- ➤ Name of the college: K.J.Somaiya College of Science and Commerce, vidyavihar
- **Year of support: 2014-2019**
- > Total grant received during the period of support: Rs.

Non recurring grant: Rs 30,00,000/-

Recurring grant: Rs 36,00,000/-

Travel grant: Rs. 3,00,000/-

> Recognition by other funding agencies:

DST-FIST Rs 90,00,000

> Names of the departments supported:

Chemistry, Physics, Botany, Zoology, Microbiology, Biochemistry

PROJECTS UNDERTAKEN BY THE STUDENTS/SUMMER TRAINING

Department of Microbiology:

- Undergraduate Research guidance: Guided Ms. Sayali Dagde (F.Y.B.Sc) for a project entitled "Antibacerial efficacy of Soaps" which was presented as a Poster at Sajjan Gupta Konark Memorial Award Meet at K. C. College on21st and 22nd January 2015 and at UGC sponsored state level workshop on 'Microbial frontiers in Health and Hygiene' held at Elphinstone College on 2nd and 3rd January 2015.
- Two students from F.Y.B.Sc. (Microbiology) Khan Simab Faiyaz Ahmed and Yadav Padmaja.were selected for the 'National Initiative on Undergraduate Science' program (NIUS) of Homi Bhabha Centre for Science Education in Collaboration with TIFR and BARC. The camp was from 27th October to 31st October, 2014.

Department of Biochemistry: Industry Oriented Project Report

The students of Biochemistry department have carried out industry oriented projects in the academic year 2014-15. The projects were focussed on developing various functional food products which are rich in nutrition, antioxidants and energy. The idea behind the projects was to outsource the developed products commercially in the college campus, markets and in the hotels.

Following projects have been carried out by the students:

S.No.	Name of the student	Project Title		
1.	Nishma Kotekar	Formulation and preparation of nutritionally rich Nutricles		
2.	Apurva S. Kulkarni	Preparation of nutrition and fiber rich Khajur Chocolate		
3.	Vikrant Mahamuni	Formulation and preparation of nutrition rich NutriSure Powder		
4.	Aishwarya Ghaisas	Formulation and preparation of Multi-nutrient Green chutney		
5.	Kinnari Joshi	Preparation of energy rich dry fruit chocolate bar : Energybite		
6.	Kritika M. Prabhu	Development of nutritionally rich Halwa		
7.	Kamlesh C. Patade	Formulation and preparation of Indian Plum Pickle		

8.	Neha V. Thite	Formulation and preparation of nutritionally rich Cookies
9.	Sayali Patgaonkar	Development of energy rich Swiss rolls
10.	Bhakti Hardikar	Development of calcium rich Cookies
11.	Suraj Vaishya	Formulation and preparation of Paan shot
12.	Nidhi Vadodariya	Preparation of nutritionally rich biscuits – Healthy delight

The developed products have undergone sensory evaluation and have been also been appreciated by various hotels such as Hyatt group of Hotels, Mumbai, Taj group of hotels etc. In future tie up of the Biochemistry department with various such hotels and food industries is under consideration.

Department of Chemistry:

- National Initiative on Undergraduate Science NIUS is a two year program held by HBCSE for physics/chemistry/biology and is funded by the Department of Science and Technology(DST), Govt. Of India.
 Ms Rashi Gupta ,T.Y.B.Sc (Chemistry) has been selected for the above Programme. She is working at Cipla R & D center at Vikhroli on 'Method development and method validation of UV spectrophotometric method for assay and dissolution of drug product' guided by Dr.Kirit Ladge and Mr. Avinash Jagdale from HBCSE.
- Mr Vishal Ram Sharma from F.Y.B.Sc is working on "Sea water purification" under Dr. Veena Khilnani.

Department of Zoology:

- Ms Nidhi Saini from F.Y.B.Sc is working on "Prevalence of hypertension on youth " under the guidance of Dr. Veena Nayak .
- Ms Shamin Khan from F.Y.B.Sc is working on "Prevalence of Juvenile Diabetes" under the guidance of Dr. Veena Nayak.

VISITS TO RESEARCH INSTITUTES /INDUSTRIES

Department of biochemistry

 Dr.S.M.Pawaskar and Ms.Jyoti Mishra along with students of Biochemistry department had gone for industrial visit from 21st - 24th December, 2014 to Pune-Mahabalsehwar.Industries like Katraj dairy, Mapro Industries and K.F. Bioplants were visited.

Department of Botany:

- One day excursion to Kankeshwar, Alibaug, for T.Y. B.Sc students was conducted on 13th September, 2014, accompanied by Dr. Ajit Katdare and Dr Meena Patankar.
- One day institutional visit to Horticulture Training Centre (HTC), Talegaon and K.F. Bioplant, Hadapsar, Pune was organized for S.Y.B.Sc., T.Y.B.Sc., on 17th December, 2014 accompanied by all staff members of Botany department.
- A long excursion for 8 days to Bangalore, Mysore, Coorge was organized for S.Y.B.Sc. and T.Y.B.Sc. students from 8th to 15th January, 2015 accompanied by Mrs. Supriya Naik and non-teaching staff Mr. Shrikant Rane.
- A visit to 'Fruits and Flower show' at V.J.T.I., Matunga was conducted for S.Y.B.Sc., T.Y.B.Sc. on 8th February, 2015, accompanied by Dr. (Mrs.) Anjali Ratnakar and Dr. Veena Salvi.

Department of Chemistry:

Visit of IIT, Bombay Department of Chemistry: (PG & UG students)

• On 09-Feb-2015 about 60 T.Y.B.Sc students along with three faulty member-Dr Bhanu Raman, Dr Kalpana Naik and Mrs Madhavi Kate went on the visit to Chemistry Department of Indian Institute of Technology, Powai.

Department of Microbiology:

- Department organized a 6-day Industrial Visit for S.Y.B.Sc ,T.Y.B.Sc students to Chandigarh Amritsar, Kasauli and Baddi during 04th -11th December 2014. Four staff members accompanied the students.
 - The students visited Helios Pharmaceutical Company where students observed production of ointments. capsules, painkillers and tablets. United Spirits Alcohol Distillery and India Industries a food processing industry were other places of visit. The students were accompanied by Mrs. Soniya Shetty and Mr. Shabib Khan.
- Manish pharmaceutical visit: A visit of 09 S.Y.B.Sc and 18 M.Sc students was organized by Dr. Unnati Padalia on 12th February,2015 where the students observed different laboratory practices adopted for production and testing.

• **BARC visit:** A visit of 22 S.Y.B.Sc students to BARC Anushaktinagar Mumbai was organized by Dr. Unnati Padalia on 13th February,2015 where students were shown demonstration of the working of Anaerobic Biogas Plant. The session was comprehensive and students observed the processing of biodegradable waste and it's utilization for Biogas production.

Department of Zoology:

- Visit to Somaiya Medical College was organized for S Y B Sc students. Sixty eight students
 visited the laboratory of microbiology and pathology dept of the Medical College. A lecture
 on parasites and their effect on Human population was attended by the students. Dr. Veena
 Srivastava, Dr. Rajendra Nayak, Dr. Vikrant Deshmukh, Mrs. Sharvari Kudtarkar and Ms.
 Deepali Kamble accompanied the students.
- Visit to CIFE- Central Institute of Fishery Education was organized for T Y B Sc. students was organized. More than 40 students were accompanied by Dr. Deeplaxmi Satam, Dr. Amol Patwardhan and Mr. G.S. Kadam.
- Long excursion for T Y B Sc students to Konkan- Achare beach, Kunkeshwar, Malvan, Amboli. Dr. Mrinalini Sathe, Dr. Amol Patwardhan and Mr. G.S. kadam accompanied the students.
- One day excursion to Alibaug was organized for S.Y.B.Sc., T Y B.Sc. students. Thirty nine students were accompanied by Dr. Veena Srivastava, Dr. R.Nayak and Mr. Dilip Naik.

Department of Physics:

• Forty Seven students and 7 teaching staff visited GMRT (Giant Metrewave Radio Telescope)at Khodad on 5th September 2014. The detailed working and technicalities were explained by the staff of GMRT.

Guest faculty invited by Departments for Students

Sr N o	Department	Name of the Resource person	Designation of Resource person	Host Institute	Duration of Visit	Topic of lecture		
1	Biochemistry	Ms. Himani Chawhan	Research Associate	Netscribe, Parel	3 rd July'14.	Taking up management studies after graduation/ post graduation in Biological Sciences'		
		Ms. Laxmi Dalvi	Investigational product manager	Clinical Research Division,S anofi, Powai	5 th July'14	Career in Clinical Research'		
		Ms. Nazneen Husein	Director,	Freedom lifestyle and wellness Managema nt Centre,Mu mbai	2 nd December, 2014	Nutrition in Stress Management		
		Mr. Naveen Padmadas,	Assistant Professor,	D. Y. Patil University, School of Biotechnol ogy and Bioinform atics.	11 th December, 2014	"Applications of Bioinformatics softwares used in Biological Sciences"		
	Abhyas Mahotsav on Human Health							
	Biochemistry	Dr. Nandita Manglore, ,	Associate Professor & Head Dept. of Life Science & Biochemistry	, St. Xaviers College	2 nd to 5 th February, 2015	Sports Physiology		

Mr. Naveen Padmadas,	Assistant Professor, School of Biotechnolog y and Bioinformatic s	D.Y. Patil University	"Genomics and bioinformatics
Dr. Kavita Dipnaik,	Additional Professor, Biochemistry Department,	Sion Hospital.	"Reaching a Summit"
Dr. Chetan Vedpathak,	Ayurvedic Doctor		"Ayurveda in today's scenario"
Mr. Prashant Ratnaparkhi,	Assistant Professor, Department of Life Science & Biochemistry,	St. Xaviers college	"Special Instrumentatio n techniques used in biology".
Dr. Veena Zaveri,	Gynaecologist	Ghatkoper	"Fitness & Health issues in Adolescence" by
Dr. Jyoti D. Vora,	Head department of Biochemistry	Ruia college	"Alchemy of a researcher
Dr. Madhavi Phadke,	Professor,	Sion hospital	"Wonders in Biochemistry - A potpourri of facts"
Mr.Ramlal Moorjani, K.C.college, Mumbai.	Head, Department of Chemistry & Biochemistry,		Unusual Biomolecules
Dr. Bina Dias,.	Associate Professor, Department of Biochemistry,	sion hospital	"Bridging the gaps" by
Ms. Jamila	Head, Clinical	Reliance Lifescience	"Cancer

		Joseph,.	Research,	S		biology
		Dr. Sadhana Joshi.	Professor and Head, Dept of Nutritional Medicine Nutritional Medicine Division,	Bharati Vidyapeeth University, Pune.		"Nutrigenomic s
		Ms. Nazneen Husein	Director,	Freedom lifestyle and wellness Managema nt Centre,Mu mbai		Nutrition in Stress Management"
		Mr. Naveen Padmadas	Assistant Professor, School of Biotechnolog y and Bioinformatic s	D.Y. Patil University		"Genomics and bioinformatics
2	Botany					
	Invited talks	Dr. Nandini Thatte			18 th July, 2014	Know Your Prakriti
		Dr. Raut		Institute of Science, Mumbai	26 th July, 2014	Nanotechnolog y: A Tiny Revolution"
		Mr. Prashant Mahajan,	Director and Learning Catalyst	Center for Experientia 1 Learning	6 th February, 2015.	Metastudio – Mapping program
		Dr. Jai Tilak- Jain			13 th February, 2015.	Insights in Scientific Writing

3	Chemistry						
	Seminar and Exhibition in association with the Public Awareness Division, Department of Atomic Energy	Prof. Dr. (Mrs.) Z.R.Turel and Dr. S.K.Malhotra,	Public Awareness Division,.	Department of Atomic Energy	26 th July 2014.	Popularising the peaceful uses of atomic energy	
4	Microbiology						
	Enriching expressions- Lecture series by Alumni	Mr. Kumaraswami Sivan,.	Deputy General Manager	, IRIS Healthcare Pvt. Ltd	12 th July, 2014	'Competency based approaches for challenges facing Microbiology and Biotechnology graduates'	
		Dr. Shabari Sarang			19 th July, 2014	'Stem cells and Scope of stem cell research in India'	
		Dr. Neelima- Khairatkar- Joshi,	Senior Vice- President, Centre, India.	Head, NCE Discovery Research, Glenmark Research	28 th August, 2014,	"Innovative therapeutics: Today, Tommorrow and Thereafter	
		Dr. Vilas Sinkar.	Vice Presiden, Research & Development, and Head	Unilever R&D, Bangalore	15 th September,20 14	Microbiomics'	
	Lecture – demonstration on bioinstrument ation	Dr. Pradnya Prabhu,	Associate Professor	K.J.Somaiy a College of Science and Commerce.	10 th February 2015.	UV-Visible spectrophotom eter, IR spectroscopy, Flame Photometry, and	

						Fluorimetry.
5	Physics					
	Lecture	Dr. Bal Phondke "	Eminent scientist		25 th September 2014.	Emerging Trends in Science"
	Lecture	Dr. Sergey Safonov,	faculty	Saint Petersburg State University, Russia	4 th December 2014.	"International science competitions as a way for establishing collaborations and building cultural bridges"
6	Zoology	Ms. Manali Vora			7th and 8th July, 2014.	Nutrition and Health"
		Dr. Lalit Sharma			27 th August 2014.	Bio-mimicry: new vistas for zoologists'
		Mr. Ravindra Walmiki			16 th Feb, 2015	"Health and Fitness
		Shri. Narendra Nayak			12 th Feb, 2015	Scientific exposure of Miracle

WORKSHOPS ORGANISED:

Sr No	Department	Title of the Workshops	Date	Resource person
1	Botany	Flower arrangement: Ikebana, Western and Free Style	31 st July, 2014.	Mrs. Priyanka Khandekar
		Current strategies for the management of water hyacinth in collaboration with Naushad Ali Sarovar Samvardhini (NASS), Maharashtra State Angling Association (MSAA) and Indian Association of Aquatic Biologists (IAAB), on at Kodarkar field station, Powai	9 th August, 2014	
		Vegetation Mapping Survey	Mr. Prashant Mahajan, Director and Learning Catalyst for the Center for Experiential Learning	Friday, 13 th January, 2015.
2	Chemistry	Laboratory safety - MSDS	Mr. Ishwerinarayan Sharma, a renowned consultant in Safety operations	9 th August, 2014.
		Safety precautions and GLP	Mr. Satyajeet Tiilu, from Hemo pharmaceuticals	
		Laboratory safety -First aid operations.	Dr. Rupesh Gaikwad from the Institute of Science, Mumbai,	
		Demonstration on Eye- Wash and emergency Shower	Dr. Rupesh Gaikwad from the Institute of Science, Mumbai,	
		Avishkar Research Convention 2014/15"	Dr. R.T. Sane, OSD, University of	2 nd July 2014

			Mumbai	
			Willioai	
			Dr Gadre,	
			Dr Mita Rakesh	
			Dr Vaijayanti Ranade.	
3	Microbiology	Animal tissue cuture: "Basic Techniques of Animal Tissue Culture"	organized by Department of Biotechnology, G.N.Khalsa College,	27 th August,2014,
	For teachers and students	'Leadership and team building through adventurous activity':	Z-bac Adventure club, Kolad	17 th and 18 th Jan. 2015.
		Practical Session on Bioinformatics	Mrs Soniya Shetty	11 th February, 2015
4	Physics	COMPHY3.0 UGC sponsored National workshop on computational physics	in collaboration with Indian association of physics teachers	11 th February to 14 th February 2015.
5	Zoology	Yoga workshop	Dr. Kamlesh Agrawal	July 2014

FACULTY TRAINING PROGRAMMES/PARTICIPATION

Department of Microbiology

Mrs.Shailaja GirishankarAttended a Local Seminar on Proteomic Technologies for Biosciences on 25th August 2014 at KBP college Vashi.

Dr. Mrs. Unnati padalia:

- Attended a National Conference on Bioremediation-Recent Trends and Future Prospects on 9th August ,2014 at Royal College of Arts,Science and Commerce,Mira Road.
- Attended a Local Seminar on Proteomic Technologies for Biosciences on 25th August 2014 at KBP college Vashi.
- Attended a workshop on AVISHKAR 2014-Research Convention on 2nd July ,2014 at K. J. Somaiya College of Science and Commerce.

Mrs .Hemlatta Chakraborty.

- Attended a Local Seminar on Proteomic Technologies for Biosciences on 25th August, 2014 at KBP college Vashi .
- Attended a workshop on Animal Tissue Culture on 27th August, at G.N.Khalsa College.

Dr.lolly Jain:

- Attended a Lecture series –"Research ,Ethics and Patents" on 17th May 2014at D.Y.Patil University ,Navi Mumbai.
- Attended a workshop on AVISHKAR 2014-Research Convention on 2nd July, 2014 at K. J. Somaiya College of Science and Commerce.
- Attended a Lecture series and workshop –Publication ,Funding and Presentation on 16th August,2014 at D.Y.Patil University ,Navi Mumbai.
- Attended a Local Seminar on Proteomic Technologies for Biosciences on 25th August, 2014 at KBP college Vashi .
- Attended a National Conference -102nd Indian /science Congress from 3rd January,2015-7th January 2015 at University of Mumbai .

Mrs Soniya Shetty

- Attended a National Conference on Bioremediation-Recent Trends and Future Prospects.
- Attended a workshop on Animal Tissue Culture on 27th August, at G.N.Khalsa College.
- Worked as an Organizing Committee Member for one day workshop on Avishkar 2014-15 organized by University of Mumbai on 2nd July 2014.
- Resource person for orientation session on Avishkar- 2014 on 1st Sept 2014for students of the college.

• Invited as a Judge at District level National Children Science Congress organised by NCSTC, New Delhi to evaluate Science Research Projects on 15th November, 2014.

Mr.Shabib Khan

- Attended a workshop on AVISHKAR –Research convention on 2nd July,2014 at K.J.Somaiya Engineering College.
- Attended a workshop on "Techniques in Molecular Biology" from 19th-23rd August,2014 at Wilson College.

Department of Physics:

Ms. Ranjana Shukl:

- 1. Attended the state level workshop on "Physics in motion" held by BASE on 5th July 2014
- 2. Member of organizing committee and chairperson of one session of Comphy 3.0 a national workshop on computational physics.

Dr. Meena Sharma:

- 1. Attended the state level workshop on "Physics in motion" held by BASE on 5th July 2014.
- 2. Was appointed as master resource person orientation workshop for NCSC 2014 held at ISER Pune on 27th May 2014
- 3. Member of organizing committee and chairperson of one session of Comphy 3.0 a national workshop on computational physics.
- 4. Conducted a crash course in "Basic Electronics" in July 2014.
- 5. Member of organizing committee of National children science congress held at University of Mumbai from 3rd Jan to 7th Jan 2015
- 6. Member of organizing committee of National conference on Role of governance, management and leadership in institutional quality improvement program held at Somaiya College on 23rd and 24th Dec 2014.
- 7. Conducted Homi Bhabha Bal vaidnyanik Practicals on 7th and 14th December 2014.
- 8. Was appointed as r resource person at 22nd NCSC held at Kengeri, Bengaluru, Karnatak from 27th Dec to 31st Dec 2014.
- 9. Organized a quiz competition "Know your AQ" on 10th December 2014.

Dr. Deepak More:

- 1. Attended the state level workshop on "Physics in motion" held by BASE on 5th July 2014.
- 2. Member of organizing committee of AVISHKAR program held at Somaiya College in August 2014.
- 3. Member of organizing committee and chairperson of one session of Comphy 3.0 a national workshop on computational physics.

- 4. Published a paper "Correlation of structural and magnetic properties of Ni doped ZnO Nanocrystals in "International J. Phys. D: Appl. Phys. 47 (2014) 045308
- 5. Was invited as a resource person under "INSPIRE" at Science college, Nagpur on 14th January 2015.
- 6. Attended a short term course conducted by ASC Mumbai from 9th to 14th March 2015.

Dr. Geeta Nair:

- 1. Attended the state level workshop on "Physics in motion" held by BASE on 5th July 2014.
- 2. Member of organizing committee of Comphy 3.0 a national workshop on computational physics
- 3. Attended a workshop on "Particle accelerators science technology and applications" held by University department of Physics on 28th November 2014.
- 4. Attended and presented a paper at international conference on Nanomaterials for sustainable green technology conducted by Pendharkar college; Dombivili on 5th and 6th Jan 2015.
- 5. Published a paper "Synthesis and characterization of Ni nanoparticles International Journal of Chemical and Physical Sciences
- 6. Was a resource person at International Junior science Olympiad camp held at HBCSE; Mankhurd from 8th May to 25th May 2014
- 7. Was appointed as a reviewer for 3rd international conference on smart materials held at Pune
- 8. Was a resource person at pre departure camp of International Junior science Olympiad camp held at HBCSE; Mankhurd from 22nd November to 26th November 2014.
- 9. Was appointed as a judge for School level science Exhibition organized at Abhay international School Vikhroli on 10th December 2015
- 10. Attended a short term course conducted by ASC Mumbai from 9th to 14th March 2015.

Mr.A.M.Shaker:

- 1. Attended the state level workshop on "Physics in motion" held by BASE on 5th July 2014.
- 2. Organizing secretary of Comphy 3.0 a national workshop on computational physics.
- 3. Was a resource person at Experiment Development camp held at HBCSE; Mankhurd from 19th May to 4th June 2014
- 4. Was appointed on the interview panel for the selection of project assistant by HBCSE for the interviews held in February 2015

Mr. Jitendra Pendharkar:

- 1. Attended the state level workshop on "Physics in motion" held by BASE on $5^{\rm th}$ July 2014.
- 2. Member of organizing committee and chairperson of one session of Comphy 3.0 a national workshop on computational physics.
- 3. Attended a national conference on "Nano Materials-The Indian Perspectives" held by M.D. College, Parel on 22nd January 2015.

- 4. Was sanctioned a grant of Rs. 30,000/- by Mumbai University for minor research project on "Synthesis and characterization of metal oxide nanofluids" for 2014-15
- 5. Published a paper "Measurement of cognitive beliefs and brain Hemisphericity dominance amongst different branches of Engineering students at entry and exit level " in International refereed journal 'Indian streams research journal', Vol 4, Issue V/ June 2014.
- 6. Published a paper "Comparison of Development of Cognitive beliefs and Brain Hemisphericity Dominance amongst different branches of Engineering students of Karjat and New Mumbai District" in International journal 'Golden Research Thoughts', Vol.III, Issue XII/June 2014.
- 7. Published a Research article in PJERT, ISSN No: 2249-4367, Title: Being is Peace, January 2015, Vol 4, No1, pp 6-10.
- 8. Conducting Certificate Course in Bio Physics as a Convener, from last Three years, for Undergraduate students of our College.
- 9. Conducting Certificate Course in research Methodology and Computer Applications as a Co Convener from Lat Three years, for students enrolled for Ph.D.
- 10. Was a resource person at Workshop of PGRP for YCMOU for guiding research students on research Methodology held at HBCSE; Mankhurd on 9th Nov 2014.

Ms. Smita Survase:

- 1. Attended the state level workshop on "Physics in motion" held by BASE on 5th July 2014.
- 2. Attended INUP familiarization workshop held by IIT Mumbai from 26th to 28th May 2014.
- 3. Member of organizing committee of AVISHKAR program held at Somaiya College in August 2014.
- 4. Member of organizing committee of Comphy 3.0 a national workshop on computational physics
- 5. Attended and presented a paper at national conference on "Next generation electronics" held by VPM's Polytechnic college; Thane on 14th and 15th Jan 15.
- 6. Attended a refresher course held by ASC, Mumbai from 9th Dec to 30th Dec 2014.
- 7. Was invited as a guest lecturer by Birla College of Arts, science and commerce, Kalyan on 2nd and 5th March 2015.
- 8. Published a paper "Synthesis and characterization of Ni nanoparticles International Journal of Chemical and Physical Sciences
- 9. Was a resource person at International Junior science Olympiad camp held at HBCSE; Mankhurd from 8th May to 25th May 2014.
- 10. Was appointed as a reviewer for 3rd international conference on smart materials held at Pune
- 11. Was a resource person at pre departure camp of International Junior science Olympiad camp held at HBCSE; Mankhurd from 22nd November to 26th November 2014.
- 12. Member of organizing committee of National children science congress held at University of Mumbai from 3rd Jan to 7th Jan 2015

Mr.Anshul Gupta:

1. Attended the state level workshop on "Physics in motion" held by BASE on 5th July 2014.

- 2. Organizing secretary of Comphy 3.0 a national workshop on computational physics
- 3. Atended "Industrial physics forum" held by The university of Campinas, Sao Paulo Brazil from 28th September to 3rd October 2014.
- 4. Was sanctioned a grant of Rs. 1,80,000/- by UGC for minor research project on "Optical properties of dye doped polymers and their applications as sensors" for 2014-16.
- 5. Was appointed as a judge for School level science Exhibition organized by Lion's club on 15th August 2014.
- 6. Member of organizing committee of National children science congress held at University of Mumbai from 3rd Jan to 7th Jan 2015

Mr. Deepak Jalla:

1. Member of organizing committee of Comphy 3.0 a national workshop on computational physics

Mr.Amit More:

- 1. Member of organizing committee of Comphy 3.0 a national workshop on computational physics
- 2. Was appointed as a judge for School level science Exhibition organized at Bal Gandhi High School Kurla on 3rd December 2015.

Dr. Pallavi Raote:

- 1. Member of organizing committee of Comphy 3.0 a national workshop on computational physics
- 2. Member of organizing committee of National children science congress held at University of Mumbai from 3rd Jan to 7th Jan 2015

Department of Botany:

- 1.Dr Anjali Ratnakar & Dr. Veena Salvi have worked as resource persons for conducting practicals for 'Bal Vaigyanik' conducted by HBCSE.
- 2.Dr. (Mrs.) Anjali Ratnakar and Dr. Meena Patankar were called as judges for Science Exhibition 2014, conducted by L ward and S ward respectively.
- 3.Dr. (Mrs.) Anjali Ratnakar was also called as a judge as well as a resource person by 'Paryavaran Shala', Paryavaran Dakshata Manch
- 4. Dr. Mrs. Meena Patankar completed a refresher course conducted at Birla College and has secured an "A" grade.

Department of Chemistry:

- 1. Dr. Yogesh Ghalsasi participated in an International conference "Advances in Biomolecular Sciences and Analytical NMR" from 25th to 27th Aug 2014 held at Srimad Andavan Arts and Science College, Tiruchirapalli
- 2. Dr. Pradnya Prabhu gave an oral presentation in a National conference CONCHEM-2014 (Societal Impact of Chemistry- Vision 2020) during 12-13th September,2014 at Department of chemistry D.Y.Ruparel College Mumbai.
- 3. Mrs. Nutan Navelkar and Dr. Pradnya J. Prabhu attended an one day international conference "India Chemistry" held at Hotel Lalit on 9th Oct. 2014
- 4. Dr. Chitra Kamth and Dr. Veena Khilnani had participated in a one day local workshop on Open Source Chemistry Software (G.Chem paint JMd) on 25th Nov.2014 organized by I.I.T.Bombay.
- 5. Dr.Pradnya Prabhu, Dr. Veena Khilnani Dr. Chandana Basu and Dr. Nishamol Kanat attended a three days Internatinal Conference on Education in Chemistry(ICEC-2014) organized HBCSE (TIFR) Mumbai during 12-14th Dec, 2014
- 6. Dr.Sugandha Shetye participated in an International Symposium "New Horizons in Chemistry" organized by Vivekananda College during 8th -9th Dec.,2014
- 7. Dr. Bhanu Raman attended a National Seminar "Recent Trends in Analytical Chemistry" at Acharya Marathe College on 9th June 2014.
- 8. Mrs. Nutan Navelkar, Mrs. Maddhavi Kate, Dr. Kalpana Naik, Dr.Chitra Kamath, Dr. Yogesh Ghalsasi and Mr. Saurabh Shete participated in an one day Local Workshop on "Teaching Training" organized by KJSCSC on 17th April 2015.

Department of Microbiology:

Student's achievements:

- Ms. Kothari Jimisha H --participated in the Second International Science School Applied Chemistry and Materials Science at St.Petersburg State University, Institute of Chemistry during 12th -17th November, 2014
- Mr. Varun Apte for first prize in Power Point Presentation at MICROSCOPE 2014. organised by Department of Microbiology K.J.somaiya college of Science and Commerce, on 21st November,2014.

Poster Presentation:

Guided Ms. Sayali Dagde (F.Y.B.Sc) for a project entitled "Antibacerial efficacy of Soaps" which was presented as a Poster

at Sajjan Gupta Konark Memorial Award Meet at K. C. College on 21st and 22nd January 2015 and at UGC sponsored state level workshop on 'Microbial frontiers in Health and Hygiene' held at Elphinstone College on 2nd and 3rd January 2015.

Research Consultancy:

Title of the Project: Microbial testing of a Dairy cleaning Compound.

Name of the firm or company: CHEMSARK INDIA PVT.LTD.

Duraion: 29/09/2014 to 30/04/2015

Research Project - "Biosorption of Lead funded by Somaiya Vidyavihar with Rs.66000/-

from 2011 till completion of project"

Department of Physics:

Student 's achievements:

- 1. Ms. Swati Kashyap (M.Sc-By research student) won the second prize at the post graduate poster presentation competition. The competition was conducted by National Science congress on 4th January 2015 at University of Mumbai. She presented a poster on "Mission of Mars".
- 2. Ms. Ashita Parab stood first in the inter collegiate power point competition held by Royal College, Miraroad on 7th February 2015. Her topic was "Applications of nanomaterials in environment".
- 3. Ms. Pooja Anam Sudhir (Captain). Kothari Jimisha Harshad and Khatri Akshay Dinesh qualified extramural round and were invited to represent during 12-18 November 2014. in International natural science tournament held at St Pettersburg University Russia.
- 4. Ms Vaishnavi and Mr.Sangram of T.Y.B.Sc were selected by INFOSYS through campus placement on 21st February 2015.

- 5. Ms. Ashita Parab won the first consolation prize in elocution competition held at science college, Wardha on 28th February 2015
- 6. "Bhautiki" a Department newsletter was unveiled at the hands of Dr. Bal Phondke. The motive behind this newsletter was that we strongly felt that we need a platform to disseminate information about the events and activities of the department.
- 7. An interaction with Dr. Sergey Safonov, a faculty at Saint Petersburg State University,
- **8.** Second issue of "Bhautiki" was unveiled at the hands of Dr. K.G.Bhole on science day i.e 28th February 2015. This issue covered articles related to "Light" to mark the "international year of light".

Department of Zoology:

• Zoofest-Zorilla- On 19th& 20th Dec, 2014: Zoofest Zorilla intercollegiate event was organized by the dept. This was the 4th year of the event. In 2014-15 event 400 students from 17 different colleges in Mumbai University participated in various competitions. F.Y.B.Sc., S.Y.B.Sc., T.Y.B.Sc.., M.Sc. students with teaching and non teaching staff helped in organization of the event and made it a success.

Department of Botany:

• Senior Kindergarten students of Somaiya School visited our laboratory on 21st August, 2014 at 9.30 am to observe botanical specimens in the Botany laboratory.

Department of Biochemistry:

Students Achievements:

- Ten students from Biochemistry department participated in various events in Luminescence held on 6th August 2014,organized by Mithibai College.
- Shilna Kunnath and Sharmilee Bal of T.Y.B.Sc. won first prize in Mocktail preparation.

Suraj vaishya won second prize in poster making in Zorilla,2014, organized by department of Zoology .

Department Chemistry

Publications:

 Mr. Yash Punjabi, Dr. Veena Khilnani and Mrs. Padmaja Damle published a paper "Anti bacterial Activity of Flower Extracts of Nymphore Nouchali" in International Journal, Pharmacophore 2014 Vol 5(2), 352-357

Other activities

Department of microbiology

Video lecture for virtual classroom: The video lecture recording by all the staff members for virtual classrooms was done on 14th July, 2014 at Kalina. The purpose was to upload some comprehensive lectures on Youtube to make them available for the students.

Science exhibition:The Somaiya School, a sister institute organized Beams Exhibition on 20th September, 2014 to celebrate the Science day. Department of Microbiology had demonstrated "Extraction of DNA from onions", "Microscopic observation of Protozoa enriched by Hay infusion technique".

Microscope -2014:Like every year this year too, the department organized their annual Intercollegiate fest "MICROSCOPE 2014" This year the event was organized on 21st November, 2014. The event witnessed students from different colleges all over Mumbai, right from CHM College in Ulhasnagar to St.Xavier's in Fort and Bhavan's College in Andheri to K.C. College in Churchgate. The fest was a one day event with many activities, among those were Power-Point Presentation, Biorangoli, Biocollage, Petri Plate painting, Poster competition, Capture-O-Graphy, Neuron Activators (Quiz competition) and Arabian Nights (Treasure Hunt).

State level microbiological olympiad:K.J.Somaiya College of Science and Commerce for the first time participated in the 14THSTATE LEVEL MICROBIOLOGICAL OLYMPIAD and the initiative was taken by the Department of Microbiology. Totally 70 students participated (48 F.Y.B.Sc, 09 S.Y.B.Sc and 13 T.Y.B.Sc students). Of the total no. 10 students were from the Department of Biotechnology and Botany and the rest (60 in Number) were from the Department of Microbiology. A screening test was conducted on the 8th of January 2014 in the College.

K.J.Somaiya college of Science and Commerce was at the 12th position in the T.Y.B.Sc category with the average of top 3 students being 68.66%. The college ranked 24th in the S.Y.B.Sc category with the average of the top 3 students being 60.67%. In the F.Y.B.Sc category the college stood 13th with the average of the top 3 students being 61.33%.

Among the participants, Mr. Dineshkumar Krishnan of F.Y.B.Sc(Microbiology) scored 62% marks, Ms. Manali Mehta of S.Y.B.Sc (Microbiology) scored 68% marks, Ms. Kirankumari Maurya of T.Y.B.Sc (Microbiology) scored 72 % marks. All these 3 students stood first amongst the participants of the college. This event was coordinated by Mrs. Shailaja Girishankar, and Dr. Lolly Jain.

List of new techniques:

Department of Chemistry has introducedmicro techniques in their practicals at FY and SY BSc level in volumetric analysis and organic spotting.

Also demonstration of GLC and HPLC has been introduced in T.Y.B.Sc syllabus.