenomena

**Suraj Kumar Sinha, PhD** (Institute for Plasma Research, Gandhinagar)

Specialization: Plasma Physics.

**D Bharathi Mohan, PhD** (University of Hyderabad)

Specialization: I-VII Semiconductors, Plasmonics and Solar cells

**K V P Lata, PhD** (Indian Institute of Astrophysics)

Specialization: Atomic Physics, Ab-initio electronic structure calculations, CP Violation beyond the standard model, Theoretical simulations of dust around active galactic nuclei, Theoretical study and simulations of 2D materials

**Gangineni Ramesh Babu, PhD** (Technical University / IFW Dresden, Germany)

Specialization: Spintronics, Multiferroics

### Assistant Professors

**B Muthukumar, PhD** (Saha Institute of Nuclear Physics)

Specialization: Quantum mechanics, Field theory on non-commutative spaces

### UGC-Assistant Professor

**Yugeswaran Subramaniam, PhD** (Bharathiar University)

Specialization: Thermal plasma processing, Advanced coatings, Waste treatment and Clean energy



# DEPARTMENT OF CHEMISTRY

School of Physical, Chemical and Applied Sciences



The Department of Chemistry at Pondicherry University is a leader of the molecular revolution, addressing the most challenging and important questions in physical and life sciences of the 21st century. By leveraging its multi-disciplinary vision, its culture of synergistic collaboration and translational science, and its excellence in the physical, biological and engineering sciences, the Department with its distinguished faculty and alumni is opening new fields and frontiers and fundamentally new and innovative ways to address the increasingly complex scientific, health, energy and environmental problems of our time.

Since its inception in 1989, the Department has been engaged in imparting the highest level and quality of academic education and has focused upon addressing key scientific problems, which have gathered worldwide appreciation and recognition. The Department has a 16-member faculty expertise in frontier levels of research and have had the exposure and scope to carry out research of preliminary originality contributing genuinely towards the enhancement of academic and industrial interactions. We have contributed towards the publication of over 300+ research papers and 5 patents. There are about 10 ongoing research projects sponsored by various government organizations.

## Vision and Mission

- Boldly explore and advance new chemical frontiers in life sciences, physical sciences, medicine, energy, materials, and environmental sciences through visionary research, innovation, collaboration, and scholarship
- Discover, Create and Understand
- Design and model molecules that modulate biological processes
- Create materials for energy storage, reaction enhancements, and applied materials
- Understand the contribution of geometric and electronic structure to function
- Inspire and Educate
- Inspire a knowledge platform that supports an inventive culture
- Educate future leaders about how chemistry underlies living systems and physical processes
- Lead and Collaborate
- Lead in fostering solutions to problems of global significance by collaborating across many disciplines both within and external to Pondicherry University

## Research Activities:

The Department is engaged in a number of innovative areas of work. Our research crosses traditional boundaries and engages with other disciplines, both within Pondicherry University and with external stakeholders across a range of sectors. The importance of the Department's research in the real world is exemplified by our many industrial collaborations and successful start-ups. This collaborative network is reflected in our 8 main research themes.

## Catalysis:

The research areas are diverse across the theme, encompassing: small molecule and novel-materials synthesis, the development of routes to new pharmaceuticals and therapeutics, new energy vectors, new polymeric materials, efficient use of renewable resources, novel heterogeneous systems for chemicals essential for modern society, electrocatalysis, innovative healthcare solutions, chemical biology, theory and computation.

**Synthesis:**

Our major synthetic research are (a) developing new and efficient catalyst, (b) preparing small drug and probe molecules (c) preparing new functional materials (d) developing new, energy efficient, and greener synthetic routes.

**Chemical Biology:**

Our collaborative research areas are (a) understanding biology at the molecular level; synthesis and modification of biomolecules; development of biomolecular machines; molecular basis of biological mechanism (b) mechanistic studies of metalloenzyme redox catalysis; small molecule activation at metal centres in enzymes; new energy storage and generation solutions (c) creation of hit-lead-probe-drug candidates; development of diagnostic methods; molecular imaging of disease; novel methods for the interrogation of diseased systems; molecular strategies in targeted delivery; De Novo synthetic biology, novel therapeutic strategies.

**Dynamics and Mechanism:**

Precision gas-phase kinetics and reaction dynamics studies are undertaken through quantum theoretical and collaborative efforts for experimental investigations to improve our understanding of molecular collisions at the most fundamental level.

**Functional materials and interfaces:**

Our expertise spans the discovery, understanding and development of theory for materials providing solutions in energy, healthcare, electronics, engineering and catalysis. Much of the research is naturally interdisciplinary and collaborative.

**Computational Chemistry and modelling:**

The Theoretical research group at Pondicherry amply reflects this breadth and diversity, yet maintains coherence in terms of research themes and methodology. Core research activities range from fundamental studies of quantum theory in condensed matter, chemical reaction dynamics, and electronic processes in macromolecular systems, to computational soft and biological matter, computer simulation of novel materials, and applied computational research in inorganic and organic chemistry.

**Programs of Study:**

Chemistry at Pondicherry University offers teaching and research programs, namely, M.Sc. Integrated Chemistry a five year program, M.Sc. Chemistry a two year program and Ph.D. Chemistry (full-time / part-time) of These programs is:

aim:

- To provide a strong foundation in fundamentals of Chemistry through various degree programs to develop human resources with high professional competence, work ethics and human value.
- To develop skills to carry out research in cutting edge areas, both of basic and applied nature, on par with international standards
- To develop diversified, integrated, interdisciplinary knowledge and skills as well as inculcation of the values needed to survive in the highly competitive knowledge and skilled society.
- Give students relevant experience at the master's level and the opportunity to carry out focussed research in the discipline under close supervision.
- Give students the opportunity to acquire or develop skills and expertise relevant to their research interests.
- Provide all students with relevant and useful researcher development training opportunities to broaden their horizons and properly equip them for the opportunity which they seek following their PhD studies.

**Admission to Programs:**

**5-years M.Sc. Integrated Chemistry** is a ten-semester program, enabling students to explore the links within the subject and related sciences. The core material is taken by all students, with opportunities to specialize later in the program. The fifth year is devoted exclusively to research. Minimum Qualification: 10+2 school completion certificate from any central/state board with Mathematics, Physics, Chemistry as main papers.

**Admission procedure:** Admission will be based on the Central Universities Entrance Test (CUET), 2022.

**2-years M.Sc. Chemistry** program offers the right proportion of a combination of theory and laboratory-based courses. Theory courses are offered at two levels spread over four semesters. Class room attendance, interaction with peers and faculty, problem-solving approach and integration with online learning management system are features of the program. Minimum Qualification: B.Sc. Chemistry or equivalent from any UGC recognized university/college. Candidates who do not possess mathematics in their +2 examination must prove their competence by registering for a designated mathematics course through NPTEL/MOOC.

**Admission procedure:** Admission will be based on the Central Universities Entrance Test (CUET), 2022.

**PhD Chemistry** offered by the Department of Chemistry full-time/part-time modes introduces students to research skills and specialist knowledge. Students are integrated into the research culture of the Department by joining a research group, supervised by one of our academic staff, in one of the following areas of Chemistry: solid state chemistry and inorganic materials, coordination chemistry, analytical chemistry, bio-inorganic chemistry, bio-organic chemistry, organometallic chemistry, synthetic organic chemistry, carbohydrate chemistry, photochemistry, polymer science, homogeneous and heterogeneous catalysis, green chemistry, nano chemistry, quantum chemistry, computational chemistry, cheminformatics, reaction dynamics, molecular and magnetic resonance spectroscopy. Minimum Qualification: M.Sc. Chemistry/Chemical Sciences or equivalent from any UGC recognized university/college. Candidates possessing other degrees like M.Sc. Materials Chemistry, M.Sc. Industrial Chemistry, M.Sc. Biochemistry are also considered for admission but for specific research groups. Admission procedure: Admission to this program will be through a common entrance examination with the question paper having 100 multiple choice questions distributed in all sub-branches of chemistry at post graduate level. Shortlisted candidates from the entrance examination must appear for an interview to evaluate their research aptitude. The cumulative marks from entrance examination and interview will be taken for admission. Prospective students having CSIR-UGC JRF, are exempted from the entrance test and may appear for the interview directly.



## Research Funding and Facilities

Premier national funding agencies such as DST, CSIR, UGC and AICTE support the research work of the faculty members. Apart from individual major sponsored research projects by the faculty members, the Department is also supported by the Department of Science & Technology (DST), Government of India through FIST (Level-I) program and by the University Grants Commission through UGC-SAP (DSA-I) program to aim for higher impact research activities.

The Department houses selected instrumental facilities to support day-to-day teaching and research activities. The major facilities are: HRMS, Single Crystal XRD, FT-IR, LC-MS, HPLC, C/H/N/S analyzer, UV-Vis spectrometer, Fluorescence spectrometer and electrochemical workstations. In addition to this, the Central instrumentation Facility offers numerous advanced level instrumentation and analysis support to the department activities. The Department has excellent computational facility and computer networking for both intra and internet facilities. This computational centre provides the necessary infrastructure to theoretical and computational research activities.

In addition to the above, individual research groups have laboratory space, fume hoods, essential laboratory equipment, anaerobic facilities, specialized equipment and others.

## PLACEMENT AND FUTURE PROSPECTS

The academic curriculum of the Department helps a good number of students to qualify in national level competitive examinations including NET, GATE, and to find placement in major pharmaceutical, chemical manufacturing, industries and as academic professionals in colleges and universities through campus recruitment and personal contacts. Research students have opportunities for post-doctoral positions in various international and national institutes through government agencies and personal contacts.

## FACULTY

### Professor & Head

**Bala. Manimaran, Ph.D.** (IIT-Bombay)

Specialization: Organometallics, Nanoscale Materials and Supramolecular Chemistry.

### Professors

**Bidhu Bhusan Das, Ph.D.** (IIT-Kanpur)

Specialization: Synthesis and state-of-the-art structure-property relations in Electronic and Magnetic Materials, Powder XRD, Magnetic Resonance Spectroscopy (EPR, NMR).

**K. Anbalagan, Ph.D.** (University of Madras)

Specialization: Nanomaterial Photocatalysis, Inorganic Photo-Chemistry, Nanosized Ferromagnetic materials, Surface Adsorption Dynamics.

**K. Tharanikkarasu, Ph.D.** (University of Madras)

Specialization: Controlled Radical Polymerization, Anionic Polymerization, Fuel Cell Membranes, Nanocomposites, Anti-TB and Anti-Malarial agents.

**R. Venkatesan, Ph.D.** (IIT-Bombay)

Specialization: Applied Material Chemistry, Photochemistry, Electrochemistry, Computers in Chemical Education.

**C. Sivasankar, Ph.D.** (IISc, Bangalore)

Specialization: Catalysis, Organometallics, Bioinorganic and Computational Chemistry.

**M. Bakthadoss, Ph.D.** (University of Hyderabad)

Specialization: Stereo Selective Organic Synthesis, Heterocyclic Chemistry, Green Chemistry, Asymmetric Synthesis.

**G. Vasuki, Ph.D.** (Madurai Kamaraj University)

Specialization: Green chemistry, Stereo selective Synthesis and Chemistry Education (Constructivist Learning).

**N. Dastagiri Reddy, Ph.D.** (IIT-Kanpur)

Specialization: Main group organometallics, transition metal based homogenous catalysis.

**M. M. Balakrishnarajan, Ph.D.** (Bharathidasan University)

Specialization: Chemical Information Sciences, Computational Chemistry

**C. R. Ramanathan, Ph.D.** (University of Hyderabad) Specialization: Asymmetric synthesis, Drug design and discovery. Binoy Krishna Saha, Ph.D. (University of Hyderabad) Specialization: Crystal Engineering, Host-guest Chemistry, Polymorphism, Solid-state.

## Associate Professors

**S. Sabiah, Ph.D.** (IIT-Madras)

Specialization: Bio-inorganic chemistry, Coordination Chemistry and Metal-carbene Chemistry.

**Toka Swu, Ph.D.** (Nagaland University)

Specialization: Material Science, Coordination Chemistry.

**R. Padmanaban, Ph.D.** (University of Hyderabad) Specialization: Quantum Dynamics, Excitation energy transfer.

**P. Thanasekaran, Ph.D.** (Madurai Kamaraj University) Specialization: Photochemistry, Materials chemistry and Chemical biology.

(For more information visit <https://chempu.ac.in>)

## DEPARTMENT OF EARTH SCIENCES

School of Physical, Chemical and Applied Sciences



The Department of Earth Sciences at Pondicherry University was started in September 1994. The Department is being supported by UGC- Special Assistance Programme at DRS level and by DST-FIST Programme. A national facility for geochronology and isotope geosciences is housed in the Department. The Department strives to achieve academic excellence and to produce geoscientists with world class training.

### ● PROGRAMMES OF STUDY

**M.Sc. Applied Geology (2 year)**

**Integrated M.Sc. Applied Geology (5 year)**

These M.Sc. courses are designed to develop basic understanding of the earth and earth processes, as well as, skills to apply this knowledge to solve problems of global and national importance. The curriculum includes theory courses offered by experienced faculty, practical courses with world class laboratory facilities, intensive field training at the best locations in the country, and a project work supported by sophisticated equipment.

### **Ph.D. Earth Sciences**

**(Full – time, part time (Internal & External))**

The research programme includes course designed to develop research orientation, and supervised research work in conventional, as well as, emerging areas of geosciences. State of the art research facilities, including XRD, ICP-AES, ICP-MS, TIMS, IRMS, optical microscopes and heating –freezing stage are available in the Department. Additionally, XRF, EPMA, confocal Laser Raman Spectrometer and other sophisticated research equipment useful for geo scientific research are available in the Central Instrumentation Facility

### ● ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

## INFRASTRUCTURE FACILITIES

The Department has well equipped laboratories with sophisticated equipment to cater to the needs of the practical course-work of M.Sc. students as well as for research. Major facilities available in the Department are listed below:

### Mineralogy, Petrology & Paleontology Laboratories:

Student and Research model Polarizing Microscopes with Photographic facility heating-freezing stage for fluid inclusion Analysis Stereoscopic zoom microscopes, Laser Particle Size Analyser, X-ray Powder Diffractometer, Isodynamic Magnetic Separator are available in the Department. SEM, XRF and EPMA are available in CIF to support paleontological / mineralogical / petrological studies.

**Museum:** The Department has a Geology museum with a collection of about 800 rock forming minerals, ore minerals, industrial minerals, various type of rocks and fossils.

**Geochemical Laboratory:** Advanced analytical facilities like ICP-OES, ICP-MS are available. This laboratory also has other minor equipment like Furnace, Electronic balance, Spectrophotometer, Flame photometer, Conductivity meter, pH meter, MilliQ Water Purifier etc.

**Isotope Geoscience Laboratory:** Thermal ionization mass spectrometer with ultra-clean laboratory to carry out Rb-Sr, Sm-Nd and U-Th-Pb geochronological and isotope studies is available. This laboratory is also used for cosmogenic isotope studies (10Be, 26Al) in collaboration with IUAC, New Delhi.

**Computing and Remote sensing & GIS Facility:** Adequate number of PCs with internet connectivity through University intranet and online access for large number of journals and other e-sources. ERDAS, ArcGIS, ENVI-IDL, Total Station Microsurvey CADD2010 softwares and digital satellite imageries for remote sensing and GIS applications are available.

**IRMS Laboratory:** For measurement of stable isotope composition of H, C, O, S, in a variety of sample (water carbonates, sulphides Organic Matter etc) a lab is established as a central facility.

**Field Equipment:** Global positioning system, Survey equipment, SLR and Digital cameras are available to carryout geological field studies.

**Geoscience Workshop:** Rock cutting machine, thin section preparing machine, Mounting machine for polished ore blocks are available for preparing thin sections and ore mounts. Ball mill and Planetary mill with agate grinding sets, Automatic sieve shaker are available for sample preparation.

**Geophysics Laboratory:** Digital refraction seismic timer with geophone, Terrameter, Portable magnetometer and Resistivity meters are available.

**Topographic maps and Geological maps:** Large collection of topographic maps in 1: 50000 scale covering southern states of India and geological maps of Indian states, districts and important mineral deposits in various scales have been procured.

## RESEARCH ACTIVITIES

The research areas offered by the Department are Geochemistry, Isotope Geochronology, Ore Geology, Tectonics, Metamorphic Petrology and Paleoclimate studies, Hydrogeology, Remote Sensing and GIS. Interdisciplinary research with the Departments of Chemistry and Physics are being actively pursued in the fields of EPR spectroscopy of minerals and paleomagnetism. Inter-institutional collaborative research involving IITs, and PRL are also in progress. Presently, 25 full-time and 2 part-time scholars are working for Ph.D. All the faculty have research projects funded by DST, CSIR, UGC, PRL, BRNS, PLANEX etc. Recognising the research capability of the Department, DST has provided funds under FIST programme (₹ 50 lakhs) for the Second Phase recently.

### Geochronology and Radiogenic Isotope Research

A variety of studies, such as, Archean crust-mantle evolution, early oxygenation of the Earth, tectonic evolution of south Indian granulitic terranes, petrogenesis of carbonatites, origin of Proterozoic sedimentary basins and provenance of modern and ancient fluvial, deltaic and beach sediments and water-rock interaction studies are being carried out. Rb-Sr, Sm-Nd and Pb-Pb isotope compositions on whole-rock and mineral separates are being routinely analyzed using a clean isotope geochemistry lab and Thermal Ionization Mass Spectrometer (TIMS, Triton - model of Thermo-Finnigan) and LA-ICPMS. 10Be and 26Al isotope studies are undertaken to estimate denudation and sedimentation rates.

### Ore Geology

There are active research programmes on the study of well known ore deposits in India and Russia to understand the environment and process of ore formation. These research programmes are supported by well equipped optical microscopy, fluid inclusion, XRD and LA-ICP MS labs in the Department and EPMA, WD-XRF and Laser Raman Microprobe in the Central Instrumentation Facility.

Stable isotope (hydrogen, carbon, nitrogen, oxygen and sulfur) analysis of carbonate, sulfide and sulfate ore minerals is also carried out using IRMS for understanding processes of ore formation.



### **Rock Weathering and Sediment Geochemistry**

The research includes study of elemental, including REE, redistribution during the surface earth processes and its use in provenance and tectonic interpretations. The study of micro and macro-level geochemical and mineralogical changes in different rock types weathering under different climatic regimes is also being carried out. The research is carried out in well equipped laboratories with facilities for chemical digestion of geological samples and elemental analysis by ICP-MS, ICP-AES and EPMA

### **Paleoclimatology and climate studies**

The research involves reconstruction of the past climate employing chemical and isotopic studies of various proxies such as lacustrine and deltaic sediments and tree-rings. The current projects deal with paleoclimate reconstruction of the Cauvery river basin and high resolution temperature reconstruction of western Himalaya. The Research also includes isotopic characterization of modern precipitation for understanding the evolution of isotopic composition of rainfall during precipitation. Modeling studies for proxy characterization and response analysis is also being carried out. The research work is supported by IRMS, particle size analyzer, XRD etc.

### **Remote Sensing and GIS**

The research activities involved are lithological discrimination and mineral targeting using hyperspectral remote sensing and Planetary Geology. The lab is equipped with computational facilities to do image processing and GIS related work. Software – ERDAS Imagine 10, ENVI4.7, ARCGIS are available.

### **Micropaleontology**

Research at post-graduate and PhD level is offered and the laboratory is equipped with Wet laboratory, Stereozoom Microscopes and SEM with all other essential facilities.

### **Geophysics**

With the help of Proton Precession Magnetometer and the crustal modeling “Oasis Montaj” software ground magnetic studies are being carried out in the northeast part of Tamil Nadu.

### **Geohydrology**

Groundwater and surface water chemistry, geochemical and geohydrological modeling, thermodynamics and speciation modeling, remote sensing and GIS applications in groundwater resource estimation and management is being done. Equipment such as Flame photometer, Spectrophotometer, Ion selective detectors and Resistivity equipments and groundwater modeling software are available.

## **PLACEMENT OPPORTUNITIES**

The academic curriculum of the Department helps a good number of students to qualify in national level competitive examinations including NET, GATE, and to find placement in major geoscientific organizations like AMD, GSI, CGWB, NHPC, ONGC, etc. Private companies also recruit students through on and off campus placements.

## **ONGOING DEVELOPMENTS:**

Several new faculty members are being recruited who are expected to join the Department before the start of new academic year. A new programme 2-year M.Sc. (Geophysics) will be started shortly.

## **FACULTY**

### **Professor & Head**

**Rajneesh Bhutani, Ph.D.**

(Physical Research Laboratory, Ahmedabad)

*Specialization:* Isotope Geology, Tectonics.

### **Professors**

**M. S. Pandian, Ph.D.** (Indian School of Mines, Dhanbad)

*Specialization:* Economic Geology, Mineral Exploration.

**D. Senthil Nathan, Ph.D.** (IIT, Kharagpur)

*Specialization:* Paleontology, Sedimentology.

**Pramod Singh, Ph.D.**

(Jawaharlal Nehru University, New Delhi)

*Specialization:* Geochemistry, Sedimentology.

**K. Srinivasamoorthy, Ph.D.** (Annamalai University)

*Specialization:* Hydrogeology, Remote Sensing and GIS.

### **Associate Professors**

**Subhadip Bhadra, Ph.D.** (IIT, Kharagpur)

*Specialization:* Structural Geology, Geochemistry.

**Nurul Absar, Ph.D.**

(Aligarh Muslim University, Aligarh)

*Specialization:* Sedimentary Geochemistry, Precambrian

### **Assistant Professors**

**S. Lasitha, Ph.D.** (Cochin University of Sci. & Tech.)

*Specialization:* Geophysics (Seismology & Gravity).

**Manisha Kumari, Ph.D.**

(Mohanlal Sukhadia University, Udaipur)

*Specialization:* Palaeontology, Stratigraphy,

Micropalaeontology.

Crustal Evolution, Sedimentology.

**K. N. Kusuma Ph.D.**

(IIT Bombay)

*Specialization:* Hyperspectral Remote Sensing, GIS, Planetary Geology, Geomorphology.



# DEPARTMENT OF MATHEMATICS

Ramanujan School of Mathematical Sciences

The Department was established in 1986 and it aims to train people who are oriented towards research and teaching in advanced areas of Mathematics. The Department was supported for the development of infrastructure by the Department of Science and Technology (DST), Government of India under FIST programme during 2009-14 and University Grants Commissions (UGC) - Special Assistance Programme (SAP) - DRS-I level during 2009-14. Presently, the Department is supported by the University Grants Commission - Special Assistance Programme (SAP) - DRS-II level for enriching Research Support for the period 2015-20. The National Board for Higher Mathematics (NBHM) gives support for the purchase of library books related to Mathematics. The faculty members are involved in national and international projects.

## PROGRAMMES OF STUDY

**M.Sc. Mathematics**  
**M.Sc. Mathematics (Five Year Integrated Course)**  
**Ph.D. Mathematics (Full-time)**

## ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

## INFRASTRUCTURE FACILITIES

The Department has a separate building, a seminar hall and a well-equipped computer laboratory. Various mathematical softwares for course work and research are also available. The National Board for Higher Mathematics (NBHM) gives support for Library. .

## FACULTY

### Professor & Head

**Rajeswari Seshadri, Ph.D.** (I.I.Sc., Bangalore)  
*Specialization:* Differential Equations & their Numerical Methods

### Professors

**M. Subbiah, Ph.D.** (I.I.T., Kanpur)  
*Specialization:* Hydrodynamic Stability  
**T. Duraivel, Ph.D.** (Pondicherry University, Puducherry)  
*Specialization:* Commutative Algebra

### Associate Professor

**A. Joseph Kennedy, Ph.D.** (University of Madras, Chennai)  
*Specialization:* Combinatorial Representation Theory

### Assistant Professors

**S. Francis Raj, Ph.D.** (SASTRA University, Thanjavur)  
*Specialization:* Graph Theory.  
**S. N. Fathima, Ph.D.** (Mysore University, Mysore)  
*Specialization:* Number Theory, Special Functions  
**I. Subramania Pillai, Ph.D.**  
 (University of Hyderabad, Hyderabad)  
*Specialization:* Topological Dynamics.

## DEPARTMENT OF STATISTICS

[DST-FIST & UGC-SAP(DRS-1) Department]

Ramanujan School of Mathematical Sciences

The Department of Statistics was established in 2006. Currently, the department offers M.Sc. Statistics, M.Sc. Five Year Integrated (Statistics) and Ph.D. (Statistics) programmes. The department aims to train students in the development and applications of Statistical techniques for analyzing data arising in the scientific investigation of problems in various disciplines. It also provides first hand practical experience in handling modern statistical software in the analysis of such data. In the present scenario, it is rather impossible, even to think of any field which does not employ modern statistical tools to arrive at rational conclusions from research studies and a statistician is always an indispensable part of any research team carrying out any research investigation.

The Department is supported for development of infrastructure by the Department of Science and Technology (DST), Government of India under FIST program and University Grants Commission (UGC) – Special Assistance Program (SAP) – DRS – I level. The faculty members are actively engaged in research and published papers in National and International journals.

### ● PROGRAMMES OF STUDY

M.Sc. Statistics

M.Sc. Statistics (Five Year Integrated)

Ph.D. Statistics (Full-time and Part-time)

### ● ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

## INFRASTRUCTURE FACILITIES

The Department of Statistics has separate premises with facilities like Seminar Halls, Statistical Computing Laboratories. Classrooms with LCD projectors and Wi-fi connectivity for conducting classes. There are around 70 terminals in the computing laboratories with high end configuration that support standard statistical software like IBM SPSS 19.0, MINITAB 17 and R language. Students will have ample opportunities to use of these software's that will help them in placement after completion of the course. The course curriculum includes a blend of theoretical and applied papers. Preparing the students for the needs of current job market trends is the main objective of our course programs.

Statistics books (both text book and reference book) worth more than 20 lakhs are available in the central library in addition to e –resources and e – journals. The recent syllabus for M.Sc. course provides broad choice of opportunities in selecting the elective subject according to their preferences. Since the updated syllabus includes UGC-CSIR NET examination contents, the students will be benefitted in taking NET examination and other competitive examination for the All India Services

## PLACEMENTS AND BEST PRACTICES

The Placement activities of the Department are taken care by a Placement Cell which comprises of a student member and a faculty advisor. The placement cell organizes campus recruitment programs every year and takes pride in facilitating placement for eligible students in Multinational Companies and other companies in the private sector. Many MNC are conducting the campus placement/recruitments in the department in the core areas of statistics and general recruitments along with other departments. Our students are excelling their careers on Five broad spectrum of TRACS

- Teaching & Learning
- Research & Higher Education,
- Administrative Placements & Self Employment
- Consulting & Data Practicing
- Statistical Software Training & Skill Development

Department is also providing co curriculum activities for overall development of students by undertaking the necessary programs.

- Alumni activities for better liaison between the current and past students;
- Student affairs for exploring interactions among university and industry;
- Eminent invited lecture series;
- Placements, Career Planning and Soft skills developments;

Statistics department is hosting regular academic activities in the form of Conferences, Workshops, Seminars, educational tours, Placement Activities, Alumni Networking, Skill Development Programs, Statistical Software Training, etc.

Semester wise Academic planning, Special invited lecture series with eminent people, Campus recruitment, Career guidance, Student coordinating activities for overall development, Choice based credit system, Freedom for selecting either internal or external soft core papers and pursue the courses as per the flexibility of students need are some other interesting features of the courses.

The department is making the up gradation of academic orientation and syllabus modification as per the current trends and changing requirements of job market as well as emerging changes in new knowledge inputs. There are periodical meetings of Board of studies to take up the above mentioned activities.

**R. Vishnu Vardhan, Ph.D.** (Sri Venkateswara University)

*Specialization:* Biostatistics, Multivariate Analysis, Computational Statistics

**Sudesh Pundir, Ph.D.** (Panjab University)

*Specialization:* Distribution Theory, Statistical Inference including

Bayesian, High Dimensional Data Analysis

**J. Prabhakara Naik, Ph.D.** (Sri Venkateswara University)

*Specialization:* Statistical Modelling and Inference

## FACULTY

### Professor and Head

**Kiruthika, Ph.D.** (University of Madras)

*Specialization:* Multivariate Statistical Analysis, Artificial Neural Network

### Professor

**P. Tirupathi Rao, Ph.D.** (Andhra University)

*Specialization:* Stochastic Modeling, Optimization Methods, Statistical Computing and Biostatistics.

### Associate Professors

**Navin Chandra, Ph.D.** (Banaras Hindu University)

*Specialization:* Reliability Theory, Bayesian Inference, Survival Analysis

**V. S. Vaidyanathan, Ph.D.** (University of Madras)

*Specialization:* Data Mining, Distribution Theory, Inference.

## DEPARTMENT OF COMPUTER SCIENCE

School of Engineering & Technology

The Department aims at imparting quality education in Computer Science & Engineering and Information Technology through various post-graduate programmes. It also offers an atmosphere conducive for research scholars for pursuing research in various advanced areas of Computer Science Engineering and Information Technology.

The faculty members are actively engaged in research and have a number of patents and research publications. The Department also has an ongoing Research Project funded by SPARC (Scheme for the Promotion of Academic and Research Collaboration), an initiative by MHRD, DST-SERB facilitating academic and research collaborations between top ranked Indian Institutions and globally ranked Foreign Institutions.

### ● PROGRAMMES OF STUDY

**M.Sc.** Computer Science (University Main Campus & Karaikal Campus)

**M.C.A.** (Two Years Programme)(University Main Campus & Karaikal Campus)

**M.Sc.** Computer Science (Five Year Integrated)

**M.Tech.** Computer Science & Engineering

**M.Tech.** Network & Information Security

**Ph.D.** Computer Science

(Full-time, Part-time (Internal & External))

**Ph.D.** Computer Science & Engineering

(Full-time, Part-time (Internal & External))

### ● ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

### STUDENTS ACTIVITIES

The Computer Science students' association, PIXEL, provides opportunities to sharpen the skills of students by organizing lectures and students meet. The alumni of the Department deliver lectures on latest topics periodically for updating the skill sets of the students.

#INCLUDE, the Students' programming club organises year long training programmes and programming events for the students of the University Departments.

### PLACEMENT

The Placement activities of the Department are taken care by a Placement Cell which comprises of student members and a Faculty Advisor. The Placement Cell organizes Campus recruitment programmes every year and takes pride in facilitating placement for the eligible students in Multi-National Companies and Banking Sector. The Department organises programming and soft-skill training programmes to prepare the students for placements.

### INFRASTRUCTURE FACILITIES

The Department has a separate building, 2 seminar halls and ICT enabled classrooms. The Department is equipped with state-of-the-art programming labs, research labs, funded project labs and an IoT lab.

### FACULTY

#### Professor & Head

**S. Siva Sathya, Ph.D.** (Pondicherry University, Puducherry)

*Specialization:* Evolutionary Algorithms, Wireless Computing & Spatial Data Mining.

#### Professors

**R. Subramanian, Ph.D.** (IIT Delhi)

*Specialization:* Evolutionary Algorithms & Cloud Computing.

**T. Chithralekha, Ph.D.** (Pondicherry University, Puducherry)

*Specialization:* Cyber Security & Data Science.

#### Associate Professors

**S.K.V. Jayakumar, Ph.D.** (Pondicherry University, Puducherry)

*Specialization:* Web Services Computing, Cloud Computing & Data Science.

**K. Suresh Joseph, Ph.D.** (Anna University, Chennai)

*Specialization:* Operating Systems and Soft Computing.



**S. Ravi, Ph.D.** (M.S. University, Thirunelveli)  
*Specialization:* Image Processing, Algorithms, Bio-Metric Systems, Operating System & Medical Imaging.  
**M.Nandhini, Ph.D.** (Bharathiar University, Coimbatore)  
*Specialization:* Artificial Intelligence, Software Engineering, Evolutionary Algorithms & Combinatorial Optimization.

## Assistant Professors

**R.P. Seenivasan, M.C.A., M.Phil.** (Madras University, Chennai)  
*Specialization:* Software Engineering and Database Management Systems.  
**K.Vijayanand, Ph.D.**  
 (Acharya Nagarjuna University, Andhra Pradesh)  
*Specialization:* Natural Language Processing  
**T. Sivakumar, Ph.D.** (Pondicherry University, Puducherry)  
*Specialization:* Database Management Systems & Computer Networks.  
**R. Sunitha, Ph.D.** (Pondicherry University, Puducherry)  
*Specialization:* Theoretical Computer Science & Knowledge Engineering.  
**Pothula Sujatha, Ph.D.** (Pondicherry University, Puducherry)  
*Specialization:* Information Retrieval, Multilingual Systems & Database Technologies.  
**M. Sathya, M.Tech.** (Pondicherry University, Puducherry)  
*Specialization:* Software Engineering  
**K.S. Kuppusamy, Ph.D.** (Pondicherry University,

Pondicherry)  
*Specialization:* Human Computer Interaction & Accessibility Computing.  
**V. Uma, Ph.D.** (Pondicherry University, Puducherry)  
*Specialization:* Artificial Intelligence, Data Mining, Machine Learning & Deep Learning.  
**P. Shanthi Bala, Ph.D.** (Pondicherry University, Puducherry)  
*Specialization:* Distributed Computing Systems, Knowledge Engineering and Computer Networks.  
**T. Vengattaraman, Ph.D.** (Pondicherry University, Puducherry)  
*Specialization:* Distributed Computing & Nature Inspired Algorithms.



## DEPARTMENT OF HISTORY

School of Social Sciences and International Studies

The Department of History was established in December 1987 with following main objectives:

- To provide facilities for study and research related to the social, economic and cultural history of India
- To highlight the intellectual tradition and cultural heritage of India
- To explore the history of countries other than India
- To undertake the study of historiography and the philosophy of history
- To provide knowledge of the theory and practice of historical writing

### ● PROGRAMMES OF STUDY

M.A. History  
M.A. History (5 Year Integrated)  
Ph.D. History

### ● ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

### INFRASTRUCTURE FACILITIES

The Department is equipped with Smart Class Room facility for ICT integrated teaching. It has sophisticated equipment such as LCD projectors, public address systems, etc., for effective teaching. Besides the chalk and talk method, the teaching is done thorough Power Point presentations. Students are encouraged to develop their skills of communication through group discussions and individual seminars. State of the art survey and excavation equipment are used in archaeological, archival and historical data collection, analysis and report writing. The centralised facility of a well equipped computer laboratory in the University is an additional infrastructural facility available for the students of the Department.

### INVITED LECTURES AND FIELD TRIPS

The Department conducts national seminars and invites distinguished scholars for giving lectures throughout the academic year with a view to disseminate advanced knowledge in chosen fields of history. Field trips to nearby places of importance are undertaken every year. The students of the Department are getting placements as teachers in the history departments in colleges and universities in different parts of India and as technicians in governmental agencies like the Archaeological Survey of India and the State Departments of Archaeology and Museums.

### MEMORANDUM OF UNDERSTANDING:

The Department of History has entered into a Memorandum of Undertaking (MoU) with C.P. Ramaswami Aiyar Foundation, Chennai and Sharma Center for Heritage Education, Chennai to collaborate in teaching, training and research programmes in tune with the New Education Policy 2020.

### FACULTY

#### Professor & Head

**N. Chandramouli, Ph.D.** (Telugu University, Hyderabad)  
*Specialization:* Ancient Indian History, Field Archaeology, Archaeology of South India, Rock Art of India, Indian Numismatics and Indian Epigraphy.

#### Professors

**G. Chandrika, Ph.D.**  
(Annamalai University, Annamalai Nagar)  
*Specialization:* Modern History, Intellectual History of Modern India, Historiography and Women's History.

**K. Venugopal Reddy, Ph.D.**  
(Jawaharlal Nehru University, New Delhi)  
*Specialization:* Modern History, Economic History of India, Nationalist Movement in India and Labour History.

#### Assistant Professor

**Paokholal Haokip, Ph.D.**  
(Jawaharlal Nehru University, New Delhi)  
*Specialization:* Modern History, Overseas Slave Trade, Diaspora Studies, Colonial History of North East India and North West Burma and Genocide Studies.  
**Ruman Banerjee, Ph.D.** (University Bristol, United Kingdom)  
*Specialization:* Ancient Indian History & Archaeology, Eurasian Prehistory, Field Archaeology, Remote Sensing and GIS (RS-GIS) and Scientific Dating of Rock Art.

# DEPARTMENT OF POLITICS AND INTERNATIONAL STUDIES

School of Social Sciences and International Studies

The salient features of the Department include:

- UGC Special Assistance Programme DRS-II Level.
- Exchange programmes with prestigious foreign and Indian universities.
- Interactions with distinguished Indian and foreign scholars through seminars, conferences, workshops and refresher courses.
- Promoting teaching and research in the areas of international relations and area studies in general and South Asia in particular
- Policy input to the makers of India's foreign and security policies as well as the theoretical understanding of International relations.
- Publication of the scholarly journals titled *International Journal of South Asian Studies*.
- Publication of scholarly books on thrust areas of teaching and research programmes in the Department.

## ● PROGRAMMES OF STUDY

M.A. Politics & International Relations (2 Years)  
M.A. Political Science (2 Years)  
M.A. Political Science (Five Year Integrated)  
Ph.D. Politics & International Studies (Full-time & Part-time (Internal & External))

## ● ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022 .

## THE THRUST AREAS OF TEACHING AND RESEARCH

Specific focus on India's Foreign and Security Policy, Indian political system, Political Theory, Political Economy of Development, Public Administration, South Asian Regional operation and Peace and Conflict Resolution.

## INFRASTRUCTURE FACILITIES

The Department has good infra-structural facilities including interactive class rooms, Smart class rooms and other teaching aids to assist teachers and students in their pursuit of academic excellence and relevance.

## FACULTY

### Professor & Head

**N. K. Kumaresan Raja, Ph. D.**

(University of Madras)

*Specialization:* Pubic Administration, Public Policy and Governance & Land Administration

### Professor

**P. Lazarus Samraj, Ph.D.**

(Annamalai University)

*Specialization:* Indo-U.S. Relations, Terrorism, Indian Government & Politics

### Associate Professors

**Nanda Kishor M S, Ph.D.**

(University of Hyderabad)

*Specialization:* Geopolitics and International Relations

**Sanjay Sharma, Ph.D.**

(Jamia Hamdard University)

*Specialization:* Public Policy & Political Ecology

### Assistant Professors

**G. Rose, M. Phil.**

(Jawaharlal Nehru University, New Delhi)

*Specialization:* International Organisation, Theories of International Relations.

**Pramod Kumar Ph. D.**

(Jawaharlal Nehru University, New Delhi)

*Specialization:* Central Asian and Russian Studies, Energy Security and Sustainable Development.

**Richa Tiwari, Ph.D.**

(University of Rajasthan)

*Specialization:* Political Philosophy, Indian Political Theory

**Harsh Meena, Ph.D.**

(University of Delhi)

*Specialization:* Federal Polity, Electoral Politics & Tribal Welfare Policy

## DEPARTMENT OF SOCIOLOGY

School of Social Sciences and International Studies

The Department of Sociology was established in 1993. Students were admitted to the M.A and Ph.D programmes from 1993-94 academic year and the M.Phil programme was introduced from 1996-97. The Post-Graduate Diploma in Rural Development was launched from 2009-10. In a span of over two and half decades, the Department has trained a fairly large number of talented post-graduate students drawn from different parts of the country. From its inception, the Department has focused on understanding the complexities of modern social life through the application of advanced sociological theories and methods within an interdisciplinary framework building upon the traditions of the discipline. The students are encouraged to acquire critical reading, theoretical insights and research skills through rigorous training. The research areas undertaken by students and faculty members cover a wide range of issues of public concern like the effects of economic development on society and culture, problems of weaker sections, gender and society, disaster management, environmental issues, social movements, minority studies, etc.

The Department equips students for a variety of careers including academics, civil services, activism and advocacy. The alumni are employed in reputed governmental as well as corporate organizations in India and abroad.

### ● PROGRAMMES OF STUDY

M.A. Sociology  
M.A. Sociology (Five Year Integrated Course)  
Ph.D. Sociology

### ● ENTRANCE EXAMINATION

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

### FACILITIES

- Computer Laboratory with internet facilities.
- Rich collection of books, journals and reports in the Library.
- Class room with modern instructional equipment.

### FACULTY

#### Professor & Head

**B. B. Mohanty, Ph.D.**

(Sambalpur University, Sambalpur)

*Specialization:* Agrarian Change, Economic Sociology and Sociology of Development.

#### Professors

**K. Gulam Dasthagir, Ph.D** (University of Madras, Chennai)

*Specialization:* Sociology of Water, Rural Development Sociology, Sociology of Gender, Sociology of Religious Minorities.

**Sudha Sitharaman, Ph.D.** (ISEC, Bangalore)

*Specialization:* Sociology of Religion and Religious Communities; Sociology of Social Movements.

**C. Aruna, Ph.D.** (Bharathiar University, Coimbatore)

*Specialization:* Gender Studies, Social Network and Migration Studies.

**Pradeep Kumar Parida, Ph.D.**

(Utkal University, Bhubaneswar)

*Specialization:* Sociology of Development, Sociology of Disaster and Sociology of Education.

#### Assistant Professors

**Mansy. M, Ph.D.** (University of Kerala, Thiruvananthapuram)

*Specialization:* Migration Studies, Public Health and Development Sociology.

**Imtirenla Longkumer, Ph.D.**

(Jawaharlal Nehru University, New Delhi)

*Specialization:* Gender Studies, Sociology of Religion, Cultural Studies, Sociology of Media.



## M.A. (SEAL) (FIVE YEARS INTEGRATED PROGRAMME)

Masters of Arts in Social & Economic Administration and Law

### PROGRAMME SUMMARY

M.A.(SEAL) is a five-year integrated multi-disciplinary intensive programme on Social & Economic Administration and Law.

### PROGRAMME OBJECTIVES

- \* It is a Dual Degree Programme. And this tailor-made Dual Degree is to synergize Pondicherry University and Paris-1 Panthéon-Sorbonne in the fields of Social & Economic Management and Law, as per the M.O.U. signed on 1st April 2019.
- \* The Programme further intends to bring together the students of France and India while strengthening and encouraging youth employment.

### ADMISSION PROCEDURE

Admission will be based on the Central Universities Entrance Test (CUET), 2022.

### PROGRAMME

The students from Pondicherry University who opt for this Programme will spend the first two years in Pondicherry University, and the third year will be in Paris-1. The Paris-1 students will spend the first two years in Paris-1, and the third year in Pondicherry University. This to-&-fro mobility of each candidate will also depend on the merit of each one's academic credentials and selection interview performance, as well as the availability of the required sponsorship / scholarship / funding for the 3rd year of study in France or India.

Each group will have to reach the B2 level in French / English. The Pondicherry University B.A. (SEAL) students will have the exit option in case they do not wish to continue their Masters. If the Paris-1 students wish to continue their Masters, they will join Pondicherry University for the M.A. (SEAL), as Paris-1 does not have an M.A. (SEAL). So, the M.A. Intg. (SEAL) will follow this course:

Admission Requirements		
B.A. (SEAL)	Location	
	PU Students	Paris-1 Students
Year 1	Pondicherry University	Paris-1
Year 2.	Pondicherry University	Paris-1
Year 3	*Pre-departure 8-week Internship in an Indo-French Corporate in India (June-July) *From September to next year May, 3rd Year in Paris-1 *Post-Course Work 8-week Internship in an Indo-French Corporate in France (June-July), if the students wish	*Pre-departure 8-week Internship in an Indo-French Corporate in France (June-July) *From August to next year May, 3rd Year in Pondicherry University *Post-Course Work 8-week Internship in an Indo-French Corporate in India (June-July), if the students wish
DEGREE GIVEN AFTER EXIT OPTION	A Dual Degree : "Licence Administration Économique et Sociale" from Paris-1, and "Bachelor of Arts in Social, Economic Administration and Law" from Pondicherry University	
M.A. (SEAL)	Location	
	PU Students	Paris-1 Students
Year 4	Pondicherry University	Pondicherry University
Year 5	Pondicherry University	Pondicherry University
DEGREE GIVEN AFTER 5 YEARS' INTEGRATED PROGRAMME	A Dual Degree : "Licence Administration Économique et Sociale" from Paris-1, and "Master of Arts in Social, Economic Administration and Law" from Pondicherry University	

## **PROGRAMME OUTCOME**

This Programme offers a professional qualification curriculum and aims to further the bilateral and educational links between India and France. The M.A. Intg. (SEAL) is an interdisciplinary blend of Social Sciences, Economics, Commerce, Management, and Law, and it would give the perfect grounding to appear for the U.P.S.C. / I.A.S. / I.F.S.. It will also be an excellent opportunity to work after the completion of this Degree in governmental institutions or corporates, specially in Indo-French companies ; there is also the possibility of these graduates being absorbed by the very same companies where they would have done their internships.

## **PEDAGOGICAL METHOD**

Classroom lectures, tutorials, seminars, case studies, etc, shall form part of the teaching methods. Students are also encouraged to develop self-learning skills to carry out independent research. Project writing and presentation of the Project and Viva Voce will also form part of the teaching methods.

## **EVALUATION CRITERIA**

The evaluation of this Programme is as per the UGC guidelines of evaluation. Internal assessment is for 40% marks and End Semester Exam is for 60% marks.

1. Internal Assessments consist of term tests, written assessment / seminar presentations. (40% of marks)
2. End Semester Exam consists of 3 hours written test (60% of marks).

## **INTERNSHIP**

Between the second and third year, the students should undertake a mandatory internship, either in France or India, for at least 8 weeks. They will have to present a written report on their Internship and face the relevant Viva.

## **PROJECT**

During the fifth year, the students are required to choose any area of their interest in Social & Economic Administration and Law in order to complete the Project. This Project submission is also followed by a Viva in the fifth year (X Semester).

**COORDINATOR:** Prof. Nalini J. Thampi (E-mail: [nalini.fre@pondiuni.edu.in](mailto:nalini.fre@pondiuni.edu.in))



## PLACEMENT CELL

- One of the main responsibilities of the Placement Cell is to motivate, train and prepare the students of the University and its affiliated colleges for campus interviews.
- It plays a very important and key role in counseling and guiding the students of the University and its affiliated colleges for successful career placement which is a crucial interface for the students between the stages of completion of academic programme of studies and entry into suitable employment.

### Major activities of the Placement Cell:

- Organising On and Off Campus Interviews
- Organising training programmes like Personality Development Programmes, Mock Aptitude Tests, Group Discussion training, Mock Interviews etc.,
- Enabling Industry Institute Interaction
- Co-ordinating industrial visits
- Co-ordinating project placement for the Students
- Supporting technical seminars / conferences / workshops organized by various departments
- Organising Student workshops with major corporates
- Organising faculty development programmes collaborating with companies
- Facilitating Industry Institute Interactions through inviting experts for lectures, members of project and laboratory evaluation panels, members of selection committees etc.,
- Inviting Industries for possible collaborations with Pondicherry University

### PLACEMENTS @ PU – (Since the Academic Year 2006-2007 till date):

Number of Interviews Organized : 543+  
Number of students placed : 5300+

### Companies recruited PU students:

Reserve Bank of India, Cognizant, Accenture, HCL, Wipro, TCS, Infosys, Azim Premji Foundation, SRF Limited, HP, GE Health Care, L&T Infotech, IDBI, HSBC, Standard Chartered, Kotak Securities, Karur Vysya Bank, Datamark, Honeywell, Hindustan Zinc, Reliance, ICICI Bank, LVB, HDFC Bank, Syscloud, Mind-fire Solutions, Syntel, Polaris, Cox & Kings, Hi Tours, Berger Paints, High Design, Royal Bank of Scotland, Bank of America and many more.

### RECRUITERS CAN CONTACT:

Placement Co-ordinator  
Email: skvjey.csc@pondiuni.edu.in, skvjey@gmail.com  
Placement Cell / Student Services Centre  
Pondicherry Central University  
R.V. Nagar, Kalapet  
Puducherry - 605014

## STUDENTS WELFARE

The University has established an Office of students Welfare to cater to the welfare of the students of the University Department.

### Dean

**Dr. A. Shahin Sultana**  
Professor  
Department of Social Work  
Pondicherry University

### Deputy Dean

**Dr. S. Riasudeen**  
Associate Professor  
Department of Management Studies  
Pondicherry University

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**Registrar  
Pondicherry University**