

# Our Vision

“To emerge as a world class university in creating and disseminating knowledge and providing students a unique learning experience in their chosen field of scholarship, that would best serve the society. The quality of education and service provided will be of the highest order. The University is committed to the advancement of education across all spheres.”



# Our Mission

- Develop into an inter-disciplinary institute combining academic rigor, excitement of discovery, creativity and entrepreneurship
- Deliver world class research based education, creating new knowledge and innovations
- Provide an inspiring and stimulating environment for diverse campus community of faculty and students.



## **Contents**

<b>SRM University, AP - Amaravati.....</b>	<b>1</b>
<b>Academic Programs.....</b>	<b>6</b>
<b>Leadership.....</b>	<b>10</b>
<b>Faculty &amp; Staff .....</b>	<b>11</b>
<b>Students 2017-2018.....</b>	<b>18</b>
<b>Academic activities: Faculty .....</b>	<b>20</b>
<b>Academic activities: Students.....</b>	<b>27</b>
<b>Scientific reports.....</b>	<b>30</b>
<b>International Collaboration &amp; MOU's .....</b>	<b>48</b>
<b>Conferences, Events and Activities.....</b>	<b>49</b>
<b>Instrumentation .....</b>	<b>55</b>
<b>Sponsored Research Projects.....</b>	<b>56</b>
<b>Library.....</b>	<b>58</b>
<b>Key Student Activities .....</b>	<b>61</b>
<b>Annual Accounts Report .....</b>	<b>65</b>

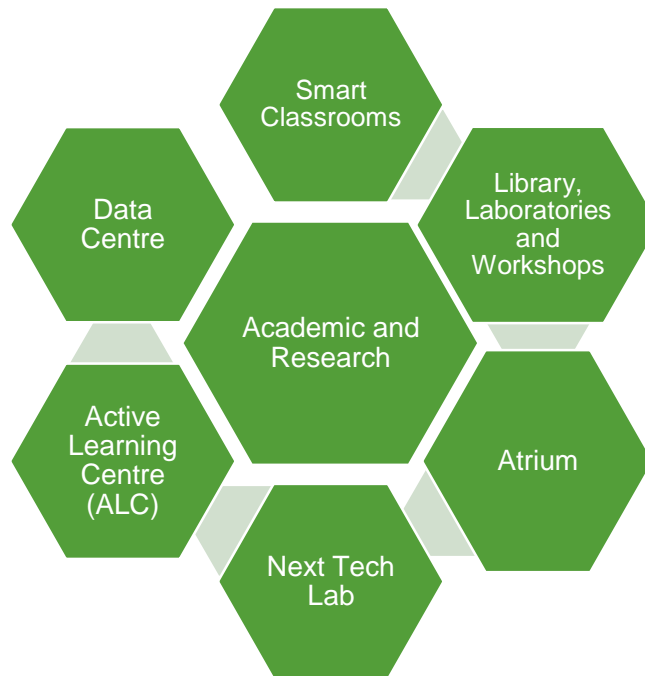
# SRM University, AP - Amaravati

## Campus

A University is the place where one lives one's life to the fullest. It is like a home away from home and SRM AP Amaravati is a 200 acres' home to its students and residential faculties and staff. Under the SRM sky learning happens everywhere in formal and informal settings. The University welcomes students of all cultures with open hands. Apart from residential scholars, students from across the world are brought in for the exchange of candidates from the University for Educational and Cultural Exchange Programs. SRM University, AP – Amaravati understands the sensitivity and caters to the diversified needs of all. The campus is eco-friendly with vast and lush green space that facilitate a conducive environment to learning and creativity.

## Facilities

Infra structure – designed by the reputed American architecture firm Perkins + Will, the University is an architectural delight. There are two fully centralised air conditioned wings in the main block – Academic and Administrative.



## Academic Environment

SRM University, AP - Amaravati offers a blend of traditional classrooms to active, problem-based environments for adaptive learning, cutting-edge research facilities and much more. Foreign faculty, flexible and dynamic curriculum, exciting research and global connections are the features on which we are building our University. With students in India seeking more inter-disciplinary programs and flexibility in learning, SRM University, AP - Amaravati has revamped the manner in which the programs are offered, and the curriculum is designed. There is also an increasing focus on experiential learning (learning through doing) and technology enabled active learning. To

address these demands, SRM introduces 'Inter-Disciplinary Experiential Active Learning' (IDEAL). As a first step towards creating this IDEAL environment, SRM offers the option of pursuing minors and specializations to students joining B.Tech degree program. This allows students to have additional knowledge in some focus areas, providing them a career edge, or pursue an area of higher study in their field of interest. This learning experience will be further enriched by providing 'Undergraduate Research Opportunities (UROP), capstone projects, industry internships and a technology-enabled active learning environment, for instance hybrid learning through MITx. Students have wide choice of cutting edge programs nanotechnology, bioinformatics, genetic engineering, blue economy, artificial intelligence, renewable energy, internet of things to choose from. Most of these programs are offered in close collaboration with foreign universities.

## **Research Environment**

SRM University, AP - Amaravati envisioned as a research-intensive University with a focus on interdisciplinary research. All the faculty members of SRM University, AP - Amaravati have significant research expertise. They have international experience as well as international exposure. The University currently focuses on two main themes: (i) issues that adversely affect humanity's current existence and (ii) breakthrough technology to transcend beyond our current reach. Keeping with these themes, our subjects of interests will be working on blue economy, alternate energy, bio computing, quantum computing, poverty alleviation, health and nutrition. SRM University, AP - Amaravati has invested in the commercialization process, directed towards propagating new ideas and invention by determining the map to seamless transfer from our laboratory to the industry.

## **Students and Faculties**

There are 238 students as the inaugural batch at SRM University, AP - Amaravati. The first batch students are from 15 different Indian states and also 36 students were from seven different countries. Among the first batch, 26% of students were females. In this first year of the University, a group of six students was sponsored to University of California, Berkeley. In the academic year 2018-2019, 1029 students were enrolled and started a weeklong orientation program from 25<sup>th</sup> June 2018.

## **Hostel & Faculty Apartments**

Four spacious and state of the art hostels have a capacity to accommodate 1200 students. Both AC and non-AC accommodation are available in a twin, tri and tetra sharing format. Every hostel is equipped with two elevators, two T.V sets, Tata Sky connection and 24 hours Wi-Fi. Besides, there are faculty apartments with 86 accommodations different categories: 1, 2 & 3 BHK. The hostel accommodated 490 students who came to participate for Indian Game Development Challenge (IGDCA). Additionally, the hostel also provided short stay to 450 guests including the parents of the students who came to visit the campus at various time. Almost 250 prospective job seekers who came for interview and recruitment process also stayed in a separate part of the hostel.



Hostel & Faculty housing at SRM University, AP - Amaravati

## Student Clubs and Societies

Clubs / Societies / Chapters or any student group enables young minds to invest their time beyond academics. Each club is to bring out the best in students and find ways to engage them in activities after college hours. The learners are cheered to participate and win accolades in all kind of art forms and are celebrated to have bring in accolades to the college through music, dance, art, hobbies, sports, etc.

	General	Academic
<b>Groups</b>	The Student Council The SRMAP Houses The SRMAP Band “Diversity” The SRMAP Photography Club “Off-Timers” The SRMAP Newsletter “Aether” The Social Media Team The Debate Society The Literary Club	The Robotics Society The Innovation Society The Coding Society The Gaming Club
<b>Clubs/ Societies</b>	Music Club Gaming Club Photography Club Debate Club	Robotics Society Literary Society Innovation Society Coding Society

## Mess, Cafeteria & Tuck Shop

The fully air conditioned mess provides dining facility for the students, faculty members, staff and visiting guests. The mess caters a varied menu, keeping the diverse community in mind. There is



a cafeteria within the mess provides munchies and beverages. One can purchase essential commodities, stationary and edibles at the Tuck shop located at the second level of the mess.



## **Fitness & Sports**

The University believes that knowledge and fitness walk hand in hand. The University has two gymnasiums with treadmills, spot cycles and dumbbells to spruce up physical agility. Besides these, there are three volley ball courts, a basketball court, an athletics track and a football field.

## **Health Care**

The University believes that healthy students create a healthy and a pleasant atmosphere. The infirmary has one doctor and one qualified nurse to take care of the medical concerns of its students, faculty and staff. This unit is equipped to administer first aid, treatment of minor ailments and has all basic medical equipment for treating medical emergencies. A round the clock ambulance service is also available. 10-15 patients are being treated on a daily basis. As an SRM University, AP activity, free clinical services are offered in the neighboring villages of Kuragallu and Neerukonda.

Highlights: In last year, a Medical camp on Diabetic Awareness and Blood Sugar Estimation was conducted in Neerukonda. An awareness program on Adolescence & Menstrual Hygiene for the Xth standard girl students was conducted at Needamaru Jilla Parishad High School. BP check of all SRM AP Amaravati staff and faculty members was conducted on, the International BP measurement month, May 2018. Random blood sugar testing and blood grouping are done from time to time. The University will soon inaugurate a new health center which would have the facility for visual testing, nebulization and administration of IV fluids.

## **Bank and ATMs**

A branch of the Indian Bank operates along with its ATM facility to cater the needs of the university. There is also an ICICI bank ATM.

## **Transport**

The University has its own transport service that includes, air-conditioned buses and cars to transport students, faculties and staffs from Vijayawada, Guntur and other neighboring regions.

## Security

The campus is completely secure with round the clock deployment of security personnel. The buildings are equipped to withstand natural calamities.

## Post & Courier

There are facilities of postal and courier services within the campus. The nearest post office is at Mangalgi.

## Loans

SRM University works closely with the leading banks in India to facilitate the loans to students pursuing studies at SRM University, AP – Amaravati.

## Scholarships

SRM scholarships are awarded based on academic accomplishments, sports, cultural excellence, and for economically challenged and differently abled students.

S. No	Scholarship name	Eligibility for the Scholarship	Percent of Scholarship		
			Tuition	Hostel	Mess
1	SRM Founder's scholarship	Top 100 in the SRMJEEE merit list CBSE or State Board District Topper in any district in India Exemplary sportspersons at National / International Level	100	100	100
2	SRM Merit Scholarship	SRMJEEE rank 101 to 500 SRMJEEE rank 501 to 1000 SRMJEEE rank 1001 to 2000 SRMJEEE rank 2001 to 3000	100% 75% 50% 25%		
3	Socio-Economic Scholarship	As determined by scholarship committee	25% to 100%		
4	Differently-abled Scholarship		25% to 100%		
5	SRM Arts and Culture scholarship	Possessing exemplary skills in literary and fine arts as assessed by the scholarship committee	25% to 100%		



# Academic Programs

The University offers its academic programs under two streams, 1) B.Tech., degree programs of various engineering courses through School of Engineering and Applied Sciences (SEAS) and 2) School of Liberal Arts and Basic Sciences (SLABS) offering BA, BBA, BCom and BSc programs across 12 departments (basic subjects) –Economics, English, History, Journalism, Psychology, Business Studies, Commerce, Physics, Chemistry, Mathematics, Biology and Computer Science. SLABS provides a choice to the students to get a diploma in their chosen field of study by spending one additional year. Both the schools started offering PhD program in various field of specialisation.

## 1. School of Engineering and Applied Sciences (SEAS)

### **B.Tech., Bachelor of Technology (four years)**

- Civil Engineering
- Computer Science and Engineering
- Electronics and Communications Engineering
- Electrical and Electronics Engineering
- Mechanical Engineering

### **M.Tech., Master of Technology (two years)**

- Computer Science and Engineering
  - Cyber security
  - Artificial Intelligence and Machine learning
  - Data Science
- Electrical and Communication Engineering
  - Electronic Product design & development
- Electrical and Electronics Engineering
  - Energy Systems
- Mechanical Engineering
  - Robotics

### **Ph.D.**

- Civil Engineering
- Computer Science and Engineering
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Mechanical Engineering

## Department of Computer Science and Engineering (CSE)

Computer Science and Engineering is a fast evolving discipline and this is an exciting time to become a Computer Scientist! We are living in the midst of an extraordinary transformation of the way we live, powered by computers. This transformation has impacted every aspect of society – from communication, manufacturing, transportation, medical care, governance, education, entertainment, and social interactions. Our curriculum prepares the student by providing a rigorous foundation in the discipline. Students get exposure to emerging areas that are gaining wide application and relevance such as AI, Data Analytics and Information Security through elective offerings. Mastery of the concepts through projects and assignments, experience in real-world applications and practices through industry internships, and exposure to ongoing research problems and the methodology of research, and innovation through the Undergraduate Research Opportunities Program (UROPO) are also some notable features of the department.

Program name	Specialization	Number of semester & Years of study	Credits required
<b>B. Tech</b>	Computer Science and Engineering	8 semesters (4 Years)	160
<b>M. Tech</b>	Data Science, Cyber Security, Artificial Intelligence and Machine Learning	4 Semester (2 Years)	62
<b>Ph. D</b>	Software Defined Network, Computer Vision, Data Science and Engineering, Wireless Sensor Network, Digital Image Processing.	----	

### Department of Electronics & Communications Engineering (ECE)

Electronics and Communication technologies are a crucial part of the changes that are revolutionizing the way we live and work today! Electronic communications underpin everyday technologies, from smart phones, wireless communication, text and video messaging to TV, radio, satellites and the Internet of Things. This major will allow you to explore digital communications, sensors, control instruments, electronic design, signal processing, and telecommunications and computer networks. Our degree program provides a balanced foundation in the physical sciences, mathematics and computing, provides exposure to the various subfields and application areas within Electronics and Communication, and develops in our students the necessary skills for the analysis, design and engineering of systems through project-based learning, industry internships and the University Research Opportunities Program (UROP).

Program name	Specialization	Number of semester & Years of study	Credits required
<b>B. Tech</b>	Electronics and Communication Engineering	8 semesters (4 Years)	160
<b>Ph. D</b>	Electronics and Communication Engineering	_____	

### Department of Electrical & Electronics Engineering (EEE)

The Electrical and Electronics Engineering program at SRM offers students an opportunity to gain mastery over the discipline through a hands-on approach to the design and engineering of hardware, software, and embedded systems. Our undergraduate program provides the student with a rigorous and balanced foundation in physics, mathematics and computing; core courses in electronics, information systems and digital systems; and the development of skills in the analysis and design of systems. Students are exposed to a wide range of applications and the challenges involved. Our curriculum prepares the student for the workplace or further study by gaining mastery of the concepts through projects and assignments, experience in real-world applications and practices through industry internships, and exposure to ongoing research problems and the methodology of research and innovation through the Undergraduate Research Opportunities Program (UROP).

Program name	Specialization	Number of semester & Years of study	Credits required
B. Tech	Electrical and Electronics Engineering	8 semesters (4 Years)	160
M. Tech	Energy Systems	4 semesters (2 Years)	62
Ph. D	Electronics and Communication Engineering	_____	

## Department of Mechanical Engineering (ME)

Our mechanical engineering department will address the world's chief concern of energy efficiency and alternate resources. We will push forward to identify and utilize new and renewable power sources for a greener and cleaner world. We will also focus on creating and analyzing materials to change the way we live our lives. We indulge in making the students feel the spirit of understanding the key concepts of Mechanical Engineering ranging from Kinematics, thermodynamics, manufacturing, etc. Students in turn experience the ease of applying the conceptual learning in design and analysis of mechanical concepts such as aircraft, heating and cooling systems, industrial equipment & machinery, etc

Program name	Specialization	Number of semester & Years of study	Credits required
B. Tech	Mechanical Engineering	8 semesters (4 Years)	160
M. Tech	Robotics	4 semesters (2 Years)	62
Ph. D	Mechanical Engineering	_____	

## Courses offered during the academic year

In the year 2017-18, only the first year of the B.Tech program was offered. The courses as such were primarily fundamental science courses, humanities and communication courses, in addition to core courses in relevant B.Tech specialization. The number of B.Tech courses offered are given in table .

Code	Course name	Participating Faculty	Credits	Semester
ENG 111	Basic Electronics	Dr. Sudhakar, Dr. Sujith, Dr. Sreenivasulu	4	II
ECE 102	Introduction to Communication Networks	Dr. Sreenivasulu	4	II
ENV101	Introduction to Environmental Science	Bhagyalakshmi Kalidass # Shoji D Thottathil	3	I
ENG101	Engineering Fundamentals	Dr. Jatis Kumar Dash Dr. Pranab Mandal Dr. Gangi Reddy Salla	3	I

Code	Course name	Participating Faculty	Credits	Semester
		Dr. Sabyasachi Mukhopadhyay		
PHY 111	Introduction to Classical Mechanics	Dr. Jatis Kumar Dash Dr. Pranab Mandal Dr. Gangi Reddy Salla Dr. Sabyasachi Mukhopadhyay	4	II
PHY 112	Electricity and Magnetism	Dr. Jatis Kumar Dash Dr. Pranab Mandal Dr. Gangi Reddy Salla Dr. Sabyasachi Mukhopadhyay	4	I
BIO 101	Introduction to Biology	Prof. Jayaseelan Murugaiyan Dr. Anil K. Suresh Dr. Krishna P. Ganti Dr. Tusar saha	4	I
CHE 101	Principles of Chemistry	Dr. S. Mannathan Dr. K. Namitharan	4	I
CHE 202	Introduction to Solid State Chemistry	Dr. K. Namitharan	4	I
CDC 101	Soft Skills	Dr. Srabani Basu	1	II






## 2. School of Liberal Arts and Basic Sciences (SLABS)

The school is preparing to offer starting from academic year 2018 onwards, B.A., B.B.A., B.Com. and B.Sc. programs across 12 departments at the Undergraduate level and Ph. D programs in 11 departments. The list of programs offered at SLABS are given in the following table

Program/Specialisation	Undergraduate Level	Graduate Level
Biology	B.Sc.	Ph. D
Business Studies	B.B.A	-
Chemistry	B.Sc.	Ph. D
Commerce	B.Com.	Ph. D
Computer science	B.Sc.	Ph. D
Economics	B.A.	Ph. D
English Studies	B.A.	Ph. D
History	B.A.	Ph. D
Journalism	B.A.	Ph. D
Mathematics	B.Sc.	Ph. D
Physics	B.Sc.	Ph. D
Psychology	B.A.	Ph. D

# Leadership

## Governing Body

	<ul style="list-style-type: none"><li>• Dr. P. Sathyanarayanan, President, SRM University</li></ul>
	<ul style="list-style-type: none"><li>• Dr. Nicholas B. Dirks, Emeritus Chancellor, University of California, Berkeley</li></ul>
	<ul style="list-style-type: none"><li>• Dr. Bertil Andersson - President Emeritus, Nanyang Technological University</li></ul>
	<ul style="list-style-type: none"><li>• Mr. N. Ram, Chairman, The Hindu Publishing Group</li></ul>
	<ul style="list-style-type: none"><li>• Dr. Pradeep Khosla, Chancellor, University of California, San Diego</li></ul>

## Board of Management

	<ul style="list-style-type: none"><li>▪ Dr. Prasant Mohapatra, Vice-Provost of Graduate Education, University of California, Davis</li></ul>
	<ul style="list-style-type: none"><li>▪ Dr. Jamshed Bharucha, President Emeritus, Cooper Union</li></ul>
	<ul style="list-style-type: none"><li>▪ Dr. Damodar Acharya, Former AICTE Chairman; Former Director, IIT Kharagpur</li></ul>
	<ul style="list-style-type: none"><li>▪ Dr. N Balakrishnan, Honorary Professor, IISc</li></ul>

## Faculty & Staff

An institution of greatness is always built by people. Started in 2017, SRMAP understood this and has been hiring top-notch intellectuals from across the world as senior administrators and faculty members. The administration and teaching staff are adequately complemented by support staff both from SRM and Green Pearl Education Management.

### Management:

S No	Name	Designation
1	Dr. T.R. Parivendar	Chancellor
2	Dr. P. Satyanarayanan	President
3	Prof. D. Narayana Rao	Pro Vice Chancellor

### Senior Administration & Director's:

S No	Name	Designation
1	Dr. D. Gunasekaran	Registrar
2	Dr. B. Sivakumar	Deputy Registrar
3	Col. Praveen Srivastava	Director, Campus Life & Maintenance (CLM)
4	Dr. J.M. Franklin	Director, HR
5	Mr. Rupesh Bisht	Director, Admissions
6	Mr. Mantri Panendra Srinivas	Associate Director, Industry Relations & Placement (IR&P)
7	Mr. Rana Vikram Singh	Assistant Director, Student Affairs (SA)
8	Dr. Lakshmi Rajyam	Medical Officer

### Faculty Members- Listed Department Wise (Alphabetic order)

#### Biology/Biotechnology:

S No	Name	Designation
1	Prof. Jayaseelan Murugaiyan	Professor
2	Dr. Anil K. Suresh	Assistant Professor
3	Dr. Krishna Priya Ganti	Assistant Professor
5	Dr. Tusar Tirtha Saha	Assistant Professor

#### Bachelor of Business Administration:

S No	Name	Designation
6	Dr. Sasikanta Tripathy	Assistant Professor

### Career Development Centre:

S No	Name	Designation
7	Dr. Srabani Basu	Assistant Professor

### Chemistry:

S No	Name	Designation
8	Dr. Ravva Mahesh Kumar	DST - Inspire Faculty
9	Prof. Chebrolu Pulla Rao	Distinguished Visiting Professor
10	Prof. Upadrasta Ramamurthy	Distinguished Visiting Professor
11	Dr. Mannathan	Assistant Professor (Adhoc)
12	Dr. Nimai Mishra	Assistant Professor
13	Dr. Sabyasachi Chakraborty	Assistant Professor

### Commerce:

S No	Name	Designation
14	Dr. Shailender Singh	Associate Professor

### Computer Science and Engineering:

S No	Name	Designation
15	Prof. T. Rangunathan	Professor
16	Dr. Vadivelu	Associate Professor
17	Dr. Kazuhito Shida	Associate Professor
18	Dr. Anil Kumar Rangiseti	Assistant Professor
19	Dr. Ashok Kumar Pradhan	Assistant Professor
20	Dr. Priyanka	Assistant Professor
21	Dr. Jatindra Kumar Dash	Assistant Professor
22	Dr. Satish Anamalamudi	Assistant Professor

### Electronics and Communication Engineering:

S No	Name	Designation
23	Dr. Sudhakar Tummala	Assistant Professor
24	Dr. Sreenivasulu	Assistant Professor
25	Dr. Sujith Kalluri	Assistant Professor

### Economics:

S No	Name	Designation
26	Dr. Shailender Swaminathan	Professor in Economics and Associate Dean - SLABS
27	Prof. Amarendra Sahoo	Professor
28	Dr. Sabina Yasmin	Assistant Professor



## Electrical & Electronics Engineering:

S No	Name	Designation
29	Dr. Tousif Khan	Assistant Professor

## English:

S No	Name	Designation
30	Prof. James West	Professor
31	Mr. Vaidyanath Nishant	Instructor
32	Dr. Priyank Varma	Assistant Professor
33	Dr. Arijit Ghosh	Assistant Professor

## Environmental Science

S No	Name	Designation
34	Dr. Bhagyalakshmi Kalidass	Assistant Professor
35	Dr. Shoji D. Thottathil	Assistant Professor

## History

S No	Name	Designation
36	Prof. Krishna Ananth	Chair & Professor
37	Dr. Maanvender Singh	Assistant Professor
38	Dr. Malavika Binny	Assistant Professor

## Journalism:

S No	Name	Designation
39	Dr. Ugen Bhutia	Assistant Professor

## Mathematics

S No	Name	Designation
40	Prof. Sergei A. Timoshin	Professor
41	Dr. Kalyan Banerjee	Assistant Professor

## Mechanical Engineering:

S No	Name	Designation
42	Prof. Vijaya Sekhar Chellaboina	Professor and Head of Faculty Development
43	Prof. Sivakumar Narayanaswamy	Professor
44	Dr. Prakash Jadhav	Associate Professor
45	Dr. Febin Cyriac	Assistant Professor

## Physics

S No	Name	Designation
46	Dr. Sabyasachi Mukhopadhyay	Assistant Professor
47	Dr. Gangi Reddy Salla	Assistant Professor
48	Dr. Pranab Mandal	Assistant Professor
49	Dr. Jatis Kumar Dash	Assistant Professor

## Non-Teaching Staff - Listed Department Wise:

### Physical Education:

S No	Name	Designation
1	Dr. Abdul Mohaimin	Assistant Director

### Lab Assistant:

S No	Name	Designation
2	Naga Prasananjanyulu	Physics -Lab Assistant
3	Lakshmi Soundharya Uppuluri	CSE - Programmer
4	Ratnakumar	ECE - Lab Assistant
5	Dinesh	CSE - Lab Assistant
6	Shanthi Kakarla	Chemistry - Lab Assistant
7	Shaik Shajahan	Mechanical - Lab Assistant
8	Rama Krishna	Biology/Biotech - Lab Assistant
9	Mule Venkata Konda Reddy	EEE - Lab Assistant
10	Desai Prasad	Environmental Science - Lab Assistant

### Library:

S No	Name	Designation
11	Srinivasa Rao	Assistant Librarian
12	Nagula Ramakrishna	Assistant Librarian
13	Baburao	Assistant Librarian

### Finance:

S No	Name	Designation
14	J. Venkata Krishna Mohan	Senior Manager
15	Sowjanya Ch	Accounts Executive
16	Kavuri Gopiraju	Cashier Cum Junior Accountant

17	Sreenivasa Rao M	Accountant
18	Ajay Roopner	Accounts Manager

## HR:

S No	Name	Designation
19	Rajitha	Lead – HR
20	Riaz Shaik	Sr.HR Executive
21	Giri Bhavani Singh K	Sr Recruiter – HR

## IT

S No	Name	Designation	Department
22	Balaji R	Senior Manager – Systems	Technology
23	Venugopal H	System Administrator	Technology
24	Syed Musthaq Ahmed	Assistant Manager - Application Support	Technical
25	Tamma Ratna Kumari	ERP ADMINISTRATOR	IT
26	Balamurali	Senior System Administrator	IT

## Administration - Support Staff:

S No	Name	Designation	Department
27	Chinnala Appa Rao	Senior Manager	Administration
28	Maria Leon	Manager Engineering services	Facility Mgmt
29	Chandra Prabhu Gd	Assistant Manager - Facility Management	Facility Mgmt
30	Chandana Kishore	Assistant Manager - Facility Management	Facility Mgmt
31	Suri Babu Kammela	Security Officer	Security
32	Jagadeeswara Prasad	Manager	Public Relations & Marketing
33	Kancharla Srinivasa Rao	Assistant Manager - Stores	Stores
34	Shaik Salam	Admin Executive	Administration
35	Madhava rao	Executive	Administration
36	Sujay Ravula	Executive - Administration	Administration
37	Addhanki Ambica	Executive - Administration	Administration
38	Ch Atchyut Kumar	Executive - Administration	Administration

39	Narasimha Rao V.V.L	Assistant Public Relations Officer	Administration
40	Ch Naga Sai Vinay Bhaskar	Jr. Executive - Administration	Administration
41	Yogesh Prasad	Assistant store manager	Administration
42	Gottam Praveen	Executive - Administration	Administration
43	Chunduru Anusha	Receptionist	Administration
44	Santhi Divakarla	Secretary	Administration
45	Bhogadhi Durag Bhavani	Executive - Administration	Administration
46	Ch George Mayor	Executive - Customer Support	Administration
47	Gannavarapu Rajeswari	Receptionist	Administration
48	Hemanth Kumar	Photo cum Videographer	Administration
49	Kollipara Bhavana	Front Office Executive	Administration
50	Suresh D	Office Assistant	Administration
51	Mahesh N	Office Assistant	Administration
52	Gannavarapu Manikanta	Store Keeper	Stores
53	Shweta Paul	Senior Executive	Student Affairs
54	Sangita Thakur	Staff Nurse	Medical
55	Kondapalli Ramakrishna Reddy	Media Coordinator	Media
56	Dinesh Babu C	Junior Engineer - Facility Maintenance	Facility Mgmt
57	Buridi Durga Prasad	Technician - Plumbing cum Mechanical Maintenance	Administration
58	Kishore Erakam	Assistant Engineer - Electrical	Maintenance
59	D.Gopi	Engineer- Mechanical	Facility Mgmt
60	T.Naveen	Electrician	Facility Mgmt
61	C. Sai Krishna	Electrician	Facility Mgmt
62	Pilla Leela Satish Kumar	Junior Engineer-Plumbing & Mechanical	MAINTAINANCE
63	Thokala Durga Prasad	Electrician	Technical

## Transport:

S No	Name	Designation
64	Shanmukh Rao P	Driver
65	Gottimukkala Kishore	Driver
66	Harinadh Babu K	Driver
67	Srinivasa Rao M	Driver

68	Parishuda Rao D	Driver
69	Sreeramulu T	Driver
70	Alavala Murali Krishna	Driver (BUS)
71	Chinni Soban Babu	Driver (BUS)
72	Nandigama Bhaskara Rao	Driver (BUS)
73	Rasupalli Koteswara Rao	Driver (Bus)
74	Mathangi Vinod Kumar	Driver (Bus)
75	Shaik Mahammed Ghouse	Driver
76	Suddapalli Suresh	Driver
77	M Srinadh	Cleaner (BUS)

### Admission:

S No	Name	Designation	Department
78	Rahul Lewis Pearce	Marketing Manager	Marketing
79	Dominic Powell	Manager - BPO	BPO
80	Pravendra Verma	Area Manager Marketing	Marketing
81	Craig Mathews	Sr. Customer Support Executive	BPO
82	Pradeep Paul Pullagoru	Sr. Customer Support Executive	BPO
83	Sirisha Yadlapali	Executive - Marketing Operations	Marketing
84	Anitha Ghantasala	Customer Support Executive	BPO
85	Naga Sai Dinesh Yerramsetty	Customer Support Executive	BPO
86	P.Padma Sailaja	Customer Support Executive	BPO
87	Shaik Abdul Khaja Mohiddin	Customer Support Executive	BPO

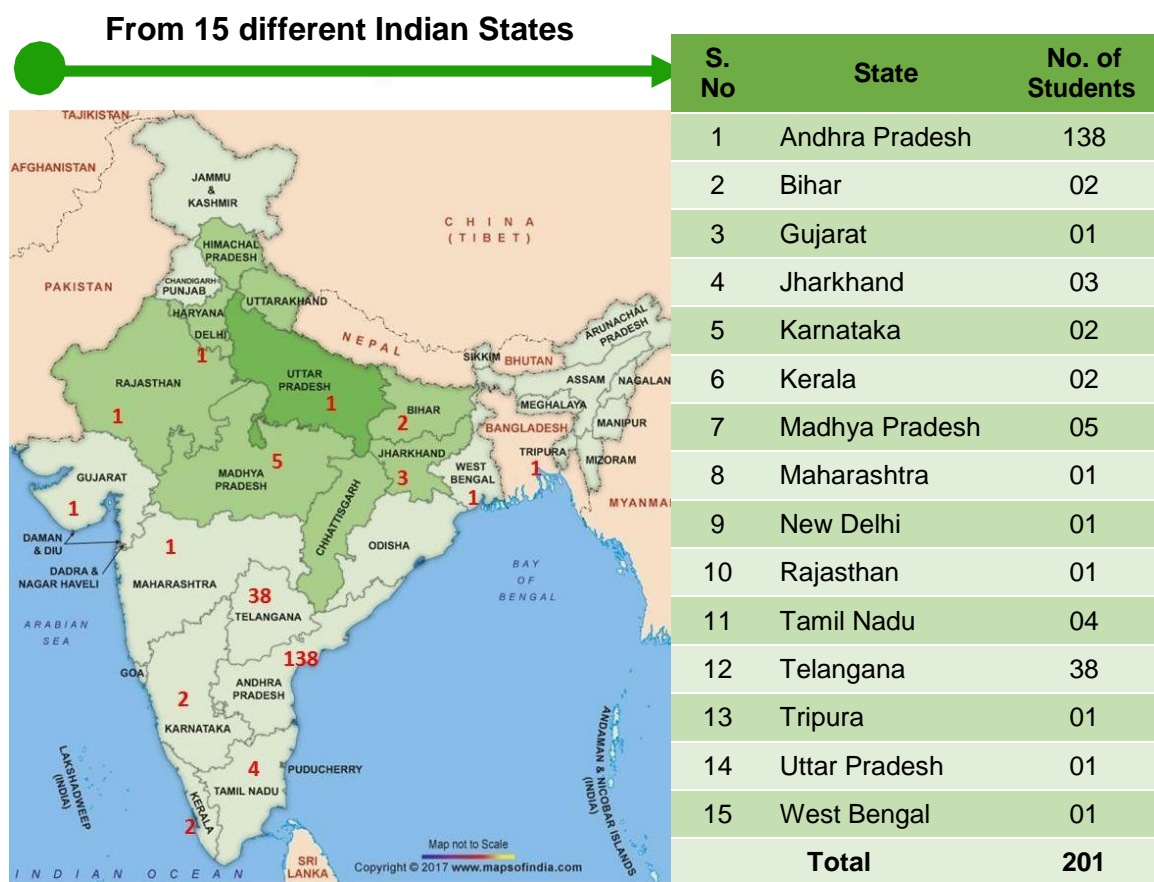
### Support Staff:

S No	Name	Designation	Department
88	Udaykumar B	Deputy Warden	Hostel
89	Janga Vijayalakshmi	Assistant Warden	Hostel
90	Velayudham	Supervisor	Administration
91	Manas B	Cook	Catering
92	Upati Ravi	Assistant Warden	Hostel
93	Teethu	Pantry Supervisor	Administration

# Students 2017-2018

## Students enrolled in the academic year 2017-18

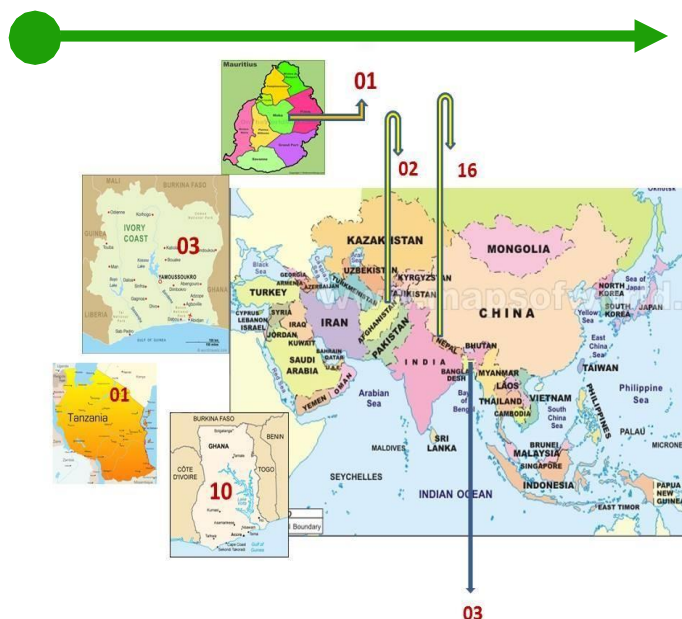
S. No	Degree Program	Boys	Girls	Total strength
1	Computer Science and Engineering	103	36	139
2	Electronics and Communication Engineering	48	25	73
3	Mechanical Engineering	25	01	26
<b>Total</b>		<b>176</b>	<b>62</b>	<b>238</b>



## Board wise Distribution

S. No	Country	Student's strength
1	CBSE	21
2	State-Board	181
3	Foreign	36

### 36 Students from 7 different countries



S. No	Country	No. of Students
1	Nepal	16
2	Bangladesh	03
3	Afghanistan	02
4	Mauritius	01
5	Ivory Coast	03
6	Ghana	10
7	Tanzania	01
<b>Total</b>		<b>36</b>

### State Board & CBSE Board Students

S. No	State	Board	
		State	CBSE
1	Andhra Pradesh	137	01
2	Bihar	01	01
3	Gujarat	-	01
4	Jharkhand	-	03
5	Kerala	-	02
6	Karnataka	02	-
7	Madhya Pradesh	-	05
8	Maharashtra	01	-
9	New Delhi	-	01
10	Rajasthan	-	01
11	Tamilnadu	03	01
12	Telangana	37	01
13	Tripura	-	01
14	Uttar Pradesh	-	01
15	West Bengal	-	01
<b>Total</b>		<b>181</b>	<b>21</b>



## Academic activities: Faculty

### Publications

1. **Suresh AK.**, Veena V, S. Ramasamy and N. Sakthivel. Medium constituents mediated engineering for size and shape tuning of gold nanocrystallites, *J. Industrial Engineering Chemistry*, 2017, 51, 288-294, 2017
2. Bhatt C. S., Bharathkumar N., Ramasamy S., Marpu S. and **Suresh AK.** Density-based Facile Fractionation of Mixture of Monodispersed Ag and Au Nanoparticles to Purity. *Soft matter*, (2018) *In Press*
3. Bostick CD, **Mukhopadhyay S**, Pecht I, Sheves M, Cahen D, Lederman D. Protein bioelectronics: a review of what we do and do not know. *Reports on Progress in Physics*. 2018;81(2):026601.
4. Raman G., Park SJ, Sakthivel. N and **Suresh AK.** Physico-cultural parameters during AgNPs biotransformation with bactericidal activity against pathogens. *Enzyme and Microbial Technology*, 2017, 100, 45-51,
5. Hari Balakrishnan M, Sathriyan K, **Mannathan S.** Nickel-Catalyzed Denitrogenative Cross-Coupling Reaction of 1,2,3-Benzotriazin-4(3 H)-ones with Organoboronic Acids: An Easy Access to Ortho-Arylated and Alkenylated Benzamides. *Org Lett.* 2018, doi: 10.1021/acs.orglett.8b01401.
6. Kaushik N, Anang S, **Ganti KP**, Surjit M. Zinc: A Potential Antiviral Against Hepatitis E Virus Infection? *DNA Cell Biol.* 2018, doi: 10.1089/dna.2018.4175.
7. Narenkumar J, Parthipan P, Madhavan J, Murugan K, Marpu SB, **Suresh AK.** Rajasekar A. Bioengineered silver nanoparticles as potent anti-corrosive inhibitor for mild steel in cooling towers. *Environmental Science and Pollution Research International* 2018, 25(6):5412-5420.
8. Patel, R. Park, J. T. Patel, M. **Dash JK.**, Gowd E., Karpoormath R., Mishra A., Kwak J., Kim J. H., Transition-metal-based layered double hydroxides tailored for energy conversion and storage. *Journal of Materials Chemistry A*, 2018, 6, 12-29
9. **Salla GR**, Kumar V, Miyamoto Y, Singh RP. Scattering of Poincaré beams: polarization speckles. *Optics Express* 2017, 25(17):19886-19893.
10. **Sreenivasulu T**, Bhowmick K, Samad SA., Yadunath TR, Badrinarayana T, Gopalkrishna Hegde, T Srinivas, "Photonic crystal based four channel DWDM de-multiplexer on SOI platform: Design and Analysis", *Optical Engineering*, 2018, 57, 4,
11. **Sreenivasulu T.**, Rao V., Badrinarayana T, Hegde G., Srinivas T "Photonic crystal ring resonator based force sensor: Design and analysis," *OPTIK*, 2018, 155, 111-120.

12. Sujatha C, Bhatt CS, **Ravva MK, Anil K. Suresh, Namitharan K.** Copper-Catalyzed Ring-Expansion Cascade of Azirines with Alkynes: Synthesis of Multisubstituted Pyridines at Room Temperature. *Org Lett.* 2018, 20(11):3241-3244.
13. **Tummala S**, “Brain Tissue Entropy Changes in Patients with Autism Spectrum Disorder”, Springer-Lecture notes in Computational Vision and Biomechanics, 2018.
14. Kumaran, N., **Vadivel, A.** & Kumar, S.S., “Recognition of human actions using CNN-GWO: a novel modeling of CNN for enhancement of classification performance”, *Multimedia Tools Application* (2018).
15. Shaila.S.G, Suma Avani, Fayeqa Faiz, **Vadivel A**, Analysis of Human Emotions using Computational Geometry for Nose and Lips Facial Features, *International Journal of Advances in Electronics and Computer Science*, 2018, 5 (4), 6-9.
16. **Rangiseti. A.K**, Valerrian. T, Pasca S and Tamma B.R, QoS aware load balance in software defined LTE networks, *Computer Communications*, 2017, 97, 55-21.
17. **Rangiseti A.K**, and Tamma B. P. Software Defined Wireless Networks: A Survey of Issues and Solutions. *Wireless Personal Communications*, 2017, 96, 2017, 1-35.
18. **Pradhan AK** and Chatterjee EC, Eiji Oki E and De T, Knapsack based Multicast Traffic Grooming for Optical Networks. *Journal of Optical Switching and Networking*, Elsevier, 2018, 27, 40-49.
19. **Pradhan AK**, SaurabhKeshri, Das K and De T, A heuristic Approach based on Dynamic Multicast Traffic Grooming in WDM Mesh Networks. *Journal of Optics*, Springer, 2017,46, 1, 51-61.
20. **Priyanka** and Maheshkar S, Region-based Hybrid Medical Image Watermarking for Secure Telemedicine Applications, *Multimedia Tools and Applications*, 2017, 1-31, 3617-3647.
21. **Dash JK**, and Mukhopadhyay. S., Similarity learning for texture image retrieval using multiple classifier system, *Springer Multimedia Tools Application*, 2018, 77, 1, 459-483.
22. **Dash JK**, Mukhopadhyay S and Gupta RD., Multiple classifier system using classification confidence for texture classification. *Multimedia Tools and Applications*, 2017, 76, 2, 2535–2556.
23. **Anamalamudi S**, Sangi AR., Alkathairi M and Ahmed AM., AODV routing protocol for Cognitive radio access based Internet of Things (IoT), *Future Generation Computer Systems*, 9 February 2018, ISSN 0167-739X.
24. Carie A, Li M, **Anamalamudi. S**, Shah SB and Khan W., An Internet of Software Defined Cognitive Radio Ad-hoc Networks based on Directional Antenna for Smart Environments, *Sustainable Cities and Society*,2017.

## Book Chapters

1. Bahrudeen S. Hameed, Chandra S. Bhatt, Nagaraj B and **Suresh Ak.**, Chromatography as an Efficient Technique to Separate Diversified Nanoparticles in Edition Nanomaterials in Chromatography, 2017, Elsevier.
2. Sumathy P, ShanmugaVadivu P and **Vadivel A**, Image Retrieval and Analysis using Fuzzy Shape Feature, Information Science and Technology Research, IGI Global, Accepted for publication (2017)
3. Naveenkumar M, Sriharsha K V, **Vadivel A**. Moving Object Detection and Tracking based on the Contour Extraction and Centroid Representation, Encyclopedia of Information Science and Technology, 4th edition, IGI Global, Eds. Dr. Mehdi Khosrow-Pour (2017)

## Conference presentations

1. **Febin Cyriac**, Assistant Professor, Department of Mechanical Engineering, The best paper-academic research, International Conference on Industrial Tribology (2017), Tribology Society of India, Rajarhat, Kolkata. December 6-9, 2017
2. Amogh P C, Goutham Veeramachaneni, **Anil Kumar Rangiseti**, Antony Franklin and Bheemarjuna Reddy Tamma, "A Cloud Native Solution for Dynamic Auto Scaling of MME in LTE " in Proc. of PIMRC, October 2017, Montreal, QC, Canada.
3. Malhar Thakkar, Lavish Agrawal, **Anil Kumar Rangiseti** and Bheemarjuna Reddy Tamma, "Reducing Ping-Pong Handovers in LTE by Using A1-Based Measurements" in Proc. of NCC, March 2017, IIT Madras, India.
4. Thomas ValerrianPasca S, Debashisha Mishra, Amogh PC, NagamaniDheeravath, **Anil Kumar Rangiseti**, Bheemarjuna Reddy Tamma and Antony Franklin, "Architectural challenges and solutions for collocated LWIP-A Network Layer Perspective" in Proc. of NCC,2017.
5. Deepa Martolia, VanlinSathya, **Anil Kumar Rangiseti**, Antony Franklin A, and Bheemarjuna Reddy Tamma, "Enhancing Performance of Victim Macro Users via Joint ABSF and Dynamic Power Control in LTE HetNets", in Proc. of NCC, March 2017.
6. Gandam Girish, **Jatindra Kumar Dash**, Adaptive fuzzy local binary pattern for texture classification, IEEE International Conference on Man and Machine Interfacing 2017.
7. **Jatindra Kumar Dash**, Mandar Kale, Sudipta Mukhopadhyay, Niranjankhandelwal, NidhiPrabhakar, Mandeep Kumar Garg, Naveen Kalra, An experimental study of interstitial lung tissue classification in HRCT images using ANN and role of cost functions, SPIE Medical Imaging 2017, Orlando, Florida, United States.
8. **Anil K. Suresh**; National Seminar on Drug Delivery Aspects of Biologics/Macromolecules, KVSR Siddhartha College of Pharmaceuticals, Vijayawada, 16th February 2018 (Session Chair and Plenary Lecture).
9. **Anil K. Suresh**; International Conference on Recent Advances in Bio-resource Technology, Thiruvalluvar University, Vellore, 15-17 February 2017. Nanotechnology Session (Session Chair and Plenary Lecture).
10. **Anil K. Suresh**; 2nd International Conference in Biotechnological Advancements in Free Radical Biology and Medicine, Integral University, Lucknow, 23-25 January 2017. Nanomedicine and Nanotechnology Session (Session Chair and Plenary Lecture).

## Contributed Talks and Poster Presentations

S. No	Faculty Member Name	Name of the conferences/seminars/workshops/ events
1	Dr. Ragunathan T – Organizer and Resource Person	Two day workshop on “Big data and Hadoop Framework” August 8-9, 2017, SRM University.
2	Dr. Jatis Kumer Dash Dr. Pranab Mandal Dr. Gangireddy Salla Dr. Sabyasachi Mukhopadhyay	Foundation of University Learning and Teaching September 11-13, 2017, SRM University-AP, Amaravati
3	Dr. Jatis Kumer Dash Dr. Pranab Mandal Dr. Gangireddy Salla Dr. Sabyasachi Mukhopadhyay	Solar & Renewables Expo Conference on “Renewable Energies for a Sustainable Future”, November 10, 2017, Vijayawada
4	Dr. Ragunathan T – Organizing Committee Member and Session Chair	Fifth International Conference on Big Data Analytics - BDA 2017, December 12-15, 2017, IIIT, Hyderabad
5	Dr. Sabyasachi Chakraborty.	International Conference on Advancements and Challenges in Chemical Sciences (ICACCS 2018), February 2-3, 2018, Pachaiyappa’s College, Chennai
6	Dr. Sabyasachi Chakraborty	Health Risks of Processed Food (invited talk), March 9, 2018, Ramnagar College, Digha, West Bengal.
7	Dr. Sabyasachi Mukhopadhyay	International Conference on Nanoscience and Technology, March 21-23, 2018, Bangalore
8	Dr. Sabyasachi Mukhopadhyay	Keysight Education Symposium, April 13, 2018, Vijayawada

## Awards and Honors

S. No	Faculty Member Name	Name of the conferences/seminars/workshops/ events
1	Dr. Febin Cyriac, Assistant Professor, Department of Mechanical Engineering	Captain Alfred E. Hunt award 2018, The Society of Tribologists and Lubrication Engineers.

## National and International Visits

S. No	Faculty name	Countries of visit	Dates	Purpose	Other information
1	Dr. Sabyasachi Mukhopadhyay	United States of America	Nov. 28-30, 2017	MIT Teaching workshop	MITx Onsite Training
2	Dr. Pranab Mandal	United States of America	Nov. 28-30, 2017	MIT Teaching workshop	MITx Onsite Training
3	Dr. Jatis K Dash	United States of America	Oct. 05-11, 2017	MIT Teaching workshop	MITx Onsite Training
4	Dr. Jatindra Kumar Dash	Visakhapatnam, India	Feb. 24-26, 2018	Partnership summit	CII partnership summit-2018
5	Dr. A. Vadivel	Bangalore, India	March 14, 2018	Seminar	Cloud foundation services
6	Dr. A. Vadivel	IIT Roorke, India	March 23, 2018	Workshop	Robo fest
7	Dr. Jatindra Kumar Dash	NVIDIA, Bangalore, India	April 14-15, 2018	Industrial visit	NVIDIA Visit
8	Dr. A. Vadivel	NVIDIA, Bangalore, India	April 14-15, 2018	Industrial visit	NVIDIA Visit
9	Dr. Jatindra Kumar Dash	SVC Engineering College, Tirupati, India	April 24-25, 2018	Workshop	IUCEE-EPICS Workshop
10	Dr. Ashok Kumar Pradhan	Finland	May 17-24, 2018	Indian Game Development Challenge Summer Course	Visited Kajaani University
11	Dr. Sabyasachi Mukhopadhyay	National Visit	June 2-13, 2018	Academic collaboration	Visit to Prof. Patil Lab, IISc

## Visits

S. No	Faculty Member Name	Name of the Institute	Date & Purpose
1	Dr. Nimai Mishra	International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad	June 14, 2018 Collaboration initiation discussion
2	Dr. Nimai Mishra	Acharya Nagarjuna University, Department of Chemistry and nanosciences	March 14, 2018 Collaboration initiation discussion

## Invited Lectures

S. No.	Faculty Member Name	Details	Date & venue
1	Dr. Nimai Mishra	Panel Speaker as a motivational talk to 12th Students at "Educational Fair", organized by The Hindu News Paper	December, 02, 2017 Vijayawada, A Plus Convention Centre
2	Dr. Nimai Mishra	Panel Speaker as a motivational talk to 12th Students at "Educational Fair", organized by The Hindu News Paper	December, 09, 2017 Vizag, Hotel Green Park
3	Dr. Nimai Mishra	Motivational Speaker at "Yeshache Mantra" event organized by SRMIST in association with Marathi News Paper Lokmat	January, 01, 2018 Jeevanvigya Mission Kamothe, Panvel, Mumbai
4	Dr. A. Vadivel	Introduction to data science: Applications in WWW, DST Sponsored national seminar	February 23-24, 2018 VR Siddhartha Engineering College, Vijayawada

## Fellowships of Academia and membership in Professional Bodies

S. No	Faculty name	Awards/Professional society name
1	Prof. D. Narayana Rao	FNA
		FNASc
2	Dr. T. Ragunathan	ISTE, CSI (Life member)
3	Dr. Anil Kumar Rangiseti	ISTE (Life member)
4	Dr. Kazuhito Shida	Physical Society of Japan
5	Dr. Ashok Kumar Pradhan	Cryptology Research Society of India (CRSI) (Life member)

S. No	Faculty name	Awards/Professional society name
6	Dr. Vadivelu A	ISTE, CSI (Life member)
7	Dr. Jatindra Kumar Dash	Member of Institution of Engineers (Life member)
8	Dr. Bhagyalakshmi Kalidass	European federation of Biotechnology (Life member)
9	Shoji D. Thottathil	International Society of Limnology (Annual member)
10	Shoji D. Thottathil	Association for the Sciences of Limnology and Oceanography (Annual member)
11	Prof. M. Jayaseelan	ISHAM Medical Phycology : Protothecosis and Chlorellosis Working Group (ISHAM-MPWG) member

## Journal reviewers

### Dr. Jatindra Kumar Dash

- **Reviewer:** Journal of Neurocomputing (ELSEVIER)  
IEEE Journal of Biomedical and Health Informatics  
Computational and Structural Biotechnology Journal(ELSEVIER)

### Dr. Ashok Kumar Pradhan

- **Reviewer:** Optical Switching and Networks (Elsevier)  
Photonic Network and Communications (Springer)



## Academic activities: Students

### Semester Abroad Program

The University is getting recognized across the country for its high standards of education, exciting opportunities and excellent placements. The University is spearheading with Semester Abroad Program (SAP), a unique initiative in providing its students an international exposure and global opportunities. Under the SAP, the students are allowed to take-up a few courses and/or a Major project in reputed foreign universities for one semester. The credits earned in the foreign university through SAP will be translated into SRM credits, by an approved conversion procedure, and taken for consideration for the award of the degree by SRM University. After the study period at a foreign university the students return to SRM university to continue with the degree program for which they were enrolled, and after fulfilling all the necessary requirements laid out in the regulation of SRM University, the students will become eligible for the award of the degree.

The list of students who have gone/planned to go abroad in 2017-2018 is given below

S. No	Name of the student	Degree program at SRM University AP	Name of the University
1	Aayusi Biswas	CSE	University of California Berkeley
2	Tuhin Sarkar	CSE	
3	Vastal Rathod	CSE	
4	K. Pushya Mitra	CSE	
5	Abhirami Ravishankar	ECE	

### Internships and trainings

S. No	Name of the student	Dept.	Details	Duration & dates
1	Aaditya Jain	CSE	Leadership development, cross-cultural global internships cooperation with AIESEC, Culture Polis, Greece	6 weeks, 10 March to 31 April 2018
2	KoushikBhargav SaptarshiMazumder RajarshiMazumder Saurav Raj	CSE	Indian Game Development Challenge, sponsored by KAMK University, Finland and APSSDC, SRM University AP	2 months, Jun to July 2018
3	Y. Deepak Sri Sai Krishna K.Saiteja Tanmai D.Deepika Manoj Rohit	CSE	Janmabhoomi Internship-Digitalization of School Classrooms, at different schools in Guntur district. Government of Andhra Pradesh.	One month, March, 20 –April, 20, 2018

## Conferences attended by the students

Junaidi. M.T.H., (Department of CSE), PyCon-2018, June 1-2, 2018, Taiwan

## Awards, Prizes & Medals

S. No	Name of the student	Department	Event	Detail
1	Saptarshi Mazumder Rajarshi Mazumder Sarvesh Shroff	CSE	ACM VIT Hackathon, March 11-12, 2018	Top 10
2	M T H Junaidi KhushbooMaheshwari KoushikBhargav Sarvesh Shroff	CSE	Robofeast nationals, March 23, 2018 IIT-Roorkee	First prize
3	Saurav Raj Hrisheekesh K SaiRishvanth	CSE	Robofeast nationals, March 23, 2018 IIT-Roorkee	Second prize
4	Fahad Kamran K Sri Ritika Pavan Krishna	CSE	Robofeast nationals, March 23, 2018 IIT-Roorkee	First prize
5	B Yoganand, Agniswar Paul	ECE	Robofeast nationals, March 23, 2018 IIT-Roorkee	First Prize
6	Shubham Rao	CSE	IIT Delhi Hackathon-2017 10-13 November 2017	First Prize

## Social activities and others

S. No	Name of the student	Activity
1	Saptarshi Mazumder Rajarshi Mazumder	Developed SRMAP VR app for the campus

## Sports & extra-curricular activities

Students of SRM AP participated in VITOPIA (3-8 March 2018) conducted at VIT AP, Amravati. There were various events such as Basketball, Volleyball, Football, Cricket, Table Tennis, and Chess. Intramural sports were conducted consisting of Volleyball, Cricket, Chess, Basketball and Carom for SRM Students. SRM AP also conducted SRM Sports Fest (16-17 March). Eight external teams participated in each game, with a total of total of 580 players. The games included

Basketball, Football, Cricket, Volleyball, Table Tennis and Chess for male students. Female students participated in Throw ball, Table Tennis, and Chess. The male students of SRM AP secured second prize in Table Tennis. Also, forty school students of the nearby villages, Koragollu and Neerukonda, had attended summer coaching for sports from May 7 to May 19, 2018 a two-week programme, during which they had received coaching regarding Football, Basketball, and Volleyball.

## Scientific reports

Research activities and trust areas are listed

### 1. Hydrogen Powered Train (Jhal Janak Rail)

Hydrogen Powered Train is being developed by SRM University in collaboration with Integral Coach Factory (ICF) of the Ministry of Railways Government of India. The Hydrogen Powered Train does not use Diesel or Electrical energy. Hydrogen is given as input to the fuel cell and the output of the fuel cell will drive the train. Lithium Ion Batteries and supercapacitors are employed. The proposed train will have 2 coaches operating at a speed of 75 Kmph. It is expected that the Hydrogen Powered Train will be operated by Dec 2019.



### 2. Department of Computer Science and Engineering (CSE)

The Computer Science and Engineering Department will investigate various issues related to image processing, pattern recognition and video analytics. Large data are generated due to the emergence of social media and mobile phone-based applications, IOTs, etc. Distributed storage and computing have become very important for addressing the problem of Big Data and a lot of organizations have already started using the technology and tools developed based on the concepts of distributed computing. The faculty and students of the CSE department are actively involved in solving problems related to Big Data. The department will also focus in developing new techniques and tools for solving the problems which require the use of the algorithms proposed in artificial intelligence and machine learning fields. The department will also investigate issues related to computer networks and security. Social mining is also one of the areas in which faculty and students of CSE department will be carrying out research activities. The department will also address some important problems in health informatics and carry out efforts for building new software systems which will assist the doctors in providing better treatment to the patients

The following are the research areas where the students and faculty members are actively engaged:

#### Research Group of Prof. T. Rangunathan

- Carrying out research activities to develop new read algorithms for reducing read access time in distributed file system. This research will be useful for the faster analysis of data stored in distributed systems.

- Investigating the issues in developing Efficient Treatment Plans for curing patients affected by critical diseases by using the concepts in Big Data and Artificial Intelligence.
- Working on to develop new concurrency control protocols for transaction processing in column oriented database systems.

#### **Research Group of Dr. Vadivelu**

- Carries out research activities in Content-Based Image and Video Retrieval for real-time image and video retrieval applications.
- Works on Mammogram analysis and interpretation using BI-RADS (Fuzzy-Object-Shape) standard for early detection of breast cancer.
- Actively involved in the research activities on Multimedia Information Retrieval from WWW using Event pattern analysis for corpus construction for query refinement

#### **Research Group of Dr. Jatindra Kumar Dash**

- Works on to develop novel image retrieval algorithms those retrieve HRCT lung images containing similar pathology against a query image.
- Design and development of software platform that can store, and retrieve high resolution computed tomography (HRCT) lung images on demand
- Developed a graphical user interface (GUI) that facilitates radiologists to delineate Pathological Bearing Region (PBR) for creation of medical image database
- Development of Interactive Tool which helps radiologists to create ground truth/gold standards for the evaluation of algorithms used in computer aided identification and segmentation of Interstitial Lung Diseases patterns from HRCT images
- Development of novel algorithm for fusion of different classifiers at the decision label.
- Design of novel texture features.

#### **Research Group of Dr. Pradhan**

- Investigating issues in improving the performance of the high speed networking schemes such as WDM.
- Carries out research activities on Routing, grooming and resource allocation in WDM optical networks in order to minimize the call blocking and optimal use of resources in the networks.
- Works on to develop scalable network infrastructure for smart cities or smart campus including minimization of cost with energy efficiency.

#### **Research Group of Dr Anil Kumar Rangiseti**

- Carries out research activities in designing software defined wireless networks architectures using SDN (software defined network) and NFV (network function virtualization) together.
- Investigating the issues in deploying 4G, 5G technologies and working towards designing novel IoT applications.

#### **Research Group of Dr. Priyanka**

- Working in the field of digital image watermarking, focusing on copyright protection, tamper detection, and content authentication.
- Carries out research work on combining machine Learning and soft computing effectively for intelligent image embedding and extraction The use of intelligent watermarking is highly

desirable in applications where imperceptibility and robustness requirements constantly change.

#### **Research Group of Dr. Shida**

- Working on the development of advanced Monte Carlo algorithms that has a better “mixing” in various difficult conditions
- Carries out research activities in application of advanced Monte Carlo algorithms in difficult optimization problems found in Physics and Computer Science.
- Conducting research activities regarding the application of Monte Carlo algorithms in data science

#### **Research Group of Dr. A. Satish**

- Carries out research activities to enhance the performance of network routing protocols in cognitive radio.
- Investigating the issues in developing new scheduling protocols for IOTs.

### **3. Department of Mechanical Engineering**

Department of mechanical engineering at SRM Amravati offers BTech, MTech and PhD programs in the field of mechanical engineering. Our research-active faculty members take a real interest in providing the best education possible and also interact with every individual student. There will be focus on industrial interactions and emphasis on applied engineering and research. The department offers specializations in the field of Robotics/Control, Manufacturing/CAM, CAD/CAE, Materials/3D Printing, Mechatronics, Design, Heat Power and Automotive Engineering.

Currently the faculty members are pursuing the research majorly in the field of Mechanics of Composite Structures; Computational and Experimental Mechanics; Tribology and Rheology; Advanced Manufacturing Technologies such as Laser Micro machining, peening, interferometric nanometrology; Rapid Prototyping and 3D metal Printing; to name a few. However, the department is also open to inter-disciplinary research and actively seeking to collaborate.

#### **Research Group of Dr. Prakash**

Goal is to continue to come up with innovative designs of fiber reinforced composite structures for aerospace, automotive, naval and other applications.

Composite Research Center in SRM University AP is being established where innovative designs of composite structures will be created (using latest composite design software and tools), manufactured (by setting up a lab level vacuum assisted resin transfer molding set up to make small fiber reinforced composite panels) and characterized/tested (by establishing the ASTM standard testing lab) for the desired loading for different applications like aerospace and automotive.

One of the project that is being worked on is, design and validate lightweight and high strength cylinders made of fiber reinforced composite structures for storing hydrogen at very high pressure for the application of hydrogen powered train which is focus area of SRM University. Storing hydrogen at high pressure means we can store more hydrogen and train can run for long time.

Dr Prakash would also pursue other research areas such mechanical characterization of thermal barrier coating material, experimental and computational mechanics of materials, vibration and impact analysis, 3D printing of Gold material etc

Research lab on design, analysis, manufacturing and testing of composite structures is being set up in the department, Universal testing machine is already ordered which will help test composite

specimens under tension, compression, shear and flexure kind of loading. Digital image correlation technique instruments are also ordered which will help study the crack initiation and propagation phenomenon in composite structures. Vacuum assisted resin transfer molding set up is being set up which will help fabricate the good quality fiber reinforced composite specimens.

### **Industry Projects**

1. Jal Janak Rail: Joint project with Indian Railway and SRM KTR campus faculties, Dr. Prakash and Dr. Febin are contributing in the development of high pressure composite cylinders for storing hydrogen for the proposed hydrogen powered passenger train
2. Titan Ltd: Dr. Febin and Dr. Prakash have proposed a research project on improving the surface finish of as cast gold jewelry using innovative surface coatings, jointly with Titan and Dr. Jatis/Dr. Sachi of Physics Dept

### **Research Group of Dr. Sivakumar Narayanswamy**

He will be working on High repetition rate nanosecond laser research program. His research work focuses on a comprehensive program on High Repetition Rate Laser (HRL) Shock Wave Processing with applications in Laser Peening to improve corrosion resistance, Laser Ultrasonics for NDE of composite materials and Laser Assisted Bioprinting, while developing economically viable applications for biomedical and aerospace industries. Laser Shock Waves have been a subject of interest over the last many decades specifically in applications ranging from characterization of materials, to surface modification to biological applications involving printing. High repetition rate shock waves is being proposed in these applications for the first time. The study of high repetition rate shock waves is expected to bring the cost of research down due to reduction in the cost of the laser primarily. The long-term objective of the program is to develop novel strategies in High Repetition Rate Laser Shock Wave Processing for Tissue Engineering, Organ Bioprinting, and Sensor Manufacturing. The novelty of the proposal lies in the utilization of cost effective HRL for shock wave generation. Since the repetition rate is higher, and the power is lower, the challenges include concentration of shock waves into microdomain as well as using high-speed scanning systems. The proposed research program will involve systematic developments and investigations in HRL shock wave processing for applications in Peening, Bioprinting and Laser Ultrasonic NDE. High-speed scanning and machine vision system will be integrated to the newly acquired laser system for peening. A novel pulse detecting laser phase modulating interferometer will be developed and integrated with the laser system to detect surface displacements for Ultrasonic NDT. A novel diaphragm nozzle combination utilizing the principle of shock waves will be developed and integrated with laser system for bioprinting. Dr. Sivakumar is also interested in mechanical characterization, bio imaging and rapid prototyping, especially in the field of 3D metal printing.

### **Research Group of Dr Vijaysekhar Chellaboina**

He is a Professor of mechanical engineering. his research interests include applied mathematics with specific focus on control system theory, stability theory, linear and nonlinear systems, stochastic and uncertain systems, optimal control, and stochastic optimization. His applied interests include computational finance and control of biomedical systems. Dr. Vijayshekar holds a Ph.D. in Aerospace Engineering from Georgia Institute of Technology, Atlanta, USA, 1996.

### **Research Group of Dr Febin Cyriac**

His research interests are tribology and rheology. He is planning to buy Rheometer and Tribometer and pursue his various interests like characterizations of lubricants, polymers, grease etc



#### **4. Department of Electronics & Communication Engineering (ECE)**

Currently, the department level research activities involve signal and image processing, computational electromagnetics and renewable energy.

##### **Research Group of Dr. Sudhakar Tummala**

Dr. Sudhakar Tummala have been working on investigating the role of biomechanical factors in the knee during early radiographic osteoarthritis (ROA). It contains development of novel markers related to biomechanics for early diagnosis, prognosis and monitoring of ROA. Biomechanical and qualitative factors such as contact area, surface smoothness, and congruence tend to change even at early ROA. So, if we could detect the disease when it is in early stages, we may be able to slowdown the progression or even halt the progression by taking some therapy/treatment.

My other research activities involve quantifying structural and functional brain changes in several disease conditions including obstructive sleep apnea, heart failure, autism spectrum disorder, congenital heart disease, cystic fibrosis. He has worked on several MRI modalities including T1, T2-weighted MRI, proton density MRI, diffusion tensor imaging for Gaussian diffusion of water, magnetization transfer imaging for myelin mapping, T2\*-weighted MRI for iron content mapping, diffusion kurtosis imaging for non-Gaussian diffusion of water, functional MRI for assessment of functional connectivity, pseudo continuous arterial spin labelling for estimating diffusion across blood-brain-barrier. These structural and functional changes could be employed as candidate markers for monitoring the disease progression or validating the efficacy of a treatment.

##### **Research Group of Dr. Sreenivasulu Tupakula**

Dr. Tupakula works on computational electromagnetics/Photonics to design and modelling of electromagnetic bandgap structures / electromagnetic metamaterials / photonic crystals. These special class of materials have various applications in the fields of RF communications (for example metamaterial based antennas), Optical communications, refractive index sensing etc. So far I contributed on De-multiplexer devices for DWDM technology based on photonic crystals, 2.5D (slab) photonic bandgap structures based sub-micro Newton range force sensors and refractive index sensors. All these devices are designed to operate at wavelengths in the third window of optical communication (centered at 1550nm).

Other area of my research is development Terahertz photonic crystals that operate at the Terahertz frequencies. Replacement of conventional terahertz devices with THz photonic crystals will reduce the cost, reduce the radiation losses, most importantly will reduce the size of the devices. Because of the existence of electromagnetic bandgap in these materials, bending losses will be negligible when compared to the conventional devices and hence they are compatible to be integrated with the other passive electromagnetic devices that are used at THz frequencies.

##### **Research Group of Dr. Sujith Kalluri**

Dr. Kalluri is involved in the industrial-scale manufacturing of the electronic materials for the rechargeable battery systems and establishment of Novel State of Charge (SoC) Algorithm and Feasible Electronic Control for Electric Vehicle's Battery Management System (BMS). The key objectives of the project are to commercialize the battery electronic materials at home laboratory and improve the battery characteristics such as enhancement of the calendar life of Li-ion battery packs and better electronic control in their applied devices. The various stages in the battery analysis includes the testing of the initial battery characteristics (battery true capacity, OCV, Current

etc.), development of SoC estimation algorithm using MATLAB platform software and Thevenin-based model (electric circuit model). A novel fading Kalman filter algorithm will be developed to estimate the SoC. The BMS hardware components: Cell Equalizer Module, Master Controller, Voltage and Current Monitoring Module, and Peripheral Modules, and BMS software platform: Based on network processor hardware which can single board computer such as Beagle Bone Black (BBB) will be used and the results of the proposed SoC algorithm and BMS's webpage user interface will be analyzed.

## 5. Department of Physics

Physics is the most fundamental science that deals with the properties and interactions of matter and radiation; which leads to the basic understanding of our nature and modern technological achievements. As such, physics provides the fundamental basis for all applied sciences and technologies.

Currently the Department of Physics at SRM University-AP, Amaravati offers the Bachelor of Science (B.Sc.) and Ph.D. graduate program. The B.Sc. with Physics major (or minor) program gives the students a solid foundation of concept and problem-solving ability on which they can be able to solve the real world problems by modelling it and design it with the application of new experimental techniques. This can lead to a variety of other careers, which the students can choose after the completion of the program. The department also encourages research opportunities for undergraduate students, as well as graduate students, in several areas of experimental and computational physics. The undergraduate students can pursue their careers with Physics major, and choosing any two minors from Computer science, Mathematics and Chemistry. A degree in Physics with such combinations open up new avenues for careers in areas such as industrial research and development, semiconductor engineering, medical physics, software and information technologies, etc.

### Research activities

The Department of Physics feels that it is essential to keep the students involved in the subject, and convey to them not just the information but the concepts and thought processes. The faculties of Department of Physics are enthusiastic and committed towards teaching as well as research and look forward to educate the next generation of Scientists and Engineers.

The Department of Physics carries out forefront research in the emerging areas like fabrication two-dimensional (2D) materials and their electronic devices, applied photonics and optical communications, piezoelectricity and ferroelectricity, high-k dielectrics, thermoelectric devices, molecular electronics, photovoltaic devices and energy applications. The departmental faculties are also involved in the project on renewable energies and supercapacitors.

## 6. Department of Chemistry

Chemistry is often called the “CENTRAL SCIENCE” as it plays a pivotal role in all aspects of physical and biological sciences, including engineering, agriculture, medicine, and allied health disciplines. The Department of Chemistry, SRM-AP is composed of dynamic faculties across diverse areas creating and spreading new knowledge at the forefront. Excellent teaching, close faculty-student relationships, and competitive research programs characterize the department. Faculty members are available as academic advisers and hold office hours for consultation about their courses; willing to discuss chemistry, science and career opportunities. In many cases, faculty,

post-doctoral fellows, graduate and undergraduate students collaboratively pursue interdisciplinary research within the department.

The Department of Chemistry, SRM-AP offers foundation courses to 1st year BTech students, three years B.Sc. (Chem), and Ph.D. programs. Our undergraduate program has been designed to provide a basic foundation in general areas of inorganic, organic, and physical chemistry, plus many more specialized courses. These courses include material, analytical, nuclear, biophysical chemistry and chemical biology, which provide undergraduate students a rigorous, high quality education and exceptional research opportunities in a challenging and nurturing environment. More importantly rather than providing formal lecture and laboratory courses, highlighted is the intellectual environment provided by the department. Additionally, our undergraduate students are benefited from access to this classroom expertise and will have opportunities to work close with faculty and student researchers who are on the leading edge of chemistry research. Undergraduate Research will frequently result in journal publications and/or presentations at scientific meetings. Moreover, Ph.D. program and the presence of post-doctoral research associates ensures a stimulating scientific atmosphere supported by modern research instruments that are accessible to undergraduates.

Research in the Department extends the disciplines of chemical sciences, including organic, inorganic, physical, and theoretical/computational chemistry. Furthermore, research laboratories in these traditional areas pursue problems at the interface of biology (i.e., chemical biology) and materials science (i.e., nano-science and materials chemistry). We benefit greatly from a highly interdisciplinary and collaborative environment, including strong interactions with other premier institutions across India and around the world.

### **Research areas**

- New Synthetic Methods in Organic Chemistry
- Heterogeneous Catalysis
- Transition-Metal Complexes as Catalysts in Organic Reactions
- Asymmetric Synthesis
- Computational Chemistry
- Synthesis of Metal-Semiconductor Hybrid Nanomaterials for Multi-modal Functionalities
- Understanding the Fundamentals of Controlled Assembly with Inorganic Nanocrystals, i.e., Polymerizations at Mesoscale.
- Functional Nanomaterials for Theranostic Applications
- Sensing Bio-relevant Entities with Nano-carbon materials.
- Core/Shell Semiconductor Nanocrystals
- Perovskite Nanocrystals
- Optoelectronic Device Fabrication

### **Research Group of Dr. Mahesh Kumar Ravva**

Our research group mainly focuses on design or modify existing electron acceptor materials with various functional groups, using state-of-the-art computational methods, for high-efficient nonfullerene organic solar cells. The computational protocols based on quantum chemical methods, integrated quantum mechanical and molecular mechanical methods, symmetry-adapted perturbation methods, and classical molecular dynamics simulations use to understand the packing between electron donor and electron acceptor materials in the active layer of solar cell. Our studies

aim to understand how chemical structures of donor and acceptor materials influence their electronic properties, morphology of active layer, and the performance of solar cell.

### **Research Group of Dr. Nimai Mishra**

Dr. Mishra's research group focuses on the High-temperature colloidal synthesis of different shapes and compositions of semiconductor and perovskite nanocrystals, such as seeded core/shell nanorod, nanotetrapods, and nanowires. Thereafter characterization of those particles under TEM, SEM, UV-Visible, PL and X-ray diffraction technique and study their assemblies in solutions and on substrates. We are also interested in a study of single particle Fluorescence blinking properties and moreover use of those particles in the making of efficient optoelectronic (Light emitting diodes, Solar cell, Photodetector) and for thermoelectric (TE) devices.

### **Research Group of Dr. S. Mannathan**

The development of new methodologies to prepare biologically important molecules is an important scientific challenge in organic synthesis. Particularly, the synthesis of nitrogen containing five and six membered heterocycles such as indoles, lactams, pyrroles, imidazoles, pyridines, pyrimidines, isoquinolines, isoquinolones, and pyridines, are highly demanding because they exist in many natural products, inhibitors, organic dyes and pharmaceutical agents. In addition to the synthesis, tailoring the properties of such molecules would also be highly interesting because, sometimes, it could lead to highly active potential molecules. In this regard, our group works on "Metal-Catalysed New Annulation and Cross-Coupling Reactions" to synthesize and functionalize various biologically active compound. Despite a lot of methods available to prepare these scaffolds, an environmentally friendly, step and atom economical approach, are always highly desirable. Particularly, the enantioselective annulation and cross-coupling reaction via C-H bond activation are rarely studied, and we are currently focusing on it.

The major research interest in our group includes as follows:

- Metal-catalysed organic transformation reactions
- Asymmetric synthesis
- Multi component reactions
- Metal-free organic reactions

### **Research Group of Dr. Sabyasachi Chakraborty**

Our group focuses on collective understanding, tailoring and controlling the interfaces between biological systems and inorganic nanocrystals for practical applications as well as fundamental studies. This requires progress on few parallel tracks, including: protein-based ligand design and characterization, functional nanoparticles design and their assembly behavior, structural and optical characterization, chemical interactions of nanoparticles with biological systems, diagnostics and therapeutics purposes together with imaging and sensing.

The major research interest of our group includes,

- Functional Nanomaterials for Theranostic Applications.
- Sensing Bio-relevant Entities with Nano-carbon materials.
- Synthesis of Metal-Semiconductor Hybrid Nanomaterials for Multi-modal Applications.
- Understanding the Fundamentals of Controlled Assembly with Inorganic Nanocrystals, i.e., Polymerizations at Mesoscale.

The research tools in which our primary focuses are as follows: Synthetic metal-ligand chemistry and inorganic nanoparticle synthesis; NMR, MALDI; Light scattering techniques; TEM and SEM; Optical spectroscopy; FT-IR; XPS; Cell viability; Cell imaging; Photodynamic therapy; Photothermal therapy.

## 7. Department of Biotechnology

Biology is a branch of science that deals with the study of life. The department at SRM-AP has an outstanding, internationally recognized faculty supported by excellent facilities for both teaching and research. It is housed in a complex that includes classrooms, a library, a computing lab, and research laboratories. In addition to stimulating and challenging course work, students also have unique opportunities to jump-start their careers by participating in cutting edge research projects under faculty guidance, serving as undergraduate teaching assistants, doing internships, and participating in student clubs.

Faculty research interests span the complete spectrum of biological phenomena and disciplines, from biochemistry to global environmental change, yet overlapping, graduate training programs: Biochemistry, Genetics, Applied Biology, Molecular, Cellular, and Evolutionary Biology (MCEB) and Ecology Evolution and Organismal Biology (EEOB).

The majors offered in Biological Sciences fulfill the basic science requirements for admission to higher professional schools; secondary education programs; and public health and research graduate programs. Our Bachelor of Science degree provides a strong foundation for careers in which familiarity with biological topics is needed, including health care, industry, government, law, and education.

Core competencies:

- Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)
- Nano-Biotechnology and Nano-Medicine
- Recombinant DNA technology
- Stem cell
- Molecular Biology
- Bioinformatics
- Cell Culture
- Microbial Culture

### Research Group of Prof. Jayaseelan Murugaiyan

**Area of research:** Proteomics, Host pathogen interactions and proteomics basis of species identification

The proteome of any given organism is complex and varies according to several parameters while the genome content almost remains the same at different stages of life cycle. In simpler words, the genome content is same throughout the life cycle of a butterfly, for example, however, the protein expression is different at every stage. Furthermore, microorganisms often possess antimicrobial resistance genes, however, the microorganism remains antimicrobial susceptible due to a mutation in the gene or lack of gene expression. The term “proteome” was coined from proteins expressed by a genome in 1995 and “Proteomics” refers to the systematic large scale investigation of the

protein constitution of the cell, tissue or organism. Proteomics investigations are of both qualitative and quantitative. Qualitative investigation is often used for rapid species identification and biomarker studies. The qualitative proteomics analysis often requires only a single step preparation of crude samples and mass spectrometric analysis referred as “Intact Protein Profiling” as applied in MALDI TOF MS based species identification of microorganisms. Quantitative proteomics analysis is applied in understanding expression level differences for e.g., between antimicrobial susceptible and resistant microorganisms. In all of these applications, proteomics analysis involves three steps, viz., 1) protein extraction or isolation, 2) separation of proteins and 3) identification of proteins. Based on the protein separation and identification, two different terminologies are used, gel based and non-gel based or mass spectrometry based proteomics analysis. With these approaches, Dr. Murugaiyan is interested in establishing a full-fledged proteomics laboratory at SRM University, AP - Amaravati . The focus of the proteomics laboratory will be

- 1) Analysis of antimicrobial adaptation and resistance mechanisms
- 2) Quantitative proteomics analysis of infectious microbes and
- 3) MALDI TOF MS based rapid species identification of microorganisms and insect species.

### **Research Group of Dr. Anil K. Suresh**

- Fabrication and characterization of nanoparticles for various biotechnology and biomedical applications, and their characterizations.
- Clinical medicine and targeted therapeutics for life threatening diseases (HIV, Cancer) using engineered nanoparticles.
- Cell and Microbiological toxicity assessments of engineered nanoparticles.
- Microbiome mediated fate and transformation of engineered nanoparticles.
- Engineered nanoparticles aided early diagnosis of cancer and other microbial based infections.

Based on Dr. Anil K. Suresh diverse research expertise within synthesis and biomedical applications of engineered nanoparticles with proper facilities and resources he would like to address several novel goals that are already funded by several funding agencies (listed below).

#### **1. *NanoBiotics: Nanomagnets aided direct removal of multi-drug resistant bacteria out of blood:* (Funded by DBT for Rs. 1 Crore, 2013-2019)**

Using iron oxide nanoparticles and magnetic fields, researchers have attempted to target a tumor, where they use the IONPs, improve all the current drawbacks (solubility, availability, retention time, selective targeting etc.) and deliver the drug to the site of action or disease location. But no one has attempted to do the opposite. What if we move the diseased cells itself out of the system, meaning selectively load or attach the IONPs onto or inside the cells and move these cells out of our system using magnetic fields placed out of the system. This can be possible with only non-adherent cells, and cannot be implemented on solid tumor. Implementation of this strategy on malaria, HIV, blood cancer, leukemia, and other blood borne pathogens will revolutionize the current therapeutics as drug resistance, side effects etc might not be anymore an issue. Currently, Dr. Anil K Suresh as a Principal investigator is working through the ongoing DBT funded grant “Direct removal of multi-drug resistant bacteria out of our blood”.

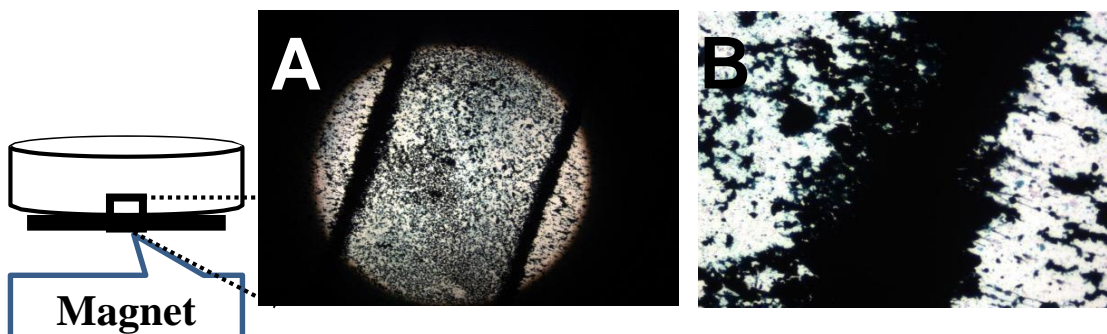
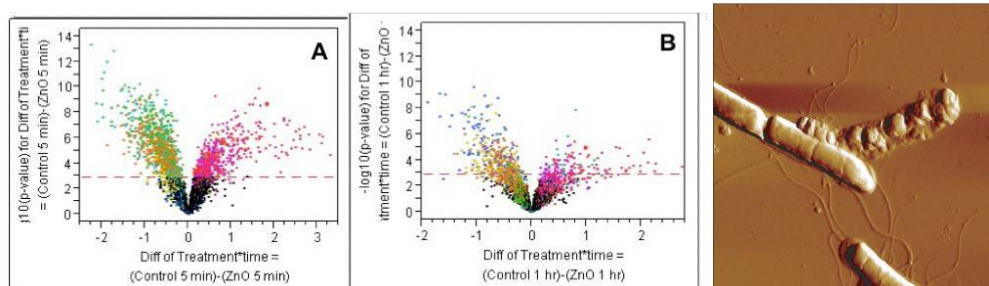


Figure. Magnetic movement of *E.coli* attached with IONP-Ab conjugates using bright field microscopy.

**2. Microbiome mediated fate and transformation of man-released nano-pollutants** (Funded by DST for 48 Lakhs, 2018-2021). Progress in nanotechnology production and applications is undergoing exponential growth outpacing the evaluation of their potential environmental and human health issues. Human exposure to these engineered nanomaterials either intentionally or unintentionally is inevitable and impacts on the biodistribution, fate and transport to host and host cells are beginning to be addressed. However, less well recognized and explored are their effects on our microbial flora; the microbiome and the indirect effects this could have on human health and disease. In recent years it is becoming increasingly clear that our microbiome can affect our overall health. We hypothesize that engineered nanomaterials will have effects on our microbiome and therefore could indirectly impact human health. The present proposal will fill this knowledge gap by evaluating the impacts of the most widely used nanomaterials on the mouse gut microbiome and potential health concerns. Together, this study will result in the basic understanding of how nanoparticles form, size and shape distributions, surface charge or surface coatings and dosage dictate gut microbiome response. This response may include binding, internalization, toxicity metabolism and genetic response. Correlations between gut microflora response and the physical and chemical properties of nanoparticles will be sought. This information will provide a foundation for understanding the probable fates of these materials in the environment, for guiding the development of effective nanoparticle-based technologies, and for understanding how microbiome adapt to these exposures. In the future, similar studies can further be implemented to understand the potential interactions of engineered nanoparticles to other microflora such as mouth, arm pits, finger tips, to better understand and use nanoparticles for various therapeutic applications.



Volcano plot analysis comparing the gene expression levels of *E. coli* after exposure with ZnONPs for 5 minutes (A) and 1 hour (B). Atomic force microscopy image of *B. subtilis* showing perforations caused by Ag nanoparticles (Right).

**3. Nano-Magnets Aided Amplification of Tumor Specific Markers in Blood for Early Diagnosis of Cancer** (Funded as a seed grant for 50 Lakhs by SRM-AP, will be submitting to and external grant after obtaining preliminary results).

Mortality due to cancers has barely decreased in decades, despite exponential increase in our knowledge about cancer pathogenesis, and significant investments in the development of efficient treatment processes. However, sub-groups of patients with a variety of tumor types including lung, bladder, and kidney have witnessed a dramatic curative success using immunotherapy. While such breakthroughs offer the hope of prolonged survival for some patients with advanced cancers, finding cancers at an early stage is a critical parameter that would afford the greatest chance for cure, given the survival rates for patients with early diagnoses are five to ten times higher when compared with the late stage disease. By enabling diagnosis and localized treatment of early stage invasive cancers (and, in some cases, pre-invasive states), screening for cancers, few cancer types including cervical and colorectal cancers has contributed to significant decline in the mortality. Detection of asymptomatic cancer occurrences by clinical screening carries a more favorable prognosis than patients presenting with symptomatic disease (4). Early diagnosis that focuses on potentially still curable cancer is highly challenging, and in the past decade, blood biomolecules such as antibodies, cytokines and metabolites have been identified as markers of specific pathological conditions, since the plasma concentration of these biomarkers correlates with disease onset, disease progression as well as patient responses to therapeutic interventions (5). In that respect, accurate quantification of biomolecules in human blood holds great potential for the detection and diagnosis of a variety of diseases including cancer (5).

Dr. Anil K Suresh hypothesize that magnetic force can be implemented to concentrate the biomarker itself in the blood system upon selective targeting. SPIONs or nano-magnets will be attached to the biomarker following specific antigen-antibody interactions as a novel signal amplification scheme exploiting the super paramagnetic properties as well as the dense atom packing in nano-crystals. Antibodies have been used for the detection of specific cells, and such antibodies are available commercially for all diseases of interest and several studies suggested successful linking of antibodies to nanoparticles. In the present proposal Dr. Anil K Suresh not only aimed to concentrate cancer specific marker in our blood using tiny nano-magnets and strong permanent magnet to a detectable range but also aimed to make use of the chromogenic property of these nano-magnets to develop a novel sensitive assay for the early diagnosis of cancer. And the biggest advantage of the proposed work is to be able to cure cancer at an early curable state, and can also be implemented to cancer reoccurrences where again the detection rate is low. As curative therapies are most successful when cancer is diagnosed and treated at an early stage. Moreover, the beauty of the proposal is that nano-magnets are acting as dual concentrating agents as well as aid in their detectability so that commonly used in-sensitive and expensive test namely ELISA can be avoided.

Dr. Anil K Suresh also have several other sub-projects on-going involving Biomedical application of nanoparticles. For example; super paramagnetic iron oxide nanoparticles for removing blood residing HIV and Malaria; Bioengineered nanobombs for targeted tumor blasting; Selective bacterial killing using engineered nanoparticles and; Simple one-plot separation of various forms of nanoparticles etc. All these projects aimed at eliminating or curing the dreadful disease causing microorganisms from our system, and by achieve selective targeting.

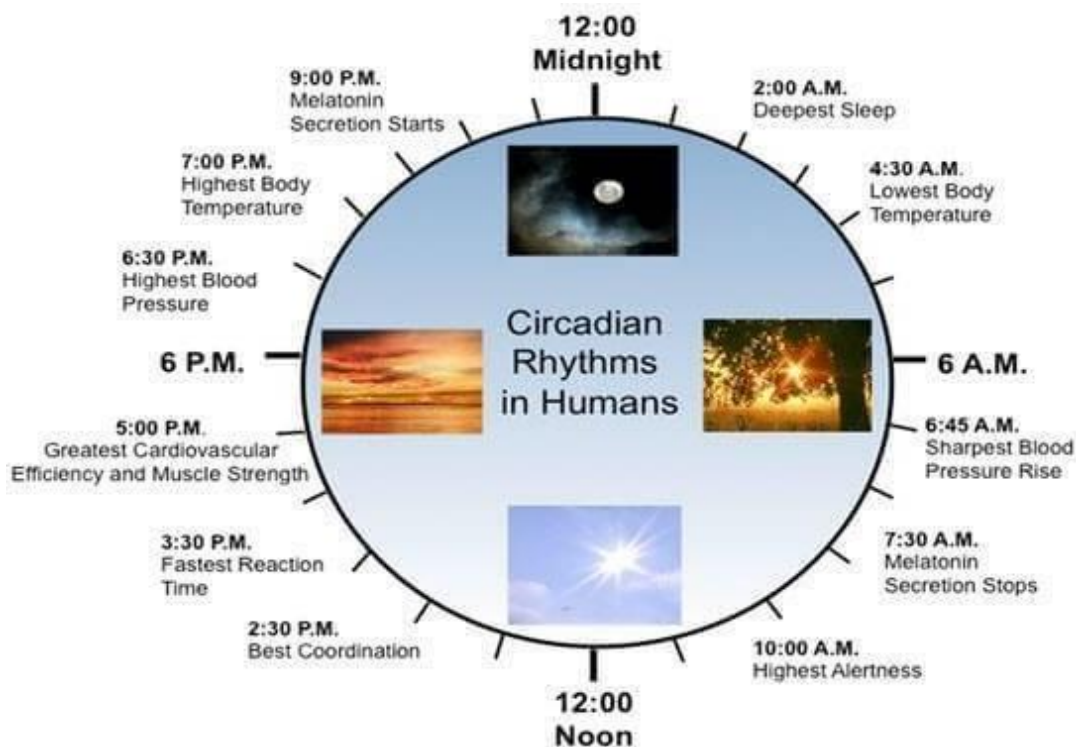
## **Research Group of Dr. Krishna Priya Ganti**

### **Research Interest:**

To understand the molecular mechanism underlying the circadian control of atopic diseases. Circadian rhythms are endogenous oscillations in all living organisms with a 24-hour period, which are adapted to the daily rotation of the earth. Mammalian circadian system is hierarchically controlled by a master clock located in SCN of the brain and peripheral clocks located in virtually all cells. Light is the principal cue synchronising the master clock, which in turn synchronise the



peripheral clocks to maintain various physiological, metabolic and behavioral processes. Several lines of evidence suggest that disruptions of normal circadian clocks are linked to several diseases like cancer, metabolic and bipolar disorders.



The prevalence of atopic diseases is increasing in the developing world (~10%) while it has increased to an epidemic proportion in the developed world (~30%). Allergic diseases comprise food allergy, atopic dermatitis, allergic rhinitis and asthma. Individuals predisposed to atopy tend to develop one or more of the above symptoms. About 50% children developing atopic dermatitis and concurrent food allergy, tend to develop allergic rhinitis and/or asthma later in life, a process termed “atopic march”. Atopy follows familial inheritance; there is 25% of chance that the child will be affected if one parent is atopic, while it increases to 50% when both the parents are atopic individuals. Atopic diseases share common clinical features; increased expression of the cytokine TSLP in the respective epithelia, Th2 inflammation, eosinophilia and hyper IgE response. Interestingly, manifestation of the symptoms in atopic individuals has been reported to follow a circadian manner. For example, in humans with dermatitis, itching and release of histamine is known to occur late in the night causing disturbed sleep, whereas asthma attacks occur early in the morning. The manifestation of these complex genetic disorders is the cumulative outcome of epithelial cell triggering by allergens, epithelial-immune cell interaction, immune cell infiltration and tissue remodeling. Though several factors are known to be involved in the above processes, little is known about their regulation round the clock.

Using mouse model of the disease, Dr. Krishna Priya Ganti would like to understand the pathophysiology of atopic dermatitis and asthma in a circadian manner. If different molecular events regulating the outcome of atopic diseases are found to follow a circadian pattern, various available clock component mutant mice will be used to demonstrate their specific role in regulating the pathophysiology of atopic diseases. In addition, various available drugs can also be tested in these

mouse models round the clock to identify the appropriate time of treatment, so as to ensure maximum therapeutic efficiency of the drug.

### Research Group of Dr. Tusar T. Saha

Insects are a diverse group of organism that has unique physiological features, posing fascinating scientific questions to biologists. Dr. Tusar T. Saha research is focused on deciphering key molecular pathways of insects which are important to human life. Dr. Tusar T. Saha is working towards establishing a vibrant “Disease Vector Biology and Arthropod Genomics Laboratory” at SRM University, AP, Amaravati. The various research focus proposed in his laboratory are detailed below.

- **Juvenile Hormone Signaling Pathway:** Juvenile hormone (JH) is an important growth regulator which controls many aspects of insect physiology including development, reproduction, diapauses, polyphenism and social behavior. In spite of its central role, cellular and molecular aspects of JH signaling mostly remain unexplored. A significant part of my research career has been focused on this classic problem of biology. Dr. Tusar T. Saha use mosquito *Aedes aegypti* as model system to study JH signaling pathway. JH is a unique sesquiterpenoid hormone found only in insects. Because of this specificity, JH and its analogs have been widely used as potent insecticides. Apart from solving a classic problem of basic biology, elucidation of the JH signaling pathway might lead us to novel pesticide targets. Thus, my work bears direct implications to insect pest control, and agricultural sciences.
- **Factors Governing Egg Production in Disease Vector Mosquito:** Mosquitoes are vectors of numerous devastating diseases including malaria, dengue, filariasis, chikungunya and more recently zika fever, affecting the lives of hundreds of thousands of people each year globally. The pathogens are transmitted while the female mosquito feeds on vertebrate blood, an obligate source of key nutrients required for egg development. Dr. Tusar T. Saha is interested in characterizing the factors that regulate egg production in mosquitoes, with an aim to develop novel vector control strategies. These include factors such as hormones, nutrients and mosquito microRNAs.
- **Temporal Regulation of Mosquito Metabolism:** Mosquitoes have a unique physiology catering to its development needs. As a result, their metabolic regulation is also expected to be unique, a domain of research that remains completely unexplored. A direction of Dr. Tusar T. Saha research is focused on deciphering how metabolism is temporally regulated in mosquitoes.
- **Insect Immunity and Host-Parasitoid Interaction:** Recently, Dr. Tusar T. Saha have started working on insect immunity and pest-parasitoid interaction aiming to elucidate the molecular mechanisms governing success of biological control agents. To study host-parasitoid interaction we have developed a model system comprising of two closely related wasp species *Microplitis mediator* (Mm) and *Microplitis terminator* (Mt), and their common host *Helicoverpa armigera* (Ha), a polyphagous lepidopteran pest (Mm/Mt-Ha model). Mm and Mt have distinct parasitic success, with Mm successfully colonizing Ha larvae and Mt being encapsulated out by 5d post infection. Dr. Tusar T. Saha is planning to use this model to better understand the molecular basis of biological control agricultural pests in the future.

## 8. Department of Environmental Studies

### Research Group of Dr. Bhagyalakshmi Kalidass

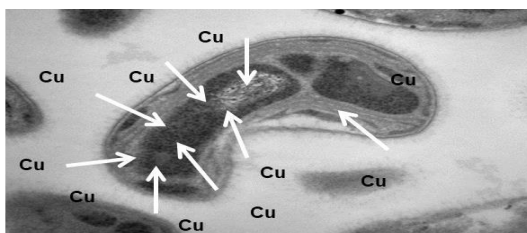
#### Area of Research:

- Effect of metals on key gene expressions in methanotrophs
- Influence of the protein, methanobactin, on gene expression that affect methane oxidation

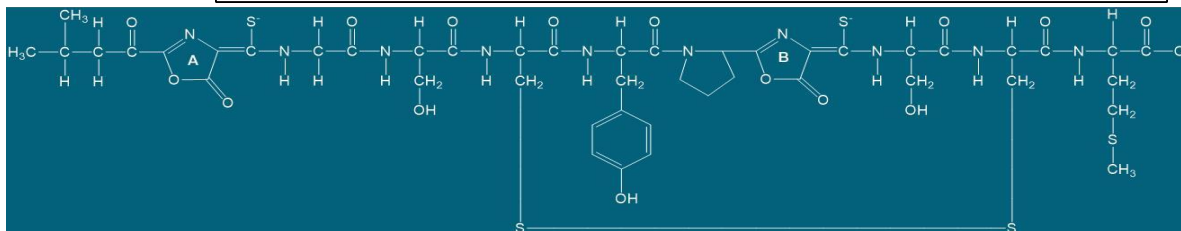
With the rise in the atmospheric concentration of methane, a very potent greenhouse gas, its mitigation requires the utmost attention (EPA, 2006). Methanotrophs are a unique set of bacteria capable of mitigating methane emissions by converting methane to carbon dioxide which has a lower global warming potential. Studies on methanotrophs mainly focus on understanding the physiological and biochemical properties of methanotrophs to best model them for field scale applications. While methanotrophs are well known to be sensitive to copper as its concentration affects the expression and activities of the two forms of methane monooxygenase, information about the effect of other abundant metal ions available in the environment is scarce. Due to the ubiquitous nature of methanotrophs, understanding their behavioral response to the diverse environments is vital for exploiting them in bioremediation.

Preliminary research has focused on understanding if metals other than copper can affect the expression and activity of methane monooxygenase. Herein, gold was shown to affect the “copper-switch” by competing with copper for uptake by a copper chelating molecule, methanobactin, secreted by few methanotrophs. In other words, while it is well known that presence of copper alone suppresses the activity of soluble methane monooxygenase (sMMO), gold actually induces sMMO activity in *Methylosinus trichosporium* OB3b, even in the presence of copper. This clearly indicates the need for understanding how the relative abundance of metals in the environment affects methanotrophic activity.

The second enzyme in the methane oxidation pathway, methanol dehydrogenase, was also identified to be affected by metals. The study indicates that the rare earth element, cerium, acts as a switch between the two forms of methanol dehydrogenase in *M. trichosporium* OB3b. Such information will likely prove important when designing systems where one form of methanol dehydrogenase that has a catalytic advantage over the other form is preferred for system performance. It was hypothesized that if metals could have a drastic impact on expression and activities of key enzyme, so might methanobactin since methanobactin acts as a means of uptake mechanism for metals like copper and gold. When *M. trichosporium* OB3b was grown in media supplemented with copper and methanobactin from *Methylocystis* sp. strain SB2, sMMO activity was induced. This shows that “cross-talk” can occur between methanotrophs and thus methanobactin qualifies as a signaling molecule affecting the gene expression in a methanotroph that did not secrete the methanobactin.



Copper uptake by the protein, methanobactin, secreted by



## 9. Report on Next Tech Lab

Next Tech Lab is a proven successful experiment in the field of ground breaking research led solely by students. Next Tech Lab provides a platform for students to learn, research and implement their ideas and develop their skills to disrupt industries and build companies of the future.

### The lab can offer to SRM – AP:

- We can offer guidance to the entire student population on how to productively use their time which will in turn help them during the four years of their life at SRM Amaravati.
- Teaching them how to secure international internships, research projects and prepare them to get the most out of their under graduation life -MS or PhD? How they will start their own Start-up company?
- Next Tech Lab is not just about the work or the research, it is about the individual who is part of the movement. We make sure that an individual grows and finds his/her purpose in life.
- We will help the entire batch to learn and build their profiles. We will also help them learn the exact skills required to get hired by major tech giants.
- Students mentored by Next Tech Lab will be ready to solve the problems of today and tomorrow enabling them to plan their start-up and know “the tech” required for it
- A strong, tightly-knit culture will be built with the help of Next Tech Lab which will inspire students to work harder and set examples to the larger student community.
- Members of the lab will be sent to technical competitions, like Hackathons and will be mentored throughout the competition.
- Members of the lab will be giving regular public talks in events such as Raspberry PI, PyData, etc. which improves their speaking and leadership skills.

## 10. Department of Career Development Centre

The Career Development Centre at SRM AP, Amaravati provides a campus to corporate programme with a difference. It offers a bouquet of various modules such as soft skills, quantitative aptitude, analytical reasoning and verbal ability. The vision is to create not only future professionals but competent personalities who are a proper blend IQ and EQ. Our mission is to create an environment where students can experience a holistic development. The objectives are:

- Grooming students as per industry requirement
- Enhancing self and people management skills
- Competency building:
  - Communication
  - Interpersonal Relationship Skills
  - Time Management
  - Team Dynamics
  - Emotional Intelligence
  - Lateral Thinking
  - Conflict Management
  - Stress Management
  - Transformational Leadership
- Complete Experiential learning through
  - Games
  - Simulations
  - Outdoor activities
  - Projects
  - Creative presentations
- Preparing students for competitive exams such as GRE, GMAT, GATE, TOEFL etc.



We enable students to **Create Dare & Conquer** by being the wind beneath their wings.

CDC activities conducted during the academic year:

Module	Activity	Objective
<b>Motivation</b>	Soldiers' Walk/ Japanese Fan	To enable students understand the importance of motivation ; learn the ways for motivating self & others
<b>Lateral Thinking</b>	Fill Me Up SLT/ SCT	To think out of the box.
<b>Team Dynamics</b>	Discussion Cafe	To improve interpersonal interaction, to ideate and plan
<b>Stress Management</b>	Postures	To strike a work life balance
<b>Extempore</b>	Pass The Buck	To think on the feet, develop preparedness



Extempore



Stress Management

## International Collaboration & MOU's

S. No	Name of the University	Collaboration Level	Nature of Collaboration
1	Illinois institute of technology, Chicago, Chicago, USA	MoU	Student projects, Student Exchange
2	University of California Berkeley, Berkeley, USA	MoU	Student projects, Student Exchange, Course development, Faculty Exchange
3	Massachusetts Institute of Technology, Cambridge, USA	MoU	Student Exchange, Faculty Exchange, Curriculum development
4	EFREI Paris, Villejuif, France	MoU	Academic Collaboration



# Conferences, Events and Activities

## 1. Indian Game Development Challenge (IGDC) at SRM University-AP (in association with Kajaani University, Finland and, EDB, AP Andra Pradesh State Skill Development Corporation APSSDC)

Eight weeks' summer course on commercial game development in collaboration with APSSDC and EDB, AP will start from 1<sup>st</sup> June, 2018 to 27<sup>th</sup> July, 2018 at SRM University. There are 320 hours of students work (worth of 12 ECTS study credits). In this event students from different regions of Andhra Pradesh are actively participated. There were around 500 students work in teams and teachers from Kajaani University work as coaches. They guide the students to make hands-on game on mobile and other platforms like PC or laptops.

The main objective of this gaming event are as follows: Firstly, to create game industry starts up and gaming companies are involved to encourage the fresh engineering graduates. Secondly, enhance the personal skills and innovation knowledge growth for ICT-students. Thirdly, connecting high-level ICT-skills with employment & business orientation with huge, global gaming industry. Fourthly, developing commercial game with monetization, publishing the game and latest pedagogical concepts.

KAMK professors' expertise, technology and industry experience offer students an unmatched foundation for careers in the game design industry. Few talented students will get an opportunity in Kajaani University or some gaming industry in Finland for internship after completing their summer course.

## 2. Cultural Fest

The university organized its inaugural cultural fest on Friday the 13<sup>th</sup> of April 2018. It was a kaleidoscope of nine events that captured the festive joyousness and the whole hearted participation of the SRMites. Mr. Galla Jayadev, Guntur MP, graced the occasion with his haloed presence as the chief guest. He motivated the students to "adapt themselves to the changing times in order to match up to the tasks." All were highly charged up with his interactive engagement. Pro Vice Chancellor, Prof. Narayana Rao, Registrar, Dr. Gunasekaran, Deputy Registrar, Dr Siva Kumar, event convener's, Dr. Srabani Basu and Dr. Anil K. Suresh along with students, staff and media people from reputed dailies added to the sparkling success of the inauguration ceremony.

This whole day long event was held in the university campus where the students displayed their talents amidst much fun and frolic. Both internal and external experts judged the various events. The SRM students left their brilliant marks in all the events.

The evening became euphoric with the magical performance of the Indian Idol, 2017 winner, L.V Revanth. Pro Vice Chancellor, Prof Narayana Rao gave away the prizes to the winners of the events and closed the ceremony with his words of encouragement.

## 3. Tech-Fest

The First Annual Technical Festival of SRM University AP at Amaravati, had a successful inaugural edition which was organized from 28-29<sup>th</sup> March 2018. The two days of extravaganza witnessed an overwhelming participation from all discipline of students and members of the faculty. SRM-AP Tech Fest 2018 was inaugurated by Dr. V K Saraswat (Chief Guest) Member NITI Aayog on 28<sup>th</sup> March 2018 in the ceremony which was attended by



eminent scientist Dr. M. Nageswara Rao (Guest of Honor), Associate Director, ISRO Satellite Center (ISAC), President of SRM-AP Dr. P. Sathyanarayanan, Pro VC Prof. D Narayana Rao, Registrar Dr. D Gunasekaran , Deputy registrar Dr. B Sivakumar, and TechFest2018 faculty coordinators Dr. Nimai Mishra and Dr. Tousif Khan. The inauguration was followed by a special guest lecture on a very interesting topic "Science & Technology for Economic Transformation of India" by Dr. V K Saraswat (Chief Guest) Member NITI Aayog – that was appreciated by one and all present. The morning session was ended with a very informative and thought-provoking talk on "The Indian Regional Navigation Satellite System (IRNSS)" delivered by Dr.

M. Nageswara Rao (Guest of Honor), Associate Director, ISRO Satellite Center (ISAC). All the technical events witnessed a very large and enthusiastic participation from our students and few participants from other colleges/universities. The event had a remarkable coverage by the leading dailies like The Hindu, The Economic Times and local Telugu newspapers. Two days of TechFest2018 were marked by all sorts of emotions like pride for victory, frustrations, joy, and celebrations. On the 2nd day, morning session we have hosted three guest lectures by (1) Prof. Sandeep Sancheti, Vice Chancellor, SRM IST Chennai on the topic "Innovation and Entrepreneurship" (2) Mr. Solaikutty Dhanabal Academic Program Manager National Instruments IndRA on the topic Talk on "The Future of Wireless Communication - 5G and beyond" and (3) Dr. S.R. Rao, Senior Adviser, Department of Biotechnology (DBT), Government of India on the topic "Genome Editing - Opportunities and Challenges". Over two days several technical events have been organized such as IBM Hackathon, Code Race, Alterplex 3D, Tech Quiz, IOT Workshop by National Instruments, Unity Workshop and Digital Treasure Hunt. In all the technical session a large number of students were attended and took part in the competence. In all these events participants were given challenging problems. The problems aimed to test their analytical and logical reasoning skills. The participants were required to solve the problems provided to them as per the rules. Use of any kind of calculator or any other electronic gadgets (including cell phones) was strictly prohibited. Our eminent faculty members were assigned to judge the event.

The prize distribution and closing ceremony was held on the last day evening, and the chief guest was Prof. Sandeep Sancheti, Vice Chancellor, SRM IST Chennai. The valedictory function marked the end of the technical paradigm with a vote of thanks speech by SRM- AP Tech Fest 2018 Faculty coordinator Dr. Nimai Mishra. The participants were completely satisfied with the events and the hospitality provided by the organizers.

The event was specifically organized for the 1st year students who would be the budding engineers of tomorrow. It provided a platform for the students to understand the basic underlying principles of Science and Technology. Also, the participants were provided with an opportunity to understand the working of various state-of-the-art facilities at SRM-AP.

#### 4. Invited Lectures

S. No.	Name of the delegate & affiliation	Date (s)	Topic	Details
1	Dr Peter Looker, Head, Teaching, Learning and Pedagogy Division, National University of Singapore	Sept.11-13, 2017	Foundation on University Learning and Teaching	Pedagogy Workshop

S. No.	Name of the delegate & affiliation	Date (s)	Topic	Details
2	Mr. K I Vara Prasad Reddy, Chairman, Shantha Biotech, Hyderabad	Sept. 20, 2017	Social Entrepreneurship	Industry Seminar
3	Mr. Sanjay Renewade and Mr. Santosh Srinivas, Manager, Titan Company Ltd, Hosur, Bangalore	Sept. 27, 2017	Academic-Industry Interaction with Titan Company Ltd., Hosur, Bangalore	Industry Seminar
4	Mr. Ravishankar, Head Factories – Lotte India	Oct. 13, 2017	Exploring job opportunities in Industry	Industry Seminar
5	Dr. Abhimanyu Singh Rana, University of Twente, The Netherlands	Oct. 24, 2017	Resistance Switching in Complex Metal-Oxides	Expert Seminar
6	Mr. Parameshwar Babu Managing Director, Param Projects Private Limited, Chennai	Nov. 11, 2017	Industry connect	Industry Seminar
7	Ms. Hema Gopal, VP, Tata Consultancy Services	Nov. 21, 2017	Industry connect Lecture	Industry Seminar
8	Dr. S. HariniPriya, Research Associate Professor, Chemical Sciences, SRM University, Kattankulathur	Nov. 22, 2017	Establishment of Center of Excellence in Solar Allied Technologies– Solar cooling applications	Expert Seminar
9	Dr. Ranjit Thapa, Assistant Professor, SRM Research Institute, SRM University, Kattankulathur	Nov. 22, 2017	Awareness on high performance computer cluster (HPCC) and scientific problem: Descriptor and indicator for sp <sup>2</sup> hybridized carbon based catalyst	Expert Seminar
10	Mr. Bhavesh Mistry, Managing Director, India, National Instruments	Jan. 10, 2018	Preparing the students for 21st Century System Design Challenges	Industrial Seminar

S. No.	Name of the delegate & affiliation	Date (s)	Topic	Details
11	Prof. Yoshiyuki Kawazoe, New Industry Creation Hatchery Center, Tohoku University, Sendai, Japan	Feb. 07, 2018	Materials Informatics based on Reliable Materials Database	Expert Seminar
12	Dr. Chiranjib Majumder Scientist, Chemical division, Bhabha Atomic Research Center, Mumbai	Feb. 07, 2018	Theoretical study on the interaction of aromatic amino acids with graphene and single walled carbon nanotube	Expert seminar
13	Dr. Nicholas B. Dirks, Professor at the University of California, Berkeley and Honorary Pro-Chancellor SRM University AP, Amaravati	March 26, 2018	Multidisciplinary Education	Seminar
14	Prof. Janaki Bakhle, Dr. Nalin Bakhle, Dr. Val Daniel, Dr. Ani Adhikari, University of California, Berkeley and South Asia Institute, Columbia University	May 7-9, 2018	Pedagogy Workshop for Foundation Courses in School of Liberal Arts and Basic Sciences	Pedagogy Workshop

## 5. Faculty/Student Seminars

S. No.	Name of the faculty/student	Date (s)	Topic	Type
1	Mr. Y. Avinash and Mr. Sajan Kumar, Student, SRM University, AP	Sept.11-13, 2017	A brief introduction to Robotics	Student Seminar
2	Dr. Prakash Jadhav, Associate professor, SRM University, AP	Oct. 30, 2017	Intellectual Property Rights	Faculty Seminar
3	Mr. Jay Prakash Ram Dayal Student, SRM University, AP	Nov. 3, 2017	The Future of Robotics Technology	Student Seminar
4	Mr. Sajan Kumar and Mr. Jitendra Prasad, Student, SRM University, AP	Nov.10, 2017	An insight into Robotics	Student Seminar

S. No.	Name of the faculty/student	Date (s)	Topic	Type
5	Dr. Salla Gangi Reddy (Physics) and Dr. Krishna Priya Ganti (Biology), Asst. Professor, SRM University, AP - Amaravati	Nov. 20, 2017	Discussion on Nobel prize winning topics of Physics and Biology	Faculty Seminar
6	Dr. Krishna Priya Ganti, Asst. Professor, SRM University, AP - Amaravati	Feb. 28, 2018	From understanding the regulation of Thymic Stromal Lymphopoietin (TSLP) gene expression in atopic diseases to uncovering a novel Glucocorticoid Receptor action	Faculty Seminar
7	Dr. Sabyasachi Mukhopadhyay, Asst. Professor, SRM University, AP - Amaravati	Jan. 04, 2018	Probing Charge Transport in Molecular Junctions	Faculty Seminar
8	Dr. Arif Ali Baig Moghal, Associate Professor, SRM University, AP - Amaravati	Jan. 09, 2018	Expansive Soils - Problems, Practice, and Solutions	Faculty Seminar
9	Dr. Prakash Jadhav, Associate Professor, SRM University, AP - Amaravati	Jan. 19, 2018	Design, Development, and Testing of Hybrid Composite Fan Blade for Aircraft Engine	Faculty Seminar
10	Dr. Bhagyalakshmi Kalidass, Asst. Professor, SRM University, AP - Amaravati	Jan. 30, 2018	Effect of metals and methanobactin on gene expression in the methanotroph, Methylosinus trichosporium OB3b	Faculty Seminar

## **6. Talks on Popularising Science**

Dr. Nimai Mishra delivered an invited lecture in “General NanoSciences”, Don Bosco School, Bandel and discussed about the possibilities with higher secondary class students on 10th January 2018.

## **7. Youtube videos on Popularising Science**

- 1) Interview with Pro-VC Prof D. Narayana Rao On SRM University Establishment in Amaravati, #MahaaNews (dated 22 January 2018) <https://www.youtube.com/watch?v=ze1uO5n5R7I>, <https://www.youtube.com/watch?v=4Yu2m7mu0aE>
- 2) Interview with Dr. Nimai Mishra on Nano Science and Nano Technology in Bengali (dated 14 January 2018) <https://www.youtube.com/watch?v=hWHxq5i3GBk&t=12s>

## Instrumentation

The following list includes some of the major instruments available and being procured

S. No.	Name of the equipment	Company	Dept
1	ELVIS II+ (35 numbers with Multisim)	National Instruments	ECE
2	CNC Milling Machine	Bhavya Machine Tools	Mech
3	CNC Lathe	Bhavya Machine Tools	Mech
4	X-ray diffractometer	PAN Analytical	Physics
5	LCR meter	Keysight Technology	Physics
6	High temperature furnaces	Ants Lab (Indian made)	Physics
7	Spectrometer	TECAN microplate reads	Physics
8	Globe box	VGard	Physics
9	Fume Hood	Indian make	Physics
10	X-ray diffractometer	PANalytical	Chemistry
11	Microplate reader (UV-Vis and PL)	TECAN	Chemistry
12	GC-MS	Perkin Elmer	Chemistry
13	Glove Box	Ex-Vigor Tech	Chemistry

## Sponsored Research Projects

(June 2017 to June 2018)

### I. Sanctioned

S. No.	Title of the Project	Names of the Investigators	Funding Agency	Sanctioned year and Duration	Sanctioned amounts (in lakhs)
1	Theoretical Insights on the critical factors that influence the performance of non-fullerene organic solar cells	Dr. Mahesh Kumar Ravva	DST	2017, 5 years	93
2	Metal-catalyzed new cross-coupling reactions via C-H bond activation and Metallacycle formation	Dr. S. Mannathan	DST	2016, 5 years	93
3	Direct removal of multidrug resistance bacteria out of blood	Dr. Anil K Suresh	DBT	2014, 5 years	98
4	Gut microbiome mediate transformation of man released nano-pollutants	Dr. Anil K Suresh	DST	2018, 3 years	47
5	Probing Charge Transport in Molecular Junctions with Impedance Spectroscopy and Transition Voltage Spectroscopy Approach	Dr. Sabyasachi Mukhopadhyay	DST-SERB	Early Career Research Award	Approved

### II. Projects submitted to the funding agencies

S. No.	Title of the Project	Names of the Investigators	Funding Agency	Scheme	Sanctioned amounts (in lakhs)
1	Methanotrophic methanol production from biogas at pilot scale.	Dr. Bhagyalakshmi Kalidass	DST-SERB	TARE	35.00
2	Controlling landfill gas emissions using methanotroph enriched biocover and tapping the methane for energy.	Dr. Bhagyalakshmi Kalidass	DST	Scheme for Young Scientists and Technologists	51.98
3	Effects of iron on petroleum hydrocarbon degradation by <i>Pseudomonas putida</i> strain ATCC 17484.	Dr. Bhagyalakshmi Kalidass	DBT	Biotechnology Career Advancement and Reorientati	50.40

S. No.	Title of the Project	Names of the Investigators	Funding Agency	Scheme	Sanctioned amounts (in lakhs)
				on (BioCARE) Programme	
4	Impact of metals on petroleum hydrocarbon degradation by <i>Pseudomonas putida</i>	Dr. Bhagyalakshmi Kalidass	DST-SERB	Core Research Grant (a.k.a.) Extra Mural Research	50.40
5	Electric-field-assisted crystallization and phase-segregation towards high-performance organic electronic devices	Dr. Sabyasachi Mukhopadhyay (SRM-AP) & Prof. Satish A. Patil (IISc)	DST-SERB	TARE	35.00
6	Development of Nano-Engineered Blue-Emitting Blinking Suppressed 'Giant' Quantum Dots	Dr. Nimai Mishra and Prof. Anunay Samanta ( Dept of Chemistry, HCU, Hyderabad)	DST-SERB	TARE	35.00
7	Effect of irregularities in composite structures on its design allowables	Dr. Prakash Jadhav	DST	EMR	65.00
8	Efficient Mechanisms for Dynamic Multicast Traffic Grooming and Survivability in WDM Optical Networks	Dr. Ashok Kumar Pradhan	DST-SERB	TARE	35.00
9	Development and validation of combinational markers based on multimodal magnetic resonance imaging data from Alzheimer's disease neuroimaging initiative	Dr. Sudhakar Tummala	DST-SERB	ECRA	23.41
10	Development of Software Prototype for Volumetric Analysis of Cartilage in MR Knee scans for the prognosis of Osteoarthritis	Dr. Jatindra Kumar Dash	DST-SERB	TARE	35.00
11	Surface finish enhancement of as-cast gold Jewellery	Dr. Febin Cyriac	Titan		20.00



## Library

SRM University A.P – Amaravati aims to build world class library for the benefit of students, faculties and researchers. Our aim is to establish one of the best International library according to International Standards. Currently, the University Library has good collection of books covering various branches of Engineering and Technology and Science and Humanities and its related fields.

The Central Library subscribes to national and international journals in print and e-Journals. The library has a video conferencing facility and NPTEL video courses, ePGpathashala, Swayam Programme and other E-Learning resources initiated by Government of India. Central Library is using in-house software for Library automation and implemented RFID technology.

The library is now located 4<sup>th</sup> floor of University Administrative Block temporary, and in couple of weeks we will shift it to 5<sup>th</sup> and 6<sup>th</sup> floors of the Administrative Block.



The major activities of the central library between June-2017 to June-2018 are described here.

S. No.	Particulars	2017-2018
1	Books	6567
2	Periodicals (News Papers)	14
3	Titles	684
4	Print Journals & Magazines	125
5	CD-ROMS	193
6	E-Books	3390

S. No.	Particulars	2017-2018
7	E-Journals	4362
8	E-Databases Including Open access	07
9	Institutional Membership	05
Circulation		
10	No of books Transactions (Issues & Returns)	3970
11	No of visitors	12,140

## Major Initiatives

### Institutional Membership:

SRM University A.P – Amaravati Library has taken Institutional membership from various library networks to improve the existing facilities and collection to provide better services to facilitate sharing of resources. Some of these networks & Data bases are:

- DELNET (Developing Library Networks)
- E-Sodh Sindhu
- National Digital Library (NDL)
- WEL ( World Electronic Library)
- SAA (South Asian Archives)

### Online resources (e-Journals, e- Databases, e-Books and E- Contents:

The SRM University A.P Amaravati subscribes most reputed Online Journals are:

A) IEEE online journals (IEL Package) which provides international standard journal articles, conference proceedings, standards, international magazines & newsletters.

B) JSTOR Journals Data base it has India comprehensive collection more than 3,000 journals which covers Science and humanities multi-disciplinary collection.

C) J-Gate Engineering Technology module, a database which provides seamless access to number of journal articles available online i.e., 17985 full text e-journals and 33,939 indexed journals.

D) Developing Library Network (DELNET). A database which provides 3700 full e-Books, 5000+ e journals

In time being Our University Resource Centre plans to procure Standard Online Journals and Databases i.e., ELSEVIER, SPRINGER, ASME, ASCE, ACM, AIP, NATURE, , TAYLOR AND FRANCIS, EBSCO AND SCOPUS Etc.,,

## Automation

All operations and services of the library has been automated with RFID (Radio Frequency Identification) technology using Windows based In-House software(ERP) developed by a team of programmers. It operates on Windows 2000 server, Oracle with J2EE. The software has excellent operational modules such as transaction, query, administration, reporting modules etc. And the library has well protected with fire alarms and CCTV security systems.

## User services

- a) Reprographics Facilities.
- b) Wi-Fi Facility.
- c) Tabs Lending Facility.
- d) Database Search through DELNET & INFLIBNET.
- e) Document Delivery Service (Digital & Print).
- f) Resource Sharing/ Inter Library Loan.
- g) New arrivals information.
- h) Open Access Facilities for Textual Documents.
- i) Provision of Separate Reading Rooms for Students and Teachers.
- j) Reference Books.
- k) Journals of National and International repute.
- l) Discussion Cabins.
- m) OPAC (Online Public Access Catalogue for search text book resources library).
- n) Lending for Home Study (only text books).

## Other Initiatives

Central Library organized books exhibition with reputed publishers in University library premises at the beginning of academic year 2017-18.

## Library working hours

Working Days	08.00 Hrs. to 22.00 hrs .
Holidays	09.00 Hrs. to 17.00 hrs.

In coming academic year, library timings will be extended up to 11.59 hrs. mid-night

## Key Student Activities

### MUSICAL EVENING:

November 14, 2017





# THE PHOTOGRAPHY CLUB

Photo Walk to Neerukonda: December 02, 2017



# SPORTS FEST:

March 16 – 17<sup>th</sup>, 2018





# CULTURAL FEST:

April 13 – 15<sup>th</sup>, 2018



# ANNUAL ACCOUNTS 2017-18





SRM TRUST AP  
RK Galleria, Srinivasa Nagar, Bank colony,  
VIJAYAWADA- 520008.-AP

BALANCE SHEET AS AT 31ST MARCH 2018

LIABILITIES	SCH No	As at 31st March 2018	As at 31st March 2017	ASSETS	SCH No	As at 31st March 2018	As at 31st March 2017
Corpus Fund	1	3,27,25,16,913	79,70,22,011	Fixed Assets	6	2,59,79,39,842	68,06,94,297
General Fund	2	(60,59,91,244)	(6,43,04,234)	Loans, Advance & Deposits			
Current Liabilities & Provisions				Trade Advance	7	30,19,835	-
Sundry Creditors	3	30,22,02,304	2,24,51,822	Capital Advance	8	13,87,45,754	7,62,65,788
Statutory payable	4	1,74,77,065	62,74,987	Advances & other deposits	9	74,02,278	51,72,000
Other Payables	5	76,81,357	7,71,000	Current Assets			
				Cash in Hand		1,13,252	83,501
				Cash at Bank		23,90,57,068	-
				Fees Receivable	10	76,08,365	-
<b>Total</b>		<b>2,99,38,86,395</b>	<b>76,22,15,586</b>	<b>Total</b>		<b>2,99,38,86,395</b>	<b>76,22,15,586</b>

FOR SRM TRUST -AP

TRP  
13  
T.R. Paavendhar  
Trustee

Dr.P.Sathyanarayanan  
Managing trustee



Place : Chennai  
Date: 24.08.2018

Vide our Report of Even Date  
For B.PURUSHOTTAM & CO.,  
CHARTERED ACCOUNTANTS  
FRN : 002808S

B. S. Purshotham  
Partner  
M No : 026785



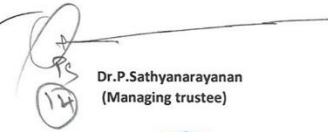
SRM TRUST AP  
RK Galleria, Srinivasa Nagar, Bank colony,  
VIJAYAWADA- 520008.-AP

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2018

EXPENDITURE	Sch. No	For the year ended 31st March 2018	For the year ended 31st March 2017	INCOME	Sch. No	For the year ended 31st March 2018	For the year ended 31st March 2017
Printing & Stationery		5,84,004	1,09,060	Fees Collection	13	4,70,63,788	-
Postage and Telephones		91,785	5,61,193	Interest Incomes		2,44,73,644	-
Travelling & Conveyance		1,97,41,284	12,57,626				
Advertisement		23,38,36,618	2,44,49,154				
Books & Periodicals		19,36,357	60,846				
Salaries		6,30,23,268	11,77,742	Excess of Expenditure over Income		54,16,87,010	6,43,04,234
Audit Fees		1,18,000	1,18,000				
Professional /Consultancy fees		7,31,13,451	3,32,99,381				
General Administration		1,01,63,944	-				
Academic Expenses		3,02,614	-				
Knowledge Partnership		3,27,85,561	-				
Other expenses	11	62,66,672	12,51,691				
Operation & Maintenance	12	7,37,52,796	19,48,087				
Depreciation		9,75,08,088	71,454				
<b>Total</b>		<b>61,32,24,442</b>	<b>6,43,04,234</b>	<b>Total</b>		<b>61,32,24,442</b>	<b>6,43,04,234</b>

FOR SRM TRUST -AP

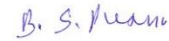
  
 Dr. T.R. Paarivendhar  
 (Trustee)

  
 Dr. P. Sathyanarayanan  
 (Managing trustee)

Place : Chennai  
Date : 24.08.2018



Vide our Report of Even Date  
For B.PURUSHOTTAM & CO.,  
CHARTERED ACCOUNTANTS  
Reg. No:0028085

  
 B.S. Purushotham  
 Partner  
 M No:026785



**SRM TRUST AP**  
**RK Galeria, Srinivasa Nagar, Bank colony**  
**VIJAYAWADA- 520008 -AP**

**Schedule-1 - Corpus Fund**

(Amount in INR)

Particulars	As at 31st March 2018	As at 31st March 2017
Opening Balance	79,70,22,011	
Dr.T.R.Paarivendhar-Contribution		2,500
Mr.P.Sathyanarayanan-Contribution		2,500
Mrs.P.Easwari-Contribution		2,500
Mrs. S. Manimangai - Contribution		2,500
<b>Add:</b>		
Donations from SRMIST	1,77,80,00,000	-
Donations from SRM Trust	69,74,94,902	79,70,12,011
<b>Total of Current year donations</b>	<b>2,47,54,94,902</b>	<b>79,70,12,011</b>
<b>Total Corpus Fund</b>	<b>3,27,25,16,913</b>	<b>79,70,22,011</b>

**Note:**

During the year the Trust has received donation of Rs.69,74,94,902 and 1,77,80,00,000 from SRM TRUST and SRMIST. The said donation is received to establish and setup a separate university in Amaravathi, the capital of Andhra Pradesh. The above donation received is treated as corpus donation.

**Schedule-2 - General Fund**

(AMT in INR)

Particulars	As at 31st March 2018	As at 31st March 2017
Opening Balance	(6,43,04,234)	-
Less : During the year excess expenditure over Income	(54,16,87,010)	(6,43,04,234)
<b>Total General Fund</b>	<b>(60,59,91,244)</b>	<b>(6,43,04,234)</b>



SRM TRUST AP  
RK Galeria, Srinivasa Nagar, Bank colony,  
VIJAYAWADA- 520008 - Andhra Pradesh

Schedule 3 - Sundry Creditors

Particulars	As at 31st March 2018	As at 31st March 2017
2CQR Automation Pvt Ltd	1,53,064	-
A - ID Systems (I) Pvt Ltd	1,53,888	-
ABC Enterprises	10,000	10,000
Algodex Systems Pvt Ltd	96,619	-
Automotive Manufacturers Pvt Ltd	4,772	-
Avens Expositions Pvt. Ltd	49,702	-
B Purushottam and Co	29,305	-
Basic Hitech Furniture Pvt Ltd	2,74,166	-
Bhavya Machine Tools	3,55,668	-
Bookionics	2,39,367	-
BSNL	5,08,315	-
Capricot Technologies Pvt Ltd	2,92,800	-
Celestile	24,835	-
CERA Sanitaryware Limited	24,67,385	-
Charan Sports Gear	30,585	-
Chandra Sekhar Bhatt	18,571	-
Chowdary Medicals	7,523	-
D.Srinivasa Rao	5,600	-
Deepakshi Handicrafts and Sports	17,809	-
Dust N Pest Facility Services	24,882	-
Firstline Infotech Pvt Ltd	7,82,500	-
GPECC - Consultancy	1,28,800	-
GPEMC - Catering	13,98,567	-
GPEMC - Man Power Services	34,30,844	-
GPEMC Construction	18,84,64,537	34,11,213
GPEMC FEES	33,45,000	-
GPEMC Project Management	7,52,38,393	94,26,147
India Labs Tec	3,58,544	-
Infiniti Travel Services	2,98,344	-
Jaico Publishing House	2,06,017	-
Johnson Lifts Private Limited	6,80,277	-
Kamadhenu Industries	26,050	-
Lakshmi Agencies	27,848	-
Lakshmi Ford	30,570	-
M.Vijaya	14,500	-
Manju Sports and Toys	90,405	-
Nimbus India	2,70,000	-
Operam Educational Research Foundation	2,70,000	3,67,500
P.Sridhar Rao	12,300	-
Popcorn Furniture and Lifestyle Pvt Ltd	3,01,082	-
Power Centre Private Limited	16,880	-
Retention	3,21,592	-
Revolve Engineers	15,16,804	-
S S Information Systems Pvt Ltd	4,04,150	-
S. Mallikarjuna Rao (Ganesh Digitals)	15,000	-
S.S.Veeranjaneyulu (AB Paper Agency)	3,810	-
SLN Infra Projects Pvt Ltd	2,81,798	18,79,607
Solaris Computers Pvt Ltd	5,51,706	-
Sree Lakshmi Press	35,355	-
Sri Bhavani Speciality Products	7,669	-
Steelcase Asia Pacific Holdings India Pvt Ltd	25,23,877	-
Stipend Payable	23,600	-
SUV Engineers	5,82,346	-
T2T Designs Pvt Ltd	15,28,879	-
The Travel Guide	49,987	-
Threshold Architects	1,35,15,640	-
Toyota Radha Madhav Automobiles Pvt Ltd	14,800	-
Travel Teeam	57,518	32,875
UshaKiran Steels	20,715	-
Varun Motors Pvt Ltd	1,793	-
Venkata Kanaka Durga Vinay Filling Station	150	-
Vidyut Technologies (India) Pvt Ltd	87,200	-
VK Building Services Pvt Ltd	3,65,011	-
Will Computers and Communications PVT LTD.,	19,765	-
LCC Readymix Concrete Pvt Ltd	-	40,74,000
Associated Projects Infra	-	24,40,871
Enart Interiors	-	3,57,209
INCI Construction & Interiors Pvt Ltd	-	2,74,400
Others	8,825	1,78,000
Audit Fees payable	1,08,000	-
<b>Total</b>	<b>30,22,02,304</b>	<b>2,24,51,822</b>



**Schedule 4 - Statutory payable**

Particulars	As at 31st March 2018	As at 31st March 2017
Service tax	17,26,234	8,91,117
TDS	1,54,30,595	53,83,870
ESI payable	4,418	-
PF payable	2,83,218	-
Professional Tax	32,600	-
<b>Total</b>	<b>1,74,77,065</b>	<b>62,74,987</b>

**Schedule 5 Other Payable**

Particulars	As at 31st March 2018	As at 31st March 2017
Salary Payable	1,31,450	2,98,500
Rent Payable	5,43,510	4,72,500
Excess Fees Received during the Year	70,06,397	-
<b>Total</b>	<b>76,81,357</b>	<b>7,71,000</b>

**Schedule 7 - Trade Advances**

Particulars	As at 31st March 2018	As at 31st March 2017
Apollo Surgicals	21,830	-
Sai Marketing	10,000	-
Studio Photoscap	54,000	-
D Manikumar	1,00,000	-
Sipoh Corp	4,49,715	-
Venus Interiors	2,91,817	-
Ivalue Infosolutions	1,76,295	-
Jayam Electronics	55,575	-
Felix Facility Management Services	4,00,602	-
GPECCL	4,64,583	-
New Generation Media Corporation Ltd	1,72,459	-
Ramadass D	1,00,000	-
Ppyrs India Pvt	4,29,120	-
P Satyanarayana	12,000	-
Sri Ganesh Travels	76,355	-
Sri Veerabhadra Car Travels	51,586	-
Phani Greeshma Agencies	12,548	-
Ramcor	38,950	-
Vanhool Auto Devices	1,02,400	-
<b>Total</b>	<b>30,19,835</b>	<b>-</b>





SRM TRUST AP  
RK Galeria, Srinivasa Nagar, Bank colony,  
VIJAYAWADA- 520008 - Andhra Pradesh

Schedule 6 - Fixed Assets

Asset Group	Dep Rate	WDV as on 01st April 2017	Additions upto 03-10	Additions after 03-10	Deletions	Total as on 31.03.2018	Depreciation for the year	WDV as on 31.03.2018
Land		51,95,90,688	-	3,76,75,152	-	55,72,65,840	-	55,72,65,840
Building & Construction	10%	-	-	1,15,79,34,874	-	1,15,79,34,874	5,78,96,744	1,10,00,38,130
Furniture & Fixtures	10%	67,51,934	1,40,39,810	7,07,67,544	-	9,15,59,288	56,17,552	8,59,41,736
Office Equipments	15%	25,900	1,12,97,499	46,78,428	-	1,60,01,827	20,49,392	1,39,52,435
Lab Equipments	15%	-	8,32,527	36,52,256	-	44,84,783	3,98,798	40,85,985
P&M	15%	-	60,78,167	92,06,593	-	1,52,84,760	16,02,220	1,36,82,540
Vehicles	15%	7,92,985	1,41,110	1,63,56,983	-	1,72,91,078	13,66,888	1,59,24,190
Software & IT	40%	-	5,63,94,911	3,00,92,651	-	8,64,87,562	2,85,76,495	5,79,11,067
<b>Sub Total</b>		<b>52,71,61,507</b>	<b>8,87,84,024</b>	<b>1,33,03,64,481</b>	-	<b>1,94,63,10,012</b>	<b>9,75,08,088</b>	<b>1,84,88,01,924</b>
Capital Work in Progress		15,35,32,790	-	1,75,35,40,002	1,15,79,34,874	74,91,37,918	-	74,91,37,918
<b>Total</b>		<b>68,06,94,297</b>	<b>8,87,84,024</b>	<b>3,08,39,04,483</b>	<b>1,15,79,34,874</b>	<b>2,69,54,47,930</b>	<b>9,75,08,088</b>	<b>2,59,79,39,842</b>



**Schedule 8 - Capital Advances**

Particulars	As at 31st March 2018	As at 31st March 2017
Mobilisation Advance	10,24,20,265	7,19,15,788
Advance Threshold	54,33,501	-
Johnson Lifts	53,43,209	-
Advances Will Computers	-	40,00,000
Hygree Waterfal	13,07,034	-
Powerica Limited	1,30,11,556	-
Sobha Limited	5,16,291	-
East (India) Furniture	3,26,823	-
SLN Infra	4,50,000	-
T2T Designs	27,440	-
Qasami Transport	14,04,718	-
Transteeel Seatin	6,38,095	-
Business Octane Solutions	11,52,893	-
Delta Scientific Company	4,57,009	-
SS Engineering & Co	3,88,160	-
Dust N Pest Facility Services	17,154	-
Life Style International	3,73,444	-
Vijayadurga Auto Sales International	1,32,000	-
Yokogawa Ltd	19,96,761	-
Physitech Power Systems Pvt Ltd	3,76,250	-
Radha Madhav Automobiles	19,73,154	-
Ramsil Scientific	10,00,000	-
Basic Hitech Furniture	-	3,50,000
<b>Total</b>	<b>13,87,45,757</b>	<b>7,62,65,788</b>

**Schedule 9 - Advances and other deposits**

Particulars	As at 31st March 2018	As at 31st March 2017
BSNL	32,11,236	10,000
Security deposit Electricity	-	15,00,000
Advances Abarajithan	25,000	-
Advances Anshuman	1,869	-
Advances Krishna Chaitanya	20,000	-
Advances Sivarangan	63,022	-
Advances Syed	7,000	-
Others	-	62,000
Professional tax	19,850	-
Rent Payable	40,000	-
Salary Advance	7,37,301	-
Rental Advances	32,77,000	36,00,000
<b>Total</b>	<b>74,02,278</b>	<b>51,72,000</b>

**Schedule 10 - Fees Receivables**

Particulars	As at 31st March 2018	As at 31st March 2017
Allou Ali Kadio Levy	10,000	-
Arun Prasath M	10,000	-
Chinimilli Manasa	5,000	-
Hari Prabhu J	10,000	-
Julius Mwita Chacha	10,000	-
Rajesh A	10,000	-
Siehi Iro Hans Kyril	10,000	-
Suchet Bahadur	11,060	-
Sujan Bahadur Thapa	11,060	-
GPEMC	75,21,245	-
<b>Total</b>	<b>76,08,365</b>	-



**Schedule 11 - Other Expenses**

Particulars	For the year ended 31st March 2018	For the year ended 31st March 2017
Bank Charges	12,66,341	2,00,184
IT Operating Cost	9,95,894	-
Transportation	1,94,424	-
Food Expenses	5,16,702	-
Sports Expenses	7,98,496	-
Lab Consumables	22,18,503	-
Misc expenses	2,335	-
Housekeeping expenses	-	13,750
Pooja Expenses	-	45,095
Staff welfare expenses	-	40,204
Interest on TDS	-	2,36,073
Office maintenance	-	5,94,823
Fire NOC charges	-	1,21,562
Service Charges	2,53,650	-
Medical Expenses	20,327	-
<b>Total</b>	<b>62,66,672</b>	<b>12,51,691</b>

**Schedule 12 - Operation & Maintenance**

Particulars	For the year ended 31st March 2018	For the year ended 31st March 2017
Electricity & Fuel Expenses	89,20,264	1,82,073
Repairs & Maintenance	49,45,344	47,300
Rent & rates and taxes	1,79,62,280	16,59,195
Hostel and Mess expenses	23,08,292	59,519
Operation & Maintenance	3,96,16,616	-
<b>Total</b>	<b>7,37,52,796</b>	<b>19,48,087</b>

**Schedule 13 - Fees Collection**

Particulars	For the year ended 31st March 2018	For the year ended 31st March 2017
Application Fees	15,65,812	-
Admission Fees	23,90,000	-
Tuition Fees	5,97,50,000	-
Hostel Fees	76,91,245	-
Examination fees	11,16,731	-
Less:Scholarship	(2,54,50,000)	-
<b>Total</b>	<b>4,70,63,788</b>	<b>-</b>





SRM TRUST AP  
RK Galleria, Srinivasa Nagar, Bank colony,  
VIJAYAWADA- 520008.-AP  
SIGNIFICANT ACCOUNTING POLICIES AND NOTES TO ACCOUNTS  
Schedule No-1

- 1 General**  
Financial Statements are prepared under historical cost convention and in accordance with generally accepted accounting practices
- 2 Fixed Assets**  
  
Fixed Assets are stated at the values at which they are acquired, less accumulated depreciation. The value at which fixed assets are acquired includes all related expenses upto the date of putting them to use,
- 3 Depreciation**  
Depreciation is provided under written down value method, in accordance with rates and rules prescribed in Income Tax Act.
- 4 Inventories**  
Inventories are valued at cost or market price whichever is lower.
- 5 Fee Collections**  
Fees from students are accounted on the basis of accrual method of accounting.
- 6 Foreign Exchange Transactions**
  - a) Transactions in foreign currency are initially accounted at the exchange rate prevailing on the date of transactions, and adjusted appropriately with the difference in the rate of exchange arising on actual receipt / payment during the year.
  - b) At each Balance Sheet date  
Foreign currency monetary items are reported using the rate of exchange arising on that date  
Foreign currency non-monetary items are reported using the exchange rate at which they are initially recognised.
- 7 Taxation**  
No provision for incometax is considered as the trust is exempt from tax under Section 12 AA of the Income Tax Act.
- 8 Impairment of Assets**  
Impairment losses, if any, are recognised in accordance with Accounting Standard 28 issued in this regard by Institute of Chartered Accountants of India.
- 9 Previous year figures**  
Previous year figures were regrouped wherever necessary.

FOR SRM TRUST AP

Vide our Report of Even Date  
B.PURUSHOTTAM & CO.,  
CHARTERED ACCOUNTANTS

T.R.P.  
15

*T. R. Paarivendhar*  
Dr.T.R.Paarivendhar  
(Trustee)

*Dr. P. Sathyarayanan*  
15 Dr.P.Sathyarayanan  
(Managing trustee)

*B. S. Purshotham*

B.S.Purshotham  
Partner  
M No : 026785

Place : Chennai  
Date : 24.08.2018



**Citation:**

SRM University, AP - Amaravati, Annual report 2017-2018

Compiled and Edited by

1. Prof. M. Jayaseelan, Department of Biotechnology,
2. Prof. N. Sivakumar, Department of Mechanical Engineering
3. Prof. T. Ragunathan, Department of Computer Science and Engineering
4. Dr. S Priyanka, Department of Computer Science and Engineering
5. Dr. B Sivakumar, Deputy Registrar
6. Dr. Mahesh Kumar Ravva, Department of Chemistry
7. Dr. Sabyasachi Mukhopadhyay, Department of Physics
8. Dr. Srabani Basu, Department of Career Development Centre.
9. Dr. Arijit Ghosh, Department of English,
10. Mrs. Shweta Paul, Senior Executive, Students Affairs,
11. Mr. Aaditiya Jain, Student, Department of Computer Science and Engineering

Photos: Mr. Hemanth Kumar, Photo / Videographer, SRM University, AP - Amaravati

@ No part of this publication be reproduced without permission from the authorities of SRM University, AP – Amaravati