

Autonomous College - Affiliated to Osmania University Accredited with 'A' grade by NAAC Sainikpuri, Secunderabad - 500094



# NAAC RE-ACCREDITATION - 2ND CYCLE

Criterion VI: -Governance, Leadership and Management

6.5.3 Collaborative Quality Initiatives 2018-19

Submitted to

National Assessment and Accreditation Council



# Bhavan's Vivekananda College

of Science, Humanities and Commerce Sainikpuri, Secunderabad-500 094 (Accredited with 'A' Grade by NAAC) Autonomous College - Affiliated to Osmania University

# **Two Day Faculty Development Program**

@ Vivekananda Institute of Human Excellence

Date <mark>- June 5<sup>th</sup> & 6th, 2018</mark> Venue - VIHE, Ramakrishna Mutt, Domalguda, Hyderabad

# A Report

A two-day Faculty Development Program was organized by VIHE, Ramakrishna Mutt for the faculty of Bhartiya Vidya Bhavan, Sainikpuri, Kendra. Twenty seven lecturers from Bhavans Aurobindo Junior college and Fifty five from Bhavan's Vivekananda College participated in the program.

The main objective of the FDP was to train teachers to impart value based education on Bhartiya Sanskriti.

## Day 1

The program started with a good breakfast. The session started with yoga, which was conducted by **Ms. Zarna Mohan**, who was a disciple of the late yoga exponent BKS Iyengar. She gave an introduction on the principles of yoga and it's practice. After the yoga session the teachers proceeded to visit the temple where they could spend time in meditation and prayer.

**Swami Bodhamayananda** welcomed the faculty and congratulated the management for taking the initiative of sending their faculty to R.K.Math for the faculty development program. While addressing the faculty he spoke on **`Implementation of values in our lives'.** He said that we have to implement humanity at work and we need to incorporate it in the existing curriculum. He focused on maintaining the Indian culture and traditions. He also said that there are problems everywhere amidst which we have to find our path.

**Mr. Murthy** spoke on the vision of **K.M. Munshi**, his very aim to start **Bharatiya Vidya Bhavan** was for the upkeep of the tradition and culture of India. He insisted that the teachers must teach the students the great culture of India.

Swami Aakrutananda spoke on `Ways and means of implementation of ancient methods to modern education'. He said that, unless we, the teachers, have it in ourselves we cannot teach it to the students. He said that the purpose of education is to convert `The Animal' Into Divine. He said that our education does not end with a bread winning education. Struggle is the essence of life and one should be as strong as a lion, should neither be optimistic nor pessimistic, but should have a balanced mind.

**Prof. Pramod Kumar, a student of IIT, Chennai, assistant professor at Amrita Vidyalayam, Coimbatore,** sent a recorded file which was played for the faculty. He expressed the challenge of value educational programs in the curriculum. He insisted that it is the responsibility of the teachers to awaken the intellect within the students. Students have to develop a sense of belonging to the institution and society, which can be done through various activities and celebrations. He emphasized on how to equip our students to deal with all the negativity around them, for which we have to be patient as change takes place gradually. He suggested that the institutions should have a foundation course on culture and heritage. An elective subject based on great epics can be included.

**Ms. Shreya**, working as a teacher at Dilsukhnagar Public School, a volunteer at R.K Mutt who has been selected for Gandhi fellowship,who will be working for the suburb areas of Gujarat, shared her experience at R.K Mutt and how it has brought about a change in her thinking and what is it that students seek in a teacher.

#### Post Lunch

Dr. Vivek Modi, Medical Doctor and trainer, spoke to the faculty on how a teacher's attitude should be. He said that a good teacher's attitude should shift from 'I'm important to you are important.' He said that teaching is all about delivery and not content. He gave insights as to how a teacher should also take care of oneself in regard to health, as it is important for a teacher to stay equally energetic from the first hour to the last hour. Being a doctor himself, he suggested some good and healthy food and sleeping habits to practice.

## Day 2

The second day started with the yoga session conducted by **Ms. Zarna Mohan**. Giving the principles and basic yoga techniques, she emphasized on practicing yoga on a daily basis. She gave a few tips which could be followed at the workplace with ease. The faculty had their breakfast after proceeding for the temple visit.

Swamiji addressed the faculty for the day. He gave ancient solutions for modern problems. He stressed on the importance of self - improvement classes. He was sure that we can imbibe our Indian culture in the students during the classes.

DR. Ratnakar, Director, Global Hospitals, spoke on Integrating our cultural and moral values into our education. He wanted the teachers and parents to be well equipped with the culture of our country and equally practice it. He suggested not to treat it as a separate entity but to make it a part of the curriculum. It can be dealt with in every class during the last ten or fifteen minutes.

He mainly spoke on the ten main concepts through which the culture of any nation would be reflected in. They are : History of the country, politics of the country, language, literature, religion, philosophy, arts, sciences, society and the great men who wrote the history of the country.

He cited three important ways of speaking to children that would have a better impact. Teaching children through parables, as they relate to them and understand their morals in a better way. To imbibe Indian culture and its values into the tender minds, he suggested collecting relevant value-based audio and video clips and present to them at regular intervals. He also suggested taking up case studies based on values. The sacrifices made by the parents for their upbringing should also be narrated to

them at regular intervals. Parents as role models should be able to improve their quality and they should be benefitted by them.

#### Post Lunch

Mr. Sravan Kumar, Principal of New Era Junior College, Narayanguda spoke on Social responsibilities, values and culture. He presented the problems, mannerism and facts of the present generation in a very simple language and gave live examples. He as a Principal is concerned about the welfare of the students but every day becomes challenging to him. While explaining the difference between 'Guru' and 'Upadhyaya', he navigated us through the culture, ethics and moral values of our country. He expressed his unhappiness that Indian culture has unfortunately taken a backseat now. He said that the parents and teachers need to change, they have to be patient enough with their lads and teach them with utmost love and care. One needs to be devoted towards their duties.

#### Concluding session

In the concluding session Swami Bodmayanandji asked the teachers to share their experiences on the two day faculty development program. Faculty members from BSAJC and BVC expressed their happiness and shared their views. They expressed their gratitude and gave their impressions and also gave a few suggestions for better practices of teaching history and culture to the students during the last few minutes of every class. There was also a suggestion to decentralize Swami Vivekananda's teachings so that it is accessible for all those who are interested in attending the sessions on a more regular basis.

Swamiji also gave information about the future courses going to be offered exclusively for the girl students. He informed about the Special programs going to be organized at R.K.Math for different age groups during July and August.

The faculty was enriched with the program and felt that more such programs be organized on a regular basis which will enhance their teaching skills and they would try to inculcate them into their classroom teaching.

Dr. C. Kameswari Program Coordinator



# FACULTY ORIENTATION PROGRAM @R.K. MUTT

5th & 6th of June 2018

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ndane Fune 2018	S.No.	Phone number	Name of the Teacher	Designation	Attendance 5 <sup>th</sup> June 2018
. (206)6			LANGUAGE DEPARTMENT		
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P	1	9391136608	DR. C. KAMESWARI	HOD-Languages	5/6/18
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610	5	9849006553	MRS. SARITA DOMINIC XAVIER	Lecturer in English	Dave Hi 179118
- S Daw 17	6	7013468486	MRS.SWATHINA SASHI	Lecturer in English	Wathing Tr
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			COMMERCE DEPARTMENT		W 5/6
N	13	7893039358	MRS. L V KAMALA DEVI	Lecturer in Commerce	
1	14	9885846745	DR.D.SANJEEVA RAO	Lecturer in Commerce	DeRoy 10 DERev 616
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T	17	9989827210	MRS.JYOTHI MEHRA	Lecturer in Commerce	25
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1. my	25	~	MS.M.VIJAYLAKSHMI	Lecturer in Commerce	1 11 310
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			CURMICTRY DEPARTMENT		-
			CHEMISTRY DEPARTMENT		

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18		MR.GV.RAMANA MURTHY	Lecturer in Chemistry	-2 ~
26	N	MR.GV.KAMANA MORTHY MRS.MARY NYGI KURIAN	Lecturer in Chemistry	Tim
27		MRS.MARY NYOI KUMAN MRS.MOUMITA BANDHOPADHYAY	Lecturer in Chemistry	Vi
28		MRS.PRERANA LOOMBA	Lecturer in Chemistry	bie
29		MRS.PKERANA LOOMD.		F
		GENETICS/BOTANY/BIOTECH. DEP	ARTMENT	
	-	MRS. B. KALPANA	Lecturer in Genetics	
30		DR.S. NAGAMANJU	Lecturer in Genetics/BT	Logio
31		DR.S. NAGAMANJU DR.I RACHANA KUMARI	Lecturer in Genetics	AS. T
32	/	MRS.MOHINI AIYENGAR	Lecturer in Genetics	ANOL
33		MRS.MOHINI AT LENGAN		
		MICROBIOLOGY DEPT.		ŕ
A		DR. S.P.SREEDHAR BHATTAR	Lecturer in Micro.	Die
GAA	110010010	MRS.S.ANJU	Lecturer in Micro.	ph-
85		DR.SHALINI DEVI SUVALA	Lecturer in Micro.	2
36		MRS.S.CHAITANYA KUMARI	Lecturer in Micro.	t
37		MRS.S.CHAITANTA KOMMAN		
1		BIO-CHEMISTRY DEPT.		
		MRS.RAJANI D.	Lecturer in Biochem.	Ry
38	9703536015		Lecturer in Biochem.	1 Bra
39		MRS.M.USHA		
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		MATHS DEPARTMENT	Lecturer in Maths	14
40	9160069998	MRS.SANTI ROHIT RAO	Lecturer in Maths	180
41		MRS. K. SRI LATHA	Lecturer in Maths	M.
42		MS.M.SHOBANA	Lecturer in Maths	
43		MS.K.SRAVANTHI		1
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		PHYSICS DEPARTMENT		1
		MRS. V R MANJULA	Lecturer in Physics	RH
44	9676499011	MRS. V R MANJULA MS.K.SRI LAKSHMI SAVITA	Lecturer in Physics	10 July
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		COMPUTER SC. DEPART.		200
		MR.P.SRINIVASA	Lecturer in Comp.Sc.	VY
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47		MR.K.MURALIDHAR	Lecturer in Comp.Sc.	DX-
48	the second se	MRS.AMITHA MARRAM	Lecturer in Comp.Sc.	No
49	9052648821	MRS.SHARON ROSY	Lecturer in Comp.Sc.	Wit
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5 55		MRS.W.ASHWINI	Lecturer in the	

# BHAVAN'S SRI AUROBINDO JUNIOR COLLEGE

# LIST OF THE STAFF MEMBERS ATTENDING THE PROGRAMME AT RAMAKRISHNA MUTT,

		5th & 6th Ju	me 2018	the second
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Jyne 18	1	MR A SRINIVASA RAO	9700823011	Assey 124
	2	MR P V SATYANARAYANA	9949600800	LAS IS
	3	MR N RAGHAVENDRA	8106409469	- Lee
	4	MR R NAGARAJU	9866245891	- BI cand Pras
	5	MRS P V R SARADA	9441285797	- The salara
4		MRS B ESTHER RANI	9346441471	Fister to
Ester	7	MR DASHRATH JOSHI	9440044608	P vra
1	8	MR Y V SUBBA RAO	9866061136	- MARTINE EN
	9	MR B VINAY KUMAR	9885926931	B Janey Kund BU
	10	MR V PAVAN KUMAR	9848529511	- Re
	10	MR U RAMAKRISHNA	9885368928	Con to F
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S. Andrew	19	MRS G HARATHI	7330942021	- and have
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B	20	MR J UDAY KUMAR	7989937629	- Con Robert
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	23	MRS G SOUMYA	9347995745	ditte and Suga
	23	MR G KRISHNA	8123776458	- True
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# **BHAVAN'S VIVEKANANDA COLLEGE**

OF SCIENCE, HUMANITIES AND COMMERCE SAINIKPURI, SECUNDERABAD Autonomous College-Affiliated to Osmania University Accredited with 'A' Grade by NAAC

## TWO DAY WORKSHOP ON "EXPERIMENTAL PHYSICS"

Chief Patron Shri I.Y.R Krishna Rao, IAS(Retd.) Chairman BVB, Sainikpuri Kendra. Former Chief Secretary, Govt. of AP

Patron Air Commodore (Retd) JLN Sastry, VSM Vice Chairman, BVB, Sainikouri Kendra

Workshop Chairman Prof. Y. Ashok Principal, Bhavan's Vivekananda College, Sainikpuri

Advisory committee Dr. Venu Gopal Reddy Professor of Physics [ Retd. ], Former Head, Department of Physics, O.U.

Dr. V. Rajeshwar Rao Professor and HOD,Humanities and Sciences. Kamala Institute of Technology and Science. Singapur,Huzurbad,Karimnagar. President, IAPT (RC-22),Telangana.

Prof. G. Prasad Head, Department of Physics, O.U.

Prof. D. Ravinder BOS-Physics, Department of Physics, O.U.

Prof. Rehman BOS-Electronics, Department of Physics, O.U.

#### Bhavan

BHAVAN'S VIVEKANANDA COLLEGE OF SCIENCE, HUMANTTIES AND COMMERCE SAINKPURI, SECUNDERABAD Autonomous College Affiliated to Osmania University Accredited wtih "A" Grade by NAAC



A Two Day workshop on

"Experimental Physics" 22nd and 23rd March, 2019

ORGANIZED BY DEPARTMENT OF PHYSICS & ELECTRONICS

IN ASSOCIATION WITH INDIAN ASSOCIATION OF PHYSICS TEACHERS (IAPT-RC22)

Chief Guest Prof. Chandrasekhar Vadapalli Centre Director, TIFR, Hyderabod

<u>Guest of Honour</u> Dr. K. Venu Gopal Reddy Professor of Physics ( Red. ) Former Head, Department of Physics, OU.

<u>Keynote Speaker</u> Dr. Ravi Chandra Gundakaram Scientist F and Team Leader Center for Haterials Charaterization and Testina, Hyderabad

Registration Registration Fee: ₹500/-DD No. Date: Bank: NOTE : In case for Online Transfer, Contact the Following.

**Contact Details** 

Convener: Mrs. B. Niraimathi, Head, Department of Physics and Electronics Email: niraimathib@gmail.com

Co-Conveners: Mrs. V R Manjula - 9676499011 Email: vrmanjula.phys@bhavansvc.org Dr. GSVRK Choudary - 9866552709 Email: svrk481974@gmail.com

**Organizing Committee:** Mrs. M. Prasanna Mr. TVLNH Prasad Mrs. P. Lavanya Mrs. T. Sai Santoshi Ms. Asiya Sultana Ahmed

# Report on Two Day workshop on Experimental Physics

The department of Physics and Electronics, Bhavan's Vivekananda College in association with Indian Association of Physics Teachers (IAPT-RC22) conducted a two day workshop on "Experimental Physics" on 22<sup>nd</sup> and 23<sup>rd</sup> March, 2019. The workshop is intended to give hands-on experience to physics teachers at the undergraduate level with practical experiments comprising of relatively sophisticated and expensive set-ups.

A total 19 participants from 13 colleges and one international school participated in the workshop with 4 outstation candidates. There participants also include physics teachers from Engineering colleges.

The dignitaries present for the inaugural session were Air Commodore (Retd) JLN Sastry, VSM, Vice Chairman, BVB, Sainikpuri Kendra, Prof. Y. Ashok, Principal, Bhavan's Vivekananda College, Sainikpuri, Prof. V. Chandrasekhar, Center Director, TIFR, Hyderabad, Prof. K Venugopal Reddy, Professor in Physics (Retd.), Former Head, Department of Physics, Osmania University, Mrs B. Niraimathi HOD, Dept of Physics & Electronics, Dr. Ravi Chandra Gundakaram, Scientist 'F', ARCI Hyderabad, Prof. D. Ravinder, BOS-Physics, Department of Physics, Osmania University and Prof. Syed Rehman, BOS-Electronics, Department of Physics, Osmania University. The chief guest, Prof. V. Chandrasekhar delivered a lecture on 'Year of the Periodic Table'. His speech was in an effort to highlight why this year is named the year of Periodic Table. In his lecture he went through the glorious past of the periodic table with little anecdotes and tales mixed-in along with cold hard facts. He finished it off with an optimistic view of how things might evolve in the future.

Following the tea break after the inaugural session was the keynote address by Dr. Ravi Chandra G, Scientist 'F', ARCI Hyderabad titled 'Precision and Accuracy'. His address was to nail in the importance of following the proper technique in any measurement at all levels of sophistication. His talk predominantly consisted of real life examples of measurements at different size scales and what degree of accuracy is needed. He kept reiterating the importance of methodological and precise nature of measurements in any experiments and the academic and professional level.

The Technical Session-I followed with a talk by Dr. K. Venu Gopal Reddy, Professor in Physics (Retd.), Former Head, Department of Physics, Osmania University. His talk was titled 'Science for the people and Experimental Physics'. It followed the theme set for the National Science Day which reads 'Science for the people and people for science'. He spoke of how one must not forget that in the quest for science, certain ethics must not be forgotten and that science and physics in particular must ultimately benefit the society in some way. His talk basically highlighted the fact that even though the instruments used in

laboratories may get complicated, the underlying principle of their working is still basic physics and once this thought is firmly rooted into the minds of students, they would no longer fear the experimental side of physics. This is essential because there is no physics without experimentation. This point was reiterated by Prof. D. Ravinder and Prof. Syed Rehman who instructed the participants that they must be their duty to make sure that the basic physics is well understood by the students as it will make or break their future.

The Practical Session–I followed after lunch where everyone was able to view and perform various experiments which are taught at an undergraduate level. The list of experiments totaled twelve different experiments with number of set ups. The participants were provided with handbooks with all the details about the experiments and tables to record data while performing an experiment. The faculty members of the organizing department were present to give a demo if necessary and to answer any queries participants might have.

Day 2 started with a technical session by Dr. Venkataiah Gorige on the topic "Experimental Demonstration of Magnetization Reversal in Ferromagnetic/Ferroelectrics". His lecture focused on the use of magneto elastic and magneto electric materials for switching circuits. This session was followed by practical session again wherein the participants continued having hands-on experience.

The valedictory session started at 3.00pm with Prof Y Ashok, Dr Venu Gopal reddy and Mrs B Niraimathi gracing the dais. Mrs Manjula presented the report of the workshop. Dr K. Venu Gopal Reddy appreciated the efforts of the Department of Physics and Electronics of the college. The participants gave a feedback about the workshop. The participation certificates were given away to all the participants. Dr Choudary proposed vote of thanks. With this the workshop came to a successful end.



#### HANS NEWS SERVICE

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Hyderabad: The department of Physics and Electronics, Bhavan's Vivekananda College in association with Indian Association of Physics Teachers (IAPT-RC22) conducted a two-day workshop on "Experimental Physics" on March 22, 23.

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'భవన్స్'లో ముగిసిన వర్క్షేషాప్ ఒక

నేరేద్మిట్: డివిజన్ పరిధిలోని భవన్స్ డిగ్రీ కళాశా లలో ప్రయోగాత్మక 'ఎల క్రాషనిక్స్ - భౌతికశాస్త్రం'పై రెండు రోజులపాటు కొనసాగిన వర్కేషాప్ శని వారం ముగిసింది. హైదరాబాద్లోని 18 కళాశా లలతోపాటు ఒక ఇంటర్నేషన్ స్కూల్ విద్యార్థులు, భౌతిక శాస్త్రం అధ్యాపకులు పాల్గొన్నారు. ఆవర్తన పట్టిక ప్రాధాన్యతను వివరిన్నూ, విజ్ఞాన శాస్త్రం పరి శోధనల నియమాలను విస్మరించొద్దని ఈ నంద రృంగా వ్యక్తలు పేర్కొన్నారు. భౌతిక, విజ్ఞాన శాస్రాలు ఏదో రకంగా సమాజానికి మేలు చేస్తు న్నాయని అభిప్రాయపడ్డారు. 'అయస్కాంత లైజేషన్ రివర్సల్'అనే అంశంపై వివరించారు. మొత్తం 12 ప్రయోగాల జాబితాను విద్యార్థులు అందించారు. అధ్యాపకులు, విద్యార్థులకు నిర్యా



వర్మ్ షాప్ ను పరిశీలిస్తున్న అతిథులు

హకులు ప్రశంసావత్రాలను అందజేశారు. భవన్స్ విద్యాసంస్థల చైర్మన్ జేఎల్ఎన్ శా.స్త్రి. ప్రిన్ఫిపాల్ ప్రా.వై.అశోక్, ప్రూఫెనర్లు వి.చంద్రశేఖర్, కె.పేణు గోపాల్రెడ్డి, డీ.రవీందర్, నయ్యద్ రహమాన్,తో పాటు హెచ్ఓడీ నిరైమతి తదితరులు పాల్గొన్నారు.



#### BHAVAN'S VIVEKANANDA COLLEGE OF SCIENCE, HUMANITIES AND COMMERCE, SAINIKPURI, SECUNDERABAD. Autonomous College Affiliated to OSMANIA UNIVERSITY, Hyderabad.

# PRESS REPORT

# **DAY 1:**

Department of Chemistry,Bhavan's Vivekananda Degree College, organized a two day Zonal Centre Training Program in association with E-Cell IIT Kharagpur, makeintern.com on "Emerging Trends in Bio-Inorganic Chemistry." There was participation from 44 students in the workshop.

Day one of the workshop, 28<sup>th</sup> November, 2018 commenced with an introductory session on Bio-Inorganic Chemistry by the Resource person for the workshop,Dr. Kirthana M.V.Sindhe,who has professional research experience in Biomedical research,drug discovery & molecular biology.

Post lunch session, hands on training on computers was given to the participants by Dr .Kirthana on various research articles & gene assays for drug designing.

Students from Bhavan's Vivekananda College, BITS Pilani-Hyd campus, St Francis College for women & St Ann's College took part in the workshop.Selection of top 5 students to round 2 in IIT Kharagpur Campus marks the major attention of Day 2 of the workshop to be held on 29th Nov 2018.The selected student in the finale round gets an internship with IIT Kharagpur.

## **DAY 2:**

The second day of the workshop, 29<sup>th</sup> November, 2018, organised by Department of Chemistry,Bhavan's Vivekananda College of Science,Humanities and Commerce in association with E-cell IIT -Kharagpur,<u>makeintern.com</u> on 'Emerging Trends in Bio-Inorganic Chemistry' began with a talk on career guidance in Chemical & Biological Sciences by the resource person Dr.Kirthana M.V.Sindhe.

Five participants were selected from round one based on recent research article presentation & group discussion by the participants.Selected participants are called for the finale round at IIT Kharagpur & the final selected participant gets an internship with IIT Kharagpur.

The workshop was an enriching one for all the participants & motivated them to stay focussed & succeed further.



#### Dr A S Rao Award's Council—Residential Workshop

A Residential Science Workshop for 9<sup>th</sup> and 10<sup>th</sup> Class Students was organized by Dr AS Rao Awards Council from 26<sup>th</sup> April 2019 to 1<sup>st</sup> May 2019, in which 4 faculty members Mrs M Prasanna, Dr GSVRK Choudary, Mr T Prasad and Mrs T Sai Santoshi from the Department of Physics and Electronics were deputed as resource persons.







Santoshi Dept. of Physics & Electronics

Bornicli

# **VISIT TO MAXIVISION EYE HOSPITAL**

Dept. of Physics & Electronics organized a visit to Maxi Vision Eye Hospital, Dr A.S.Rao Nagar, Hyderabad on 18-01-2019. About 25 UG students were taken for the visit. The purpose of the visit is to inculcate interest among the students and developing a deeper insight in the vision related aspects by providing them an exposure to the rectifying mechanisms used for correcting the various eye defects.





### Visit to MSN Labs Pvt Ltd, Formulation Unit

#### **Bollaram, Hyderabad**

Students of M.Sc Biochemistry 2<sup>nd</sup> year were taken for an industrial visit to MSN Labs, Industrial Estate, Bollaram, Hyderabad on 28<sup>th</sup> Jan, 2019. They were shown the analytical chemistry labs and were explained about the working of HPLC, GC, IR spectrophotometer for identifying the raw materials. They were also shown other instruments like total organic content analyser, tablet density apparatus etc. They were explained about the stability studies of the drugs at various temperatures. Students were briefed about labelling and packing of injectables, orals and capsules.

The staff explained about all the instruments in detail and the students found the visit very useful.



# 2018-2019

## Workshop on

# **'Flow Cytometry and its Applications' 23<sup>rd</sup> to 25<sup>th</sup> January, 2019**

The Department of Biochemistry has organized a workshop on "Flow Cytometry and its Applications" for M. Sc Biochemistry first year students in collaboration with CFRD (Central Facilities for Research and Development), Osmania University, Hyderabad from23<sup>rd</sup> to 25<sup>th</sup>, January, 2019. The workshop started with an introductory lecture on lasers and fluorescence by Mr. Anil followed by Ms. Sumathi explaining about the principle, instrumentation and applications of Flow cytometry. On second day students and faculty were briefed about apoptotic staining, sample preparation, its assay, immunotyping of samples and acquisition of samples. On the last day, students were explained about preparation of cell cycle samples and how to interpret the data and analyze it. The last session was on the do's and don'ts during the sample analysis.

This workshop has enriched the students about working of the flow cytometry and its applications in cell study.















#### Visit to Yes Labs, Kapra, Sainikpuri, Secunderabad.

The Students of M.Sc Biochemistry 2<sup>nd</sup> year and students of B.Sc SEC (Medical Diagnostics) course were taken for a visit to Yes Labs at Gandhi Nagar, Kapra, Sainikpuri, Secunderabad on 16-01-2019. They were shown various instruments with high automation for estimating complete blood picture, electrolytes, glycosylated hemoglobin. and also for routine biochemical parameters and hormone assays including parathyroid hormone (PTH). The trip gave the students an awareness about the level of sophistication with respect to automation in present day diagnostics. They also understood how maximum number of samples can be analysed with minimum human intervention in a short time span.









#### Visit to Hyderabad Central University, Gachibowli, Hyderabad.

The final year students of M.Sc Biochemistry were taken to Hyderabad Central University, School of Life Sciences for an educational trip on 18<sup>th</sup> December, 2018. Students were taken to Genomics, Proteomics and Metabolomics labs and were explained about the working of various instruments and their applications in the field of biology. The instruments explained were PCR, Real time PCR, MALDI-TOF, Microarray instrument, 2D PAGE, Surface plasmon resonance and GC-MS. Later they were taken to nanotechnology centre and were explained the working principles of various microscopy techniques that includedFACS (fluorescent activated cell sorter) and Confocal microscope.At the end of visit they were taken to BioNest incubation centre and were given a detailed explanation on the various facilities available to test the generated ideas for startups.

The visit to HCU washighly informative and educative to the students who had got the opportunity to view the working of sophisticated instruments that are being used routinely in labs for various research activities. Overall, the trip was a great learning experience for students.

















# 2018-2019

# Value Added Course

# Institute of Genetics and Hospital for Genetic Diseases 17<sup>th</sup> to 20<sup>th</sup> of September, 2018

The students of final year M.Sc Biochemistry attended a Value Added Course from 17<sup>th</sup> to 20<sup>th</sup> of September, 2018 at Institute of Genetics, Begumpet, Hyderabad. Students had the opportunity to learn about TIFA scanning for identifying any genetic abnormalities in the foetus. They were also shown how HPLC is used for the detection of thalassemias. They had hands-on-experience in performing ELISA and Comet assay (single - cell gel electrophoresis). Students were given exposure on cytogenetics aspect of karyotyping on chromosomal abnormalities of various genetic syndromes. They were explained in detail about Genetic counselling and its importance for individuals and families who are at risk of genetic defects.

Overall, the students had a good experience in learning different experiments related to genetic disorders.

















# 2018-2019

# **Health Camp**

#### 14<sup>th</sup> and 16<sup>th</sup> August, 2018

A Health camp was conducted by the Department of Biochemistry on 14<sup>th</sup> and 16<sup>th</sup> of August, 2018 for the staff and students of Bhavan's Vivekananda College. The camp was organized in association with Vimta labs. As a part of the camp various blood parameters like glucose, lipid profile, liver profile, kidney profile, complete blood count, thyroid profile, vitamin D and vitamin B12, were investigated. Complete health checkup panel, Master health checkup panel and Extended health checkup panel were included in the list of tests done apart from individual tests. About 39 staff members and 73 students got their tests done for various parameters. About 242 students got their blood group tested. There was an active involvement of students of under graduate and post graduate students in conducting the Health camp activities.

These health camps are successful in helping the staff and students to monitor their health status periodically and make necessary corrections in terms of diet or clinical help from a doctor. The department was appreciated by staff and students for the initiative taken and continuing the activity which has become useful at their convenience.









# **Free Dental Check-up**

(28th July, 2018)



The Department of Biochemistry and the NSS unit of Bhavan's Vivekananda College, Sainikpuri, organized a free dental check-up for staff and students of the college on 28th July, 2018. This camp was organized in the college in collaboration with the Department of Conservative Dentistry &Endodontics and Department of Public Health, Army College of Dental Sciences. There were 12 doctors and 11 interns who screened staff and students' oral health. The camp received a huge response with nearly 420 students availing this free dental check-up.

#### **OUTREACH PROGRAMME**

The department of Biochemistry has organized an outreach programme for the 7<sup>th</sup> consecutive time at ZillaParishad High School for girls, Alwal on 10<sup>th</sup> and 11<sup>th</sup> July, 2018. Undergraduate and Post graduate students of Biochemistry have participated with enthusiasm and displayed models and charts related to the various concepts of biological science. They demonstrated various experiments like TLC of plant pigments, pH of various solutions of day to day use, microscopic visualization of stomata, working model of cardiac cycle and concepts of exothermic reactions and density. School students were very enthusiastic to observe and learn the concepts of all these experiments. Animations were also shown on circulatory and digestive systems.

Blood group determination was done for 133 students of 9<sup>th</sup> and10<sup>th</sup> standards and body mass index (BMI) was done for nearly 60 students. This programme received a good appreciation from the students and staff of the school.







## Summer Internship – Genetic Counseling

## April/May 2018

A summer training program was conducted by the Department of Genetics & Biotechnology at the Institute of Genetics & Hospital for Genetic Diseases, Begumpet, Osmania University from 21<sup>st</sup> April to 19<sup>th</sup> May, 2018. A total of 12 students enrolled for the course (Second year students from BtGC and MiGC). The students had an exposure to the Molecular Biology techniques like PCR, Gel Documentation, FISH, Ultrasonography etc. The Faculty and Research Scholars delivered lectures on various aspects of Genetic counseling, Genetic diseases, Prenatal diagnostic methods, molecular markers etc.

Apart from this students had an interaction with the patients suffering from various genetic disorders at the Hospital. This helped them to analyze the symptoms of the disease and the subsequent treatment in terms of management of the disease. Students had an interaction with the research scholars regarding the future prospects of the internship programme as well as career opportunities in the field of life sciences.

They participated in one day seminar on PLASTIC POLLUTION AND ITS EFFECT ON HUMAN HEALTH held on 5<sup>th</sup> June, 2018 on the occasion of World Environment Day. They bagged the third prize for the event: Model –making entitled Waste and Train Management.

The students found the training programme very informative, helpful and a good exposure to the hands on Karyotyping, Biochemical assays, application of molecular markers in Genetic diseases and interpretation of the Ultrasonograph etc.




#### List of students Enrolled for Training Program at IOG- 2018

1	45916001	A Sai Pravalika	MiGC II year
2	45916016	M S Pujitha	MiGC II year
3	45916022	Rahul Andharia	MiGC II year
4	45916035	P V N S Mounika	MiGC II year
5	45916037	P Sailaja	MiGC II year
6	45916040	Sharon Mariam Abraham	MiGC II year
7	45916045	J Sujitha	MiGC II year
8	45916050	Y S S Yashaswee	MiGC II year
9	57316007	C Uday Kiran	BtGC II Year
10	57316036	Naina Kumari	BtGC II Year
11	57316041	R prashanth Sai	BtGC II Year
12	47116030	Nikhitha	MiGC II year

# Activities 2018-19

# Report on workshop conducted by the Dept. of Genetics & Biotechnology in collaboration with Make Intern and E-Cell, IIT Kharagpur on 15<sup>th</sup> & 16<sup>th</sup> February 2019

A two-day workshop was conducted by the Department of Genetics and Biotechnology in collaboration with Make Intern and E-Cell, IIT Kharagpur on 15<sup>th</sup> & 16<sup>th</sup> February 2019. The workshop included two topics: 1. Advance Techniques in Molecular Biology, 2. Micro-array Data Analysis. The resource persons were: Dr. Hema Mohan for Advance Techniques in Molecular Biology and Dr. C. N. Prashantha (Entrepreneur-Scientific Biominds) for Micro-Array data Analysis.

#### Day 1:

#### Advance Techniques in Molecular Biology

Dr Hema Mohan gave a presentation on Advance techniques in Molecular Biology to acquaint students with theoretical background and refresh their basic concepts. She also conducted a test to evaluate the students' understanding of the principles involved in various Molecular Biology techniques.

The students learned the technique of DNA extraction from E. coli using Proteinase K enzyme (Salting out method). This was followed by casting agarose gel for electrophoresis which would be carried out the next day.

#### Microarray data Analysis

Dr C.N. Prashantha briefed the participants on the need for Microarray data analysis and its applications in studying gene expression and clinical studies. The students were engaged in an interactive system based tutorial on wet lab procedures involved in preparing a Microarray plate and collecting data from it. They were given an introduction to the different types of Microarrays available. Then they were guided through a practical involving an R Language based Affymetry type of Microarray for samples from AIDS patients. The students learned the collection, reprocessing, clustering of raw data, and checking for Quality Control.

#### **Day 2:**

#### **Advance Techniques in Molecular Biology**

Dr. Hema Mohan showed the preparation of reaction mix for Polymerase Chain Reaction (PCR) and demonstrated the working of the PCR Thermocycler to the

participants. After lunch, the participants were trained to extract DNA from E. coli using the Phenol-Chloroform method. The isolated DNA samples and the PCR amplified products were subjected to Agarose Gel electrophoresis and viewed under UV Transilluminator. Towards the end of the session, Dr Hema Mohan conducted a written test to assess how well the participants grasped the concepts taught in the workshop.

#### Microarray data Analysis

Dr C. N. Prashantha guided the students through completing the code to generate and tabulate the various genes expressed and the pathways they followed.

Further, the students were introduced to online databases such as ToppFun Database, Gorilla Database and David Functional Annotation Database which they used to analyze the genes associated with disease conditions. Genes that were upregulated and down-regulated in cells were identified. The pathways of these genes and their contribution to disease progression were identified and heat maps were constructed. Finally, a code for network relations between different genes was generated and executed. At the end of the session, Dr C.N. Prashantha assessed the students by conducting a written exam.

The two-day workshop concluded with a valedictory function that included distribution of certificates to all participants by the Head, Department of Genetics and Biotechnology. Five meritorious students from each topic were selected by the Resource Persons to compete in the National Level Competition for Bio-Science Students which will be conducted by the E-Cell of IIT Kharagpur.

The participants interacted actively with the resource persons about research and career opportunities in the field of Biological Sciences. They participated with great enthusiasm and had a very fruitful experience at the two-day workshop.









#### **Industrial visit**

#### **RADHA TMT**

25<sup>th</sup> September,2018

The final year students of the BBA program from Bhavans Vivekananda College were taken on an industrial tour to RADHA TMT, Chegunta, Hyderabad on 25<sup>th</sup> September 2018. Approximately 50 students were present for this visit. Mrs Lalitha and Mrs Kavitha from the department of management studies accompanied the students on this programme. The students left at 9:30am and returned by 4pm.

Radha TMT a plant situated in Shankarampet Chegunta village in Medak district is a full-fledged state of the art manufacturing unit which includes steel melting induction furnaces, fully atomized hi-speed rolling mill, continuous casting machine(CCM) and testing facilities to make high quality primary steel. This plant has been operational since 2008-2009. The students were taken around and the manufacturing process was explained in detail. From initial stage of procurement of raw material to manufacturing of the finished product. The following is the process: (source: emsonsteel.com)



The student were divided into two batches for the tour. During the tour of the plant the students were provided about deep insights about the working of the plant and detailed information was shared. We all got to see the whole process of how the iron is collected using a magnet then heated and turned into iron bars and then rolled to make iron rods.

At the end, the student were offered with refreshments and drinks to regain their energy for the trip back . The industrial visit to RadhaTMT was an enriching and informative experience for the students in getting live exposure and first hand information of the functions and process.



#### **Industrial visit**

#### THE TELANGANA STATE DAIRY DEVELOPMENT CO-OPERATIVE FEDERATION LIMITED

#### (VIJAYA DAIRY)

#### 22<sup>nd</sup> December, 2018

The visit was organised with prior permission and guidance of General Manager, Milk Products Factory. The management was pleased to accord permission to 120 students in 4 batches along with faculties to visit the Milk Products Factory on 22-12-2018 at 11:00 am, without disturbance to regular work.

We started from college around 10:00 am and within 45 minutes reached to the factory. At the beginning of our visit we met General manager. Students of Management department were able to explore the various process of milk products like Ghee, Milk (various fully automatic and semi- automatic pasteurisation machinery), Badam milk, Butter, Khova, Sweet Lassi, Butter Milk,SFM(Flavored Milk), Panner, Skim Milk Powder.

The state run Telangana state diary development cooperative federation limited (vijaya diary), Hyderabad plant now has a capacity of 4 lakh litres and has drawing up large scale modernisation and expansion to improve the capacity to 10 lakh liters. plants are also situated in Warangal, khammam, nizamabad, mahabubnagr and khamareddy districts.

On an average of 3.04 lakh litres of milk is being sold in Hyderabad and other districts. From the Lalapet factory, 40000 litres of tetra packed milk is being transported to Anganwadi schools in state.

The TSDDCF has one milk products factory, seven dairies, 11 milk chilling centres and 126 bulk milk cooling units. Plans are also afoot to establish 1000 kiosks for selling vijaya dairy products at tourists' spots, highways, and other crowded places across the state.

To promote the vijaya brand, 25 RTC buses are being used and vijaya parlours and vijaya cafes have also been set up. In order to have full- fledged milk sales in the city, distributor – wise milk supply adopted.

The diary has enhanced its milk procurement methods. At present around 5.6 lakh litres of milk is procured from 65000 producers. At present incentives to milk producing incentives are provided to farmers through cooperative societies and union producers.





#### Acumen Connect-Industrial visit-RC Cola

On 25th of January, 2019 we visited RC Cola Industry, Patancheru as a part of our Industrial visit. A 1012 of 57 students attended

Even before the Industrial visit happened, we had an Orientation Program in the college premises on 19<sup>th</sup> January, 2019 where we were given theoretical insights of the happening of the company and what was expected out of us during the visit. The Orientation program was successful in giving us a brief idea of how the industrial visit is going to take place .A fun activity to teach the importance of Team unity, Authority and Delegation was also conducted.

Our Actual Industrial visit was one of the best learning experiences. An actual implication of theoretical knowledge gained earlier was seen. It was fun based learning. We got the opportunity to interact with the Human resources of the Industry which added to the beauty of the visit.

It was well organized and planned. The best part learnt was the practical implication of the theoretical subject Knowledge, be it Production, Operation, Distribution or Human resource.

We sincerely Thank Acumen Connect for such a fruitful experience. Waiting forward to seeing you again soon.

A Big Thank You.

# Industrial Visit-Acumen Connect-RC Cola

On 25th of January, 2019 we visited RC Cola Manufacturing industry, Patancheru.

Rc cola, short for Royal crown cola is the the 3rd position holder in soft drink international market. The industry which we visited in particular produced the following:RC mineral water,RC cola,RC Q-lemon, orange, jeera soda. The industry has a co parking unit-Trinity Beverages.

#### The Aim of the Visit was

- To have an exposure towards real life working conditions of an industry.
- To gain inside and outside knowledge of an industry.
- To combine theoretical and practical knowledge.
- To have a clear insight of the working of a company.

#### The Key take backs are-

•Real life exposure to a working industry

•Learning and practical knowledge

•Practical example of the theoretical knowledge gained earlier.

- •Got an insight on the internal working environment of an industry.
- •A clear idea of how an industry runs.
- •In depth knowledge of a manufacturing unit.
- •A perfect learning experience.

# A PESTLE analysis for RC Cola.

# **POLITICAL:**

RC Cola products are at the mercy of the FDA. They must meet regulations, given by the government, to put products on store shelves.

# **ECONOMIC:**

RC Cola products are distributed all over the world. Various countries have different cultures, tastes and desires. The company is trying its best to match and stand up on the expectations of its Target market.

# SOCIAL:

RC cola is trying its best to stand up on the expectations of its consumers. Also it continuously tries to update itself with the social needs, For example, it is now trying to replace sugary drinks with healthy diet drinks, keeping in mind the changing tastes of the consumer market. It has launched 2 diet drinks i.e Diet RC Cola Lemon and Diet Cherry RC since 2016.

# **TECHNOLOGY:**

Continuous technological upgradation has helped the company produce better and faster.Most of the production depends on the machinery and a little human supervision is the only thing reqired in these industries.

# LEGAL:

RC Cola retains all rights related to their business, including past and future products developed with a patented process.

# **ENVIRONMENTAL:**

Environmental resources have an extreme affect on the working of the company. Water being the main raw material for the making of the product, any shortage or water scarcity will have an adverse effect on the smooth running of the industry.

#### **Tax Invoice**

то	FROM	INVOICE NUMBER		
Bhavan's Vivekananda College	Acumen Connect	1382		
India	plot no 69 Secunderabad			
	Hyderabad 500011	ISSUE DATE	CURRENCY	
		1/25/19	INR	,

		QUALITY	UNIT	UNIT PRICE	TAX	TOTAL INR EXCL. TAXES
1382	Industry Connect Program	57	pcs	500.00	0% + 0%	28,500.00
1302	Industry Connoct Pogram			Taxable value		28,500.00
				CGST 0% of 28,500.00 INR		0.00
				SGST 0% of 28,500.	SGST 0% of 28,500.00 INR	
κ.				Total INR		28,500.00
				Total taxes INR 0.00		
				INR – Twenty eight t	undered only	

#### NOTES

This invoice is regarding the industrial visit conducted for the BBA II year students (2017-2020) of Bhavan's Vivekananda Degree College. Industries visited : Royal Crown Cola, Hyderabad. Date of the Visit: 25/1/2019. Cheque Details: Acumen Eduventures Pvt Ltd. Pan No : AAOCA1235A. GST Details: 36AAOCA1235AIZ6 Τo,

The Principal

Dt: 16.01.2019.

Bhavans Vivekananda College,

Sainikpuri, Secunderabad-94

Dear Sir,

SUB: Permission for Industrial visit – Req - Reg.

This is for your kind information that M/S. RC Cola a beverage company (Royal crown cola), Patanchreru, Hyderabad, has accorded permission for local industrial visit to our BBA II year students on 25<sup>th</sup> January 2019. In this regard, We request and seek your permission for our students to go for industrial visit on 25/1/2019.

Thanking you

**Yours Sincerely** 

Schelineva

Dr. NS Chakravarty

Head, Department of Management Studies.

Yumilt of.



MBA AFM SEM I-....docx







