

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
[DEEMED TO BE UNIVERSITY]

THE ANNUAL QUALITY
ASSURANCE REPORT
(AQAR) SUBMITTED BY
THE INTERNAL
QUALITY ASSURANCE
CELL (IQAC)



2015-16

Vidyagiri, Prasanthi Nilayam – 515 134
Anantapur District, Andhra Pradesh,
Phone: (08555) 287239 Fax: 286919

sssihl.edu.in

Emails: vc@sssihl.edu.in ;
registrar@sssihl.edu.in ; controller@sssihl.edu.in

SSSIHL

The Annual Quality Assurance Report (AQAR) of the IQAC (2015-16)

Part – A

1. Details of the Institution

1.1 Name of the Institution

Sri Sathya Sai Institute of Higher Learning
(Deemed to be University)

1.2 Address Line 1

Vidyagiri, Prasanthi Nilayam

Address Line 2

Anantapur District

City/Town

Puttaparthi

State

Andhra Pradesh

Pin Code

515134

Institution e-mail address

registrar@sssihl.edu.in

Contact Nos.

+91 8555 287239

Name of the Head of the Institution:

Prof. K B R Varma

Tel. No. with STD Code:

+91 8555 289982

Mobile:

+91 8500746749

Name of the IQAC Co-ordinator:

Mobile:

IQAC e-mail address:

1.3 NAAC Track ID (For ex. MHC0GN 18879)

1.4 NAAC Executive Committee No. & Date:
(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

1.5 Website address:

Web-link of the AQAR:

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	A++	96%	2003	2008
2	2 nd Cycle	A	3.63	2011	2016
3	3 rd Cycle				
4	4 th Cycle				

In the first accreditation on 21st March 2003, the Sri Sathya Sai Institute of Higher Learning (Deemed to be University) was one of the very few Universities in India to be awarded an A++ rating (95 to 100 percentile) by the National Assessment and Accreditation Council (NAAC).

In January 2011, the NAAC reaccredited Sri Sathya Sai Institute of Higher Learning (Deemed to be University) with an 'A' Grade and a Cumulative Grade Point Average (CGPA) of 3.63 (on a scale of 4.00). This put the Sri Sathya Sai Institute of Higher Learning among the top 7 out of 175 Universities accredited by NAAC.

1.7 Date of Establishment of IQAC: DD/MM/YYYY

1.8 AQAR for the year (for example 2010-11):

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011)

- i. AQAR 2010-11 _NAAC/JP/SR/AQAR/2012/Ack/dt. 26/03/2012
- ii. AQAR 2011-12 EC_54_RAR_076 dated 21/11/2012
- iii. AQAR 2012-13 EC_54_RAR_076 dated 21/11/2013
- iv. AQAR 2013-14 EC_54_RAR_076 dated 21/11/2014
- v. AQAR 2014-15 EC_54_RAR_76 dated 21/11/2015

1.10 Institutional Status

University State Central Deemed Private

Affiliated College Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution Yes No

(e.g. AICTE for Management Courses and NCTE for Teacher Education Courses)

Type of Institution Co-education Men Women

Urban Rural Tribal

Financial Status Grant-in-aid UGC 2(f) UGC 12B

* Recognized under notification no.F.9-11/81-U.3, Government of India, Ministry of Education and Culture (Department of Education), New Delhi dt.10.11.1981 conferred by section 3 of the UGC Act 1956 (3 of 1956), the Central Government.

Grant-in-aid + Self Financing Totally Self-financing

1.11 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify) M.Tech.(Computer Science) and
M.Tech.(Optoelectronics and Communications)

1.12 Name of the Affiliating University (*for the Colleges*)

Not applicable

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by ~~State~~/Central Govt. / ~~University~~ Central Govt.

University with Potential for Excellence UGC-CPE

DST Star Scheme UGC-CE

UGC-Special Assistance Programme Yes DST-FIST Yes

UGC-Innovative PG programmes Yes Any other UGC
DBT Projects
DAE Project
ISRO
DRDO
DST-TSDB
DST-SERB
SSSIHL funding
(Specify)

UGC-COP Programmes

2. IQAC Composition and Activities

2.1 No. of Teachers	17
2.2 No. of Administrative/Technical staff	1
2.3 No. of students	0
2.4 No. of Management representatives	1
2.5 No. of Alumni	1
2.6 No. of any other stakeholder and Community representatives	0
2.7 No. of Employers/ Industrialists	1
2.8 No. of other External Experts	0
2.9 Total No. of members	21
2.10 No. of IQAC meetings held	0
2.11 No. of meetings with various stakeholders:	No. <input type="text" value="12"/> Faculty <input type="text" value="2"/>
Non-Teaching Staff <input type="text" value="1"/> Students <input type="text" value="4"/> Alumni <input type="text" value="2"/> Others <input type="text" value="3"/>	

In addition to the above meetings, the outcome of the following meetings with various stakeholders have also been used as inputs by IQAC:

Committees that cater to academic standards at SSSIHL:

- Academic Council
- Research Conferment Cell
- Board of Studies
- Institutional Ethics Committee
- Institutional Biosafety Committee
- Alumni University Business meet

Committees that cater to quality of life at the different Campuses of SSSIHL:

- Campus-Hostel Management Committee
- Leadership Committee

Committees that cater to governance at SSSIHL:

- Board of Management
- Planning and Monitoring Board

2.12 Has IQAC received any funding from UGC during the year? Yes No

If yes, mention the amount

NA

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. International National State Institution Level

(ii) Themes

- 1) Differential Geometry – Foundation & Developments
- 2) Recent Trends in Networking Technologies
- 3) Indian Economy: Emerging Trends and Challenges
- 4) Financial Inclusion
- 5) Light Matters – Celebrated International year of Light
- 6) Parabolic Partial Differential Equations and Applications to Image Processing
- 7) Functional Materials and their Applications in Devices
- 8) The 60th DAE-BRNS Symposium on Nuclear Physics
- 9) International Symposium on Computational Science
- 10) Integrated Chemie CONFERENCE (ICCON 2016) on Frontiers in Applied Chemistry – From Molecules to Materials
- 11) Leading with Values – Values and Financial Decisions & Strategies
- 12) Emerging Trends in Multidisciplinary Approaches to Oncology
- 13) Challenges in Human Resource Management

Note: The Institute centrally organizes various seminars/conferences/workshops/symposia to enhance the quality of knowledge under the respective departments wherein majority of IQAC members are part of it. The IQAC takes note of progress of these activities.

2.14 Significant Activities and contributions made by IQAC

The IQAC has taken note of progress of the following activities for the year 2015-16:

- The Vice-Chancellor has formulated a Campus-Hostel Management Committee on 18th Aug 2015. Issues related to faculty and students, curricular, co-curricular and extra-curricular activities of students, management, and facilities are discussed regularly in the CHMC meetings.
- The university continues to invest in equipment and infrastructure across the campuses. A new hostel building at the Muddenahalli Campus was inaugurated on 2 April 2016. The hostel's thirty-seven rooms will accommodate 300-plus students.
- The merit-based open admission policy care is taken to ensure that the students selected excel in both academics and co-curricular areas and make the most of the atmosphere and facilities.
- A consolidation of academic programmes keeping in view the latest trends, led to the rechristening of the Department of Home Science to Food & Nutritional Sciences in Nov 2015. The department subsequently introduced the B.Sc. and M.Sc. in Food & Nutritional Sciences programmes in June 2016.

In addition to the above IQAC monitors and ensures:

- Establishment of Research Conferment Cell to give a fillip to research.
- Regular curriculum review through Boards of Studies and Academic Council meetings.
- Redrafting of Ph.D. regulations in tune with the new UGC's standards for Ph.D. which was introduced in 2015-16.
- Recruitment of faculty as per UGC's standards. (12 faculty recruitment were made in the year 2015-16).
- One in five teachers are residential (hostel) in this Integral Education system. Teaching faculty with Ph.D. and teaching experience.
- Online Feedback mechanism for reviewing and improving Quality of Teaching is continued.
- Promotion and reward of quality of teaching/research ('Sai Krishna' awards are given in alternate years, one for each campus of the University).
- Conduction of interdisciplinary Science colloquia every fortnight to facilitate better understanding amongst various Science discipline.
- Student teacher ratio of 8:1 is maintained as one of the best in the country. The model of integral education adopted, necessitates a favourable student-teacher ratio and a host of residential teachers who are willing to make sacrifices by living with the student. This student-teacher interaction is the basis of a modern *Gurukula*.

- Sixty per cent of the final year postgraduate students who appeared for national examinations such as the GATE JET and CSIR-UGC NET have qualified.
- In addition, students were exposed to hundred and six visiting faculty and guest lecturers from top institutions and organizations in India and abroad.
- Examination section reforms – Electronic Document Dispatch & Receipt System (EDDRS) which was successfully implemented in 2014-15 is functioning without any glitches.
- Students diversity in enrolment: (26 out of 29 states in India).
- Academic and Administrative ratio [1 : 1 (162 : 163)]
- Collaborative research with sister organisations, Linkages and Research for Societal Benefit is continued.
- Encouraging Young Faculty Members to participate in Research actively.
- Steps taken to showcase SSSIHL’s contribution towards Quality Education, free of charge.
- Sri Sathya Sai Values based Integral Education System is internalised. (The University education system focuses on grooming the Intellectual, Physical, Academic and emotional facets of a personality)

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year

Plan of Action	Outcome / Achievements
<ul style="list-style-type: none"> ● Infrastructure ● Collaborative Research with National and International Agencies to give a fillip to research quality 	<p>₹ 12 Crore investment on infrastructure and equipment during 2015-16 went towards establishing state-of-the-art research laboratories that house the latest equipment.</p> <p>The total value of all research grants during the academic year 2015-16 was ₹ 5.47 crores.</p> <p>Physics: Multimodal Microscope: Field Trails (Phase-II) – DST-TSDB; Design and development of optofluidic resonator geometries for biomedical sensing applications – UGC-DAE-CSR; Research based reforms in Physics Instruction: Classroom and Laboratory – VGST, DST, Govt. of Karnataka.</p> <p>Mathematics and Computer Science: Automatic Defense against Zero Day Polymorphic Worms in Communication Networks using</p>

	<p>Machine Learning Algorithms – SSSIHL funding; Near-Real-Time Super resolution of Aerial Video (Visual and IR) Sequences for Defense Applications – DRDO ER&IP, Delhi; Diabetic Retinopathy Screening Tool – Zentron Labs, Bangalore</p> <p>Chemistry: Aerial Regiospecific functionalization of Anisotropic Nanoparticles & Implications towards generation Plasmonic Metal Nanoclusters – DST INSPIRE Faculty Award; Develop interfacial Chemistry based structure-property relationship in Nanodielectric composites for enhanced energy storage applications – DST-SERB</p> <p>Biosciences: Mechanism of ATP secretion and the role of ATP-activated P2 receptors in the Microglial inflammatory response: Implications for multiple sclerosis – DBTD; Modulation of TNF Alpha and homocysteine induced inflammation by HDAC and Hsp90 inhibitors – UGC-Startup grant</p> <p>Active Collaborative Research Projects with International Institutions:</p> <ul style="list-style-type: none"> ● Active research collaboration has been on for the past several years between Department of Physics and Kinard Laboratory of Physics at Department of Physics and Astronomy, Clemson University, SC, USA. Prof. Appa Rao’s group of Clemson University ● Clemson University, SC, USA collaborates with Prof K. Venkataramaniah, Prof. S. Siva Sankara Sai and Dr. V Sai Muthukumar of the Department of Physics, SSSIHL in the areas of Surface Plasmon Coupled Emission (SPCE) and Nonlinear Optical studies of Nanomaterials. ● The Department of Biosciences has established a “Centre for Regenerative Medicine and Tissue Engineering” in Collaboration with Sri Sathya Sai Institute of Higher Medical Sciences – Prasanthigram. Faculty from the Department of Biosciences have developed “Autologous Chondrocyte Implantation” to treat the osteochondral defects of the knee in collaboration with the Department of Orthopedics, SSSIHMS-PG. This project has been approved by the Institutional Ethics Committee of SSSIHL (SSSIHL/IEC/PSN/BS/2012/01) and Clinical Trials Registry of India (CTRI/2015/06/005841). First transplantation of invitro Cultured Autologous Chondrocytes has been successfully performed and one year followup reveals excellent regeneration and repair of the knee cartilage. ● The Department of Biosciences along with the Dept. of Physics, SSSIHL has signed a Memorandum of Understanding with Centre for Biologics Evaluation and Research (CBER), Food and Drug Administration (FDA), Bethesda, Maryland, USA. As
--	--

<ul style="list-style-type: none"> ● Faculty Training in-House and in Other External Agencies: ● Engaging Young Faculty Members in Research 	<p>part of the research agreement, our research teams have synthesized several fluorescent nanoparticles for ultrasensitive, rapid and specific detection of HIV-1 p24 using Time Resolved fluorescence in a Sandwich ELISA format. The lowest detection limit of this assay is 0.3 pg/ml in blood serum or plasma. There have been no false positive reactions and cross reactivity was not observed when tested using serum/plasma samples infected with other viruses such as Dengue, Hepatitis-B and HCV.</p> <ul style="list-style-type: none"> ● The department of Mathematics and Computer Science has an MoU with Intel Corporation, Santa Clara, CA, USA for collaboration in High Performance Computing (HiPC) projects. <p>Research for Societal benefit:</p> <p>Research at the institute continues to touch greater milestones without sacrificing the focus on societal benefit. For instance, SSSIHL faculty are involved in the development of sensors for water monitoring in and around Anantapur District. Successful performance of autologous chondrocyte implantation in a patient with osteochondral defect in collaboration with Sri Sathya Sai Institute of Higher Medical Sciences is a noteworthy achievement by the faculty.</p> <p>Establishment of Research Conferment Cell:</p> <p>Under the guidance of the Vice-chancellor, a Research Conferment Cell (RCC) has been established for (1) Sciences and (2) Management, Commerce, Economics & Humanities on 9th July 2015. This cell will overview the research activities being undertaken in the Institute under the Chairmanship of the Vice-Chancellor. The syllabi for Pre-Ph.D courses are sent through the respective Dean of Sciences / Dean of Management & Commerce / Dean of Economics & Humanities to the Vice-Chancellor for approval. The RCC regularly meets and sends the inputs to the administration accordingly.</p> <p>Besides meeting rural needs, our faculty are also involved in the design and fabrication of high end equipment such as multimodal microscope and resonant optical gyroscope for a variety of applications.</p> <p>Yearly faculty orientation workshops were organized. Faculty orientation workshop is organized in the last week of May every year. The workshop focussed on training young faculty in question paper setting, evaluation, and other rules of engagement.</p> <p>Young faculty members without Ph.D. were also encouraged to enrol for Ph.D. and faculty with Ph.D. qualifications were encouraged to undertake supervision of research work either</p>
---	---

<ul style="list-style-type: none"> Well-Structured UG-PG-M.Tech-PhD Programs and augmenting with new programs (Curriculum review): 	<p>through projects or guiding research scholars.</p> <p>Courses are restructured and revamped based on the inputs received from various stakeholders with a view to encourage the students to pursue doctoral research considering the latest trends in the particular fields, the BOS proposes changes and modifications in the programmes.</p> <p>A well formulated and comprehensive annual report is brought out by the Institute every year reporting the milestones achieved in the field of Quality education and other dimensions of holistic development being undertaken. Link for Annual Report of 2015-16: http://www.sssihi.edu.in/sssuniversity/portals/0/Images/Resources%20and%20Help/Publications/SSSIHL-AR-2016-web-v2.pdf</p> <p>M.Tech Computer Science and M.Sc (Mathematics) were revamped keeping in mind the introduction of Integrated MCA programme. This was ratified by the academic council.</p> <p>Changes in the syllabus and academic regulations were proposed by the following departments in the year 2015-16 in the Academic Council meeting:</p> <ul style="list-style-type: none"> Introduction of M.Sc. (Materials Science) Programme from the academic year 2015-16 onwards. A two-year Bachelor of Education (B.Ed.) Programme was introduced for women at Anantapur Campus of the institute from the academic year 2015-16 onwards in consonance with the new Gazette Notification No.51-1/2014-NCTE (N&S) dt.28th Nov 2014. Modification of syllabus of B.Sc.(Hons.) in Mathematics, M.Sc.(Mathematics) and M.Tech.(Computer Science) Programmes Modification of syllabus of B.Sc.(Hons.) in Physics, and M.Tech.(Optoelectronics and Communications) Programmes Modification of syllabus of B.Sc.(Hons.) in Chemistry, and M.Sc.(Chemistry) Programmes A new programme viz., B.Sc. in Food and Nutritional Sciences is introduced in lieu of B.Sc.(Food Science and Nutrition) and B.Sc.(Food Technology) A new programme viz., M.Sc. in Food and Nutritional Sciences with a specialization in in (A) Applied Nutrition or (B) Food Technology is introduced in lieu of M.Sc. (Food Science and Nutrition) and M.Sc. (Food Technology). The Department of Home Science has been renamed as Department of Food and Nutritional Sciences The General English syllabus for Undergraduate Programme has been revised. The Telugu syllabus for Undergraduate Programme has been
---	---

<ul style="list-style-type: none"> ● Promoting Excellence in Research and Teaching: ● Attracting bright Students to the Institute ● Promoting Public Awareness of SSSIHL's Contribution and Quality Education ● Alignment of thrust areas of teaching and research with SSSIHL vision- Sri Sathya Sai Values-based Integral Education ● Performance of students ● Campus-Hostel Management Committee 	<p>revised.</p> <ul style="list-style-type: none"> ● BA (Philosophy) syllabus has been revised. <p>Providing the best possible facilities for students, scholars and faculty to further excel in their respective areas of interest has always been a priority for the institute administration and Sri Sathya Sai Central Trust.</p> <p>Mass email campaigns, WhatsApp campaigns to create awareness, and reaching out to the different schools across India with the help of information poster were carried out by the institute. The institute, in tune with the Revered Founder Chancellor's philosophy, believes only in creating awareness about this unique institute. The salient features of the institute were highlighted on Career's 360 portal with the help of regular posts during the admissions season which started in November and culminated with the admission test and interview in April. These awareness campaigns helped the institute in attracting a pool of good talent as applicants.</p> <p>A well formulated and comprehensive annual report is brought out by the institute every year reporting the milestones achieved in the field of Quality education and other dimensions of holistic development being undertaken for the students in the institute. This is uploaded on the website for the public at large to refer to it.</p> <p>As a part of creating awareness about the institute for prospective applicants during the admissions season, admissions posters briefly describing the salient features of the value based education at SSSIHL, is circulated to all the major schools and universities across India.</p> <p>Help of the Sri Sathya Sai Seva Organization (SSSSO), a sister organization of SSSIHL is taken to create awareness about this unique experiment of value based education across the country. This is done through the service (sevadai) volunteers and office bearers of SSSSO.</p> <p>Overall examinations pass rates at the institute continue to be upwards of 94% across all programmes and departments. The education system successfully moulds students in a wholesome manner, in line with the vision of our Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba. Research is also conducted in SSSIHL for societal benefit in tune with the Revered Founder Chancellor desire.</p> <p>The four campuses and hostels of SSSIHL are important and co-dependent and complementary parts of the Institute. This committee deliberate and approve all decisions pertaining to the Campus and Hostel to ensure smooth functioning Campus-Hostel dyad.</p>
--	---

<ul style="list-style-type: none"> Leadership Team for Quality assurance 	<p>Three meetings were held in the year 2015-16 and issues related to faculty and students, curricular, co-curricular and extra-curricular activities of students, management, parity across campuses, campus-working schedule, vacant land use, campus-workers welfare, facilities like renovation of bathroom complex in the hostel, vehicle parking, garbage disposal, sports-cultural & self-reliance calendar, provision for greater IT infrastructure access to the students were discussed regularly in the CHMC meetings.</p> <p>Leadership Team consisting of Vice-Chancellor, Registrar, Controller of Examinations, Directors of the Campuses, Wardens of the Campuses, Heads of Departments and Associate Heads of Departments of the Institute has been established in 7th Jan 2015.</p> <p>On 30th Aug 2015, the Leadership team met and discussed the important matters. This team takes leadership role in all the academic matters and administrative help in dealing with the items like policy regarding extra classes, support to young faculty, use of expertise available, role of HoDs, uniform policy across campuses, student internship, students appearing for national examinations, orientation to newly joined faculty, mentoring of young teachers, workshop on examination evaluation and question paper setting, evaluation of various aspects of the Sri Sathya Sai System of Integral Education, This plays an active role of quality assurance as per IQAC.</p> <p>As stated in the previous AQAR report for the year 2014-15 these two qualitative measures have been successfully implemented.</p>
---	--

** Attached the Academic Calendar of the year as Annexure-I.*

2.15 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body Board of Management

Provide the details of the action taken

AQAR along with Annual Report presented in Board of Management on 21/11/2016.

The points stated in AQAR reflect in the Annual Report of the University. The key points and achievements are figured in comparison with the National averages in the Annual Report. The infographics provide qualitative status w.r.t. NAAC parameters and national averages.

Part – B

Criterion – 1

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
Ph.D.	11	0	11	11
PG	6	2 (M.Sc. Food and Nutritional Sciences, M.Sc. Materials Science)	8	8
UG	9	1 (B.Sc.(Food and Nutritional Sciences))	10	10
PG Diploma	Not applicable	Not applicable	Not applicable	Not applicable
Advanced Diploma	Not applicable	Not applicable	Not applicable	Not applicable
Diploma	Not applicable	Not applicable	Not applicable	Not applicable
Certificate	Not applicable	Not applicable	Not applicable	Not applicable
Others (Professional)	6	0	6	6
Total	32	3	35	35

Interdisciplinary	1	1*	1	1
Innovative	2	3#	3	3

* M.Sc Materials Science

M.Sc. Materials Science,

B.Sc. Food and Nutritional Sciences,

M.Sc. Food & Nutritional Sciences

1.2 (i) Flexibility of the Curriculum: ~~CBCS~~/Core[✓]/Elective option[✓] / ~~Open options~~

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	✓ All programmes
Trimester	
Annual	

1.3 Feedback from stakeholders* (On all aspects) Alumni Parents Employers Students

Mode of feedback: Online Manual Co-operating schools (for PED)

***Please provide an analysis of the feedback in the Annexure:**

In order to ensure that the academic curriculum of the Institute is in sync with the developments happening in the scientific, economic and business world, regular interactions are held with the alumni, employers, members from the scientific and business community. Interactions are also held with parents and students of the Institute to analyse and study the impact of the inputs on their career and all round personality development.

The Alumni actively participate in providing feedback on the practical relevance of the courses that they have undergone on their work/profession. They also share the new developments which have happened in the field of their work/profession, which may be included as a part of the curricula. They help the alma mater in the conduct of annual workshops, seminars, and conferences. They are a part of the placement structure for the outgoing batch of students each year by running a programme which makes the students industry ready. (Refer to **Annexure-III**)

The feedback from different stakeholders are factored in the curricular design and upgradation, like starting new courses, new chapters to the syllabi of several courses in various disciplines and modifying the curriculum vis-à-vis the latest trends in the industry and academia.

Students: Through formal and informal interactions in and outside the classroom and through written course-wise feedback every semester. Refer to **Annexure-IV** for the Questionnaire of the online teaching quality feedback. The students also have interactions with the HoDs, Director, senior faculty and administration where their inputs are taken.

Industry: The industrial experts and employers of our students visit the institute for guest lectures, colloquia and give their valuable feedback regarding all aspects of the institute.

Parents: A comprehensive report on the performance of the students, both academic and integral item is sent to the parents when the students go for vacation. The parents share their feedback based on the report and their observations on the growth/development of their ward. A formal/informal interaction with the parents of each ward to appraise them about the

performance of the student and elicit feedback about the different dimensions in the student life is also carried out at regular intervals. (Refer to **Annexure-V**)

Employers: The employers of our students generally use the alumni who are a part of the placement team, to share feedback on the performance of the newly recruited students to reinforce the current practices adopted by the various departments of the institute and at times also suggest introduction of new techniques which can further augment the skill set of the students.

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

Changes in the syllabus and academic regulations were proposed by the following departments in the year 2015-16 in the Academic Council meeting:

- Materials science is an interdisciplinary field involving the properties of matter and its applications to various areas of science and engineering. It includes elements of applied physics and chemistry, as well as chemical, mechanical, civil and electrical engineering. To cater to the growing need of Materials science experts, Master's course in Materials Science was introduced in the academic year 2015-16.
- To ensure quality teacher training, National Council for Teacher Education (NCTE) increased the duration of B.Ed. course from 1 year to two years. Hence, a two-year Bachelor of Education (B.Ed.) Programme was introduced for women at Anantapur Campus of the institute from the academic year 2015-16 onwards in consonance with the new Gazette Notification No.51-1/2014-NCTE (N&S) dt.28th Nov 2014.
- Obsolete portions in different courses were deleted to provide extra time for classroom demos and some subjects were reworded for improving clarity.
 - Syllabus of PMAT: CS7- Formal Languages and Automata was updated for M.Sc Mathematics
 - Updating syllabus of UCHM-101: Theoretical Chemistry and Analytical Chemistry for B.Sc.(Hons.) Chemistry course
 - Some modifications were made in subjects for B.Sc. Hons. Mathematics course, M.Sc. Mathematics and Integrated MCA course.
 - Modifications in some papers of B.Sc. Honours Physics, M.Tech Optoelectronics and Communications courses.
 - Modifications were made in subjects for B.Sc. Hons. Chemistry course and M.Sc. Chemistry.
- The Department of Home Science was renamed as Department of Food and Nutritional Sciences to cater to the latest developments in the field of Food Science and Nutrition and Food Technology. With a thrust on practical, competitive and industry based learning, B.Sc. in Food and Nutritional Sciences and M.Sc. in Food and Nutritional Sciences was introduced under this department.
- Department of English revamped the syllabus at the undergraduate level with special emphasis on improving language, communication skills, inculcate the habit of reading, improvement of aural skills etc.
- Topics in Philosophy and Telugu were revamped to remove redundancy and providing clarity to the students of B.A course.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Nil

Criterion – 2

2. Teaching, Learning and Evaluation

Total	Asst. Professors	Associate Professors	Professors	Others
162	90	34	22	16 *

* Teaching Asst. = 12, Part-time = 2 Information Scientist and Placement Officer = 2

2.1 Total No. of permanent faculty

2.2 No. of permanent faculty with Ph.D.

96/162

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others (Research Faculty)		Total	
R	V	R	V	R	V	R	V	R	V
12	3	0	0	0	2	-	-	12	5

2.4 No. of Guest and Visiting faculty and Temporary

NA

106

16

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	46	84	6
Presented papers	32	33	6
Resource Persons	4	8	6

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- With the help of Multimedia Learning Centre established in all the campuses of the institute, the video conferencing facility is widely used for teaching and conducting workshops/conferences etc.
- The institute operationalizes its goals and objectives through a **unique and innovative Sri Sathya Sai System of Values-based Integral Education** which makes it a **modern Gurukula**. The Sri Sathya Sai values-based integral education system aims to seamlessly blend high academic standards along with the inculcation of basic human values in its

students. It aims at developing a balanced personality in students which takes care of Intellectual, physical and emotional aspects of the students. This institute is a modern *Gurukula*, a place where teachers and students live and grow together in love and wisdom. This system of education is being followed in the institute right from its inception. This helps the students to gain leadership skills, communication skills, experiential skills etc.

2.7 Total No. of actual teaching days during this academic year

196

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Continuous Internal Evaluation for all courses of study, Double Valuation in Post Graduate courses, Semester system followed right from the inception of the university, Online MCQs administered by LMS- E-Guru.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop/Academic Council

All the 161 faculty members of Sri Sathya Sai Institute of Higher Learning involve at different levels of curriculum and syllabus development.

2.10 Average percentage of attendance of students

95

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				
		O & O+ grade	A & A+	B grade	C grade	Pass %
		Distinction %	I %	II %	III %	
Ph.D	6	-	-	-	-	-
M.B.A	52	52	48	-	-	100
M.B.A in Finance	24	50	50	-	-	100
M.Tech. in Computer Science	10	50	50	-	-	100
M.Tech. in Applied Optics	10	30	70	-	-	100
M.Sc. in Mathematics	19	47	47	-	-	95
M.Sc. in Physics	16	69	31	-	-	100
M.Sc. in Nanoscience and	3	100	-	-	-	100

Nanotechnology						
M.Sc. in Chemistry	3	67	33	-	-	100
M.Sc. in Biosciences	16	38	62	-	-	100
M.Sc.(Food Science and Nutrition)	5	20	80	-	-	100
M.Sc.(Food Technology)	5	40	60	-	-	100
M.A. in English Language & Literature	8	38	62	-	-	100
M.A. in Economics	9	38	62	-	-	100
Integrated MCA	15	7	80	-	-	87
B.A.	17	41	47	12	-	100
B.Sc.(Hons) Economics	8	12	76	12	-	100
B.A. (Hons.) Economics	12	33	56	8	-	100
B.Sc. Home Science	10	10	90	-	-	100
B.Sc. (Hons.) Biosciences	26	4	92	4	-	100
B.Sc. (Hons.) Chemistry	20	30	55	10	-	95
B.Sc. (Hons.) Mathematics	26	12	77	8	-	96
B.Sc. (Hons.) Physics	35	31	69	-	-	100
B.Com.(Hons.)	74	53	35	7	-	95
BCA	3	-	100	-	-	100
BBM	51	18	71	10	-	98
B.Ed.*	-	-	-	-	-	-
M.Tech.(Nuclear Medicine)	4	100	-	-	-	100
Master of	8	62	38	-	-	100

Financial Management						
----------------------	--	--	--	--	--	--

* B.Ed. was offered as a 2 year course from 2015-16.

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

Through reports of departmental committee meetings (held every month), Research Advisory Board, Academic Council meetings, Examination Committee, Teaching quality feedback, performance of students results and performance of students at national level exams etc.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	0
UGC – Faculty Improvement Programme	0
HRD programmes	0
Orientation programmes	0
Faculty exchange programme	1
Staff training conducted by the institute	Annual Faculty Development Programme Department of Mathematics & Computer Science-21, Physics- 15, Chemistry- 15, Biosciences- 18, Food & Nutritional Sciences- 6, Management and Commerce- 25, Economics- 8, Education- 7, English- 11 and Honorary faculty, teaching assistants and adjunct faculty etc.
Staff training conducted by other institutions	0
Summer / Winter schools, Workshops, etc.	13 workshops/seminars 5 departments 96 faculty
Others	47

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	68	0	2	0
Technical + Support Staff	95	0	2	0
Total	163	0	4	0

Criterion – 3

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

The “Sai Krishna Award for excellence in research and teaching” has been instituted to recognize the prominent researchers and teachers at the Sri Sathya Sai Institute of Higher Learning each year. This award is given for excellence in Research for a given year and for excellence in teaching the next year and so on, alternately.

The research awards are given for excellence in research in three categories viz., **a. Sciences b. Management, Commerce, Economics and Education c. Languages and Philosophy.**

Interdepartmental Science Colloquium provides an opportunity for doctoral research scholars, teaching faculty and visiting experts to share their research experiences with one another. It breaks down barriers of communication and helps merge traditionally distinct scientific disciplines, thereby creating new opportunities for research. There are around 18-20 sessions in one academic year. See **Annexure- II**

The Research Advisory Board of the Institute monitors and gives inputs to faculty in Research, Consultancy and Extension.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	5	11	1	2
Outlay in ₹ Lakhs	₹ 167.84	₹ 244.82	₹ 80.36	₹ 115.67

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	1	1	1	1
Outlay in ₹ Lakhs	5	5	5	5

3.4 Details on research publications*

	International + National	Others
Peer Review Journals	100	Books = 5 Chapters in books =2 Articles in Sanskrit = 12
Non-Peer Review Journals	-	
e-Journals	1	
Conference proceedings	125	

* Please refer to Annexure-VI

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

PS: Optical Engineering – 0.993, ACS Applied Materials & Interfaces – 8.097

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (₹ in lakhs)	Received (₹ in lakhs)
Major projects:				
1. Near-Real-Time Super Resolution of Aerial Video (Visual and IR) Sequences for Defense Applications	3	DRDO ER & IP	48.76	₹ 10.11
2. Elliptic Curve Cryptography	3	DST	₹ 17.70	₹ 2.82
3. Design and Development of small organ Imaging Gamma Camera System	2	DST	₹ 90.67	₹ 14.11
4. Design and characterization of optofluidic resonator geometries for biomedical sensing applications	2	UGC-DAE-CSR	₹ 6.81	₹ 1.01
5. Develop Interfacial Chemistry Based Structure-Property Relationship in Nanodielectric Composites for Enhanced Energy Storage Applications	2	DST-SERB	₹ 23.00	₹ 8.50
6. Application of plasmonic technologies and microbes-fortified	3	DBT	₹ 75.82	₹ 15.20

biosorbents for efficient integrated bioprocessing				
7. Mechanism of ATP Secretion & role of ATP-activated P2 receptors in the Microglial Inflammatory response: implications for Multiple sclerosis	3	DBT	₹ 53.72	₹ 26.22
Minor Projects	1	UGC	₹ 2.0	₹ 0.23
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	1	Autologous Chondrocyte Implantation	₹ 2.16	₹ 2.16
Students research projects- Lean Six Sigma Interventions* (other than compulsory by the University)	6 months	SSSIHL	--	--
Any other(Specify)				
Total	8	8	₹ 244.82	₹ 80.36

* Lean Six Sigma interventions carried out for the sister organizations of SSSIHL solely by students of MBA which are then certified by Lean Six Sigma black belt professionals. These are carried out in the odd semester i.e. between June- October every year. There are generally 6-7 such projects every year. These interventions improve the methodology to eliminate problems and inefficiencies to provide a better response to the consumer's needs.

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP CAS DST-FIST

DPE DBT Scheme/funds

3.9 For colleges Autonomy CPE DBT Star Scheme
 INSPIRE CE Any Other (specify)

Not applicable

3.10 Revenue generated through consultancy

The outcomes of any innovation is made available for all those who can benefit from them, without any charge. As a matter of policy, the innovations are conceived as contributions of knowledge for the benefit of the society. The Institute provides education at all levels and in all disciplines **TOTALLY FREE OF COST**. The innovations are focused on the regional and socio-economic needs in the neighbourhood areas of the Campuses and also on the needs of the state(s)/ nation. They are not pursued with the objective of commercial exploitation.

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	2	-	-	11	--
Sponsoring agencies	Universities of Melbourne, Iowa and Ohio State, IIT Kanpur, IISc, IIT Bombay and others. Ramanujan Math Society, University of New Haven, IIT Kanpur, TIFR-CAM, DAE-BRNS	-		SSSIHL	--

3.12 No. of faculty served as experts, chairpersons or resource persons - 11

3.13 No. of collaborations International National Any other

INTERNATIONAL

- The Department of Biosciences and Physics have an MOU with Center for Biologics Evaluation and Research (CBER), Food and Drug Administration (FDA), Bethesda, MD, USA; and active research collaboration has been going on in the departments for the past several years with Department of Physics and Astronomy, Clemson University, SC, USA in the areas of Nonlinear Optical studies and Surface Plasmon Coupled Emission (SPCE) of Nanomaterials. The Department of Biosciences in collaboration with Dr Indira Hewlett, US-

FDA, Bethesda USA, for investigation of Nanotechnology based diagnosis for TB, HIV, Influenza, Chickungunya and Dengue virus.

- The department of Mathematics and Computer Science has signed an MoU with Intel Corporation, Santa Clara, CA, USA for collaboration in HiPC projects.

NATIONAL

- The department of Biosciences has an MoU with Dr. V Mohan, Madras Diabetic Research Foundation, Chennai to identify molecular markers in type II diabetes patients.
- The department of Mathematics and Computer Science has an MoU with Zentron Labs, New Delhi for a Diabetic Retinopathy Project – converting research to social impact a product for societal use.

3.14 No. of linkages created during this year

11

LINKAGES

The institute has got close research linkage with the Sri Sathya Sai Institute of Higher Medical Sciences (Tertiary care hospitals) both at Prasanthigram and Whitefield, Bangalore. These research linkages are elucidated below:

- The faculty members of the department of Physics, are actively involved in modification of the Gamma Camera that is used in the Nuclear Medicine department of Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS) in collaboration with Dr. Siva Subramanian, Head, Nuclear Medicine, SSSIHMS, Prasanthigram.
- The Academic programme M.Tech (Nuclear Medicine) is being offered by the department of Physics in collaboration with the Department of Nuclear Medicine, Sri Sathya Sai Institute of Higher Medical Sciences. The M.Tech.(Nuclear Medicine) programme in Nuclear Medicine is designed to train qualified technologists needed by various Nuclear Medicine centres in India.
- "Lipoprotein associated phospholipase A2 (Lp-PLA₂), a pro inflammatory marker) is a potent pro-inflammatory mediator that plays an important role in the development of coronary atherosclerosis. Lp-PLA₂ has a significant potential to become an important marker for early onset of atherosclerosis in Indians. The Department of Chemistry, SSSIHL in collaboration with SSSIHMS has undertaken to study the role of Lp-PLA₂ towards coronary artery disease in Asian Indians and develop novel detection methods using nanomaterials. Studies related to application of nano materials (gold, nickel & silicon nano particles) as sensing and imaging agents are also being envisaged for biosensing of HIV p24 antigen and / or dopamine levels in clinical specimens. It is also intended to tap the tremendous translational potential of plasmonic structures for the design and optimization of a multi-analyte point-of-care patient friendly diagnostic tools.

- The department of Chemistry is also working on biopolymer based biocompatible scaffolds for tissue culture in collaboration with the Dept. of Biosciences, SSSIHL and SSSIHMS. This research effort involves the use of Chondrocyte cell culture and natural polymers such as alginate and chitosan for making porous scaffolds."
- The department of Biosciences along with the Department of Orthopedics, SSSIHMS, Prasanthigram are in the process of setting up a Centre for Regenerative Medicine and Tissue Engineering (Autologous Chondrocyte Implantation).
- The department of Biosciences along with the department of Microbiology, SSSIHMS, Prasanthigram are working on a project for Evaluation and characterization of extended Spectrum Beta-lactamase (ESBL) producing Enterobacteriaceae from clinical isolates.
- The Department of Biosciences along with the department of Microbiology, SSSIHMS, Prasanthigram are working on a project for Development of rapid, highly sensitive, point-of-care tests to diagnose TB and HIV co-infection.
- The Department of Biosciences along with the Department of Orthopedics, SSSIHMS, Prasanthigram are working on a project entitled "A Homocysteine Network Behind Avascular Necrosis of Femoral Head: Emerging Therapeutic Targets".
- The Department of Biosciences along with the Department of Orthopedics, SSSIHMS, Prasanthigram are working on a project entitled "A System Biology Approach to understand Mechanism for Rheumatoid Arthritis".
- The department of Biosciences along with the Department of Ophthalmology, SSSIHMS, Prasanthigram are working on a project to study "Role of Homocysteine in Glaucoma and Diabetic Retinopathy".
- The Department of Biosciences along with the Department of Orthopedics, SSSIHMS, Prasanthigram are working on a project on "Identification of Genes/mutations involved in Ellis-van Creveld syndrome".

3.15 Total budget for research for current year in lakhs:

From funding agency	₹ 618.17	From Management of University/College	₹ 15.06
Total	₹ 633.23		

3.16 No. of patents awarded this year

Type of Patent		Number
National	Applied	0
	Granted	0
International	Applied	0
	Granted	0
Commercialised	Applied	0
	Granted	0

3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year 2015-16

Total	International	National	State	University	Dist	College
2	1	1	-	-	NA	NA

3.18 No. of faculty from the Institution who are Ph. D. Guides
and students registered under them

3.19 No. of Ph.D. awarded by faculty from the Institution

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF SRF Project Fellows Any other*

* SSSIHL

3.21 No. of students Participated in NSS events: Nil*

The NCC aims at developing character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens.

Source: <http://nccindia.nic.in/en/node/141>

National Service Scheme (NSS) was introduced in 1969 with the primary **objective** of developing the personality and character of the student youth through voluntary community service. 'Education through Service' is the purpose of the NSS. Jul 23, 2018.

The sole aim of the NSS is to provide hands on experience to young students in delivering community service. Source: <https://nss.gov.in/>

* In line with this overarching objective, the Sri Sathya Sai System of Integral Education that has been developed and is being followed at this institute has a packed schedule that includes academics and participation in various curricular and co-curricular activities throughout the year that include Sports and Games, participation in cultural activities (music, dramatics, etc.), Social Service (Grama seva) etc. The institute aims at producing students who are academically sound, socially responsible and spiritually aware. The way of life at this institute holistically provides the necessary foundations to produce good citizens.

University level State level
National level International level

3.22 No. of students participated in NCC events:

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.23 No. of Awards won in NSS:

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.24 No. of Awards won in NCC:

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.25 No. of Extension activities organized

University forum *	<input type="text" value="1"/>	College forum**	<input type="text" value="4"/>
NCC	<input type="text"/>	NSS	<input type="text"/>
		Any other	<input type="text"/>

* Grama Seva

** Every campus conducts their own extension activities like river cleaning up, leper colony service, poor feeding, village adoption programmes etc.

3.26. Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- The Anantapur Campus faculty of the departments of Bioscience and Home Sciences visit the neighbouring areas to advice women and others about health and cultivation. This enhances the development of appropriate fruit and vegetable preservation technologies for providing avenues for self-employment to rural women. They also taught the newer packaging technologies for rural level product developments (2007 onwards)
- The water of the Rayalseema area where the institute is located contains high levels of fluoride and other contaminants. The department of Chemistry is in the process of designing sensors for monitoring water quality parameters in the groundwater of shallow and deep aquifers in and around the three mandals to identify aquifer zones with safe drinking water in addition to development of novel water treatment.
- Department of Biosciences in collaboration with SSSIHMS performed the first indigenous Autologous Chondrocyte implantation in August 2015. The progress of the patient revealed excellent progress in the repair of the cartilage tissue and increase in the range of movement of the knee post operation and reduction in pain.

Criterion – 4

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	**		SSSCT	147 acres**
Class rooms	178	--	--	178
Laboratories	35		--	35
Seminar Halls	5		--	5
No. of important equipments purchased (≥ 1 lakh) during the current year.		14	UGC, DRDO, DST, SSSIHL Etc.	
Value of the equipment purchased during the year (₹in Lakhs)	₹ 2028 Lakhs (2014-15)	₹ 1199 Lakhs	SSSIHL	₹ 3227 Lakhs
Others		--		

**** Total Area:** The Sri Sathya Sai Institute of Higher Learning (Deemed to be University) comprises four Campuses viz.,

- 1) Prasanthi Nilayam Campus for men at Prasanthi Nilayam, Anantapur District, Andhra Pradesh
- 2) Anantapur Campus for women at Anantapur, Anantapur District, Andhra Pradesh
- 3) Brindavan Campus for men at Kadugodi, Whitefield, Bangalore, Karnataka and
- 4) Muddenahalli Campus for men at Muddenahalli, Chickballapur district, Karnataka

[Total area in acres]

- 1) Prasanthi Nilayam Campus for men = 20.53 acres
(Academic area=5.20 acres + Playground=7.71 acres + Planetarium=2.13 acres + Stadium=5.49 acres)
- 2) Anantapur Campus for women = 82.6 acres
- 3) Brindavan Campus for men = 35.55 acres
- 4) Muddenahalli Campus for men at Muddenahalli, Chickballapur district, Karnataka (in 8.10 acres)

Total Constructed area: [In sq.m.]

- 1) Prasanthi Nilayam Campus for men = 56,217.38 sq.mts.

(Main building= 44,638 sq.mts. + Humanities building=1,744 sq.mts. + Annexe = 4,088 sq.mts. + Central Library = 5,018 sq.mts. + Planetarium = 729.381 sq.mts.)

- 2) Anantapur Campus for women = 20,018 sq.m. (3 buildings)
 - 3) Brindavan Campus for men = 29,874 sq.m. (2 buildings)
 - 4) Muddenahalli Campus for men = 4979.60 sq.m. in 8.10 acres
- University Administrative building = 4025 sq.m. in 2.25 acres

&& No. of Classrooms

- 1) Prasanthi Nilayam Campus = 42
- 2) Anantapur Campus = 40
- 3) Brindavan Campus = 31
- 4) Muddenahalli Campus = 14

Most of the classrooms are well equipped with DLP Projectors, projector screens, White boards, PC on Stick facility. In addition to this, the campuses have latest multimedia learning centers and language labs.

4.2 Computerization of administration and library

University Management System (UMS) has been initiated in the year 2011-12. Admissions have been totally computerized. Examination module and other modules such as Accounting and Finance, Hostel maintenance, administration, Back-office, etc., are being developed. Admissions module is fully functional.

The Central Library of the Institute is fully networked with INFLIBNET/INFONET with VSAT connectivity with extension of network to other departments by the UGC. EBSCO collection and databases and Science finder are also available in the Institute.

4.3 Library services:

2015-16	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
		(₹ in lakhs)		(₹ in lakhs)		(₹ in lakhs)
Text Books	168257	817.25	1540	12.59	169617	829.86
Reference Books	6470	31.52	343	3.71	6813	35.23
e-Books						
Journals	168	2.45	10	0.06	177	2.43
e-Journals*						
Digital Database	EBSCO- 8500 Journals	20.42				
	SCI.FINDER- 34000 Journals (Abstract & Bibliography)					
CD & Video	3228	0	0	0	3228	0
Others (specify)						

Note: * E-journals- The Central Library of the institute is fully networked with INFLIBNET/INFONET with VSAT connectivity with extension of network to other departments initially by the UGC. The UGC INFONET - WAN networks all the universities in India. The SSSIHL users can access the databases of Web of Sciences, Science Direct, J-CCC, J-STORE, Oxford University Press, Cambridge University Press and PRO-QUEST through INFLIBNET.

All these Journals are available to all the students and staff over our Institute campus network. These Journals cover various teaching and research disciplines actively pursued by the departments.

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1036	Labs = 14	All the computers in the institute have internet browsing facility		Computer Centres = 4	44	450	62
Added	8	Students computers = 488						
Total	1044							

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

The University has provided Laptops for all the Research Scholars, and PC for teacher. The University has established Multimedia Learning Centre and English Language Labs at Prasanthi Nilayam, Anantapur and Brindavan Campuses to cater to the needs of video-conferencing. The University is in the process of establishing Multimedia Learning Centre and English Language Lab at Muddenahalli Campus too. All the Campuses are centrally provided with the Computer Centres. The student computer ratio is **2.75 : 1 (1345 : 488)**.

E-journals- EBSCO & Scifinder: The Central Library of the University is fully networked with INFLIBNET/INFONET with broad band VSAT connectivity with extension of network to other departments initially by the UGC. The UGC INFONET - WAN networks all the universities in India.

The SSSIHL users can access the databases of Web of Sciences, Science Direct, J-CCC, J-STORE, Oxford University Press, Cambridge University Press and PRO-QUEST through INFLIBNET. We have a well-established Computer Centres at the Prasanthi Nilayam Campus which are fully networked. The Central Library is also networked with INFLIBNET/INFONET with 1 Gbps NKN/NMEICT connectivity and the internet connectivity is 100Mbps.

This facility has been extended to other campuses as well by a dedicated 2 mbps connections to each of the offsite campuses. All the e-journals are available to all the students and staff over our university campus network.

4.6 Amount spent on maintenance in ₹ lakhs :

i) ICT	9.81
ii) Campus Infrastructure and facilities	3.75
iii) Equipments	2.76
iv) Others	0.39
Total :	16.71

Criterion – 5

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- In tune with the philosophy of the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba, education is imparted TOTALLY FREE OF COST to all the students for all courses of study.
- In Sathya Sai Hostels, all students willingly undertake all the tasks to run the hostel and stay as one big family with one fourth of the teachers staying in the hostel. The students naturally pick up soft skills, get personal counselling from the teachers and get coaching and guidance on not only academic aspects but also aspects regarding life. All this facilitate a great amount of multi-skill-development. They also get coaching for games, music etc. in this unique self-reliance model.
- Rich pool of faculty visiting the university helps the students in deciding their career path and guidance for competitive examinations.
- The senior and junior students live as one family, which facilitates cooperation and not competition among the students. The concept of ragging is unheard of in Sathya Sai Hostels.
- Grievance redressal mechanism exists. A student can approach his/her room teacher with his/her grievance. If the student is not satisfied, the student can approach the floor teacher, warden. Campus Hostel Management Committee has also been set up in August 2015 which will also look into such issues. If still not satisfied the matter can be escalated to the Vice-Chancellor.
- The preceptorial system that ensures that each student has a teacher who is a mentor and helps the student develop a holistic personality. Mentors also review the progress of their mentees and make a collective and comprehensive review during the mentors' meetings.
- One of the significant teaching-innovations is “E-Guru” software package developed by a faculty and his project student, which enables the teachers to upload all the teaching material, quizzes, syllabus, session-wise schedule of each course, old question papers, standard formats for submission to examinations section, etc. This enhances the effectiveness of teaching-learning to a great extent.

5.2 Efforts made by the institution for tracking the progression

- Students appear for the different competitive examinations and the results obtained are communicated to the university.
- Information of job placement is provided in a structured manner by the CATALYST team founded by alumni to facilitate placement of the passing out students.
- During their course of study, students are evaluated from time to time and wherever necessary, remedial classes, tutorial classes are conducted. Students are being encouraged to take up projects and dissertations in their final year of study so that it can help them to focus on a problem at hand and pursue research beneficial for the society.

5.3 (a) Total Number of students

UG	PG	Ph.D.
854	416	75

(b) No. of students outside the state (out of 1345)

No	%
----	---

870

(c) No. of international students

3

No	%
3	0.22%

Men

-	-
---	---

Women

Last Year (2014-15)						This Year (2015-16)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
351	15	16	141	--	523*	292	18	17	127	-	454*

* Newly enrolled

Demand ratio: 1 of 5 admitted

Dropout %: 0.05% of Admitted

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Students of post graduate programmes are given special coaching for taking different competitive examinations like UGC NET, JRF, GATE etc. Faculty members focus on the format and type of questions generally asked in these competitive examinations and are actively involved in helping the students in solving model question papers. The students are evaluated and mentored one on one on a weekly basis. The teachers keep in mind the special skill sets required to be successful in these examinations and impart the same to the students as part of the teaching- learning process. Questions similar to the previous years' GATE/NET questions are also taken up for analysis by the teachers in the coaching classes.

No. of students beneficiaries

Interested PG students of the relevant departments are given informal coaching for competitive examinations. (30 out of 50)

5.5 No. of students qualified in these examinations

NET	8	SET/SLET	-	GATE	24	CAT	-
IAS/IPS etc	-	State PSC	-	UPSC	-	Others *	5
							* JRF, JEST

*5.6 Details of student counselling and career guidance

Students are given inputs about the different avenues available in their respective course of study from time to time throughout their period of study at the institute. Interaction with rich pool of visiting and guest faculty also broadens their perspective and gives them clarity about the career path to be chosen by them. Students are encouraged to take up projects in the 3rd year under graduation in their areas of interest which can lead to the student pursuing research or career in that field. Career guidance to final year PG students is given by alumni in a unique forum of CATALYST where tips for CV preparation, mock interviews, generating leads for the passing out students is done.

No. of students benefitted – All PG and final year UG students.

5.7 Details of campus placement *

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
33	125	82	43 **

* Students of other Under Graduate and Post Graduate courses pursue higher studies in the institute or elsewhere (IISc, IITs, TIFR, etc.,)

** The off-campus placements are also done by alumni referrals.

Our Placement Officer has close interaction with Business and Industry and, therefore, many organizations are aware of the Institute's Philosophy, functioning, academic excellence and positive attitude of the students. They also know of the uniqueness of the Integral Education system of the Institute, with its special emphasis on moulding the students into a wholesome and balanced personality, Academically Sound and Spiritually Aware. Many organizations, who have employed our students and observed their competence and sense of commitment to basic values, seek out our graduates repeatedly. Most of these graduates are occupying good and rewarding positions in India and abroad and many of them have progressed to very senior levels.

The alumni of the institute play an important role in helping graduating students find suitable employment opportunities in their chosen vocation.

They achieve this through an outreach programme called CATALYST (Corporate Aptitude Training – an Arena to Leverage Your Skills and Talents) where graduating students are coached in preparing résumés, the application process, interview techniques, networking and the like. The programme has been very successful.

5.8 Details of gender sensitization programmes- In awareness courses the inputs relating to gender sensitivity are provided to both men and women students. Students are exposed to the discourses of the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba, who had many times spoken at length about the exalted status given to women in Indian Culture. This makes a very deep impression on the young minds of the students.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events:

State/ University level* National level International level

No. of students participated in cultural events:

State/ University level* National level International level

*All students participate in the institute Annual Sports and Cultural Meet.

Note: Participation in sports, cultural and literary activities is mandatory for all students at all campuses and is indeed an integral part of the learning process. This is remarkably demonstrated by the Annual Sports and Cultural Meet which climaxes from 11th to 15th January every year with athletic and sports competitions and by the high quality of dramas and musical programmes presented to thousands of visitors in the Sai Kulwanth Hall. It may be reiterated that this kind of participation of students in sports, cultural and other activities is rather rare even in the best of our universities.

The infrastructural and other facilities needed for sports and cultural activities available to students and faculty at the SSSIHL are exceptionally good. These include a world class indoor stadium, tennis courts, a well-maintained hill view open stadium including a cricket ground, an excellent gymnasium along with well-equipped sports facilities in each campus.

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support	Number of students	Amount
Financial support from institution	1345	₹ 19.50 crores
Financial support from government	0	0
Financial support from other sources	3	₹ 9.78 lakhs
Number of students who received International/ National recognitions	NA	

*** Education is provided totally free of cost to all the students of the institute following the philosophy of Revered Founder Chancellor.**

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level* National level International level

*** The Annual Sports & Cultural Meet, Science Day Celebrations**

5.12 No. of social initiatives undertaken by the students

- GRAMA SEVA / VILLAGE SERVICE involving the whole university.

Manava Seva is Madhava Seva (Service to man is service to God).
Bhagawan Sri Sathya Sai Baba, Revered Founder Chancellor

For 1200+ young Institute students (and their teachers), nine days of their academic year is spent in the service of village folks from over 150 villages in one of the most poverty-stricken districts in India. This includes distribution of food packets, clothes and other items, along with devotional singing, in a manner that carries a message of hope.

The entire project - the planning, resourcing, organizing and implementation - is largely managed by the Institute students and teachers from start to finish. Women students spend most of the night packing tens of thousands of food packets. The Men students spend the better part of each day going to individual homes in each village to personally serve this prasadam to the villagers for ten continuous days.

- Adoption of a lepers colony of 25 families near the town of Anantapur for the last twenty five years where the students render service once in a month taking care of various dimensions of health and hygiene, education, social issues, self-sufficiency etc.
- Students under the able guidance of the teachers, participate regularly in 'Village Integrated Programmes' and take up service activities namely providing smokeless chulhas, solar bottle

bulbs, painting the school and houses, enacting street plays on social and health issues, sanitation etc.

- Students and staff of the institute are regular donors of blood to the blood banks of the two Super Speciality Hospitals in Prasanthi Nilayam and Bangalore.
- Students of all the campuses periodically take up tree plantation initiatives in and around their campus areas.

The following activities are being undertaken by the alumni under the aegis of Sri Sathya Sai Institute of Higher Learning-

- Regular medical camps are conducted all over the globe where treatment and medicines are given totally free of cost. Narayan Seva- mass feeding is also a part of these camps.
- Establishing and running of 2 children's homes and 3 schools in different parts of the country imparting value education free of cost to underprivileged children.
- An ongoing tree plantation initiative in the three mandals in and around Puttaparthi for the last 7 years in which a total of 32,000 plants have been planted till date out of which 5000 are coconut plants.
- Distribution of blankets and warm clothing to the less fortunate in major cities all over the country every year, at the onset of winter.

5.13 Major grievances of students (if any) redressed: No issues raised.

Criterion – 6

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

THE VISION

To assist generations of students acquire Self-knowledge (*Atma Vidya*) and Self-confidence (*Atma Vishwas*), so as to cultivate Self-sacrifice and earn Self-realisation; thereby moulding them into leaders who will benefit society.

THE MISSION

To mould well-rounded holistic individuals – professionally sound, socially responsible and spiritually aware – who embody noble values and a right attitude, through Educare (*Integral Education based on Human Values*) that caters to the physical, intellectual, emotional, psychological and spiritual dimensions of the human personality.

THE UNDERLYING PHILOSOPHY

The Sai educational institutions have been established not merely to enable students to earn a living but to make them acquire good traits, lead ideal lives, and give them ethical, moral and spiritual strength. I have established them with a view to inculcate love and teach good qualities to students. They will learn here humility, discipline and faith.

I have established these institutions to impart spiritual education as a main component and worldly education as a secondary one. Education should enable one to cultivate good qualities, character and devotion. The teaching of the institute curricula is only the means employed for the end, namely, spiritual uplift, self-discovery and social service through love and detachment.

This will be a Gurukula - a place where teachers and taught will grow together in love and wisdom - and like the ancient system of education, it will develop in its students a broad outlook and promote virtues and morals, which serve to foster noble ideals in society.

This Institute will be a temple of learning where youth are shaped into self-reliant, contented and enterprising heroes of action and self-sacrifice, for the purpose of serving humanity.

Sri Sathya Sai Baba
Revered Founder Chancellor

THE CORE PURPOSE OF THE UNIVERSITY IS:

- To impart true, ideal education, and mould students as ideal citizens wedded to the service of society.
- To provide the youth with an education which, while cultivating their intelligence, will also purify their impulses and emotions and equip them with the physical and mental disciplines needed for drawing upon the springs of calmness and joy that lie in their own hearts.
- To help students to cultivate self-knowledge and self-confidence, so that each one can learn self-sacrifice and earn self-realisation.
- To blossom students as true representatives of Bharatiya Samskriti, spreading tolerance, charity and brotherhood throughout the World.
- To equip students for the role of future leaders of India, as persons of integrity and character, as embodiments of truth, justice (righteousness), peace and love; and to confer on them the courage to stand up against injustice, indiscipline, immorality and falsehood.

Elaborating the purpose and philosophy of the University, the Revered Founder Chancellor says,

“This Institute has not been established just to prepare you for earning degrees...Teaching you the University curricula, preparing you for the university examinations, and awarding you university degrees – these are only means employed for the end, namely – spiritual uplift, Self-discovery and social service through love and detachment. Our objective is to provide the youth with an education, which while cultivating their intelligence will also purify their impulses and emotions, and equip them with the physical and mental disciplines needed for drawing upon the springs of calmness and joy that lie within their own hearts. Our hope is that by their lives, they will be shining examples of spiritual awareness and its beneficial consequences to the individual and society.”

6.2 Does the Institution has a management Information System

Yes. The University is in the process of implementing a computer based University-wide Management System (UMS) that include modules for managing the Examination Section, Admissions, University Administration, Hostel etc. Moreover, the finance section has Management Information System which facilitates all kinds of information in a very structured manner for meetings of Board of Management, Finance committee, Trust Meetings and such other related administrative matters.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

To supplement the conventional classroom chalk-talk method, the following avenues are created by the University for Effective learning of the subject by the students.

- Class projects for students to extend and reinforce understanding of the concepts taught in the class.
- Dissertation/Project Work is compulsory for all the postgraduate/professional courses in their final year curriculum. This trains the students to develop the capacity to analyze large amounts of data and draw conclusions. It also cultivates the ability to clearly define a research problem and choose an appropriate research methodology to address the research problem.
- Industrial tours/corporate visits are organized in all the professional programmes to complement classroom teaching. These are usually organized at the end of the first year during the summer holidays. The objective of the industry visit is to enable the student to see the relevance of the concepts studied and expose them to different/emerging technologies. These visits also give them opportunities to interact with technical experts and carry out their final year projects in the areas of current interest to the Industry. It also builds a bridge between academia and industry.
- Each department organizes at least one or two seminars/workshops per year and International Seminar/Workshops periodically in focused Thrust areas of Research. These facilitate the exposure of students to the current research/market trends and equip the students to face the real challenges in the World after they complete Undergraduate and Postgraduate studies.
- Internal workshops, special guest lectures are also organized by various departments periodically to make students appreciate industry's perspective to learning.
- The final year professional programmes students are allowed to attend and present high quality research papers in national and international conferences organized by other institutions. (Number of M.Tech. students have attended and presented papers and demonstrations in various Conferences.)
- Students are also encouraged to write articles and publish papers based on the Research Work they undertake as part of their course curriculum or otherwise.

6.3.2 Teaching and Learning

- Lean six sigma interventions are conducted by the students of MBA for solving the problems encountered by the different sister organizations to improve their efficiency and productivity. The students are then certified by a six sigma professional.
- Students are encouraged to take up mini projects as part of the Lab courses.
- As a part of the institute's initiative to improve and maintain teaching quality, the SSSIHL regularly conducts a formal and structured Online Teaching Quality Feedback Student Feedback mechanism at the end of every semester. The same is communicated to individual teachers for their self-introspection and development.
- Participative learning by students through departmental colloquium sessions
- Problem solving sessions and surprise tests are conducted regularly to induce constant touch of the students with the course materials.
- Tutorial Classes are given for every subject to enhance problem solving skills.
- Technology assisted Learning - Access to e-content: repository of video lectures, animated videos on concepts, e-books, white papers, old question papers, etc. which students are permitted to access in their free time.

6.3.3 Examination and Evaluation

The whole admissions test process is conducted through University Management System (UMS) package. UMS is a well-protected and composite software package initiated by the University.

Examination has Continuous Internal Evaluation (CIE) and End semester examination as its components. The CIE comprises assignments, seminars, quiz tests and students participation in class in addition to periodic tests. Some departments using the e-guru platform, administer online test to the students. The evaluation tests are conducted with clockwork precision and the final semester results are declared within a couple of months.

Examination Committee monitors and advises administration regarding performance of students and identify weakness if any. The exams pass-rate for the year 2015-16 for Undergraduate and Postgraduate Programmes are 93% and 95% respectively. The examination and evaluations for Ph.D. Programmes are based on minimum standards specified in the UGC's standards for PhD Programmes.

6.3.4 Research and Development

- Sri Sathya Sai Institute of Higher Learning (SSSIHL) has identified thrust areas of research around which several research projects and studies are designed, cutting across traditional subject boundaries.
- The research activities of faculty and students at SSSIHL envision exploration and promotion of socially relevant, rural-friendly, translational research encompassing three domains - Health, Environment and Energy, as elucidated below. This section details the research objectives, relating to aforementioned thrust areas, their outcomes and applications related to these three areas, along with the state-of-the-art infrastructural facilities that have been established to accomplish the well designed objectives encompassing the thrust areas.
- SSSIHL Central Research Instruments Facility (CRIF) has been created with the objective of providing the latest and advanced characterization/analytical tools to carry out translational research in various areas of Science and Technology. These in essence, include physical, biological, chemical, materials science, food and also computational and interdisciplinary areas. SSSIHL CRIF also houses a complement of specialized research facilities housing several sophisticated state-of-the-art instruments in the areas of disease biology and plasmonics.
- This would enable our researchers to keep pace with the scientific developments taking place globally; and to publish their research findings in peer reviewed high impact journals; and through their concerted efforts to carry out research in cutting edge areas of Science and Technology and contribute to the needs of the society at large.
- This facility would be used extensively by postgraduate and doctoral students as well as by faculty members across all the campuses of SSSIHL. Full-time technical assistants with specific expertise operate and maintain the instruments. The facility is further supported through a constituted body of dynamic faculty members as instruments in-charge and full-time Research Associates assist in meeting the intended research objectives at the Centre.
- The core facilities are shared resources offering a range of services to the research community at SSSIHL. Indeed, these will further strengthen, expand inter and intra-university research collaborative capabilities of our faculty.
- Internal Quality Assurance Cell, Research Advisory Board, departmental Research Committee and Research Conferment Cell provide valuable inputs to the research faculty and students.
- Regular Seminars, Workshops are organized by each department in their chosen contemporary areas of interest. An interdepartmental Science Colloquium is conducted once in a fortnight. The colloquium provides an opportunity for doctoral research scholars and the teaching faculty to share their research experiences, insights and observations with fellow researchers. Complete details are provided in Annexure- II.
- Visiting Scientists, Educationists and Executives from Industry visit the University regularly, interact with faculty members, and research scholars thereby, making them aware of recent developments in their respective subject areas.

6.3.5 Library, ICT and physical infrastructure / instrumentation

- All the faculty have access to computers and are encouraged to explore various knowledge data bases. The University has 1Gbps Internet connectivity under the aegis of the National Knowledge Network (NKN), for academic and research pursuits of staff and students. All the campuses of the University are interconnected via 2Mbps leased lines. The University is part of INFONET, E-Journal Consortium. We therefore get access through INFLIBNET to nearly 10,000 online Journals in various disciplines, from fifteen International Publishers. All these Journals are available to all the students and staff over our University campus network. These Journals cover various teaching and research disciplines pursued by the department.
- Students have access to online course material in the browsing centers of the institute where they can pick up skills from the tutorials of renowned faculty and information about the latest trends in their fields of study.
- The Library every year procures latest books pertaining to the different fields of study based on the recommendation of the respective HoDs. This includes latest editions
- Teaching aids do facilitate effective teaching as well as learning, and all the required facilities like LCD projectors, OHPs, Magnetic White Boards, Smart Class rooms etc are available. They enhance the quality of teaching and aid the students to grasp the lessons and concepts thoroughly. Multimedia learning centres and language labs are also available for the students to pick up the necessary skills.
- Library in the hard and electronic form is used extensively by teachers as well as students. **Library books Purchase Committee** decides the quality and need for purchasing books and journals. The central administration decides based on the recommendations of the Committee with Vice-Chancellor as the Chair-Person.
- State-of-the-art Central Research Instruments Facility (CRIF) will be operational in the next academic year which will go a long way in improving the quality of research in the institute. The Annexe building which is already operational in the year 2015 houses smart classrooms, lecture theatres, well equipped labs in addition to seminar hall and conference rooms. This helps in enhancing the quality of academic learning of the students.
- The finance section of the university works on Tally for accounting and TDSMan for online TDS filing. The university is in the process of graduating to SaralPaypack a software which takes care of the whole payroll of the university.

6.3.6 Human Resource Management

- It is very special to have somebody of the stature of Bhagavan Sri Sathya Sai Baba as the Founder Chancellor of this university, which may not be possible for normal universities. He says “My life is my message”. Bhagavan’s love, omniscience, omnipotence, and omnipresence and his love and concern for the students and teachers of his university make a great deal of difference. As such students, teachers, administrators, and award staff who have experienced the power of his love would do work of their own volition irrespective of mundane considerations, with complete dedication.
- Having said that, the university takes care of the career advancement of all teaching and non-teaching staff in a very regular and structured manner.
- Workload is allocated to the faculty in a departmental meeting. This helps in participative management where workload is shared in a cohesive way with mutual discussion and consultation. This makes the departments work as one unit and shortfalls, if any, arise other faculty members step in to fill that gap. This brings to forth the dictum of sharing and growing.
- Sai Krishna Teaching awards for best teacher, motivates to teachers to give the best.
- The teachers and staff can also avail the services of the two general and two super specialty hospitals which are run totally free of cost by the parent trust.
- They are also provided accommodation at a very nominal cost. Sports and recreational facilities are also available for the staff and faculty.
- Congregational singing and other spiritual activities in Prasanthi Nilayam, the abode of the revered founder chancellor, gives food for the soul to all the staff and faculty.
- Children of the staff get free education in the schools run by the parent trust, Sri Sathya Sai Central Trust.
- Senior executives from various organizations where the alumni of the university are working or have worked in the past, provide valuable feedback during their visits to Prasanthi Nilayam regarding them (alumni) and also about the inputs and skills to be provided to the students in future. They also give suggestions regarding curriculum updating.
- The education in Sri Sathya Sai Institute of Higher Learning (Deemed to be University) is IMPARTED TOTALLY FREE OF COST for all courses of study.

6.3.7 Faculty and Staff recruitment

- Through Selection Committee as prescribed by the UGC under the regulations of Deemed to be Universities, 2010.
- An employment notice is published in the website of the University inviting applications for faculty positions. The employment notice specifies and eligibility criteria for faculty position. On receipt of applications, the same will be sent to the Head of the concerned Department for scrutiny. Eligible candidates are called for giving a demonstration lecture to teachers and students. Based on the demonstration lecture, eligible candidates are shortlisted and called for an interview by a duly constituted Selection Committee consisting of the Vice-Chancellor as Chairperson, two external subject experts, Dean of the Faculty, and Head of concerned Department.
- Based on the qualifications, experience and performance in the interview and if found suitable, the Selection Committee recommends the candidate for appointment as Assistant Professor/Associate Professor, as the case may be.

6.3.8 Industry Interaction / Collaboration:

The university has taken many steps in the past few years in bringing the various disciplines at the university and SSSIHMS together to discuss issues from various perspectives and identify projects that will benefit society. This has led to interdisciplinary collaborations of SSSIHL with SSSIHMS and external agencies in areas such as the rapid detection of endemic diseases, diabetic retinopathy, development of a cost effective multi-modal microscope, regenerative medicine and tissue engineering, etc.

- **Collaboration with external agencies:**

The Dept. of Mathematics & Computer Science has research collaborations with the following organizations:

- ARM
- Zentron Labs
- NVIDIA (We are recognized by NVIDIA as CUDA Teaching and Research Centre)
- IBM
- DRDO: ADE
- ISRO: ADRIN

At the end of each academic year, final year graduating students from various departments go on official visits to reputed organizations to get a feel of how theoretical knowledge is translated in real world. Some companies visited in 2015-16 were L&T, Sundaram Clayton, LEOS-ISRO, TAFE, Akshaya Patra, Mysore Fruit Products, Olive Life Sciences, UNIBIC Biscuits, CII Green Business Centre etc.

6.3.9 Admission of Students

6.4 **Welfare schemes**- Education is imparted completely FREE OF COST in this institute and for those students who are under privileged, the mess charges are also waived. Teachers and non-teaching staff of the institute can avail residential facilities at a nominal cost. Two super specialty hospitals and two general hospitals one each in Prasanthi Nilayam and Bengaluru cater to the health needs of the students, teachers and non-teaching staff of the institute. There are fair price shops run by the parent trust where all the essential day to day items are available for a nominal price.

6.5 Total corpus fund generated

6.6 Whether annual financial audit has been done Yes No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No		Yes**	VC
Administrative	No		Yes**	VC

** Research Conferment Cell, Internal Quality Assurance committee, Internal Audit

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes No
For PG Programmes Yes No

Note: Double evaluation of scripts takes more than 30 days.

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

Examination Reforms Unit sponsored by UGC existed from 1985-1992. The activities of it are being carried on, viz., such as 10 points scale grading system, semester system, structured question papers, CIE and ESE pattern, question bank inputs, double evaluation in PG and professional programmes etc.,

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

6.11 Activities and support from the Alumni Association

The alumni of the institute play an important role in helping graduating students find suitable employment opportunities in their chosen vocation. They also help in academic inputs and industrial exposure.

They achieve this through an outreach programme called CATALYST (Corporate Aptitude Training – an Arena to Leverage Your Skills and Talents) where graduating students are coached in soft skills and in preparing résumés, the application process, interview techniques, networking and the like. The programme has been very successful.

Alumni contribute to the development of the institution in many ways. They provide valuable feedback regarding various courses and help in updating them. They help the alma mater in the conduct of annual workshops, seminars, and conferences. They are a part of the placement structure for the outgoing batch of students each year. They assist the departments by providing the list of latest references followed in similar programmes of overseas universities.

Alumni also help in formulation of courses and syllabus as members of the Board of Studies, help the research scholars with their research. Also help the students appreciate the unique value based education model of the institute.

6.12 Activities and support from the Parent – Teacher Association

The support of the parents is sought in the following manner:

Parents of all the new students have a meeting with the warden, director and faculty at the time of joining the institute.

Feedback is taken from the parent at the end of each semester. Hostel warden sends a progress report at the end of each semester and parent's feedback and comments are received. Parents are required to meet the director/warden/resident teachers one in an academic year to appraise them of the progress of their ward in five dimensions of education practiced at SSSIHL namely intellectual, physical and cultural, devotional and service.

6.13 Development programmes for support staff

Career Advancement Scheme regularly promotes the non-teaching staff and they are provided with the timely increments. Courses are conducted to increase their computer literacy and their skill sets are increased by job rotation.

6.14 Initiatives taken by the institution to make the campus eco-friendly

All the Campuses have facilities like use of biogas, vermicomposting, use of eco-friendly briquettes for cooking, solar heaters for hot water, water harvesting facility, proper waste disposal. The university also promotes students to take up tree plantation programmes on a regular basis.

Criterion – 7

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

The Campus Hostel Management Committee (CHMC) was created to cater to issues related to faculty and students, curricular, co-curricular and extra-curricular activities of students, management, parity across campuses, campus-working schedule, vacant land use, campus-workers welfare, facilities like renovation of bathroom complex in the hostel, vehicle parking, garbage disposal, sports-cultural & self-reliance calendar, provision for greater IT infrastructure access to the students.

The Leadership team was created to deal with issues such as: policy regarding extra classes, support to young faculty, use of expertise available, role of HoDs, uniform policy across campuses, student internship, students appearing for national examinations, orientation to newly joined faculty, mentoring of young teachers, workshop on examination evaluation and question paper setting, evaluation of various aspects of the Sri Sathya Sai System of Integral Education, Integral Items – maintaining status-quo, support to hostel by campus-teachers, campus-hostel committees, student mentoring etc.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

As explained under the point 2.15 w.r.t the plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year have been explained in detail. The initiatives that the institute needs to take in order to improve and sustain quality in teaching and research were discussed in the meeting of IQAC. The points that emerged from this discussion and action taken are listed below.

- Promoting Excellence in Research and Teaching:
- Collaborative Research with National and International Agencies to give a fillip to research quality
- Faculty Training in-House and in Other External Agencies:
- Well-Structured UG-PG-MTech-PhD Programs and augmenting with new programs:
- Promoting Public Awareness of SSSIHL's Contribution and its involvement in imparting Quality education
- Leadership Team

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

- 1) Academic:
Sri Sathya Sai System of Integral Education is being imparted totally free of cost with stress on experiential learning
(Please refer to **Annexure-VII** for details)

- 2) Administrative:
Online Teaching Quality Feedback from the Students.
(Please refer to **Annexure-VIII** for details)

Best Practices at SSSIHL since Inception 1981:

- Socially relevant projects are encouraged
- Exposure to top academia and industrialists
- Committed and dedicated teaching fraternity
- Totally free education of high quality
- Values-based Integral education
- Vibrant academic environment
- Holistic ambience catering to body, mind and spirit
- Rich student diversity
- Preceptorial System
- Awareness Programme
- Self-reliance programmes
- Extension programmes – Grama Seva
- Annual Sports and Cultural Meet – 100% participation
- Punctuality in all schedules
- No student unrest at any point of time.
- No concept of Ragging at all in the hostels

The Institute works with clockwork precision:

- Academic Year commences on the 1st of June every year.
- Academic Year concludes on the 15th April every year.
- Admission Entrance Examinations for all Programmes is held from April 17-30 every year.
- Convocation ceremony of the Institute is held on the 22nd of November every year.
- April 15th to May 31st – Summer Vacations every year.
- 15 days Winter Vacation in October-November every year.
- Examination results always declared in time – within a month of the examinations for Undergraduate Programmes.

7.4 Contribution to environmental awareness / protection

A two credit Environmental Awareness is offered in the first and second semester of all the Undergraduate students. The department of Biosciences offers elective courses in Environment.

7.5 Whether environmental audit was conducted? Yes * No

* Environmental audit is done at all the Campuses and Hostels in an informal way. It is pertinent to share the following processes carried out in the campuses which show concern for the environment:

Energy conservation: All the Campuses and Hostels promote usage of LED bulbs for energy consumption. Combustible non-toxic waste like coconut shells, paper, carton boxes which is produced in the hostel is used as fuel for the boiler in the kitchen.

Use of renewable energy: Solar heating panels are used in all the four hostels as a renewable energy for the requirement of hot water for the students and in the kitchen. Solar panel street lights are also used. Kitchen is a zero LPG zone running on briquettes which is made by saw dust, groundnut shells, rice husk. The institute is planning to graduate to solar power in a big way in the coming years.

Water harvesting: Some of the hostels have created a provision for water harvesting. The rain water from the hostel building flows into a specially made soak pits on either side of the hostel through pipes and a cement channel. This helps in recharging the ground water for meeting the hostel water requirements.

Efforts for Carbon neutrality: Biomass gas and gohar gas is used in place of fossil fuels and fire wood thus preventing pollution of the atmosphere. The institute campuses have lot of greenery which reduces the CO₂ content though the institute is located in dry region of Rayalaseema, Andhra Pradesh.

Plantation: Tree plantation is taken up on a regular basis by the students under the guidance of the hostel teachers. The students participate in planting trees like neem, coconut and *kanuga* (local fast growing variety) in and around the campuses under self-reliance activities. In 2014-15 and 2015-16, the students took up the initiative of cleaning and increasing the green cover of the banks of river Chitravati flowing through Prasanthi Nilayam. Many flowering plants like gulmohar, *punnaga* (Indian laurel), and bougainvilleae were planted along the banks.

e-waste management: Institute adopts buy back policy and obsolescence removal policy and through which e-waste management is controlled.

Drip irrigation facility is available in the Brindavan Campus of the institute.

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis):

SWOC analysis

Strength (Salient Features)-

- **Unique blend of Spiritual and Secular Education-** Following the dictum of Revered Founder Chancellor, 'Education is for life and not merely for a living', this institute helps a student in acquisition of both secular and spiritual knowledge. This enables a student to connect to his/her Divine inner self resulting in a calm, focused and intuitive mind.
- **Modern Infrastructure-** This Institute provides modern infrastructure to the students like digital classrooms, high speed broadband connectivity, well-equipped libraries & research laboratories

and excellent sports facilities. It houses an indoor stadium, an outdoor stadium, a planetarium, accommodation for teaching and non-teaching staff and has two super-specialties and two general hospitals for health related issues (free of cost). The student-computer ratio of the institute is 2.5:1 which is very high compared to the national average.

➤ **Academic Excellence-**

- More than 70% of the teachers have Ph.D. qualification and another 15% are pursuing doctoral research. There is a 33% increase in teaching faculty strength and 57% increase in doctoral research scholars in the last four years. Research Scholars represent 6% of the total student population at SSSIHL, a figure far above the national average. Experts from academia and industry visit the institute from time to time and share their rich experience with students in forums like departmental colloquium, guest lectures, workshops and conferences held in the institute.
- The university has adopted the semester system right from its inception (over 34 years) and a credit based grading system on a 10 point scale comprising continuous internal evaluation (CIE) and End Semester Examination (ESE) for the students. This helps the students to progressively improve their performance and have a sound conceptual knowledge. The pass percentage of students since the inception of the institute is well above 90% in undergraduate programmes and 96% in postgraduate and professional programmes. On an average, 40 % of the students secure distinction in the semester examination and one out of every four final year post-graduate students qualify in national exams such as GATE/JEST, CSIR-UGC-NET. The pass percentage in competitive examinations is far above national average.

➤ **Compulsory Residential Character-** The students live in the hostel following the ideal of ‘each lives for the other and all live for God’. This equips them with the soft skills and life skills in a practical way. The hostel runs as a self-sufficient unit where the students take care of all activities of the hostel. This makes them appreciate the dignity of labour and spirit of work. They also acquire the traits of adaptability, empathy and team work. Nearly one third of the teaching faculty stay with the students in the hostel and are readily available round the clock for students to freely discuss both academic issues and personal matters with them.

➤ **Socially Relevant Research-** According to our Revered Founder Chancellor, knowledge that is not translated into skills that benefit society is useless. Thus, research topics across all departments are chosen with great diligence, leading to translation research or directed basic research like sensors for water monitoring, Resonant optical gyroscope, Autologous chondrocyte implantation, Multimodal Microscope, deflouridation, Spirit at Work, Values in Management etc.

➤ **Free Education-** The Institute offers education TOTALLY FREE OF COST for all courses of study.

➤ **Service Dimension-** The students are encouraged to experience the deep inner satisfaction of giving joy to others through selfless service. The students under the able guidance of the teachers run the hostel as a self-sufficient unit. They take care of departments like Housekeeping, Health Care, Publications, Culinary tasks, Entertainment, Provision Stores without any external support. These self-reliance activities enable students to become self-confident and independent, and also contribute to leadership and entrepreneurial development. The students and teachers of the institute participate in Grama Seva, a sacred activity of serving nearly 3,00,000 poor and needy of the nearly 150 villages around Puttaparthi. This is being modified from this year onwards to

make it an ongoing activity rather than a one off event with an objective to give a better hands on experience to the students. Activities being contemplated are- Skill development of youth, Vocational training, inculcating cleanliness culture, tree plantation.

- **Cultural Dimension-** SSSIHL on an average has student representation from almost all the states of India making it rich in diversity. This helps in a healthy exchange of ideas, beliefs and facilitates mutual appreciation of cultural nuances, instilling in them the virtue of 'Unity in Diversity.' All students are also exposed to life lessons in forums like Summer Course in Indian and Spirituality, Awareness Courses, Moral Classes, Dramatics, Public speaking etc.
- **Physical Dimension-** The students are trained to overcome their physical limitations and strive for excellence. Daily yoga classes are conducted for the students at the hostel. Students have to participate in compulsory morning exercises and games every day. All students enthusiastically participate in different sports and cultural events in the 'Annual Sports and Cultural Meet'.
- **Gender Sensitivity-** Gender related problems never occur in this university as the campuses for men and women are different with dedicated men and women staff respectively. Revered Found Chancellor, Bhagawan Sri Sathya Sai Baba has said, "Women should never be slighted or treated with disrespect. Wherever women are honoured, there is prosperity and happiness.' Students are taught this ideal of respect for women during their course of study.
- **Clockwork Precision-** The academic year commences on 1st June and ends on April 15th the subsequent year. The results of every semester are declared within two and half months of the end of the semester.

Spirit of Camaraderie- The students live in the hostels in a spirit of camaraderie. One alumnus recalls, "When I entered the hostel for the first time, the seniors came forward and helped me to feel at home. I was surprised that the word **ragging** is unheard of in Sri Sathya Sai Hostels."

Weaknesses-

- Though the system at SSSIHL doesn't have any obvious weakness, the newly admitted students in our unique system of Integral Education may have some difficulties to adjust to the system in the initial stages. Nevertheless, the same students after a couple of months of experiencing the system seem to enjoy the system at SSSIHL and continue to practice the same in future life.

Opportunities-

- Conducive atmosphere for students to achieve academic excellence.
- Lot of opportunities for students to develop and chisel their academic skills and talents.
- Students can go beyond the mundane to enquire and explore the real purpose of life and inculcate virtues of ethical and moral living.
- Due to the rural set up of the institute, there is immense potential to undertake need based research for the benefit of the society.

Challenges-

- In this internet age with so many distractions, temptations and instant gratifications, it is the biggest challenge to make young minds of the students to be focussed and self-sufficient and inspire them to dive deep within to know the true purpose of life.
- Maintaining Sathya Sai System of Integral Education for making ideal Sai student / Ideal Citizen.
- Contemplating on multi-disciplinary programmes and advanced research with a policy on social relevance for the neighbourhood and the society.

8. Plans of institution for next year:

Road Map Ahead:

The quality initiatives SSSIHL need to take in order to improve and sustain quality in teaching and research were discussed. The points that emerged from this discussion are listed below.

- Curricula of select UG, PG and Professional Programmes are revisited on a regular basis to meet emerging global challenges.
- Alignment of thrust areas of teaching and research with the vision of SSSIHL.
- The emphasis is going to be on quality research for societal benefits to strengthen the ongoing scientific collaborations with like-minded organizations both at national and international levels.
- To support students to think in a focussed manner by assigning project oriented work which will give direction to their carrier which they would like to choose in future.
- SSSIHL would like to have a robust quality assurance system in place.
- Continues to have faculty training in-House and by deputation to other External Institutions (National and International)
- Promoting Green Initiatives in the institute.
- Continue to address to the needs of villagers by running the programmes such as soft-skills, computer literacy, promoting rural entrepreneurship, helping farmers to identify soil / weather compatible crops through the research efforts of faculty, conversion of waste materials into useful products.
- Certificate course in skill development once a year has been planned.
- The focus will be on the synthesis and characterization of a variety of multifunctional materials.



Signature of the Coordinator, IQAC

Name: Dr. Pallav Kumar Baruah



Signature of the Chairperson, IQAC

Name: Prof. K B R Varma



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
(Deemed to be University)

Academic Calendar 2015/16

SUMMER SEMESTER		
JUNE		
1	Mon	SUMMER SEMESTER BEGINS
12-14	Fri-Sun	Summer Course in Indian Culture & Spirituality
JULY		
18	Sat	<i>Eid al-Fitr*</i>
20-23	Mon-Thu	Supplementary End-Semester Examinations
31	Fri	<i>Guru Purnima*</i>
AUGUST		
15	Sat	<i>Independence Day*</i>
SEPTEMBER		
5	Sat	<i>Sri Krishna Janmashtami*</i>
17	Thu	<i>Ganesh Chaturthi*</i>
25-28	Fri-Mon	Study leave for End-Semester Examinations ^{††}
OCTOBER		
Sep 29-11 Oct	Tue-Sun	End-Semester Examinations
2	Fri	<i>Gandhi Jayanti*</i>
13-22	Tue-Thu	Dasara Celebrations Grama Seva Activities ^{††}
20	Tue	<i>Durgashtami*</i>
21	Wed	<i>Mahanavami*</i>
22	Thu	<i>Vijayadasami*</i>
24	Sat	<i>Muharram*</i>
25	Sun	SUMMER SEMESTER ENDS

WINTER SEMESTER		
OCTOBER		
26	Mon	WINTER SEMESTER BEGINS
30 October – 13 November WINTER VACATION		
NOVEMBER		
11	Wed	<i>Deepavali*</i>
14	Sat	Winter Semester Resumes
14-15	Sat-Sun	Akhanda Bhajan
18-23	Wed-Mon	Bhagawan Baba's 90 th Birthday Celebrations ^{††}
22	Sun	SSSIHL 34 th Annual Convocation
23	Mon	<i>Bhagawan Baba's 90th Birthday*</i>
DECEMBER		
25	Fri	<i>Christmas*</i>
JANUARY 2016		
1-15	Fri-Fri	Annual Sports & Cultural Meet ^{††}
13	Wed	<i>Bhogi*</i>
14	Thu	<i>Makarasankranti*</i>
26	Tue	<i>Republic Day*</i>
FEBRUARY		
22-25	Mon-Thu	Supplementary End-Semester Examinations
MARCH		
7	Mon	<i>Mahashivaratri*</i>
25	Fri	<i>Good Friday*</i>
26-31	Sat-Thu	Study Leave for End-Semester Examinations ^{††}
APRIL		
8	Fri	<i>Ugadi*</i>
15	Fri	<i>Sri Ramanavami*</i>
1-15	Fri-Fri	End-Semester Examinations
15	Fri	WINTER SEMESTER ENDS
24	Sun	<i>Sri Sathya Sai Aradhana Mahotsavam</i>
16 April – 31 May SUMMER VACATION		
17-30 April		SSSIHL Admissions Tests
28-29 May		Annual Workshop for Teachers
Wed, 1 June 2016		Academic Year 2016/17 commences



*Holiday

††Classes Suspended

Note: The university will remain closed on Tue, 8 Mar 2016, the day after *Mahashivaratri*.

Academic Calendar 2015/16 | 2 Jul 2015

The colloquium provides an opportunity for doctoral research scholars, teaching faculty and visiting experts to share their research experiences with one another. It breaks down barriers of communication and helps merge traditionally distinct scientific disciplines, thereby creating new opportunities for research.

All the science departments (across campuses) of the university participate, using the videoconference facility.

The topics for 2015/16 were:

DATE	PRESENTER	DESIGNATION	TOPIC
20 Jun 2015	Dr. Ravishankar Polishetty	Cardiovascular Surgeon, Canada	From Ayurveda to predictive analytics in systems biology
27 Jun 2015	Prof. B V Rathish Kumar	Professor, Department of Mathematics and Statistics, IIT Kanpur	An overview of WEBSFEM in modelling and simulation
11 Jul 2015	Prof Shyamal Ghosh		Air pollution control vis a vis sustainable development
25 Jul 2015	Prof Mukunda Rao	Visiting Professor, VIT	Clinical implications of breathing
22 Aug 2015	Research scholars of the Chemistry Department	Doctoral Research Scholars	Research work carried out at Japan Institute of Science and Technology (JAIST)
19 Dec 2015	Prof. K B Chandran	Professor, University of Iowa, USA	Applications of modelling in the human circulatory system

Aum sri sai ram

SSSIHL-SCIENCE ALUMNI INTERACTION ON 8th -9TH August, 2015
CONFIRMED ACTION PLAN FOR THE ACADEMIC YEAR 2015-16

1. **Workshop / Awareness program** on Patenting procedures and implications to be organized **for all science faculty**

Alumni coordinators:

- i. Dr.K.Anil Kumar, TCL, Pune
- ii. Dr.Kumar Rajamani, Rober Bosch, Bangalore
- iii. Mr.Eswar (Tejas- Chennai)

SSSIHL coordinators:

- i. Dr. R. Sai Sathish
- ii. Dr.Pradeep B.E.

2. **Workshop /Awareness program** regarding the Project funding from DST, other funding agencies of Government and Industry for **all science faculty**

Alumni coordinators:

- i. Prof. B.R.Prasad, IIA, Bangalore
- ii. Dr.K.Anil Kumar, TCL, Pune

SSSIHL coordinator: Prof.Siva Sankara Sai, Dean

3. All science departments have agreed to take the help of alumni in
- i. Updating the syllabus in various courses and offering new electives in chosen specialization areas
 - ii. Help in updating the data regarding the alumni in academic field
 - iii. Using them as Examiners (paper setting, viva etc)
 - iv. Research collaboration

1

INDIVIDUAL DEPARTMENTAL ACTION PLANS

A. Department of Mathematics & Computer Science (DMACS):

- I. Monthly colloquium talks by Alumni on 2 & 3rd Periods on Saturday colloquium hours for all the 10 months of academic year 2015-16. These are hands on workshop sessions on new interesting technologies. All ready three sessions in June, July and August are completed.

Alumni coordinator:

- i. Mr.B.Krishna Murthy, HP, Bangalore

SSSIHL coordinator:

- i. Dr.Raghunath Sharma, Assistant. Professor

- II. Collaboration in Mathematical Modelling of the Agricultural crops area with reference to Natural farming: Predator-Prey Modelling

Alumni coordinator:

- i. Dr.K.Anil Kumar, TCL, Pune

SSSIHL coordinators:

- i. Dr.Vamsi D.K.K. Assnt. Professor

B. Department of Bio-Science (DOB):

- I. Establishment of a bio-repository platform for management of clinical data from SSSIHMS that include genomic, proteomic, metabolomic, histological, microbiological, biochemical and other patient data that the DOB uses in clinical research that is actively pursued.

Alumni coordinator:

- i. Mr. Venkat, Dell, Chennai / Bangalore?

SSSIHL coordinator:

ii. Dr.S.Venkatesh, Assistant. Professor

II. Laboratory skill development interaction for the research scholars of DOB in preparation of competent bacterial cells and bacterial transformation

Alumni coordinator:

- i. Dr. Shiva Kiran, DFRL, Mysore
- ii. Mr.Bhanu Ramanand

SSSIHL coordinator:

- i. Dr.S.Venkatesh, Assistant. Professor

C. Department of Physics (DOP):

I. Mentorship for all final year M.Tech students is taken up.

Alumni coordinator:

- i. Mr. Devarajan, Infinera, Bangalore
- ii. Mr. Satyabrata Mohanty, Heterogeneous, Chennai

SSSIHL coordinator:

- i. Prof.Siva Sankara Sai, Dean

II. Elective course on Optical Networks being offered for the I Year M.Tech(OEC) students in the 2nd Semester.

Alumni coordinator:

- i. Mr. Devarajan, Infinera, Bangalore
- ii. Mr. Satyabrata Mohanty, Heterogeneous, Chennai

SSSIHL coordinator:

- i. Dr.Gowrishankar, HOD

D. Department of Chemistry (DOC):

- I. Lab safety protocols and Safety skills training program for waste disposal methods etc. will be taken up Alumni working in Shell Company.

Alumni coordinator:

- i. Mr.Mouli Krishna, Shell company, Bangalore

SSSIHL coordinator:

- i. Dr. Rajesh Babu, Assistant. Professor

Dr.S. Prathap Chandran, Assistant. Professor

- II. Training of specific lab skills in the Industry during the summer /winter vacations to the project students at TCL, Pune

Alumni coordinator:

- i. Dr.K.Anil Kumar, TCL, Pune

SSSIHL coordinator:

- i. Prof.G.Nageswara Rao, HOD



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
(Deemed to be University)

CONFIDENTIAL FEEDBACK ON TEACHING QUALITY

The purpose of this feedback/assessment is to help improve the overall quality of teaching.

- ☞ *Kindly respond to the following questions in relation to the quality of teaching of this course.*
- ☞ *Your **honest opinion** is solicited and your feedback will **not** have any influence on your grade.*

Indicate the response to the following questions on a scale of 1 to 6 where **1 is Strongly Disagree** and **6 is Strongly Agree**.

CORE TEACHING

- 1 The course was covered effectively in an organized manner (includes uniform spacing of course lectures and assignments).
- 2 Lectures were communicated effectively (i.e. clarity of expression, reinforcement of key ideas).
- 3 Passion in teaching the subject was evident.

PEDAGOGY

- 4 Appropriate teaching aids (includes blackboard/slides/videos/demos), when necessary, were used effectively.
- 5 A variety of questioning techniques were employed to enhance learning.
- 6 A broad perspective of the subject was given to stimulate learning.

CLASS INTERACTION

- 7 Class participation/discussion was encouraged.
- 8 Accessibility for clarifying doubts/queries (inside and outside the class) was adequate.
- 9 Doubts/queries on the subject were answered convincingly.

CONDUCT OF CIE

- 10 Syllabus was taught comprehensively.
- 11 Learning was enhanced by the effective use of assignments and tests.
- 12 Grading of assignments/answer scripts was impartial.
- 13 Students were given timely feedback on their performance.

STUDENT-CENTRIC TEACHING

- 14 Classes kept the students interested and focused.
- 15 Students' point of view in class discussions was considered.
- 16 Openness to accept errors & omissions was shown.

DISCIPLINE AND VALUES

- 17 Discipline was maintained in class.
- 18 Values and the teachings of Bhagawan were seamlessly integrated into the teaching process.

OVERALL RATING

- 19 How would you rate the overall quality of teaching?



Teaching Quality Feedback

Questionnaire for Experiment based Practicals:

- P1: Effective theoretical guidance related to practicals was given.
- P2: Planning and execution of practicals were explained.
- P3: Appropriate methodology to carry out the practicals was explained.
- P4: Practicals were supervised effectively.
- P5: Doubts and questions raised during the practicals were clarified effectively.
- P6: Helpful comments/suggestions were given on lab records for improvement.
- P7: Time given for practicals was adequate.
- P8: Equipment for practicals were in working condition.
- P9: Prescribed minimum number of practicals were completed and performed.
- P10: Evaluation of practicals was fair and impartial.
- P11: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)



Teaching Quality Feedback

Questionnaire for Software Laboratory:

- P1: Effective theoretical foundation related to programming exercises was given.
- P2: Planning and execution of programming or mini-project related exercises were explained.
- P3: Appropriate methodology to implement the software solution was explained.
- P4: Software lab sessions were supervised effectively.
- P5: Doubts and questions raised during the programming sessions were clarified effectively.
- P6: Assignments were corrected on time.
- P7: Constructive comments/suggestions were given on assignment/ lab exercises.
- P8: Time given for exercises/assignments was adequate.
- P9: Computing equipment were in working condition and of capability needed to perform the tasks.
- P10: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)

Name of the Student: **ABHISHEK GANAPATHY**
 RegdNo: 16451 Class: IMBA Room No: B11

FEEDBACK FROM PARENTS

We feel extremely happy and blessed that our son Abhishek has been given this opportunity to pursue his education at the Lobis feet surrounded by such pious, dedicated and inspiring teachers and staff of the institution.

Our heartfelt gratitude goes to the teachers for being continuously, on a day to day basis, a role model for the students and promoting the most important values of brotherhood and humanity as an integral part of the education. With heartfelt gratitude at the Lobis feet
 Jai Sai Ram Sithu G

Name of the Parent / Guardian	K.K. GANAPATHI
Email id of Parent/Guardian (Compulsory)	ganapathykk@yahoo.com
Contact mobile number of parent / Guardian (Compulsory)	98196-74586
Signature of the Parent / Guardian	K.K. Ganapathi

Note: This copy duly acknowledged by Parent / Guardian, should be returned to the Room Teacher at the time of rejoining Hostel on 03rd November, 2016.

Research Publications in Peer reviewed Journals

Faculty of Sciences

Sai Hareesh A and Chandrasekaran V, Color Child: A Novel Color Image Local Descriptor for Texture Classification and Segmentation, *Pattern Analysis and Applications*, 19(3), 821-837, (2016).

Bharadwaj B V K and Baruah P K, Existence of a Non-Oscillating Solution for a Second Order Nonlinear ODE, *Communications in Mathematics and Applications*, 6(2), 41-47, (2015).

Ajith Padyana and Baruah P K, Performance of DNA Sequences Compression on Multicores and GPUs, *RGN Publications*, 7(3), 131-147, (2015).

Sree Ranga Vani K and Prasada Rao D R V, Effect of Thermal Radiation on Unsteady Convective Heat Transfer Flow of a Rotating Nano-Fluid Past a Vertical Plate, *Pelagia Research Library, Advances in Applied Science Research*, 7(3), 83-94, (2016).

Sree Ranga Vani K and Prasada Rao D R V, Effect of Non-Linear Density Variation on Convective Heat and Mass Transfer with Third Order Boundary Conditions, *Mathematical Theory and Modelling*, 5(12), 112-123, (2015).

Sree Ranga Vani K and Prasada Rao D R V, Combined Influence of Chemical Reaction, Dissipation and Radiation Absorption on Convective Heat and Mass Transfer Flow in a Non-Uniformly Heated Vertical Channel, *Advances in Physics Theories and Applications*, 47, 32-44, (2015).

S Deepa, Dwaraka Rani Rao and Venkataramaniah K, Precision Electron–Gamma Spectroscopic Data from The Beta Decay of ^{153}Sm , *Radiation Physics and Chemistry*, 119, 207, (2016).

L A Avinash Chunduri, Aditya D Kudekar, Sandeep Patnaik, Vishnu Dev B, Tanu Mimani Rattan and Venkataramaniah K, Carbon Quantum Dots from Coconut husk: Evaluation for Antioxidant and Cytotoxic Activity, *Materials Focus*, 5(1), 55-61, (2016).

Sivasubramanian V, Osho Sai and Venkataramaniah K, Renal Perfusion Phase Curve Analysis in DTPA Renal Scintigraphy- Significance and Utility, *Asian Journal of Medical Sciences*, 7(2), 44-48, (2016).

Rahul Namdeo, Sivasubramanian V, Vijay Sai K and Venkataramaniah K, Scintimetric Evaluation in the Assessment of Delayed Union of Skeletal Fractures, *International Journal of Innovative Research and Development* (2015). <http://www.ijird.com/index.php/ijird/article/view/74783/58198>, Vol. 4(8), 362-365, (2015).

Pradyumna Mulpur, Sairam Yadavilli, Praharsha Mulpur, Neeharika Kondiparthi, Bishwambhar Sengupta, Apparao M Rao, Ramakrishna Podila and Venkataramaniah K, Flexible Ag-C60 Nano-Biosensors Based on Surface Plasmon Coupled Emission for Clinical and Forensic Applications, *Physical Chemistry Chemical Physics*, 17(38), 25049-25054, (2015).

Sai Kiran Aditha, L A Avinash Chunduri, Sandeep Patnaik, Tanu M Rattan and Venkataramaniah K, $\text{Cu}_2\text{ZnSnS}_4$ Synthesised Through a Low Cost Reflux Method, *Nanotechnology Reviews*, 4(5), 473-478, (2015).

E Rajasekhar, R Jeevan Kumar, K L Narasimham and Venkataramaniah K, Comparison of Gamma Ray Attenuation Coefficients of Wood Materials with Theoretical Values, *Journal of Global Biosciences*, 4(1), 1836-1841, (2015).

- V Sivasubramaniyan and Venkataramaniah K, Direct detection of Left Ventricular Diastolic Dysfunction by Phase Image Analysis in Gated Thallium SPECT Scan, *Journal of Medical Science and Clinical Research*, 4(7), 11226-11233, (2016).
- Sivasubramaniyan V and Venkataramaniah K, Non-invasive Quantitative Characterization of Skeletal Metastasis in Carcinoma Prostate by Tc99m MDP Bone Scans using Dr. V Siva's Retention Ratio in Correlation with Serum PSA Levels, *Medical & Surgical Urology*, 5(2), 1-6, (2016).
- Sivasubramaniyan V and Venkataramaniah K, Temporal Scintimetric Characterization of Skeletal Hotspots in Bone Scan by Dr. V Siva's Retention Ratio, *Advances in Intelligent Systems and Computing*, 433, 297-305, (2016).
- Sivasubramaniyan V, Adavala Jagadeesh and Venkataramaniah K, Utility of 99mTc DTPA Renogram in the Evaluation of Renal Dysfunction Associated with Coronary Artery Disease in a Hypertensive Patient, *Journal of Medical Science and Clinical Research*, 4(6), 10912-10914, (2016).
- Sivasubramaniyan V, Sai Shiv Narayan and Venkataramaniah K, Comparison between GFR Values Obtained by CG-formula and DTPA Renography in Different Renal Disorders, *Journal of Medical Science and Clinical Research*, 4(6), 10996-11000, (2016).
- Shiva Amruthavakkula, Sai Vignesh T, Sivasubramaniyan V, Rajamani Kumar T and Siva Sankara Sai S, Development of an Interactive GUI Tool for Thyroid Uptake Studies using Gamma Camera, *International Journal of Biomedical and Clinical Engineering*, 5(1), 2161-1629, (2016).
- Benoy Anand, Mehmet Karakaya, Gyan Prakash, S Siva Sankara Sai, Reji Philip, Paola Ayala, A K Sood, Anurag Srivastava, Apparao Rao and Ramakrishna Podila, Dopant-configuration Controlled Carrier Scattering in Graphene, *RSC Advances*, 5, 59556-59563, (2015).
- Gowrishankar R and Sood P C, Level Structures in Odd-Odd Deformed Nucleus 184Ta, *Eur. Phys. J A*, 52, 31, (2016).
- F Kondev, E McCutchan, B Singh, J Tuli, S Deepa, K Vijay Sai and R Gowrishankar, Nuclear Data Sheets for A = 227, *Nuclear Data Sheets*, 132, 257-354, (2016).
- Abhijit B K, Aditya Jayaraman and Muralikrishna Molli, Electronic Band Structure And Optical Properties of Antimony Selenide Under Pressure, *AIP Conference Proceedings*, 1731. DOI: 090020-1-090020-3, (2016).
- Aditya Jayaraman, Abhijit Bhat Kademane, and Muralikrishna Molli, DFT Study on the Carrier Concentration and Temperature-Dependent Thermoelectric Properties of Antimony Selenide, *Indian Journal of Materials Science*. Article ID: 7296847, (2016).
- Muralikrishna Molli, Prabin Pradhan, Devarun Dutta, Aditya Jayaraman, Abhijit Bhat Kademane, V Sai Muthukumar, Venkataramaniah K, Reji Philip, Study Of Nonlinear Optical Absorption Properties of Sb₂Se₃ Nanoparticles in the Nanosecond and Femtosecond Excitation Regime, *Applied Physics A*, 122, 549-553, (2016).

Shailesh Srivastava and Bibhuti Patnaik, Resonant Optical Gyroscope with 'Reflector': Analysis and Simulations, *Journal of Optics (Springer)*, 45 (2), 152-157, (2015).

Prathibha Chinnakoti, Avinash L A Chunduri, Ranganayakulu K. Vankayala, Sandeep Patnaik, Venkataramaniah K, Enhanced fluoride Adsorption by Nano Crystalline Gamma Alumina: Adsorption Kinetics, Isotherm Modeling and Thermodynamic Studies, *Applied Water Science*. DOI: 10.1007/s13201-016-0437-9, (2016).

Sai Kiran Aditha, Aditya Dileep Kurdekar, L A Avinash Chunduri, Sandeep Patnaik, Venkataramaniah K, Aqueous Based Reflux Method for Green Synthesis of Nanostructures: Application in CZTS Synthesis, *Methods X*, 3, 35-42, (2016).

Pradyumna Mulpur and Venkataramaniah K, A Novel Surface Plasmon Coupled Emission Enabled Forensic Detection Platform, *Nanotech Insights*, 7(1), 8-15, (2016).

Sandeep Patnaik, L A Avinash Chunduri, M Sai Akilesh, Krishna S B and Venkataramaniah K, Enhanced Dissolution Characteristics of Piroxicam Soluplus® Nanosuspensions, *Journal of Experimental Nanoscience*. <http://dx.doi.org/10.1080/17458080.2016.1178402>, (2016).

Pradyumna Mulpur, Ramakrishna Podila, Apparao M Rao, Venkataramaniah K, Carbon Nanotubes as Novel Spacer Materials on Silver Thin-Films for Generating Superior Fluorescence Enhancements via Surface Plasmon Coupled Emission, *Materials Research Express*, 3(6), 066402, (2016).

Aditya Kurdekar, L A Avinash Chunduri, Eswarappa Pradeep B, Mohan Kumar H, Venkataramaniah K, Indira K Hewlett, Comparative Performance Evaluation of Carbon Dot-Based Paper Immunoassay on Whatman Filter Paper and Nitrocellulose Paper in the Detection of HIV Infection, *Micro Fluidics and Nanofluidics*, 20(7), 1-13. DOI: 10.1007/s10404-016-1763-9, (2016).

Pradyumna Mulpur, Sairam Yadavilli, Apparao M Rao, Venkataramaniah K, and Ramakrishna Podila, MoS₂/WS₂/BN-Silver Thin-Film Hybrid Architectures Displaying Enhanced Fluorescence via Surface Plasmon Coupled Emission for Sensing Applications, *ACS Sensors*, 1(6), 826-833, (2016).

E Rajasekhar, R Jeevan Kumar, K Vijay Sai, Sai Prem Shaji, B V Avinash and Venkataramaniah K, Gamma Radiation Method for the Determination of Density of Wood materials, *South Asian Journal of Experimental Biology*, 5(1), 17-21. <http://sajeb.org/index.php/sajeb/article/view/20030>. Global Impact Factor 2012 - 0.495, (2015).

Ganesh K M, Suryanarayana G and Chelli Janardhana, Determination of Water Quality Index of the Groundwater in the Villages of the Kothacheruvu Mandal, Anantapur District, Andhra Pradesh, India on a GIS Platform. *International Journal of Current Research*, 7(6), 17616-17621, (2015).

Chauvan S, Singh K, Chauvan M S, Ahmad Umar and Sundaresan C N, Intermolecular Interactions of L-glutamine and L-histidine in Aqueous Solutions of Metformin Hydrochloride: Thermo-acoustic and Optical Properties. *Journal of Molecular Liquids*, 214 (Feb), 390-399, (2016).

Chauvan Santosh Kumari, Kuldeep Kumar, Ahmad Umar, Sundaresan C N and Gupta R, Influence of iso-perthiocyanic acid and Temperature on the Aggregation Properties of Sodium Dodecylsulphate in Dimethylsulphoxide. *Journal of Molecular Liquids*, 211 (Nov), 338-345, (2015).

- Arathi P J, Parth Gupta, Jagadeesh Babu N, Sundaresan C N and Ramanathan V, Conformation analysis of 1'',4''- Dispirocyclohexane-6,6'-bis(benzothiazoline): Combined IR, Raman, XRD and DFT Approach. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 217, 192-196, (2016).
- Chauvan S, Kulpdeep Singh, Kuldeep Kumar, Sundaresan C N and Girish Kumar, Drug-Amino Acid interactions in Aqueous Medium: Volumetric, Compressibility, and Viscometric Studies. *Journal of Chemical and Engineering data*, 61, 788-796, (2016).
- Sundaresan C N, Singh D K and Sunil A, Sensing of Mercury(II) using 1-(1H-Benzimidazol-2-yl) Guanidine as Chromophore. *Journal of Advanced Chemical Sciences*, 2(1), 195-197, (2016).
- Ramakrishna M, Rajesh Babu D, Gengan R M, Chandra S and Nageswara Rao G, Green Synthesis of Gold Nanoparticles using Marine Algae and Evaluation of their Catalytic Activity. *Journal of Nanostructure in Chemistry*, Vol. 6(1), 1-13, (2015).
- Sai Giridhar Sarma Kandannur, Nageswara Rao Golakoti and Srinivas Nanduri, Synthesis and In-vitro cytotoxicity of novel C-12 substituted-14-deoxy-andrographolide Derivatives as Potent Anti-Cancer Agents. *Bioorganic & Medicinal Chemistry Letters*, 25(24), 5781-5786, (2015).
- Tejkiran P J, Brahma Teja M S, Sai Siva Kumar P, Pranitha Sankar, Reji Philip, Naveen S, Lokanath N K and Nageswara Rao G, D-A-p-D Synthetic Approach for Thienyl Chalcones – NLO – A Structure Activity Study. *Journal of Photochemistry and Photobiology A: Chemistry*, 364, 33-39, (2016).
- Venkatesh S, Dnyanesh Vernekar, Garima Jaiswal, Dinesh Jagadeesan and Sai Sathish R, Earth Abundant Iron-Rich N-Doped Graphene Based Spacer and Cavity Materials for Surface Plasmon-Coupled Emission Enhancements. *ACS Applied Materials & Interfaces*, 8(19), 12324–12329, (2016).
- Venkatesh S, Pradeep Kumar Badiya and Sai Sathish R, Purcell Factor Based Understanding of Enhancements in Surface Plasmon-Coupled Emission with DNA Architectures. *Physical Chemistry Chemical Physics*, 18, 681-684, (2016).
- Venkatesh S and Sai Sathish R, Purcell Factor: A Tunable Metric for Plasmon-Coupled Fluorescence Emission Enhancements in Cermet Nanocavities. *The Journal of Physical Chemistry C*, 120(5), 2908–2913, (2016).
- Kumar M A, Patnaik S G, Lakshminarayanan V and Sai Sathish R, Electrochemical Determination of Ethanol by a Palladium Modified Graphene Nanocomposite Glassy Carbon Electrode. *Analytical Letters*, DOI:10.1080/00032719.2016.1179746, (2016).
- Mishra R K, Ramakrishna M, Mishra V, Pathak A, Rajesh S, Sharma S, Pandey A C, Nageswara Rao G and Dikshit A, Pharmaco-Phylogenetic Investigation of Methyl Gallate Isolated from *Acacia nilotica* (L.) Delile and Its Cytotoxic Effect on NIH3T3 Mouse Fibroblast. *Current Pharmaceutical Biotechnology*, 17(6), 540-548, (2016).

Kumar M A, Siddhardha R S S, Nived K C, Lakshminarayanan V and Sai Sathish R, Ultra-Selective Dopamine Detection in an Excess of Ascorbic Acid and Uric Acid Using Pristine Palladium Nanoparticles Decorated Graphene Modified Glassy Carbon Electrode. *Journal of The Electrochemical Society*, 162(9), H651-H660, (2015).

Siddabattuni S, Akella S H, Gangula A and Patnaik S, Impedance spectroscopy studies of surface engineered TiO₂ nanoparticles using slurry technique. *Bulletin of Materials Science*, 38(5), 1399-1405, (2015).

K N Naresh, Arun Sreekumar and S S Rajan, Structural Insights into the Interaction between Molluscan Hemocyanins and Phenolic Substrates: An *in silico* Study using Docking and Molecular Dynamics. *Journal of Molecular Graphics and Modelling*, 61, 272-280, (2015).

Naresh K N, Arun Sreekumar and Rajan S S, Studies using Molecular Dynamics Reveal Mechanism of Interaction of Hemocyanin with Phenolic Substrates. *Albany 2016: The 19th Conversation*, State University of New York, Albany, New York, USA, Journal of Biomolecular Structure and Dynamics, 33 sup., 29-30, (9-13 Jun 2015).

Pratima Tripathi, Flouride Laden Water's Negative Skeletal Effect. *International Journal of Clinical and Biological Sciences*, 2(4), 1-13, (2015).

Pratima Tripathi, Homocysteine-The Hidden Factor and Cardiovascular Disease: Cause or Effect? *Biochemistry & Analytical Biochemistry*, 4(4), 237-242, (2015).

Pratima Tripathi, Endocrinological Aspects of Cardiovascular Disorders. *World Journal of Pharmacy and Pharmaceutical Sciences*, 5(2), 447-462, (2016).

Niranjana Mahalingam, Bhavani Manivannan, Sudhir Jadhao, Gayathri Mishra, Pravin Nilawe and Pradeep B E, Draft Genome Sequences of Two Extensively Drug-resistant *Acinetobacter Baumannii* Strains Isolated from Pus Samples. *Genome Announcements*, 4(2), e00161-16, (2016).
Bhavani Manivannan, Niranjana Mahalingam, Sudhir Jadhao, Amrita Mishra, Pravin Nilawe and Pradeep B E, Draft Genome Sequence of a Clinically Isolated Extensively Drug-resistant *Pseudomonas Aeruginosa* Strain. *Genome Announcements*, 4(2), e00162-16, (2016).

Vishwanathan A S, Devkota Ranjan Siva Sankara Sai S Rao Govind, DREAM Assay for Studying Microbial Electron Transfer. *Applied Biochemistry and Biotechnology*, 177(8), 1767-1775. <http://www.ncbi.nlm.nih.gov/pubmed/26386586>, (2015).

Vishwanathan A S, Siva Sankara Sai S and Rao Govind, The Oxygen Paradox in Microbial Fuel Cells. *Current Science*, 109(8), 1390-1391, (2015).

Venketesh S and Samuel Fountain, Evidence for Extracellular ATP as a Stress Signal in a Single Celled Organism. *Eukaryotic cell*, 14, 775-782, (2015).

Shobha RI and Andallu B, Phytoconstituents and Antimicrobial Activity of Aniseeds (*Pimpinella anisum L.*). *Ewemen Journal of Microbial Research*, 1(2), 1-5, (2015).

Shobha RI and Andallu B, Radical Scavenging and Antiperoxidative Efficacy of Aniseeds (*Pimpinella anisum L.*): Identification of phytochemicals. *Pharmaceutical and Biological Evaluations*, 2(5), 197-203, (2015).

Rajeshwari CU and Andallu B, Bioactive phytoconstituents in methanolic extract and ethyl acetate fraction of methanolic extract of coriander (*Coriandrum sativum L.*) seeds. *Annals of Phytomedicine*, 4(2), 71-76, (2015).

Shobha RI and Andallu B, Phytochemicals in Aniseeds: A Practical Approach for Isolation and Identification. *International Journal of Bioassays*, 5, 4701-4705, (2016).

Sudha Rani K and Srividya N, Effect of Inulin, Fructooligosaccharides and *L. acidophilus* in Formulating a Synbiotic Yogurt. *Asian Journal of Dairy and Food Research*, 35(1), 37-40, (2016).

Conference Presentations/ Proceedings

Iyer G, Baruah P K and Mukkamala R, Privacy-Preserving Frequent Itemset Mining in Outsourced Transaction Databases, *IEEE- ICACCI 2015*, (10-13 Aug 2015), Kochi, India.

Harish, Ayyappa T, Sai Santosh and Baruah P K, D-Face: Parallel Implementation of CNN based Face Classifier Using Drone Data on K40 and Jetson TK1, *IEEE HiPC, Student Research Symposium*, (16-19 Dec 2015), Bangalore, India.

Vishnuvardhan, Reddy V and Baruah P K, Scaling Up Training of Deep BLSTM Networks for Hand Written Text Recognition, *IEEE HiPC, Student Research Symposium*, (16-19 Dec 2015), Bangalore, India.

Lalith Srikanth C and Raghunatha Sarma R, Spectral clustering using Topological Node Features (TNF), *2016 International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS)*, (17-18 Mar 2016), Karpagam Engineering College, Coimbatore, Tamil Nadu, 4, 1513-1517.

Kumar A and Balasubramanian S, Sparse Representation based Background Subtraction in Videos, *NCVPRIPG*, (17-19 Dec 2016, IIT Patna, India.

Soukharev V, Jao D and M Seshadri Srinath, Post-Quantum Security Models for Authenticated Encryption, *7th International Conference on Post-Quantum Cryptography (PQCrypto 2016)*, Fukuoka, Japan. Takagi, T. (Ed.), Springer International Publishing, (24-26 Feb 2016), pp64-78.

Rajasimha K, Anju S and Krishna Chaitanya V, Low cost, Laser Sintered, Printable SERS substrates, *International Conference on Material Science and Technology (ICMST)*, (5 Jun 2016), Dept. of Physics, St. Thomas College, Kerala.

Rajasimha K, Shashidhara T G, Anju Sewa and Krishna Chaitanya V, Laser Sintering of Silver Nanoparticles: Printable Micro-electrodes on Flexible Substrates, *International Conference on Applications of Lasers in Manufacturing (CALM) (2015)*, (9-11 Sep 2015), New-Delhi. Proceedings of International conference on Applications of Lasers in Manufacturing.

Aditya Kurdekar, L A Avinash Chunduri, Pradeep B E, Mohan Kumar H, Venkataramaniah K and Indira K Hewlett, Carbon Dots based Paper Immunoassay (CDPIA) for sensitive detection of HIV-1 p24 Antigen, *International Conference on Nanoscience and Technology (ICONSAT- 2016)*, *International Conference on Nanoscience and technology 2016 (ICONSAT-2016)*, (29 Feb-2 Mar 2016), Indian Institute of Science Education and Research, (IISER), Pune.

L A Avinash Chunduri, Mohan Kumar H, Pradeep B E, Indira K Hewlett and Venkataramaniah K, Detection of HIV-1 P24 Antigen on Microplate and Microfluidic Chip Using Carbon Dots as Fluorescent Labels, *Fourth Nano Today Conference*, (6-10 Dec 2015), Dubai, UAE.

L A A Chunduri, M K Haleyrigirisetty, Bulagonda P E, Indira K Hewlett and Venkataramaniah K, Development of Fluorescent ZnO Nanoparticle based Immunoassay Technology for the Detection of HIV-1 (P24) Antigen, *Fourth Nano Today Conference*, (6-10 Dec 2015), Dubai, UAE.

C Prathibha, L A Avinash Chunduri, A Sai Kiran and Venkataramaniah K, Zirconium Impregnated Graphene Coated Sand: A Low Cost Bio Adsorbent for Defluoridation of Water, *Fourth Nano Today Conference*, (6-10 Dec 2015), Dubai, UAE.

C Prathibha, L A Avinash Chunduri, N L Reddy, M V Shankar, V K Ranganayakulu and Venkataramaniah K, Hydrogen Trititanate (H₂Ti₃O₇) Nanotubes: A Novel and Efficient Adsorbent for Defluoridation of Water, *Fourth Nano Today Conference*, (6-10 Dec 2015), Dubai, UAE.

L A Avinash Chunduri, C Prathibha, Pradeep B E and Venkataramaniah K, Evaluation of Antioxidant and Cytotoxic activity of Carbon Quantum Dots from Coconut Shell. *Recent Advances in Nanoscience and Technology (RAINSAT-2015)*, (8-10 Jul 2015), Sathyabama University, Chennai.

Sai Kiran Aditha and Venkataramaniah K, Synthesis and Photoelectrochemical Characterization of CZTS via Low Cost Reflux Method. *Recent Advances in Nanoscience and Technology (RAINSAT-2015)*, (8-10 Jul 2015), Sathyabama University, Chennai.

C Prathibha, L A Avinash Chunduri, V K Ranganayakulu, A Sai Kiran and Venkataramaniah K, Nano crystalline γ -alumina: A Potential Defluoridation Sorbent for Drinking Water Applications. *Recent Advances in Nanoscience and Technology (RAINSAT-2015)*, (8-10 Jul 2015), Sathyabama University, Chennai.

Sandeep Patnaik, L A Avinash Chunduri, M Sai Akilesh, Tanu Rattan and Venkataramaniah K, Wet ball Milled Piroxicam-Soluplus® Nanoformulations for Enhanced Bioavailability. *Recent Advances in Nanoscience and Technology (RAINSAT-2015)*, (8-10 Jul 2015), Sathyabama University, Chennai.

V Sivasubramaniyan, Venkataramaniah K, Scintimetric Characterization of Skeletal Hot Spots in Ca.Prostate. *International Conference on Clinical PET-CT and Molecular Imaging (IPET 2015): PET-CT in the era of multimodality imaging and image-guided therapy*, (5-9 Oct 2015), Austria.

Sivasubramaniyan Viswanathan, Kannan Sounderrajan and Venkataramaniah K, Interpretative Structured Reporting - SAIVIEW. *International Conference on Soft Computing and Pattern Recognition (SoCPaR 2015)*, (13-15 Nov 2015), Kyushu University, Fukuoka, Japan.

Abhinav Nair, Prabin Pradhan, Sai Muthukumar V, Gowrishankar R, Shailesh Srivastava and Siva Sankrara Sai S, Development of Low Cost Multimodal Microscope using Fourier Optical Image Processing with Dye Doped Twisted Nematic Liquid Crystals. *Eighth International conference on Materials for Advanced Technologies of the Materials Research Society of Singapore (ICMAT 2015) and IUMRS-ICA 2015*, (28 Jun -3 Jul 2015), Singapore.

Sivasubramaniyan V and Venkataramaniah K, Temporal Scintimetric Characterization of Skeletal Hotspots in Bone Scan by Dr. V Siva's Retention Ratio. *Third International Conference on Information System Design and Intelligent Applications*, (8-9 Jan 2016), ANITS, Visakhapatnam.

Anilal P, B V Sainandan and Siva Sankara Sai S and Prabhakara Yellai, Experimentation and Analysis of Multipath TCP. *Ninth IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS)*, (15-18 Dec 2015), Indian Statistical Institute, Kolkata.

Govardan C, Sri Krishna Chaitanya K, Krishna Kumar Naik B, Shreesha Rao D S, Jagadeesh C, Gowrishankar R and Siva Sankara Sai S, A Heuristic Algorithm for Network Optimization of OTN over DWDM Network. *Ninth IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS)*, (15-18 Dec 2015), Indian Statistical Institute, Kolkata. DOI: 10.1109/ANTS.2015.7413606; p1-6

Jagadeesh C, Sainandan B V, Shiva A, Sachin S, Krishna Kumar Naik B, Shreesha Rao D S and Gowrishankar R, Demonstration of a Smart Communication System using LiFi. *Ninth IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS)*, (15-18 Dec 2015), Indian Statistical Institute, Kolkata. 978-1-5090-0293-1/15; pp374-376.

Sairam Lodhi, Amar Sainath Reddy, Aditya Sarma Tangirala, Satyabrata Mohanty, Ramaprasad P, Gowrishankar R and Siva Sankara Sai, Agriculture IoT: A Step Towards Better Livelihood of Farmer. *Ninth IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS)*, (15-18 Dec 2015), Indian Statistical Institute, Kolkata

Shiva A, Siva Sankar Sai S, Kumar Rajamani and Siva Subramaniyan V, A Study on Segmentation of Renal Scintigraphy using Level Sets Algorithm. *Third International Conference on Image Information Processing*, (Dec 2015), Wakanghat, Shimla. ISBN-978-1-5090-0148-4, p290-294.

Palla Sri Harsha, Shiva A, Kumar T Rajamani, Siva Subramanyam and Siva Sankar Sai S, An Interactive Freehand ROI Tool for Thyroid Uptake Studies using Gamma Camera. *Third International Conference in Information System Design and Intelligent applications - Advances in Intelligent Systems and Computing*, (Dec 2015), Wakanghat, Shimla. ISBN 978-81-322-2755-7, p349-55.

Sood P C, Burke D G, Vijay Sai K and Gowrishankar R, $\Delta K=0$ Admixed Band Structures in the odd-odd Deformed Nucleus Lu176. *60th DAE-BRNS symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of DAE-BRNS Symposium on Nuclear Physics, 60 (2015) 120 [A33]. <http://sympnp.org/proceedings/>

Harsha Theja K, Murali Ravi, Aditya Sarma, Sachin Sable, Sivaramakrishnan S and Siva Sankara Sai S, System on Chip Solution for Processing of Gamma Camera Images for Thyroid Uptake Studies. *60th DAE-BRNS Symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60. 942-43, 60. <http://sympnp.org/proceedings/>

Vijay Sai K, Gowrishankar R, Saisivaramakrishna M and Sood P C, Long-Lived Isomers in the Z=71 (Lu) isotopic sequence. *60th DAE-BRNS symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60 (2015), p142-143.

Vijay Sai K, Gowrishankar R, Murthy A V R, Bharadwaj P S J and Sood P C, N Forbidden Allowed β -decays in Deformed Nuclei. *60th DAE-BRNS symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60 (2015), p290-291.

Deepa S, Dwaraka Rani Rao and Venkataramaniah K, New levels in 160 Dy from the beta decay of 160Tb. *DAE-BRNS Symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60 (2015), p116.

Sood P C, Sheline R K, Gowrishankar R and Vijay Sai K, Level Structures in the N=91 Odd-Odd Nucleus 156Tb. *60th DAE-BRNS symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60 (2015), p122-123.

Gowrishankar R, Jena K, Adhitya S, Vijay Sai K and Sood P C, Level Structures in n-rich Np(Z=93) Isotopes, *DAE-BRNS symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60 (2015), p76-77.

Subam Rai, K V Sai Sundar, K Vijay Sai and Debendranath Sahoo, Simulation of a CZT - Detector for Application in SPECT Imaging Using GATE – a Geant4 Plug-in. *DAE – BRNS Symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60 (2015), 940 - [G19].

Murali Ravi, Sachin Sable, T Aditya Sarma, K Vijay Sai, S Sivaramakrishnan and S Siva Sankara Sai, Hardware Design of Data Acquisition Mechanisms in Small Organ Imaging Gamma Camera. *DAE – BRNS Symposium on Nuclear Physics*, (7-11 Dec 2015), SSSIHL, Prasanthi Nilayam, Andhra Pradesh. Proceedings of the DAE-BRNS Symposium on Nuclear Physics, Vol. 60 (2015) 1086 – [G92]. <http://sympnp.org/proceedings/>

Romala Satti Babu, Hari Nanda Kumar and Shailesh Srivastava, Stress Sensor with Few Mode Fibers. *Light Matters 2015*, (26-27 Oct 2015), SSSIHL, Prasanthi Nilayam.

Pradyumna Mulpur, Sairam Yadavilli, Ramakrishna Podilla, Apparao M Rao, Venkataramaniah K, Studies on Carbon Nanotubes and Carbon Dots based Spacer Layers on Silver Thin Film Substrates towards Boosted Surface Plasmon Coupled Emission. *Recent Advances in Nanoscience and Technology (RAINSAT-2015)*, (8-10 Jul 2015), Sathyabama University, Chennai.

Sadhu Sai Prashanth, Tukaram S, Akash Pradhan, Abhijit B K, Muralikrishna Molli, Sai Muthukumar V and K B R Varma, Nonlinear Optical Properties of Relaxor Ferroelectric Material: Tellurium Vanadate (Te₂V₂O₉). *Recent Advances in Optical Sciences*, (6-7 May 2016), University of Hyderabad.

Pratima Tripathi, Association of NOXes Affliction with Cardiovascular Diseases. *International Conference ICBNP-2015; on Biochemistry, Nutrition and Pharmacy in Human Welfare: Recent Trends and Future Challenges*, (3-5 Sep 2015), Dept. of Biochemistry, University College of Science, Osmania University, Hyderabad.

Pratima Tripathi, Endocrinological Mechanism of Insulin Resistance and Cardiovascular Diseases. **26th All India Congress of Zoology (AICZ) & International Symposium on innovation in Animal Sciences for Food Security, Health Security and Livelihood-2015**, (29-31 Oct, 2015), Babasaheb Bhimrao Ambedkar University, Lucknow.

Pratima Tripathi, Homocysteine - The Hidden Factor and Cardiovascular Disease: Cause or Effect? **3rd Lucknow Science Congress LUSCON 2015 & National Conference on Science for Society an Interdisciplinary Approach**, (31 Oct-2 Nov 2015), Babasaheb Bhimrao Ambedkar University, Lucknow.

Pradeep B E, Bhavani Manivannan, Niranjana Mahalingam, Mayur Divate, Sudhir Jadhao and Valakunja Nagaraja, Elizabethkingia meningoseptica, an Emerging Opportunistic Pathogen Involved in Diverse Human Infections. **MCB75**, (11-14 Dec 2015), Indian Institute of Science, Bangalore.

Bhavani Manivannan, Niranjana Mahalingam, Seema Chawla, P. Abhishek Rao, Shivakiran S Makam and Pradeep B E, Analysis of MDR Pseudomonas Aeruginosa Outbreak at Sri Sathya Sai Institute of Higher Medical Sciences, Prasanthigram, India. **COMB 2016 - Conference on Microbial Biofilms**, (29-30 Jan 2016), Sastra University, Thanjavur, Tamil Nadu.

Vishwanathan A S, Aiyer K S, L A Avinash Chunduri, A Sunil, S Siva Sankara Sai and Venkataramaniah K, Carbon Nanodots Enhance Microbial Fuel Cell Performance. **Recent Advances in Nanoscience and Technology (RAINSAT - 2015)**, (8-10 Jul 2015), Satyabama University (in association with Central Leather Research Institute), Chennai.

Aiyer K S Vijayakumar B S Vishwanathan A S, Factors Affecting Electroactivity of Biofilms. **Conference on Microbial Biofilms**, (28-29 Jan 2016), SASTRA University, Thanjavur.

Vishwanathan A S Aiyer K S Siva Sankara Sai S Rao Govind, Novel High-throughput Sensing Platform for Screening Microbial Fuel Cell Components. **26th Anniversary World Conference on Biosensors**, (25-27 May 2016), Gothenburg, Sweden.

Kartik Aiyer, B S Vijayakumar, Roshan Rai, A.S. Vishwanathan, Assessing Performance of Microbial Fuel Cells using DREAM Assay. **Association of Microbiologists of India Conference**, (07-10 Dec 2015), New Delhi.

Jyotishree R and Meera M, Shelf Life Studies of Flax Seed Flour Incorporated Soup Mixes. **47th National Conference on Nutrition and Agriculture – The Connect and Disconnect**, (9-10 Oct 2015), National Institute of Nutrition, Indian Council of Medical Research, Jamai-Osmania PO, Hyderabad.

Vimalakumari D and Meera M, Formulation and Development of Green Leafy Vegetable Incorporated Papad. **47th National Conference on Nutrition and Agriculture – The connect and Disconnect**, (9-10 Oct 2015), National Institute of Nutrition, Indian Council of Medical Research, Jamai-Osmania PO, Hyderabad.

Andallu B, Natural Remedies for Stress-induced Diseases (Diabetes, Cancer and Inflammatory diseases), **National Symposium on prospects and potentials in medicinal and aromatic plants**, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

Shobha RI and Andallu B, Bioassay Guided Isolation of Phytochemicals with Special Reference to Luteolin-6c-Glucoside from Aniseeds (*Pimpinella anisum* L.). ***National Symposium on Prospects and Potentials in Medicinal and Aromatic plants***, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

Ghoola M D and Srividya N, Nutraceutical Potential of Fenugreek Microgreens: Phytochemicals and Antioxidant Activity. ***National Symposium on Prospects and Potentials in Medicinal and Aromatic plants***, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

Sai Ramya A and Meera M, Utilization of Dehydrated Cauliflower Leaves. ***National Symposium on prospects and Potentials in Medicinal and Aromatic Plants***, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

Anita T and Meera M, Physical and Sensory Attributes of Banana Flour Supplemented Cookies. ***National Symposium on prospects and Potentials in Medicinal and Aromatic Plants***, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

Gayathri S and Meera M, Millet Based Cookies with Green Leafy Vegetables - Spinach (*Spinacia oleracea*) and Mint (*Mentha arvensis*). ***National Symposium on prospects and Potentials in Medicinal and Aromatic Plants***, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

Meera M and Savitha R, Value Addition with Wonder Plant, *Nelumbium nucifera*. ***National Symposium on prospects and Potentials in Medicinal and Aromatic Plants***, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

Sumana A and M Aruna, Potential Application of Agathi (*Sesbania grandiflora*) Leaves as Source of Nutraceuticals in the Formulation of Functional Food. ***National Symposium on prospects and Potentials in Medicinal and Aromatic Plants***, (19 Dec 2015), Dept. of Botany, Government College, Anantapur, Andhra Pradesh (in collaboration with Science Tech Foundation, Bangalore).

BOOKS

Krishnashree V and Andallu B, ***Phytochemicals and Antioxidant Potential of Vanilla Pods and Essence***. LAMBERT Academic Publishing GmbH & Co. (Germany). ISBN: 978-3659799778, (2015).

CHAPTERS IN BOOKS

Krishnashree V and Andallu B, ***Phytochemicals and Antioxidant Potential of Vanilla Pods and Essence***. LAMBERT Academic Publishing GmbH & Co. (Germany). ISBN: 978-3659799778, (2015)
N Sivakumar, The Role of Spirituality in Creating Moral Corporate Cultures, ***Chapter 18 in The Power of Mind and Managerial Decision Making, Volume 5 of Compendium on Integrating Spirituality and Organisational Leadership***. Edited by Sunita Singh Sengupta, ISOL Publications, New Delhi. 2016, pp185-196, ISBN: 978-93-85355-04-2.

N Sivakumar and U S Rao, Values Based Entrepreneurship through Service Orientation: Guidelines from Indian Ethos, *Chapter 19, in Models of Economic Development- Rediscovering the Indigenous Knowledge, Vol 7 of Compendium on Integrating Spirituality and Organisational Leadership*. Edited by Sunita Singh Sengupta, ISOL Publications, New Delhi. 2016, pp200-208, ISBN: 978-93-85355-06-6.

Faculty of Management & Commerce and Economics & Humanities

Research Publications in Peer Reviewed Journals

Prachi Satapathy and Swetha Thiruchanuru, A Critical Analysis of Behavioral Finance. *International Journal of Research in Social Sciences, ISSN:2249-2496*, 6(5), 57-58, (2016).

Swetha Thiruchanuru, Strengthen the Small to Strengthen the Nation: Insights on HR Issues in SMEs. *International journal of Business Management and Economic research (IJBMER)*, 7(2), 579-587, (2016).

Vidyasagar Mani Thota and B Sai Giridhar, Impact of Foreign Presence on Capital Structure of Four Wheeler Companies in India. *The IUP Journal of Entrepreneurship Development*, ISSN: 0973-2659, (2016).

Daksh Seth, B Sai Giridhar and Sundara Krishnaswami, Impact of Crude Oil Price Changes on Select Indian Industries. *International Journal of Social Sciences and Management*, 3(2), 87-92, (2016).

Chandrasekhar B, Factors That Act as Enablers or Roadblocks to Saving by the Poor - A Study Based in South India. *International Journal of Management and Development Studies*, 4(2), 198-210, (2015).

Chandrasekhar B, Predicting regular saving behavior of the Poor using Decision Trees - An Important Input to Financial Inclusion in India. *Scholedge International Journal of Management and Development*, 2(8), 16-30, (2015).

Chandrasekhar B and Anantharaman A, Microsavings - A Neglected Pillar of Microfinance: Does Literacy Influence the Saving Preferences of Poor Women? *Journal of Contemporary Research in Management*, 10 (1), 17-30, (2015).

Sai Satya Narayana V, Subramanian S, Suriyanarayanan V, Bank Bankruptcy Prediction Using Machine Learning Algorithms. *International Journal of Management, IT and Engineering*, 6, (2 Jun 2016), 27-42, (2016).

Tejas Hegde, and Subramanian S, A Study of the Risk Management Practices of Banks in India. *International Journal of Management and Social Sciences Research*, 5, (2 Feb 16), 46-52, (2016).
M Guru Santosh & Prakash Sharma V N, Interest Rate Risk Management: A Comparative Study of State Bank of India and HDFC Bank. *International Journal of Science Technology and Management*, 5(1), (2016).

M Guru Santosh & Prakash Sharma V N, Interest Rate Risk Management: A Comparative Study of Bank of Baroda and ICICI Bank. *IOSR Journal of Economics and Finance (IOSR-JEF)*, Ver. 3, 7(1) 1-4, (2016).

M Guru Santosh & Prakash Sharma V N, Interest Rate Risk Management: With Special Reference to State Bank of India. *International Journal of Management and Social Sciences Research (IJMSSR)*, 5 (2), (2016).

Sai Sudha Nunna and Ch Radhakumari, A cost-effective ERP formulation – A prototype for small enterprises. *International Journal of Management and Applied Science (IJMAS)*, 2(1), 132-137, (2015).

Aditya G and Desai R, Pricing Efficiency and Price Discovery of Indian Equity ETFs. *The Journal of Index Investing*, 6(3), 67-79.

N Sivakumar (2015) The Role of HR and Communication Practices in the Insurance Industry – Management Lessons for Excellence. *IRDA Journal*, 4-6, (2015).

K J Srinivas and Sanjay Mahalingam, Lean Strategies at Sri Sathya Sai Institute of Higher Medical Sciences. *The International Journal of Business & Management*, 4 (2), 237-244, (2016).

G Padmavathy , Jaya Jaiswal, Performance Evaluation of Leading Commercial Banks Using CAMEL Model. *International Journal of Research in Social Sciences IJRSS-ISSN: 2249-2496*, 6(5), (2016).

G Padmavathy Sheenum Bajaj, A Study on Factors Affecting E-Commerce Adoption by SMEs in Delhi. *Advances in economics and Business Management - ISSN-2394-1545*, 2(14), 1400-1403, (2015).

G Padmavathy Shanthi latha Donger, CSR- An Initiation for an Era Sustainable Development. *Advances in economics and Business Management - ISSN-2394-1545*, 2(14), (2015).

A Sudhir Bhaskar and Amey Deshpande, Importance of Strategic Planning in SMEs. *Asian Journal of Multidimensional Research (AJMR)*, 5(7), 2278-4853, (2016).

Paramanik R N and Jyothi Ch, Nexus between Financial Development and Economic growth in Selected Asia: A Post 1997 Crisis Analysis. *AIMS Journal, USA*, 10(3), 101-111, (2016).

B C Sutradhar and R Prabhakara Rao, Inferences in Longitudinal Count Data Models with Measurement Errors in Time Dependent Covariates. *Sankhya: The Indian Journal of Statistics, Series B*, 1-27, (2015).

Anvesh Dhagat and Raghavender Raju G, Measurement of Foreign Exchange Exposure for Selected Indian Firms. *Amity Journal of Finance*, 1(1), (2016).

Ankush Sharma and Raghavender Raju G, Exchange Rate Pass-Through in India: A Post-Reform Period Analysis. *Journal of Economic Policy and Research*, 1, (2016).

Raghavender Raju G and V Pandit, An Analysis of India's Trade Flows: During the Post-Reform Period. *Journal of International Economics*, 1(1), (2016).

Rajbhushan J Nayak and V Pandit, GDP Growth and Public Debt: Alternative Scenarios. *Journal of Economic Policy & Research*, (2016).

Siva Kiran Gupta K, Prabhakar Rao R, The Volatility Behavior of Emerging BRICS Stock Markets. *Emerging Market Finance*. Accepted for publication, (2015).

Siva Kiran Gupta K, Prabhakar Rao R, An Empirical Analysis of Growth and Threshold Inflation in India. *Indian Journal of Economics and Development*. Accepted for publication, (2016).

Siva Kiran Gupta K and Sai Pranav, The Determination of Exchange Rate in India: An Empirical Investigation. *South Asian Journal of Management Research*. Accepted for publication, (2016).

K U Gopakumar and V Pandit, Price Movements for Rice and Wheat: A Structuralist Policy Perspective. *Indian Economic Review*, 49(2) 227-244, (2014).

P S Gayathri and P L Rani, Book Review: The Narrow Road to the Deep North by Richard Flanagan. *Transnational Literature*, 8(10), (Nov 2015)

Srinivas S, Polish Yers in Harmonic Serialism. *The EFL Journal*, 7(1), 47-71, (2016).

Al-Oshari Waleed, Kashav Pushpa and Srinivas S, Prosodically-driven Constraint Re-ranking in Optimality Theory. *EFL (formerly CIEFL) Occasional Papers in Linguistics*, 17, 45-69, (2015).

Kiron Bala Arora, Varnabheda Evam Shri Naresh Mehta Ji Ka Kavya 'Shabari'. *Sankalya*, Quarterly's 44th Year (Jan-Mar), 74-77, (2016).

Piyush Kumar Shrivastava, Hamsna. *Sankalya*, Varsh44 Amk 1 (Jan-Mar), 104, (2016).

M Praphulla, Manucharithra - Sanghikaviluvuvalu. *Journal of Indian Languages and Literature (JOILL)*, ISBN: 978-1-5330-3849-4, 1(2), 54 - 58, (2016).

Conference Presentations/Proceedings

Monil Khatri and B Sai Giridhar, More Water for Irrigation. *International Conference on Innovations in Sustainable Water & Wastewater Treatment Systems*, (21-23 Apr 2016), Pune.

N Jayaprada, Impact of Globalisation on Human Rights. *Human Rights - Trends and Issues*, (9-10 Nov 2015), Organized by School of Social Sciences, KSN Degree College, Anantapur, Andhra Pradesh.

N Jayaprada, Backflush Costing – An Innovative Inventory and Production Management Technique. *UGC National Seminar on Creativity and Innovation in Management*, (29-30 Nov 2015), Sri Krishnadevaraya Institute of Management, S K University, Anantapur, Andhra Pradesh.

Krithika & N Jayaprada, Living Conditions of Workers in B & K Area, CCL. *4th International Conference on Managing Human Resources at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development (SDMIMD), Mysore. ISBN 978-93-83302-07-9.

N Janani and N Jayaprada, Re Engineering. *Creativity and Innovation in Management*, (29-30 Nov 2015), Sri Krishnadevaraya Institute of Management, S K University, Anantapur, Andhra Pradesh.

Sai Sudha Meegada and N Jayaprada, Green Buildings. *Creativity and Innovation in Management*, (29-30 Nov 2015), Sri Krishnadevaraya Institute of Management, S K University, Anantapur, Andhra Pradesh.

Sumit Agarwal and Deepak Anand, Finding Intrinsic & Extrinsic Value of a Firm Using Big Data. *2nd International Conference on Big Data & Analytics for Business*, (2015), New Delhi.

R R Raghavan, S Subramanian and R Prabhakar Rao, Assessing Value at Risk in Emerging Markets: A Disaggregated Study. *XII International Conference on Business and Finance*, (10-11 Jun 2016), IBS Hyderabad.

Sai Sudha Nunna and Ch Radhakumari, A Cost-Effective ERP Formulation – An Epitome for Small Enterprises. *International Conference on Computer Science, Software, Networking and Information Technology (ICSSNIT-15)*, (7-8 Nov 2015), Singapore. <http://www.ijmas.iraj.in>. (Won 'Excellent Paper' Award).

Sai Sharanya and Ch Radhakumari, Linear Programming Technique and Goal Optimization: A Case Study of Ice Cream Manufacturing Unit. *ICMCS 2015 -- International Conference on Mathematics and Computer Science*, (10-11 Nov 2015), Vienna, Austria. <http://mathematics.conference-site.com/>

Akanksha Madhok and Ch Radhakumari, Empowerment of Rural Citizens – A Ray of Hope in Financial Inclusion implementation. *Business, Economics, and Social Science & Humanities-BESSH-2015*, (2-3 Nov 2015), Sea View Langkavi, Malaysia. <http://academicfora.com/bessh-langkavi-November-15/>

T R Rajeswari, Green Accounting – A Signal to Nations to Move Away from Illusory Development and March towards Sustainable Growth. *4th International Conference on Emerging Trends in Finance & Accounting - Global Recovery: India Story*, (21-22 Aug 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development (SDMIMD), Mysore. ISBN: 978-93-83302-09-3.

T R Rajeswari, Healthy Power and Corporate Success - A Vedantic View. *4th International Conference on Managing Human Resources at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development (SDMIMD), Mysore. ISBN 978-93-83302-07-9.

Lakshmi and T R Rajeswari, Financial Wellbeing - Looking Back and Forth: A Study on Bank Officers in South Chennai. *4th International Conference on Managing Human Resources at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development (SDMIMD), Mysore. ISBN 978-93-83302-07-9.

Supriya and T R Rajeswari, Opted Out or Pushed Out? A Study on the Vanishing Number of Women Professionals in Indian Corporates. *4th International Conference on Managing Human Resources at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development (SDMIMD), Mysore. ISBN 978-93-83302-07-9.

Manisha Pradhan and T R Rajeswari, Indian Shrimp Industry: Drift from Blue Revolution to Red Revolution. *2nd International Conference on Fisheries and Aquaculture 2015*, (25-27 Aug 2015), The International Institute of Knowledge Management, Colombo, Sri Lanka.

M Pushpa, Impact of Modern Teaching Aids in Improvising Teachers' Caliber in Current Education Systems with Specific Reference to Management Teaching. *National Conference On Pragmatic Approached and Quality Initiatives for Enhancing Teachers Caliber in Business Education*, (6 Jun 2015), R V Institute of Management, Bangalore.

N Sivakumar, The Linkage between Empathy Learning and Social Consciousness – Evidence from a Game Theory Based Experimental Study. *International Conference on Consciousness, Cognition and Culture – Implications for the 21st Century*, (9-11 Dec 2015), Organized by National Institute of Advanced Studies (NIAS), Bangalore.

Gurung Deepa and Uppalury Suma, Smart Cities- The Indian Way. *International Conference on Global Economic Growth and Sustainability- Prospects and Challenges*, (20-21 Nov 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development, Mysore.

Harsha Rathor and Uppalury Suma, How Diverse is the Gender Diversity at the Work Place? *4th International Conference on Managing Human Resources at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development, Mysore.

Unnikrishnan Veena and Uppalury Suma, Payment Banks- An Initiative Towards a Paradigm Shift. *National Conference on Retail Credit- Issues, Challenges, and Redressal Mechanisms*, (31 Oct 2015), Vishakapatnam Gitam University.

U Divya and Kirti Kiran, Assessing the Service Quality of Banks; An Empirical Study of Public and Private Sector Banks in Kerala, Kottayam District. *Innovative Management Practices in Marketing, Ecommerce, Economics, Business, Banking, Neo-Tourism*, (29 Nov 2015), Jawahar Lal University, New Delhi.

K Subhashree and Vyshnavidevi B, A Study on Competency Mapping in KCP Ltd, Chennai. *International Conference on Managing Human Resource at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development, Mysore. ISBN: 978-93-83302-07-9.

Sai Krishnam Naidu and Akanksha Aggarwal, Dr. W Edward Deming and Performance Appraisal: Application in Current Times- A Study on the Indian Defense Services. *4th International Conference On Managing Human Resources at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development, Mysore.

Mopati Hemalatha and Akanksha Aggarwal, A Conceptual Framework Embedding Food and Tourism: Agroculinary Tourism as a Rural Development Strategy. *TIKM's 3rd Annual International Conference on Hospitality and Tourism Management*, (5-6 Nov 2015), Colombo, Sri Lanka.

G Padmavathy, Organizational Climate and its Influence upon Performance: A Study in BSNL. *4th International Conference on Managing Human Resources at the Workplace*, (4-5 Dec 2015), Shri Dharmasthala Manjunatheshwara Institute for Management Development, Mysore. ISBN: 978-93-83302-07-9.

M R Geetha Bala, Financial Literacy's Impact on Financial Inclusion. *National Conference on Emerging Trends in Business Paradigm*, (22-23 Feb 2016), Shikshana Prasaraka Mandali's Sir Parashurambhau College, Pune. ISBN: 978-93-5158-594-7. Printed and Published by Success Publications (pp164-167).

Karan S Khera and Raghavender Raju G, Fuelling the Country: Crude Oil and Indian Economy. *Indian Economy: Emerging Trends and Challenges*, (10 Aug 2015), Dept. of Economics, SSSIHL, Prasanthi Nilayam, Andhra Pradesh.

Prashant MP and Raghavender Raju G, FDI in India & China: An Institutional Approach. *Indian Economy: Emerging Trends and Challenges*, (10 Aug 2015), Dept. of Economics, SSSIHL, Prasanthi Nilayam, Andhra Pradesh.

Dhruv Vyas and Raghavender Raju G, Service Sector Growth in India. *Indian Economy: Emerging Trends and Challenges*, (10 Aug 2015), Dept. of Economics, SSSIHL, Prasanthi Nilayam, Andhra Pradesh.

Siva Kiran Gupta K, Prabhakar Rao R, Volatility Experience Among the BRIC Stock Markets. *The 7th RMUTP International Conference on Science*, (23-24 Jun 2016), Technology and Innovation for Sustainable Development, Thailand.

Madhu Kapani, Innovative Teaching and Learning Methods. *Strategies to Enhance Relevance of Higher Education*, (14 Dec 2015), IQAC & JKC, Government Degree College, Uravakonda, Andhra Pradesh.

P Lavanya, Technology and Facilities for Effective Teaching and Learning. *Innovative and Creative Teaching, Learning & Evaluation Methods*, (6-7 Aug 2015), SVGM Govt. Degree College, Kalyandurg, Andhra Pradesh.

P Lavanya, Human Rights Education. *Human Rights: Trends and Issues*, (9-10 Dec 2015), KSN Government Degree College for Women, Anantapur, Andhra Pradesh.

Neetu Gupta, Human Rights: Role of Education. *Human Rights: Trends and Issues*, (9-10 Dec 2015), KSN Government Degree College for Women, Anantapur, Andhra Pradesh.

Neetu Gupta, Fostering critical thinking, Creativity and Scientific Temper. *Innovative and Creative Teaching, Learning & Evaluation Methods*, (6-7 Aug 2015), SVGM Govt. Degree College, Kalyandurg, Andhra Pradesh.

Neetu Gupta, Peer Learning. *Strategies to Enhance Relevance of Higher Education*, (14 Dec 2015), IQAC & JKC, Government Degree College, Uravakonda, Andhra Pradesh.

Lalitha Sarma R and Rajeshwari C Patel, Ambiguity and Ambivalence in Lessing's The Golden Notebook. *Protean Frames: International Conference on Contemporary Discourses of Gender*, (12-13 Jan 2016), Christ University Main Campus, Bangalore.

Rajeshwari C Patel and Swathi Metla, Defreezing Empathy as Redemption. *National Conference on Media, Culture and Community: Contemporary Perspectives and Practices (PU-ACT-TNP-2016)*, (29-30 Mar 2016), Pondicherry, Tamil Nadu.

Rani P L, Unbiased Lingo- Can the Media Claim Neutrality? *Contemporary Research in English Studies: Global Perspectives*, (4-6 Feb 2016), Waymade College of Education, Vallabh Vidyanagar, Gujarat.

Siddhartha R, Cricket as a Tool to Decolonize the Mind. *Contemporary Research in English Studies: Global Perspectives*, (4-6 Feb 2016), Waymade College of Education, Vallabh Vidyanagar, Gujarat.

Divya Goyal, Ibsenian Characters as Products, Participants and Progressive Agents in a Society. *Contemporary Research in English Studies: Global Perspectives*, (4-6 Feb 2016), Waymade College of Education, Vallabh Vidyanagar, Gujarat.

B Venkataramana, Language study through Literature- Adding Cultural Grammar to the Learners. *International Conference on Advances in English Studies and Women Empowerment*, (21-22 Aug 2015), K L University, Guntur.

B Venkataramana, Okonkwo- The tornado on the war path in chinua Achebe's "Things Fall Apart". In *UGC Global Seminar On Celebrating the Ancient/Contemporary Wisdom of Fourth World*, (14-16 Dec 2015), Acharya Nagarjuna University, Guntur.

B Venkataramana, The Black Thief and the Jewish Gaze in Saul Bellow's, Sammler's Planet. *International Conference on Transnational Approach to Literary Studies*, (27-28 Jan 2016), Anna Adarsh College for Women, Chennai.

Sharada Subramaniam, Kierkegaard on the significance of Religious Knowledge. *International Dharma-Dhamma Conference - Harmony of Religions – Welfare of Humankind*, (24-26 Oct 2015), Indore, Madhya Pradesh.

M Venkatalakshmi, Atmanubhava - the Highest Aesthetic Delight. *Samskrute Bharatita Kalayaha Saundarya cha Tattvam*, (26-28 Sep 2015), Benaras Hindu University, Varanasi, Uttar Pradesh.

Kiron Bala Arora, Bhartiya Hindi Sahitya Mein Sabhyata Aur Sanskruti. *Heritage and Culture in Indian Literature*, (24-25 Mar 2016), SUV, Tirupati, Andhra Pradesh.

M Praphulla, Sreerasthu kathasamputi - Oka Anuseelana. *Ravoori Bharadvaja Sahithe Vaisishtyam*, (21-22 Aug 2016), Sree Varra Chennareddy Govt. Degree College, Palamaneru. Published in the proceedings, pp183-189, ISBN No: 978 -81-931212-3-8.

M Praphulla, Sreemadvaalmiki Ramayane Bhavachithraani. *International Seminar on Samskrute Bharatheeya kalayaha soundaryam cha tattvam*, (26-28 Sep 2015), Banaras Hindu University, Varanasi.

M Praphulla, Sivamahimnastothre Sivattvam. *International Seminar on Sivattva in Sanskrit Literature*, (7-9 Feb 2016), Shree Somanath Sanskrit University, Gujarat.

BOOKS

B Venkataramana, *Protagonists in Saul Bellows Fiction*. SBW Publishers. (New Delhi). ISBN: 978-81-85708-63-8, (2015).

B Venkataramana, *Nissim Ezekiel's Poetry-A Thematic Study*. Scholar Press (Germany). ISBN: 978-3-639-76790-2, (2015).

N Venkatesha Rao, *Sarvasamaqrpana Gadya*. Pavana Parimala Prasarini Trust (Bangalore), (2015).

N Venkatesha Rao, *Brihati Sahasra Pradeepah*. Hayagreeva Prakashana (Bangalore), (2015).

ARTICLES

N Venkatesha Rao, Indriyani Hayani. *Sarvamoola*, (Jul) 13(7), 22-23, (2015).

N Venkatesha Rao, Parayanah. *Mukhyaprana*, (Jul) 7(7), 7-12, (2015).

N Venkatesha Rao, Sulabha Sopana. *Mukhyaprana*, (Aug) 7(8), 7-10, (2015).

N Venkatesha Rao, Dukha parayanah. *Mukhyaprana*, (Sep) 7(9), 9-12, (2015).

N Venkatesha Rao, Ko Vijayee Bhavet. *Sarvamoola*, (Nov) 13(11), 13-14, (2015).

N Venkatesha Rao, Dushtashva Iva Saratheh. *Sarvamoola*, (Dec) 13(12), 19-20, (2015).

N Venkatesha Rao, Naika Shrugog Gadagrajah. *Mukhyaprana*, (Dec) 7(12), 15-19, (2015).

N Venkatesha Rao, Priyakruth Preetivardhanah. *Mukhyaprana*, (Jan) 8(1), 14-18, (2016).

N Venkatesha Rao, Yuktena Masa Sada. *Sarvamoola*, (Jan) 14(1), 19-20, (2016).

N Venkatesha Rao, Yatha Gurustatha Shishyah. *Sarvamoola*, (Apr) 14(4), 22-23, (2016).

N Venkatesha Rao, Yastu Avijnanavan. *Sarvamoola*, (May) 14(5), 16-17, (2016).

N Venkatesha Rao, Chintana Kavaca. *Mukhyaprana*, (Jun) 8(6), 8-13, (2016).

Title- Sri Sathya Sai System of Integral Education (SSSSIE)

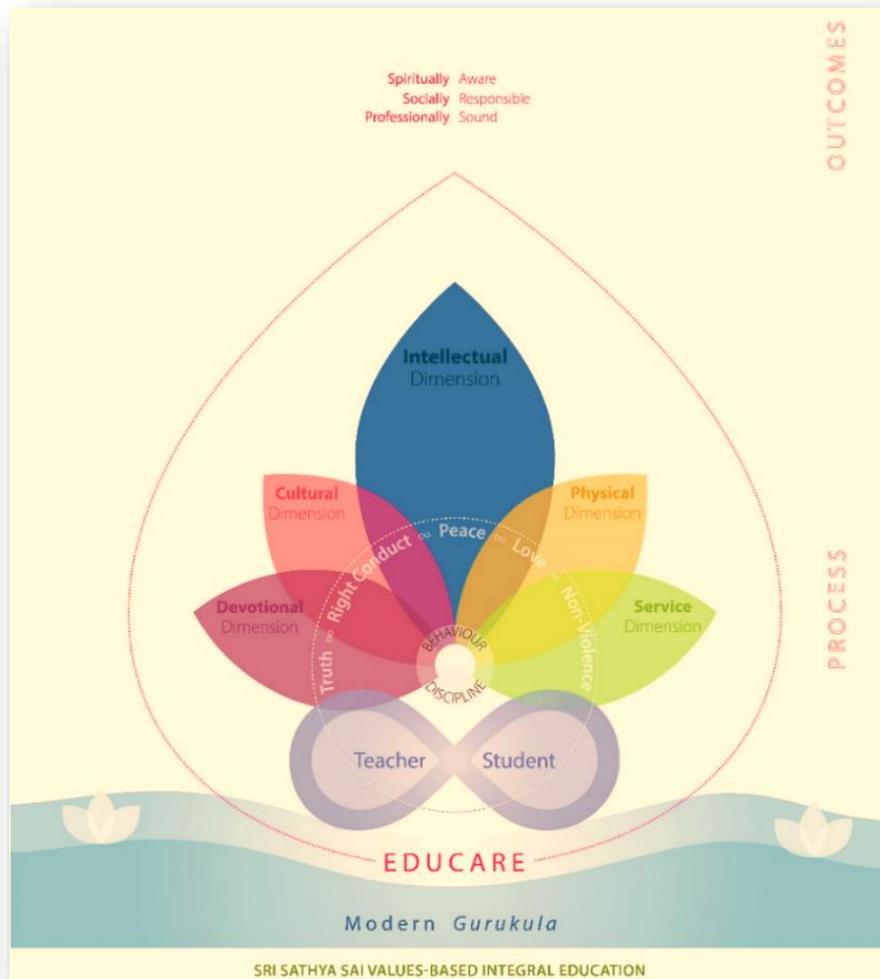
Objectives of the Practice- According to the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba- *End of Education is Character*. Keeping in mind this dictum, the objective of this 'best practice' is to impart education which moulds students into ideal citizens wedded to the service of the society. SSSSIE aims to combine academic competence with development of good character, noble attitudes and values, social sensitivity and spiritual awareness in all students.

Context- Education is increasingly becoming an instrument for filling the minds with mere information. The students are charged substantially high fees in the name of imparting world class education. The sole purpose of education has become earning a livelihood and not acquiring life skills. The worth of an educational institution is being judged by the placements and pay packages it can offer to its students. Revered Founder Chancellor observed- At present, colleges are infected with anxiety and perplexity, discontent and ill-discipline, irreverence and futility; they have lost the status of temples of learning, where youth are shaped into self-reliant, contented and enterprising heroes.

In this context, Sri Sathya Sai Baba, the Revered Founder Chancellor, had foreseen the need for values based education programme and had taken concrete steps to implement the same into a formal educational system known as SSSSIE. He observed- *The crisis in educational field is well known. Many attempts have been made to bring about changes in the educational system. But it is forgotten that what gives education its true value and significance is its moral and spiritual content.*

Practice- The word education, according to the Oxford dictionary, has come out of the root word *educare*. According to the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba- The word Educare has its origin in the Latin word, 'educere', which means 'to elicit'. Educare has two aspects, the worldly and the spiritual. Worldly education brings out the latent knowledge pertaining to the physical world. Spiritual education brings out the inherent divinity in man. So, both worldly and spiritual education is essential, without which the human life has no value.

This unique model of education was established on the lines of **Gurukula** system of education of the yore to make the students Professionally Sound, Socially Responsible and Spiritually Aware. It has five dimensions- Intellectual, Cultural, Devotional, Physical and Service to develop the students in holistic individuals.



The unique and distinctive features of this system of education are:

- Equal emphasis on curricular and co-curricular aspects
- Integrating values with secular knowledge through curriculum and classroom teaching
- Curriculum steeped in rich Indian Culture
- Synthesis of Science and spirituality
- Compulsory residential system

- One in five teachers stay in the hostels guiding and mentoring the students in academics and other aspects
- Inculcating the spirit of self-reliance in students in the hostels- self-reliance means reliance on one's own innate capabilities and talents which is facilitated in the students through dignity of labour and respect for work
- Open admissions policy irrespective of caste, creed, religion or income or region
- Free education for all students

As the Sri Sathya Sai System of Integral Education offers FREE EDUCATION for all irrespective of caste, creed, religion or region with no fees whatsoever have been charged from any students; no non-recurring budget (salaries) are taken from State or Central Govt.; and totally a residential nature of education have been offered – no constraints have been encountered so far by Sri Sathya Sai Institute of Higher Learning.

Evidence of Success- According to Bharat Ratna Dr. APJ Abdul Kalam, the then President of India at the 21st Convocation of the Sri Sathya Sai Institute of Higher Learning dt. 22.11.2002:

“The purpose of real education is to initiate a learning process that transforms students into good human beings with knowledge and value systems. Is values-based education possible? Sri Sathya Sai Institute of Higher Learning has given an answer in the affirmative. I would like to congratulate the Institute for this noble education.”

Few tangible results of the SSSSIE:

- Academic calendar is followed scrupulously with clockwork precision
- Teachers and students grow in a spirit of camaraderie hence there has never been an occasion of student unrest or ragging.
- Alumni Impact Analysis: An alumni impact analysis survey was carried out in the year 2011 where total of 744 alumni completed the survey. The broad findings are given below:

7 in **10** alumni felt that their experience at the university contributed "**VERY SIGNIFICANTLY**" to developing their ability / competence in one or more of the following:

Integrity n = 388

Work ethics

Concern for society and environment

Dealing with different types of people

Working in teams

9 in **10** alumni felt that their experience at the university contributed "**SIGNIFICANTLY**" to developing their ability / competence in one or more of the following:

Patience and perseverance n = 388

Inspire others by example

Leadership

Organizing time effectively

Problems Encountered and Resources Required- In the SSSSIE, a complete residential system of education is followed where the dictum- 'Each lives for the other and all live for God' is sincerely followed. The faculty and the students live like on family in the institute promoting the spirit of camaraderie. Hence, the institute NEVER encounters any problems whatsoever. In line with the dictum of Free education for ALL by the Revered Founder Chancellor, education is imparted totally free of cost where the various needs of the students, teachers and non-teaching staff are taken care by the parent trust of the institute. The staff and students on their part exemplify the virtue of 'Simple Living and High Thinking'. Hence, the institute never faced any paucity of resources.

Notes (Optional)

Title- Teaching Quality Feedback (TQF)

Objectives of the Practice- According to the Revered Founder Chancellor Bhagawan Sri Sathya Sai Baba, a teacher should be an '*acharya*' who teaches students by his *acharana*- conduct (practice). Teachers should not only have knowledge of the subject but the skills to impart the same to the students. He/she should have the spirit of being a student for life to never stop learning and kindle the same spirit in the students. Objective feedback from the 'taught' about the teaching process goes a long way in providing the necessary inputs to the teacher to assess his/her teaching vis-à-vis the benchmarks of an ideal teacher and bring about the necessary improvements.

Context- The rigour of the present day workplace like corporates, research institutions, entrepreneurship etc., requires the students to be thorough in their basics, also acquire additional knowledge in their specific fields of study and also be innovative in their approach. Due to this, the teaching process is witnessing a paradigm shift from the traditional chalk and talk method to the interactive and participative type of teaching enhanced by the modern teaching aids available to the

teachers. In this context, to undertake effective teaching, the feedback from students about the teaching process becomes very important. For the feedback to be effective, following points had to be addressed:

- Has to be confidential so that students can give candid and constructive inputs about the teaching process.
- The questionnaire should be designed in such a way that it captures information about all the aspects of teaching learning process.
- The analysis of the feedback to be presented to the faculty in a way so that they can take steps to improve/modify (if required) their teaching process

Practice-

A committee was constituted to do an in-depth review of the teaching learning process and it arrived at the six broad dimensions of **Core Teaching, Pedagogy, Class Interaction, Conduct of CIE, Student Centric Teaching, Discipline & Values** and 3 to 4 questions in each dimension. A Likert scale of Strongly Disagree- Strongly Agree was employed for scaling the responses of the students. Different set of questionnaires were designed for Theory, Experiment based Practicals and Software Lab. The questionnaires are coded in PHP and administered through a specially dedicated server. The feedback sessions in the respective computer labs of the campuses were kept completely anonymous to elicit candid responses from the students.

Feedback is recorded at the end of every semester from the students about the teaching process of the semester. The responses received are automatically compiled through a computer programme and are made available to the faculty and the HoDs at the beginning of the next semester. The HoDs receive the feedback of the faculty members of the whole department and they counsel/advise wherever necessary after going through the reports of the individual faculty. Following are the set of questions for a theory subject.



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
(Deemed to be University)

CONFIDENTIAL FEEDBACK ON TEACHING QUALITY

The purpose of this feedback/assessment is to help improve the overall quality of teaching.

* Kindly respond to the following questions **in relation to the quality of teaching of this course**.

* Your **honest opinion** is solicited and **your feedback will not have any influence on your grade**.

Indicate the response to the following questions on a scale of 1 to 6 where **1 is Strongly Disagree** and **6 is Strongly Agree**.

CORE TEACHING

- 1 The course was covered effectively in an organized manner (includes uniform spacing of course lectures and assignments).
- 2 Lectures were communicated effectively (i.e. clarity of expression, reinforcement of key ideas).
- 3 Passion in teaching the subject was evident.

PEDAGOGY

- 4 Appropriate teaching aids (includes blackboard/slides/videos/demos), when necessary, were used effectively.
- 5 A variety of questioning techniques were employed to enhance learning.
- 6 A broad perspective of the subject was given to stimulate learning.

CLASS INTERACTION

- 7 Class participation/discussion was encouraged.
- 8 Accessibility for clarifying doubts/queries (inside and outside the class) was adequate.
- 9 Doubts/queries on the subject were answered convincingly.

CONDUCT OF CIE

- 10 Syllabus was taught comprehensively.
- 11 Learning was enhanced by the effective use of assignments and tests.
- 12 Grading of assignments/answer scripts was impartial.
- 13 Students were given timely feedback on their performance.

STUDENT-CENTRIC TEACHING

- 14 Classes kept the students interested and focused.
- 15 Students' point of view in class discussions was considered.
- 16 Openness to accept errors & omissions was shown.

DISCIPLINE AND VALUES

- 17 Discipline was maintained in class.
- 18 Values and the teachings of Bhagawan were seamlessly integrated into the teaching process.

OVERALL RATING

- 19 How would you rate the overall quality of teaching?



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
(Deemed to be University)

Teaching Quality Feedback

Questionnaire for Experiment based Practicals:

- P1: Effective theoretical guidance related to practicals was given.
- P2: Planning and execution of practicals were explained.
- P3: Appropriate methodology to carry out the practicals was explained.
- P4: Practicals were supervised effectively.
- P5: Doubts and questions raised during the practicals were clarified effectively.
- P6: Helpful comments/suggestions were given on lab records for improvement.
- P7: Time given for practicals was adequate.
- P8: Equipment for practicals were in working condition.
- P9: Prescribed minimum number of practicals were completed and performed.
- P10: Evaluation of practicals was fair and impartial.
- P11: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)



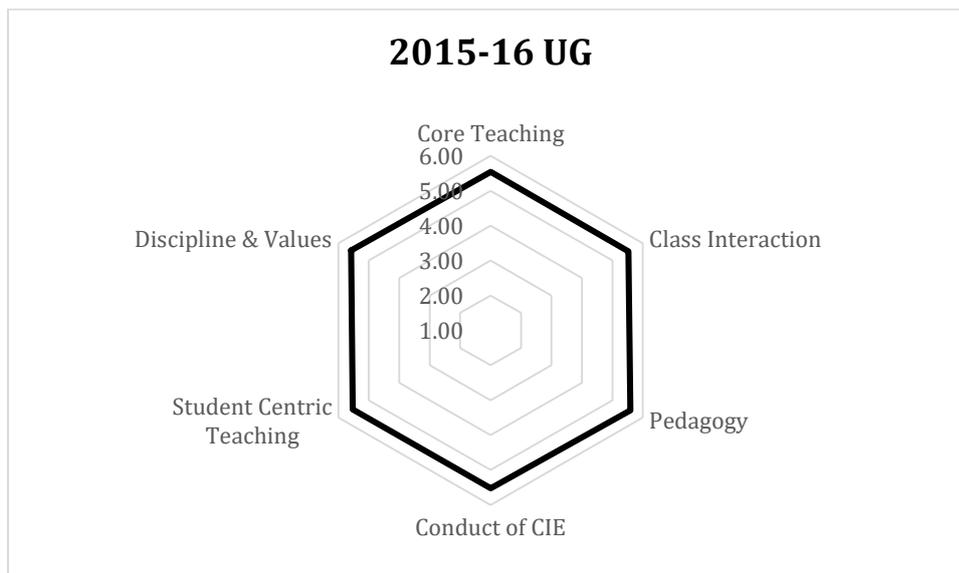
SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
(Deemed to be University)

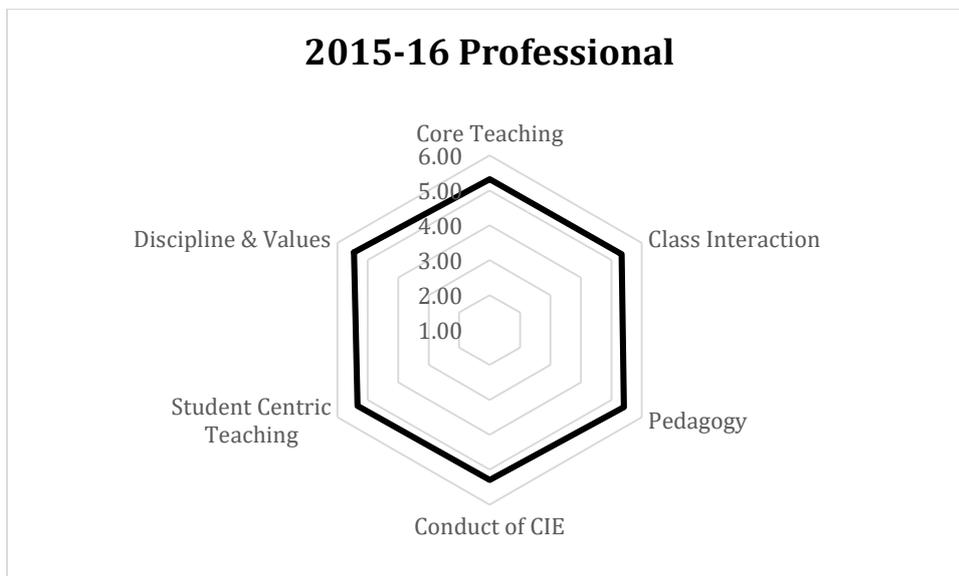
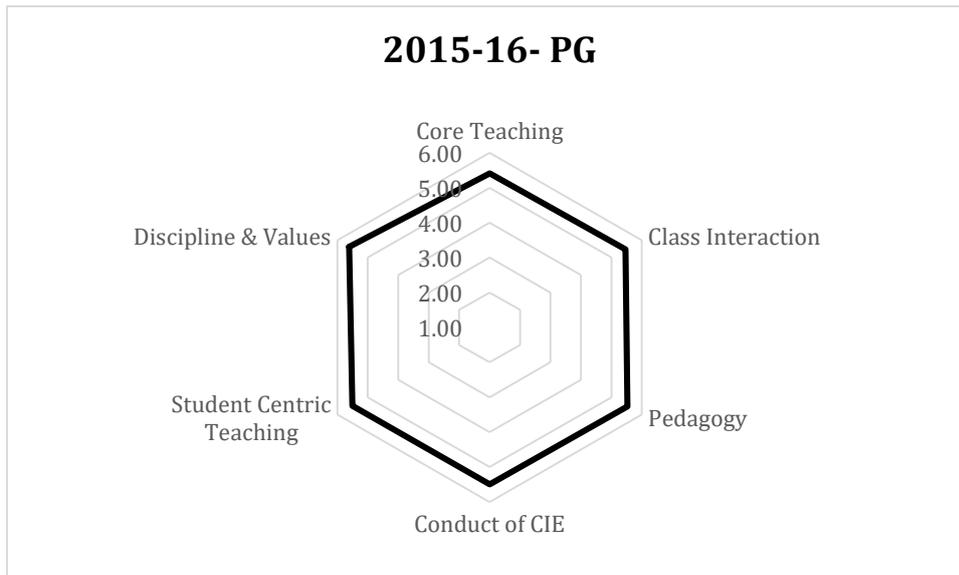
Teaching Quality Feedback

Questionnaire for Software Laboratory:

- P1: Effective theoretical foundation related to programming exercises was given.
- P2: Planning and execution of programming or mini-project related exercises were explained.
- P3: Appropriate methodology to implement the software solution was explained.
- P4: Software lab sessions were supervised effectively.
- P5: Doubts and questions raised during the programming sessions were clarified effectively.
- P6: Assignments were corrected on time.
- P7: Constructive comments/suggestions were given on assignment/ lab exercises.
- P8: Time given for exercises/assignments was adequate.
- P9: Computing equipment were in working condition and of capability needed to perform the tasks.
- P10: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)

Evidence of Success- The feedback of students helps the teachers to ascertain the areas where improvement is needed (if any). This helps them in planning for the classes in a better way for the subsequent semester. The HoDs study the feedback reports of the individual faculty and use it as an effective tool to allocate subjects to the teachers in the subsequent semesters. The subjects where the feedback from the students is poor, the HoDs initiate corrective action. They also identify the strong areas of a faculty based on the feedback and give them subjects in those areas while deciding the workload in the following semesters. The feedback is also taken into consideration as one of the components in selecting the best teacher for Sai Krishna Best Teacher award from each campus once in two years. **Radar chart of 2015-16-** theory for the Undergraduate, Postgraduate and Professional Programmes are attached for reference.





Problems Encountered and Resources Required- Few issues were encountered regarding administering the feedback to the whole student community at the end of the semester through the campus intranet. This was initially addressed by dedicating the net connectivity only to the computer labs during feedback time. After the installation of dedicated lease lines from the individual campuses to the main campus this problem also has been addressed.

Notes (Optional)

