Department of Biochemistry

Report

Guest lecture by Dr. Sourav Kanti Mukopadhyay

12-12-2019

The Department of Biochemistry has organized a guest lecture on 12-12-2019 under DBT-Star college scheme for undergraduate students of Biochemistry. The lecture was delivered by Dr. Sourav Kanti Mukopadhyay, Scientist, Analytical Sciences Dept, Aurobindo Pharma Ltd, Biologics Division, Hyderabad. He spoke on "Good Lab Practices (GLP) and Method Development". He gave insights made the students aware of why GLPs were created and the implications of following poor lab practices. They were also explained about the good documentation processes, calibration of instruments, ALCOA (attributable, legible, contemporaneous and accurate). The guest lecture was benefiting to the M. Sc biochemistry students also as they interacted with the speaker and gained information about the GLPs followed in industries.







Report on

Training in "Clinical Laboratory Diagnostics" at Vimta Labs

3rd to 9th September, 2019

The students of B.Sc, Biochemistry were taken to Vimta Labs, Cherlapally, Hyderabad for observership to gain experience in clinical laboratory setup. This programme was organized under the DBT-STAR COLLEGE SCHEME for undergraduate students from 3rd September, 2019 to 9th September, 2019. In the Clinical Reference Laboratory (CRL), students were given an extensive understanding of the procedures and were shown about the sample collection, processing, barcoding and segregation of various samples. Students were demonstrated about the high end automation used in clinical laboratories. They were also explained and demonstrated about the chemiluminiscence immunoassays (CLIA) and serum protein electrophoresis. In the histopathology lab, they were shown the grossing, section cutting, staining and mounting of various biopsy samples. M.Sc Biochemistry students along with other life science students were also shown the same facilities to improve their diagnostic skills. Students have interacted with the staff and cleared their doubts. Overall, the training programme was an enriching experience to the students in terms of high level automation used in clinical diagnostics.



Head, Dept. of the Chemistry Bhayan's Vivekananda College

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BHAVAN'S VIVEKANANDA COLLEGE of Science, Humanities and Commerce Sainikpuri, Secunderabad-500 094

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(Autonomous- Accredited with 'A' Grade by NAAC)							
1	list of B.Sc and N	A.Sc students to visit VIMTA					
Date	Roll No	Name Of The Student	Course				
3 rd september, 2019	107218514002	Surya Lalitha Adiraju	M.Sc(Biochemistry)				
	107218514003	B Kaviya Purnima	M.Sc(Biochemistry)				
	107218514004	Ch Durga Satya Deepthi	M.Sc(Biochemistry)				
	107218514006	D Naga Jyothi	M.Sc(Biochemistry)				
	107218514007	Gowraram Bhavya Harika	M.Sc(Biochemistry)				
	107218514009	Jadala Nagajyothi	M.Sc(Biochemistry)				
	107218514011	K L Gouriaishwarya	M.Sc(Biochemistry)				
4 th September,2019	107218514012	K Rama Krishna	M.Sc(Biochemistry)				
900	107218514013	Kuruva Ramasai	M.Sc(Biochemistry)				
	107218514014	Lella Gayatri	M.Sc(Biochemistry)				
	107218514015	M Rohit Kumar	M.Sc(Biochemistry)				
	107218514016	Mala Ravi Kumar	M.Sc(Biochemistry)				
	107218514017	Mettu Suraj	M.Sc(Biochemistry)				
	107218514018	Md Juweriya Tahseen	M.Sc(Biochemistry)				
5 th September,2019	107218514019	Mudigonda Chandana	M.Sc(Biochemistry)				
	107218514021	Parameshwari Banoth	M.Sc(Biochemistry)				
	107218514023	Porika Rahul Naik	M.Sc(Biochemistry)				
	107218514024	Potluru Sree Vyshnavi	M.Sc(Biochemistry)				
	107218514028	Sadurgam Vaijayanthi	M.Sc(Biochemistry)				
	107218514029	Sandhe Pushpa	M.Sc(Biochemistry)				
	107218514031	Sowmya Jai Kumar Sreeja	M.Sc(Biochemistry)				
6 th September,2019	107217471034	Kusuma	B.Sc(MBBCC)Sem V				
	107217471041	Sugandha Pathak	B.Sc(MBBCC) Sem V				
	107217471042	Sunitha	B.Sc(MBBCC) Sem V				
	107217471043	Alekhya	B.Sc(MBBCC) Sem V				
	107218471004	Harshit Mishra	B.Sc(MBBCC) SemIII				
п	107218471035	Raaga Yepuri	B.Sc(MBBCC) Sem III				
	107218471036	Vyapti Nair	B.Sc(MBBCC) Sem III				
7 th September,2019	107218459003	C.B.Harika	B.Sc(MGC) Sem III				
	107218459006	G.Chaitanya	B.Sc(MGC) Sem III				
	107218459010	L.Sravani	B.Sc(MGC) Sem III				
	107218459019	Aishwarya B	B.Sc(MGC) Sem III				
	107218459024	Megha	B.Sc(MGC) Sem III				
	107218459030	S.Aishwarya	B.Sc(MGC) Sem III				
	107218459047	J.Swati	B.Sc(MGC) Sem III				
9 th September,2019	107218459008	K.V.Vilasini	B.Sc(MGC) Sem III				
	107218459029	Rashi Sarda	B.Sc(MGC) Sem III				
	107218459034	Tanya Sharma	B.Sc(MGC) Sem III				
	107218459036	Althea Rosalia Nargis	B.Sc(MGC) Sem III				

Total Strength-39.

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Report on Value Added Course on "Clinical, Cytogenetics, Molecular Diagnostic methods and Genetic Counselling"

Institute of Genetics and Hospital for Genetic Diseases 25th to 29th November, 2019

The Department of Biochemistry has organized a five-day Value-added course on "Clinical, Molecular Diagnostic methods and Genetic Counselling" for the students of B.Sc (MBBCC) at the Institute of Genetics & Hospital for Genetic Diseases, Begumpet, Hyderabad from 25th to 29th November, 2019. This programme is organized under DBT-Star College Scheme. Students were given exposure in the areas of Clinical Genetics, Cytogenetics, Environmental Toxicology, Molecular Biology, Clinical Biochemistry and Genetic Counseling.

In Clinical Genetics, students were briefed about the different pre-natal and post-natal diagnostic techniques, new born screening and about genetic disorders. They were also explained about the significance of Genetic counselling to the couples who are at increased risk of having a heritable disorder and the risk of transmitting it to their unborn offspring.

Students also learnt about Karyotyping, FISH and Micro-array techniques which are used for diagnosis of chromosomal disorders in new-borns while in the Cytogenetics lab they learnt about the DNA isolation techniques. Various types of PCR (Conventional, PCR-RFLP, Microsatellite repeats, SSCP, Allele-specific PCR, ARMS PCR) were learnt in Molecular Biology lab.

In Clinical Biochemistry lab, analysis of ceruloplasmin, TSH, 17-OH Progesterone and urine copper were learnt. The importance of HPLC in diagnosing Haemoglobinopathies was also demonstrated. Students had hands-on experience with some of the diagnostic techniques that are routinely used in biochemistry labs.

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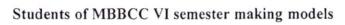
List of students for Value Added Course at Institute of Genetics, Hyderabad 25th to 29th November, 2019

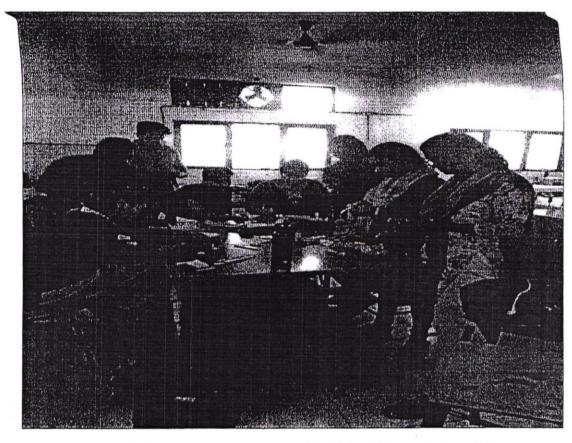
S. No	Roll No	Name of the Student
1	107217471001	Aparna U
2	107217471002	Nannaparaju Archana
3	107217471003	Bhukya Karan
4	107217471004	C Lahary
5	107217471005	Devi Priya Bashaboina
6	107217471007	Kareti Anoosha
7	107217471008	Koride Manaswini
8	107217471009	Manasa Kanduri
9	107217471014	Prasanna Kumar Thummala
10	107217471015	Bhagavathula Priyanka
11	107217471016	Putchakayala Tejaswi
12	107217471019	Shwetang U
13	107217471021	Sowmya Kolechelimi
14	107217471022	S. Ashwini
15	107217471023	N Ch Tanmayee Venugopal
16	107217471025	Afroz Zeba
17	107217471026	Domakonda Rajashree
18	107217471028	Jatin Sirohi
19	107217471031	Jennifer Duvvena
20	107217471032	K Geetha
21	107217471033	Kanchan Singh
22	107217471034	Kusuma P
23	107217471035	Meghana Prakash
24	107217471038	Pawan
25	107217471039	Sakshi Jain
26	107217471043	M Alekhya
27	107217471044	Manisha Roy
28	107217471047	Lekha Mudundi
29	107217471048	Sathvika Kothuri
30	107217471050	Kiranmayee Ampolu

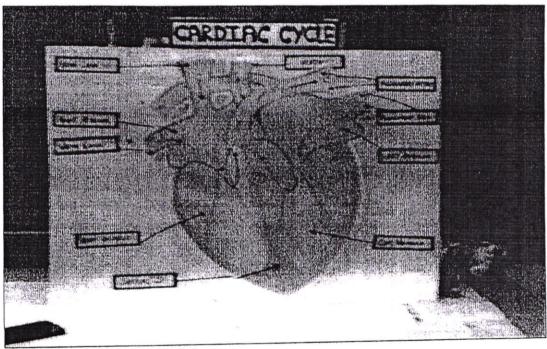
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Head, Dept. of Bio-Chemistry Bhavan's Vivekananda College Bainikpuri, Secunderabad-500 (cc.





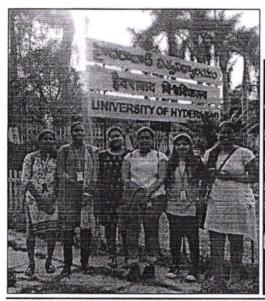


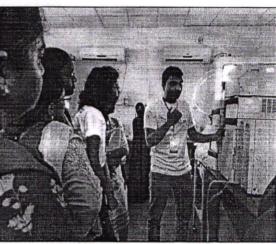
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Industrial Visit to Hyderabad Central University, Hyderabad

The students of BSc (MBBCC) and MSc II year Biochemistry have attended the Open Day Visit organized by the Department of Biochemistry, School of Life Sciences, Hyderabad Central University. The visit was organized on 28th September, 2019 as a part of 25 years' celebration of the department. Students were made aware of research related to cancer biology, bioinformatics and molecular biology through posters. They were also explained about the techniques like PCR, Blotting techniques and X-Ray crystallography. They were also given an insight into the principles and applications of instruments like HPLC, sonometer and nanospectrometer. The visit was very informative and motivating to the students in terms of their progress towards science.









Head, Dept. of Blo-Chemistry
Bhavan's Vivekananda College
Sainikpuri, Secunderabad-500 034

Open Day visit to University of Hyderabad Department of Biochemistry School of Life Sciences 28/9/2019

List of BSc III year MBBCC Students

S.No	Roll No	Name of the students
1	107217471001	Aparna U
2	107217471008	Koride Manaswini
3	107217471009	Manasa Kanduri
4	107217471020	Sowjanya Deshabathni
5	107217471029	Jayalaxmi V
6	107217471030	Jayshree Mandal
7	107217471032	K Geetha
8	107217471033	Kanchan Singh

List of MSc II-year Biochemistry Students

S.No	Roll No	Name of the students
1	107218514007	Gowraram Bhavya Harika
2	107218514012	K Rama Krishna
3	107218514013	Kuruva Ramasai
4	107218514026	Raagi Shivani
5	107218514028	Sadurgam Vaijayanthi

24/9/19

Dept. of Blockemistry pyr

Report on Visit to CDFD, Uppal, Hyderabad 9th July, 2019



The Students of B.Sc Biochemistry (MBBCC) 3rd year were taken for a visit to Center for DNA finger printing and Diagnostics (CDFD) at Uppal, Hyderabad on 9th July, 2019. They had an opportunity to listen to the lecture given by Prof. D.N. Rao of IISc, Bengaluru on "Helicobacterium pylori". The students have attended poster session put up by the research scholars of the institute. They were explained about the work going on in the institute in various research areas. Overall the trip to CDFD was found to be informative to the students and staff.







Head, Dept. of 810-Clear Str.,
Bhavan's Vivekananda College
Sainikpuri, Secunderabad-500 094

S.No	Roll No	Name of the Student
1.	107217471001	APARNA U
2.	107217471002	NANNAPARAJU ARCHANA
3.	107217471003	BHUKYA KARAN
4.	107217471004	C LAHARY
5.	107217471005	DEVI PRIYA BASHABOINA
6.	107217471007	KARETI ANOOSHA
7.	107217471008	KORIDE MANASWINI
8.	107217471009	MANASA KANDURI
9.	107217471011	MOHAMMAD ASLAM
10.	107217471014	PRASANNA KUMAR THUMMALA
11.	107217471015	BHAGAVATHULA PRIYANKA
12.	107217471016	PUTCHAKAYALA TEJASWI
13.	107217471017	RAJEEV SONTI
14.	107217471018	SHIRAMSHETTI SHIVASHANKAR
15.	107217471019	SHWETANG U
16.	107217471020	SOWJANYA DESHABATHNI
17.	107217471021	SOWMYA KOLECHELIMI
18.	107217471022	SUNKARI ASHWINI
19.	107217471023	N CH TANMAYEE VENUGOPAL
20.	107217471024	THAMMANABOINA ABHIRAM
21.	107217471025	AFROZ ZEBA
22.	107217471026	DOMAKONDA RAJASHREE
23.	107217471028	JATIN SIROHI
24.	107217471029	JAYALAXMI V
25.	107217471030	JAYSHREE MANDAL
26.	107217471031	JENNIFER DUVVENA
27.	107217471032	K GEETHA
28.	107217471033	KANCHAN SINGH
29.	107217471034	KUSUMA P
30.	107217471035	MEGHANA PRAKASH
31.	107217471038	PAWAN
32.	107217471039	SAKSHI JAIN
33.	107217471040	SHIVANI M
34.	107217471041	SUGANDHA PATHAK
35.	107217471042	SUNITA
36.	107217471044	MANISHA ROY
37.	107217471047	LEKHA MUDUNDI
38.	107217471047	SATHVIKA KOTHURI
39.	107217471048	SHASHI VARDHAN REDDY SAMPATH
37.	10/21/4/1049	SHASHI VARDHAN REDD'I SAMFATI

Names of the faculty	Mrs.D.Rajani, Mrs.S.Vanitha

Head, Dept. of Bio-Chemistry
Bhavan's Vivekananda College
Samikpuri, Secunderabad-500 09

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Genetics Activity (2019-20)

Crossword Puzzle:

Name of the student: D. Sowjanya & Roll No:

20 & 32

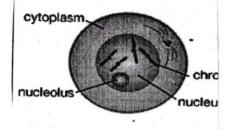
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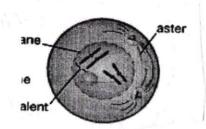
- 1. Heterozygous individual have a mutant allele but does not express it phenotypically.
- 2. Recessive gene transmitted from parent to grandson through his daughter.
- 3. Genes exclusively on Y chromosome.
- 4. Killer particles in Paramecium.
- 5. Type of mutation that causes a base change in a codon to stop codon.
- 6. Removal of anthers from flowers.
- 7. Genes individually exerts a little effect on the phenotype but along with other genes control a quantitative trait.
- 8. Phenotype of a progeny is dependent on genotype of mother.
- 9. Chromosome arrangement based on length and position of centromere.
- 10. A Cross between F1 with its recessive parent.
- 11. Significance of Meiosis.

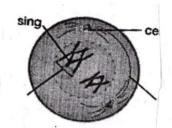
Match the following:

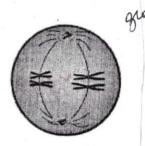
S. No	CROSS	RATIO	Answer
1	Polygenic inheritance	9:3:3:1	7
2	Monohybrid cross (Phenotype)	1:1:2:2:4:2:2:1:1	3 ~
3	Dihybrid cross (Genotype)	1:1	4/
4	Back cross (Monohybrid)	1:2:1	6 /
5	Test cross (Dihybrid)	1:6:15:20:15:6:1	
6	Monohybrid (Genotype)	1:1:1:1	.5 /
7	Dihybrid (Phenotype)	3:1	. 2, _



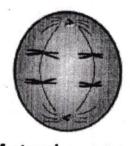




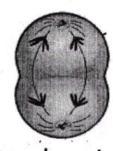




Prophase I



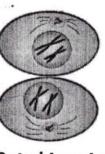
Metaphase I



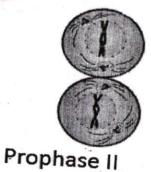
Anaphase I



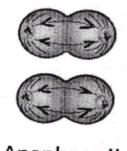
Telophase I



Cytokinesis



Metaphase II



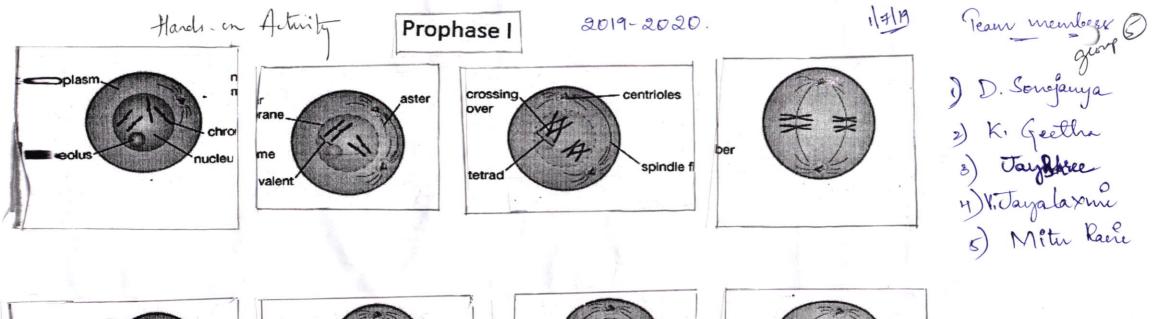
Anaphase II

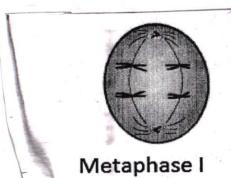


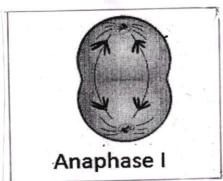


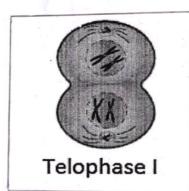
Telophase II

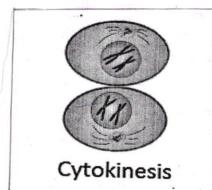
Perophase-I has 5 phases:-(i) <u>Leptotene</u>:- Chromosome begins to condense and are attached to nuclear membrane via Telomeres. (ii) Lygotene: - Synapsis begins with a synaptonemal Complex forming between homologous chromosomes. Ciii) Pachytene: - Ocossing over genetic material occurs. (iv) Diplotene: - Disappear--ance of synaptonemal complex. Metophase-I:- Centrioles arie at opposite poles of the cell. Anaphase - I: They more forther towards the opposite pole of the cell. Telophase-I:- Cytoplasm idinision begins. Cytokinesis: - There is Complete division of cytoplasm and 2 cells are formed with diploid sells of chromosomes. Prophase 1:- The diploid sets of chromosomes begins to separate. Metaphase II: They more towards the centronece. Anaphase I: They further more towards the poles and division of cytoplasm begins. Telophase II: The cytoplasm fuether divides into 4 Haploid Cells.



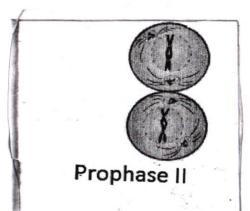


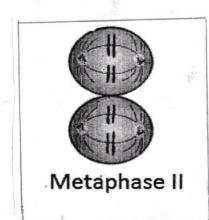


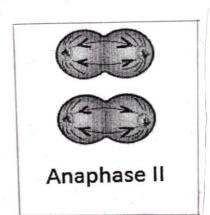


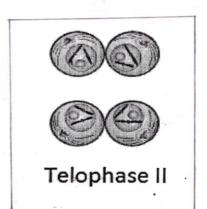














Prophase-1 Prophase-II 1) Condensation of chromosomes. Chromosome formed to 2) Formation of brokent chromosomes 5) Formation of order rays from combroile. 7) Nuclear membrane and nucleolus Ilasted 1) Y- chaped Chairmala formaleon ? 2) Splindle fibre break disappeareing. 5) Formation of tetrad chromosomer. Mitaghase I 6) Total disappearance of nuclear membrane and nucleolux. 1) Chromosome because arranged den Genear 7) Acter crays producing spludle fibres. 2) Crossing over of tetral chromosome.

9) Segregation of tetral chromosome. 2) Attachment of spiralle fibre 10) Spinelle of the gelling attached to to Rendochore of chromosom kindochore of Chromosome. Anaphase - 11 Metaphase -1) One cell started deviding into 2 north) retrad chromosomer are movery towards pole, 2 chromosomer in Anaphase _ each cell. (Itarling of ajtokinem).) Celle starte to divide 2) Chromosomes completely moved (relophase-1) towards pole. D Completion & ajlokeneux Relighanceand skaryokenesse took 1) Appearance & 2 milear membrane with 2 chromosomes in each Place. 2) 2 celle dévided ento ruclear membrane, haploid set Jehromoromes, arter vay Cytokenesis 1) Nuclear membrane fully formal wand cytoplasm. 2) Cell divided Porlo 2 with 2 chromosomes meach cell.

2019-20 GE-Activités 2019/2019 BSc Physiel Science

Nutrition Activity 2019-20

Group No: }

Name of the group: NAD

Date: 20/4/19

Question No 3: Calculate BMI for your group





Team Students name	Weight	Height	BMI
· Navya	59.6	65 may	21.89
Aishwaya	55.7	1.50 CAS	24-7
Deekshita	47.5	158 000	19.027
	1 1+ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Categorize and Give their Nutritional status

Less than 18.5	18.5 to 24.5	25 – 29.9	30 and above
under tweet	Normal	overweight	obesite
,			

Nutrition Activity 2019-20

Group No:

Name of the group: NAD

Date: 2

Question No 2: Identify the food Samples and write their significance

S.No	Name of the food item	Significance
1	Kaju	protecting against heave
2	×3	J. 102103
3	*	
9	Biscut	gives instant energy
5	Beaus	Can help lower Blood choles bod

Nutrition Activity 2019-20

(12)

Group No: }

Name of the group: NAD

Date: 20/9/19

Question No 4: Match the following

1.Vitamins and Minerals	Diabetus	8/
2. Fats and Carbohydrates	Micronutrients	1
3. Tofu	Obesity	9.
4. Glycemic Index	Calories	10
5. Vitamin "C"	Anemia	7/
6. Blood clotting	Amla Duly Tune	51
7. Deficiency of Iron	Soybean	3~
8. Increased blood sugar	Energy giving foods	2
9. Accumulation of excess body fat	AUC (Area Under Curve)	4
10. Energy	Calcium	6

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Nutrition Activity 2019-20

Group No:

Name of the group: NAD

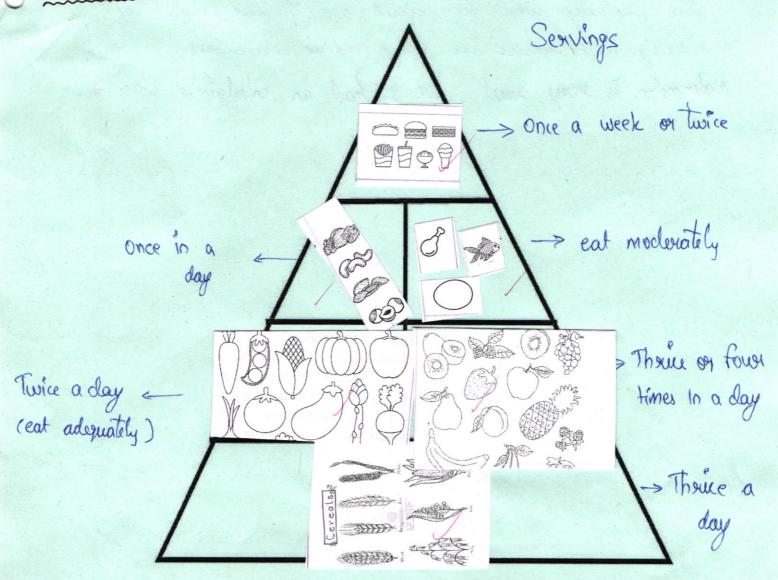
Date: 20/9/19

Question No 5: Diet plan for a Prognant Woman

Time	Menu	Quantity
7:00 am	Tea	1 cup with sugar
9:00 am	Milk bread chapathis lidlis legg	200m/ 2 shies 2(2/1
11:00 am	facility juice	1 glass
1:00 pm	Rue chapathis meat award vegtable	809 809 909 1259 25
4:00 pm	Milk I Sandwich I vada	Ighanst 1/1
7:00 pm	Rice chapathis meat cuand vegetables	809/809/909/1259/250
9:00 pm	WIK	200 M

Numbion Activity

Question No: 1



1. Complete the above Food Pyramid using the pictures provided to you.

2. Give the name for each step in the pyramid

Group Number: NAD

Name of the students in the group: M. Navya, K. Aishwaya, S. Deekshita

Date: 20/9/19

The activity was fun and we gained a lot of knowledge. It made us very active in class.

Water melon is very sweet: we g had an entertaining class.

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- NATE

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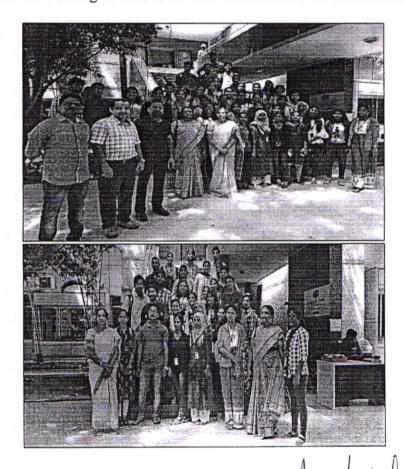
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Report on

Industrial Visit to Biological E Limited

20th September, 2019

Students of B.Sc (MBBCC) were taken for an industrial visit on 20th September, 2019 to Biological E Limited at Shamirpet, Hyderabad as a part of DBT-STAR COLLEGE SCHEME. The students were taken to Analytical and R&D Labs where testing and analysis of active components of drugs is done. Students were explained about the working of various instruments like Integra viaflo, Gas Chromatography chamber, FTIR Spectrometer, UPLC, HPLC, GC-MS, DSC-TGA, LD-LC-MS, qPCR, Surface plasmon resonance and Liquid handling system. Students were also shown Particle Size Analyzer, Ion chromatography, Karl Fishcher Titrators and Dissolution testing systems. MSc Biochemistry students were also a part of this industrial visit. Overall the visit has been very informative and the students had an opportunity to see the working of various advanced instruments used in formulation industries.



Head, Dept. of Bio-Chemistry Bhavan's Vivekananda College Sainikpuri, Secunderabad-500 094

Department of Biochemistry List of MSc II Year Biochemistry students for Industrial Visit Biological Evans Limited, Shamirpet, Hyderabad 21/9/2019

S. No	Hall Ticket No	Students Name
11	107218514001	Abbaraju Lakshmi Pavani
2	107218514002	Surya Lalitha Adiraju
3	107218514003	B Kaviya Purnima
4	107218514004	Ch Durga Satya Deepthi
5	107218514006	D Naga Jyothi
6	107218514007	Gowraram Bhavya Harika
7	107218514009	Jadala Nagajyothi
8	107218514010	Javvaji Thirumala
9	107218514011	K L Gouri Aishwarya
10	107218514012	K Rama Krishna
11	107218514013	Kuruva Ramasai
12	107218514014	Lella Gayatri
13	107218514015	M Rohit Kumar
14	107218514016	Mala Ravi Kumar
15	107218514017	Mettu Suraj
16	107218514018	Mohammed Juweriya Tahseen
17	107218514019	Mudigonda Chandana
18	107218514021	Parameshwari Banoth
19	107218514023	Porika Rahul Naik
20	107218514024	Potluru Sree Vyshnavi
21	107218514026	Raagi Shivani
22	107218514027	Rachakonda Saiteja
23	107218514028	Sadurgam Vaijayanthi
24	107218514029	Sandhe Pushpa
25	107218514030	Shaista Naghma
26	107218514031	Sowmya Jai Kumar Sreeja
27	107218514032	Sreekar Vattem
28	107218514033	Sucharita Nandy
29	107218514035	V Sai Chandana
30	107218514036	V Vaishnavi
31	107218514038	Raparthi Subash Chandra Bose

Total No of students: 31

Name of the Faculty:

1) Dr. S. Padma 2) Mrs. S. Vanitha Head, Dept. of Bio-Chemistr British van's Vivekananda Colle an kpuri. Secunderabad-500



Department of Biochemistry List of B.Sc III year (MBBCC) Students for Industrial Visit Biological Evans Limited, Shamirpet, Hyderabad 21/9/2019

Under DBT- STAR College Scheme

S. No	Roll No	Name of the Student
1	107217471001	Aparna U
2	107217471003	Bhukya Karan
3	107217471004	C Lahary
4	107217471005	Devi Priya Bashaboina
5	107217471007	Kareti Anoosha
6	107217471008	Koride Manaswini
7	107217471009	Manasa Kanduri
8	107217471014	Prasanna Kumar Thummala
9	107217471015	Bhagavathula Priyanka
10	107217471016	Putchakayala Tejaswi
11	107217471018	Shiramshetti Shivashankar
12	107217471020	Sowjanya Deshabathni
13	107217471021	Sowmya Kolechelimi
14	107217471023	N Ch Tanmayee Venugopal
15	107217471024	Thammanaboina Abhiram
16	107217471029	Jayalaxmi V
17	107217471030	Jayshree Mandal
18	107217471031	Jennifer Duvvena
19	107217471032	K Geetha
20	107217471034	Kusuma P
21	107217471040	Shivani M
22	107217471048	Sathvika Kothuri
23	107217471050	Kiranmayee Ampolu

Total No of Students: 23 Name of the Faculty:

1) Dr. S. Padma

2) Mrs. S. Vanitha

SECURITY IKP, HYDERABAD *

Head, Dept. of Blo-Chemistry Bhavan's Vivekananda College Sainikpuri, Secunderabad-500 094

Andrew State Transport

2019-2

Report on Visit to NIPER, Balanagar, Hyderabad (National Institute of Pharmaceutical Education and Research)

The students of B.Sc final year (MBBCC) were taken for an educational visit to NIPER on 3rd December, 2019 under DBT-Star college scheme. The students were shown the high end instruments that are used in science research programmes like HPLC, HPTLC, LC-MS/MS, SEM, NMR spectrometer, Zeta sizer for particle size analysis, Microfluidizer, Nano ball mill, fluorescence microscope and Confocal microscope. In the Regulatory toxicology department students were shown the tissue sectioning and fixation and automated differential blood cell counter. Animal house facility was also shown and explained about Rotarod test and YMaze test. Students interacted enthusiastically with the staff and the research scholars at the institute and were benefitted from the information provided. As part of this visit M.Sc final year Biochemistry students were also included.



Head, Dept. of Bib-Chemistry Bhavan's Vivekananda College Samkpuri, Secunderabad-500 094

List of B.SC and M.Sc students who visited NIPER

3rd December,2019

S No	Roll No	Name Of The Student
1.	107217471001	APARNA U
2.	107217471002	NANNAPARAJU ARCHANA
3.	107217471003	BHUKYA KARAN
4.	107217471007	KARETI ANOOSHA
5.	107217471008	KORIDE MANASWINI
6.	107217471009	MANASA KANDURI
7.	107217471014	PRASANNA KUMAR THUMMALA
8.	107217471015	BHAGAVATHULA PRIYANKA
9.	107217471016	PUTCHAKAYALA TEJASWI
10	107217471019	SHWETANG U
11.	107217471020	SOWJANYA DESHABATHNI
12.	107217471025	AFROZ ZEBA
13.	107217471026	DOMAKONDA RAJASHREE
14.	107217471028	JATIN SIROHI
15.	107217471028	K GEETHA
16.	107217471032	KANCHAN SINGH
17.	107217471035	MEGHANA PRAKASH
18.	107217471038	PAWAN
19.		
- 20	107217471039	SAKSHI JAIN
20.	107217471043	M ALEKHYA
21	107217471048	SATHVIKA KOTHURI

S.NO	Roll no	Name of the student
1.	107218514002	SURYA LALITHA ADIRAJU
2.		CH DURGA SATYA
	107218514004	DEEPTHI
3.		GOWRARAM BHAVYA
	107218514007	HARIKA
4.	107218514010	JAVVAJI THIRUMALA
. 5.	107218514012	K RAMA KRISHNA
6.	107218514013	KURUVA RAMASAI
7.	107218514014	LELLA GAYATRI
8.	107218514015	M ROHIT KUMAR
9.	107218514017	METTU SURAJ
10.		MOHAMMED JUWERIYA
	107218514018	TAHSEEN
11.	107218514019	MUDIGONDA CHANDANA
12.	107218514020	O VAISHNAVI
13.		PARAMESHWARI
	107218514021	BANOTH
14.	107218514023	PORIKA RAHUL NAIK
15.	107218514024	POTLURU SREE VYSHNAV
16.	107218514028	SADURGAM VAIJAYANTH
17.		SOWMYA JAI KUMAR
	107218514031	SREEJA
18.	107218514032	SREEKAR VATTEM
19.	107218514035	V SAI CHANDANA
20.	107218514036	V VAISHNAVI

Head, Dept. of Bio-Chemistry
Bhavari's Vivekananda College
Samikpuri, Secunderabad-500 054



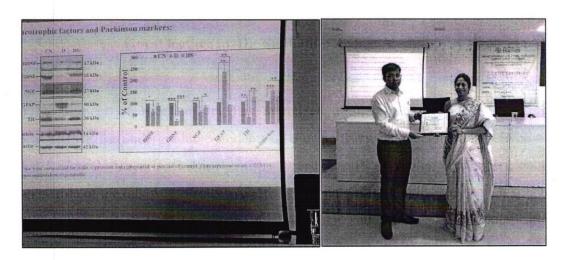
Department of Biochemistry

Report

Guest lecture by Dr. Sudhakar Reddy. V

12th July, 2019

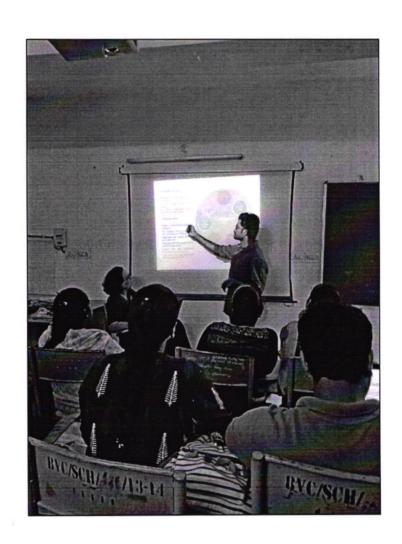
The Department of Biochemistry has organized a guest lecture under DBT-STAR COLLEGE SCHEME for undergraduate students of Biochemistry. The lecture was delivered by Dr. Sudhakar Reddy. V Scientist-B, Biochemistry Division, NIN, Tarnaka, Hyderabad, on 12th July, 2019. The title of the talk was "Protective effects of Vitamin B12 in diabetes". He explained about the different types of diabetes and the microvascular and macrovascular complications involved. Students were also made aware about the hyperglycemia induced neurodegeneration and the role of vitamin B12 under such conditions.



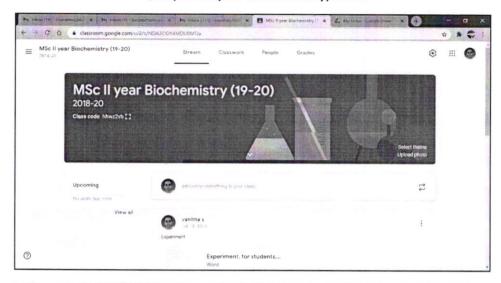


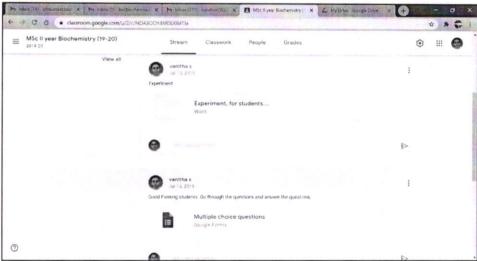


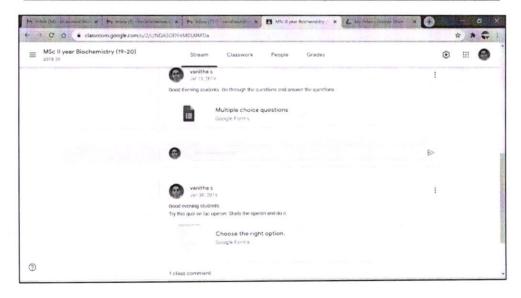
Students Seminar Presentation by K Ramakrishna (M. Sc Biochemistry) 2019-20

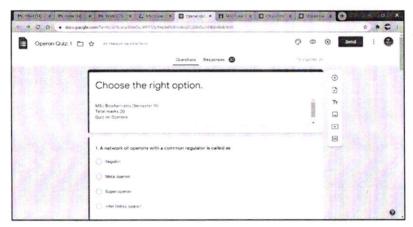


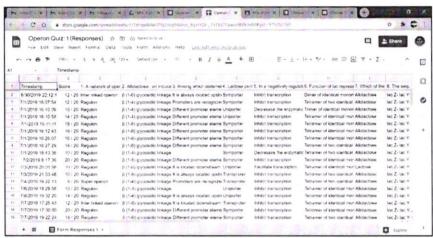
Quiz (MSc II year Biochemistry) 19-20

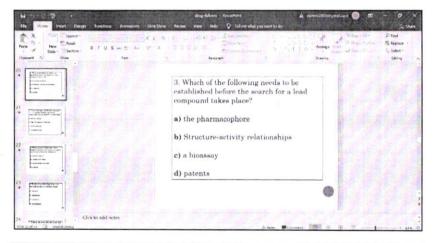


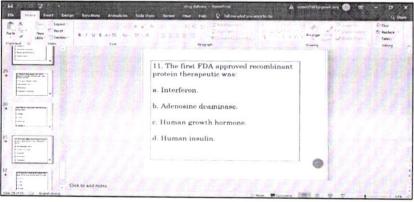














Department of Biochemistry

Foundation Day Lecture at GMERF

28th September, 2019

Students of M.Sc Biochemistry have attended the 6th foundation day at GMERF (Global Medical Education and Research Foundation) on 28th September, 2019. Prof. Kakarla Subba Rao, Former Director of NIMS, Hyderabad was awarded 'Professor of Eminence'. Shri. K. Padmanabhaiah, IAS (Retd) chairman of ASCI delivered a lecture on "Privatization of Medical and Health Care" where he explained about the implications in privatization of health care and emphasized on New National Health Policy (2017). He also made the audience aware of its goal in increasing the quality of health care without facing financial hardships. He stressed on the importance of eliminating corruption in health care and stated the importance of institutes to take up more research activities for which the facilities should also be enhanced by the organizations.







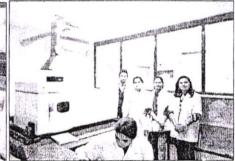
Report

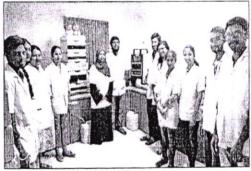
Workshop at StarTech Laboratories Pvt. Ltd.

16th - 21st December, 2019

Department of Biochemistry has organized a workshop for 2nd year M.Sc students from 16th – 21st December, 2019 at StarTech Laboratories Pvt.ltd, Madinaguda, Hyderabad. Students were given detailed knowledge of different instruments and techniques that are routinely used in Pharma industries and in the labs associated with scientific analysis. Students had a thorough training in loss on drying (LOD), COD (Chemical Oxygen demand), BOD (Biological oxygen demand). X- Ray Diffraction (XRD) which is a rapid analytical technique, primarily used for phase identification of crystalline material providing information on unit cell dimensions. Students were also trained in HPLC technique which is used in analytical chemistry to separate, identify, and quantify each component in a mixture. The importance of instruments like sound level meter, noise dosimeter, indoor air quality, oxygen and anemometer in industrial hygiene were also demonstrated. Students also had a chance to learn in detail the Gas chromatography (GC) technique which is used in analytical chemistry for separating and analyzing compounds that can be vaporized without decomposition. Overall, the workshop had been very useful for students in learning various analytical techniques that are carried out in Pharma industries.









Bhavan's Vivakananda College Bhavan's Vivakananda College Bankoud, Sacunderabad-500 Our



BHAVAN'S VIVEKANANDA COLLEGE OF SCIENCE, HUMANITIES AND COMMERCE,

Sainikpuri, Secunderabad-500 094
Autonomous, Accredited with 'A' Grade by NAAC

Value Added Course in "Training in Analytical Techniques" Organized by Department of Biochemistry

In collaboration with

StarTech Laboratories Pvt.ltd, Madinaguda, Hyderabad 16th – 21st December, 2019

S.No	Roll No	Name
1	107217514005	R.Roshini
2	107218514001	Abbaraju Lakshmi Pavani
3	107218514002	Surya Lalitha Adiraju
4	107218514003	B Kaviya Purnima
5	107218514004	Ch Durga Satya Deepthi
6	107218514006	D Naga Jyothi
7	107218514009	Jadala Nagajyothi
8	107218514010	Javvaji Thirumala
9	107218514011	K L Gouriaishwarya
10	107218514012	K Rama Krishna
11	107218514013	Kuruva Ramasai
12	107218514014	Lella Gayatri
13	107218514015	M Rohit Kumar
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19	107218514023	Porika Rahul Naik
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21	107218514028	Sadurgam Vaijayanthi
22	107218514029	Sandhe Pushpa
23	107218514030	Shaista Naghma
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25	107218514032	Sreekar Vattem
26	107218514033	Sucharita Nandy
27	107218514035	V Sai Chandana
28	107218514036	V Vaishnavi
29	107218514038	Raparthi Subash Chandra Bose

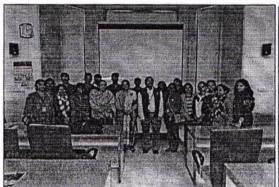


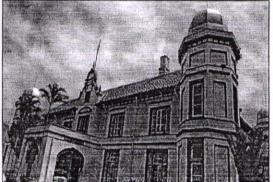
Report on

Educational Trip to Pasteur Institute, Coonoor

15th to 20th November, 2019

The final year students of M.Sc Biochemistry were taken on an educational trip to Pasteur Institute, Coonoor. The trip started on 15th November evening from Hyderabad to Bengaluru and there were 18 students accompanied by two lecturers. On 16th morning from Bengaluru, students were taken to Mysore where they visited the Brindavan Gardens and Mysore palace and reached Ooty on 17th evening. On 18th morning students were taken from Ooty to the Pasteur Institute, Coonoor, where Mr. G. Chandra Mohan, Asst. Research Officer explained the students about the facilities and procedures in the preparation of vaccines that are followed at the Institute. The students were given a good insight into the vaccine production of DPT. He emphasised on the set up of laboratories under GLP requirements, which were taken care under the DBT funding to the institute. The trip ended by returning to Hyderabad on 20th morning. Overall, the trip has been enjoyable and educative to the students and the faculty.







Head, Dept. of Bio-Chemisses Bhavan's Vivekananda College Sainikpuri, Secunderabad-500 094

MSC Biochemistry 2019-20 Students' seminar

S.No	Name of the student	SEM	TOPIC	Reference
1.	Racha Roshini	IV	To find the content of cold drinks available in the market	International Journal of Research in Engineering, Science and Management ISSN(online):2851-5792
2.	Abbaraju Lakshmi Pavani	IV	Preparation of Inulin from Chicory Roots	Anil K Gupta, Navdeep Kaur, Narinder Kaur, Journal of Scientific and Industrial Research, Vol62, Sept 2003, p916-920
3.	Surya Lalitha Adiraju	IV	Inhibition of polyphenol oxidase in banana, apple and mushroom by using different anti-browning agents under different conditions	Samanta Arpita, Das Subroto, Bhattacharyya Pinaki And Bandyopadhyay Bidyut Int. J. Chem. Sci.: 8(5), 2010, S550-S558
4.	B Kaviya Purnima	IV	Extraction, purification and characterization of polyphenol oxidase from peel and pulp of tomato	Shanti, Richa, Anannya Mohapatra, Parijatham Kanchana, Mala ranjan, Sr.Sandra horta Int.J.Curr.Res.Aca.Rev. 2014.2(3): 74-82
5.	Ch Durga Satya Deepthi	IV	Diversity analysis of wheat cultivars on the basis of solubility- fractionated seed storage protein polymorphism	Tirthartha Chattopadhyay and Sudhir Kumar, Indian J Biotechnol.Vol 15,2016 P190-194
6.	D Naga Jyothi	IV	Using a non-reducing sugar in the green synthesis of gold and silver nanoparticles by the chemical reduction method	Agudela, W.,Montoya Y., Bustamante.J Dyna rev.fac.nac.minas vol.85 no.206 Medellín Jul y/Sept. 2018
7.	Gowraram Bhavya Harika	IV	Impact of sewage water on seed germination and vigour index of Cicer arientum and Pisum sativumL	Sankar Narayan Sinha and Dipak Paul, International Journal of Food, Agriculture and Veterinary Sciences ISSN: 2277-209X (Online) 2013 Vol. 3 (3) September- December, pp.19-26
8.	Inturu Sai Tejaswini	IV	Identification of synthetic food colors adulteration by paper chromatography and spectrophotometric methods	Bachalla N. IAIM, 2016; 3(6): 182-191
9.	Jadala Nagajyothi	IV	Coriandrum sativum seed extract assisted in situ green synthesis of silver nanoparticle and its anti- microbial activity	G.M.Nazeruddin, S.R.Prasad Y.I.Shaikh S.R.Waghmare ParagAdhyapak, Industrial Crops and Products Volume 60, September 2014, Pages 212-216
10	Javvaji Thirumala	IV	Hypertension and Lipid profile of patients of DGKhan District	Ahamad A Hypertension and Lipid Profile of Patients of DG Khan (2018) District. Clin Med Biochem 4: 142. doi: 10.4172/2471-2663.1000142
11	K L Gowri Aishwarya	IV	Coriandrum sativum seed extract assisted in situ green synthesis of	G.M.Nazeruddin, S.R.Prasad Y.I.Shaikh S.R.Waghmare ParagAdhyapak, Industrial

			silver nanoparticle and its anti- microbial activity	Crops and Products, Volume 60, September 2014, Pages 212-216
12	K Rama Krishna	IV	Chitosan delays ripening and ROS production in guava (Psidium gujava)	W.B Silva, GMC Silva et al Food Chemistry, Volume 242, 1 March 2018, Pages 232-238
13	Kuruva Ramasai	IV	Green synthesis of zinc oxide nanoparticles: a comparison	Shabnam Fakhari, Mina Jamzad & Hassan Kabiri Fard (2019) Green Chemistry Letters and Reviews, 12:1, 19-24,
14	Lella Gayatri	IV	Protease inhibitors from ripened and unripened bananas.	Rao NM <u>Biochem Int.</u> 1991 May;24(1):13-22.
15	M Rohit Kumar	IV	Aqueous two phase extraction of protease from neem leaves (Azadirachta indica)	K. Subathra, G. C. Jeevitha, Raj Deepa(2012) International Journal of Chemical Sciences and Applications Vol 3 Issue 3
16	Mala Ravi Kumar	IV	Preparation and antibacterial activities of Ag/Ag ⁺ /Ag ³⁺ nanoparticle composites made by pomegranate (<i>Punica granatum</i>) rind extract	YangHu, RenYan-yu, WangTao, Wang Chuang (2016) Results in Physics, Volume 6, Pages 299-304
17	Mettu Suraj	IV	Interaction of Hormones with Reactive Oxygen species in Regulating seed germination of Vigna radiate (L). Wilczek	Chaudhuri, A, Singh KL, and Kar RK(2013) Journal of Plant Biochemistry and Physiology, Vol 1 Issue 1
18	Mohammed Juweriya Tahseen	IV	Glucosidases and galactosidases in soils	F.Eivazi *M.A.Tabatabai (1988),Soil Biology and Biochemistry, Volume 20, Issue 5, Pages 601-606
19	Mudigonda Chandana	IV	Isolation and characterization of protease enzyme from leguminous seeds	M. Akhtaruzzaman1, N.H.M. Rubel Mozumder, Ripa Jamal, Atikur Rahman and Tanjina Rahman (2012)Agricultural Science Research Journals Vol. 2(8), pp. 434-440,
20	O Vaishnavi	IV	Extraction and partial purification of peroxidase enzyme from plant sources for antibody labelling	Gutema Dinkisa Idesa and Belayneh Getachew, International Journal of Veterinary Science & Technology, Volume 2 Issue 1
21		IV	Nutritional and biochemical alterations in Vigna Radiata (Mung bean) seeds by germination	Inamul Hasan, MadarAmjad Hussain, Asangani, Shantkriti Srinivasan Iftikhar Aslam Tayubi and Gideon I. Ogu(2017) nternational Journal of Current Microbiology and Applied Sciences Volume 6 Number 9 pp. 3307-3313
22	Porika Rahul Naik	IV	Isolation and characterization of protease enzyme from leguminous seeds	M. Akhtaruzzaman1, N.H.M. Rubel Mozumder, Ripa Jamal, Atikur Rahman and Tanjina Rahman (2012)Agricultural Science Research Journals Vol. 2(8), pp. 434-440,
23	Potluru Sree Vyshnavi	IV	Use of Musa AAB in kidney stone treatment and other diseases	Prasobh G.R, Revi Kumar (2011), Asian Journal of Pharmaceutical and Clinical Research 4(3):117-118

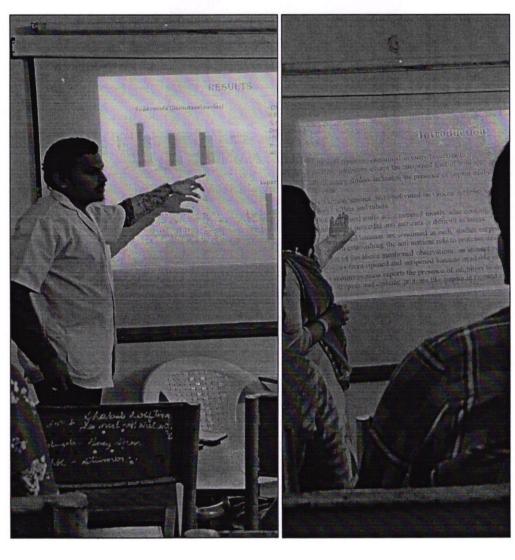
	Raagi Shivani	IV	To study the antioxidant properties in germinated and non-germinated seeds of <i>Glycine max</i> (soya bean)	Brosché M, Overmyer K, Wrzaczek M, Kangasjärvi J, Kangasjärvi S. Stress signaling III Reactive oxygen species. In: Abiotic stress adaptation in plants: Physiological, molecular and genomic foundation. Pareek A, Sopory SK, Bohnert HJ, Govindjee, eds. Dordrecht: Springer, 2010: 91-102.
25	Rachakonda Saiteja	IV	An overview of nutritional and anti- nutritional factors in green leafy vegetables	Hemmige Natesh N, Abbey L, Asiedu SK – (2017) Horticulture International Journal Volume 1 Issue 2
26	Sadurgam Vaijayanthi	IV	Extraction, Purification and characterization of polyphenol oxidase from peel and pulp of tomato	Mala Ranjan, (2014) International Journal of current research and academic review Vol 2, No 3 P74-82
27	Sandhe Pushpa	IV	Towards enzymatic release of polyphenolic compounds with antioxidant power form Guava leaves	V.Nihorimbere and M.Musoni (2019) International Journal of Scientific Engineering and Applied Science (2019) Vol 4 Issue 01
28	Shaista Naghma	IV	Extraction of peroxidase form various plant sources and its biodegradation studies on phenolic compounds	Senthilkumar Rathnamsamy*, Raveesh Singh, Rufus Auxilia, B.N.Vedhahari (2014)BTAIJ, 9(4), [160-165]
29	Sowmya Jai Kumar Sreeja	IV	Enzymatic antioxidant activities in eight wild edible fruits of Odisha	Madhulita Patnaik and Uday Chand Basak (2014)1(3): 36–42,
30	Sreekar Vattem	IV	Estimation of chlorophyll content in young and adult leaves of some selected plants	Pramod N. Kamble Universal Journal of Environmental Research and Technology
31	Sucharita Nandy	IV	Leaf extract mediated green synthesis of silver nanoparticles from widely available Indian plants: Synthesis, characterization, antimicrobial property and toxicity analysis	Priya Banerjee, Mantosh Satpathy, Aniruddha Mukhopadhyay and Papita Das (2014) Bioresources and Bioprocessing, 1:3
32	V Sai Chandana	IV	Correlation between anthropometry and lipid profile in healthy subjects of Eastern India.	Manjareeka, Sitikantha Nanda, Jayanti Mishra, Soumya Magna Ishra
33	V Vaishnavi	IV	Phosphatases in Soils	F.Eivazi and M.A.Tabatabai (1977)Soil Biology and Biochemistry Vol 9 issue 3 pg167-172
34	Raparthi Subash Chandra Bose	IV	Extraction, Purification and characterization of polyphenol oxidase from peel and pulp of tomato.	Shanti, Richa, Anannya Mohapatra, Parijatham Kanchana, Mala Ranjan, Sr. Sandra Horta (2014) International Journal of Current Research and Academic Review ISSN:2347-3215 Vol 2 Number 3:74-82



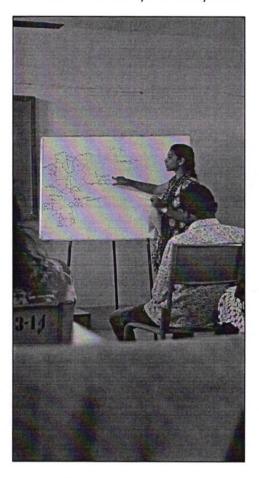
Student's Seminar M. Sc Biochemistry 2019-20

Seminar Presented M. Suraj

Seminar Presented L Gayathri



Seminar Presented by P. Sree Vyshnavi





Two-day National Seminar "Eco-friendly strategies for sustainable environment" $28^{th} \ and \ 29^{th} \ February, \ 2019-2020$

List of Research Oral/Posters presented in National Seminar -2020

S No	Student Name	Title	Oral/Poster		
1	A. Surya Lalitha,	Evaluation of the inhibitory effects of short peptides on polyphenol oxidase activity	Oral		
2	O. Vaishnavi				
3	J. Nagajyothi and KL. Gowri Aishwarya	Comparative Study of antioxidant activity of leaf and seed extracts Of Coriander (<i>Coriander Sativum</i>), Vamu (<i>Trachyspermum ammi</i>), Menthi (<i>Trigonella foenum-Graecum</i>) and <i>Insitu</i> green Synthesis of silver nanoparticles.	Poster		
4	Ch. Durga Satya Deepthi	Diversity Of Maize Seed Storage Proteins Polymorphism	Poster		
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