Research at K. C

Compiled Numbers

YEAR	International Research Papers Publications	National Research Papers Publications	Books	Projects
2014-15				
2015-16	25	6	10	5
2016-17	13	12	5	9
2017-18	12	6	1	6
2018-19	13	11	3	3
2019-20	11	7	16	5

YEAR	International Conference/ Seminars/ Workshops	National Conference/ Seminars/ Workshops	University/ State Conference/ Seminars/ Workshops	Posters
2014-15				
2015-16	2	3	1	2
2016-17	5	9	6	15
2017-18	3	2	6	1
2018-19	3	2	1	3
2019-20	-	5	2	5

2015-16

Interdisciplinary Research Journal: Srujan : Volume IV

5. "A Study of Sources of Positive Emotions at the Workplace" - Meghna Basu Thakur and Jyotika Varmani
6. "The Relevance of Ethics in Media Research" - Sudha Ravishankar
7. "Explicating the Author-function in Reading and Writing Practices in Electronic Literature"- Kavita Peter
8. "A Study on Rural Development: Mission 2020 Perspective" - Kulvinder Kaur Batth
9. "Impact of Information Communication and Technology in Contemporary Legal Education and Profession as
well as Judicial System" - Anand Mahadeo Kasle
10. "An Overview on Right to Education Act" - Dipali Vikas Patil
11. "Review of Pre-NREGS Anti-Poverty Schemes in India" - Ravikiran R. Garje

<u>ANUBHAV – 2015-16...Research Forum for Teachers</u>

This year the annual teacher's academic forum was attended by teachers from Board colleges and others. The Coordinator, **Dr. Rakhi Mehta** gave an outline of the event. The welcome address was given by the Principal, **Ms. Manju Nichani**. **Dr. Leena Pujari** proposed the vote of thanks for the inaugural program. There were 18 presentations which led to scientific deliberations at the end of each session. There was valuable discussion and concluding remarks by experts at the end of each session.

The Keynote Address by **Dr. S.M. Khopkar** highlighted the opportunities in research with financial assistance from our government. He spoke about research funding from various funding agencies. He guided the audience on how to write research proposals and emphasized the need that the thrust area of the research should be well defined. He also stated that the research should have a social impact and should contribute to national growth. He emphasized the need for full proof and factual defence before the committee.

Dr. Sangeeta Bagga Gupta enlightened the teachers on Research AS activity and epistemologies. Knowledge cultivation for whom, how and for what purpose? The concluding remarks were offered by the Convener, Research Committee, **Dr. Hemlata K. Bagla. Dr. Anupma Harshal** co-cordinator of Anubhav presented an overview of the presentations made during the day and proposed the vote of thanks. Details of the presentations at a glance-

ANUBHAV 2015-16

Dr. Rajani Athawale, KMK College of Pharmacy: Design & evaluation of long acting microspheres for protein & peptide drug delivery system.

Dr. Vandana Panda, KMK College of Pharmacy: Spinacea Oleracea (Spinach) a popular green leafy vegetable displays potent antacid activity in an artificial stomach model.

Mr. Vinod Adagle, National College: Economic thoughts.

Dr. Archana Thite, K.C. College: RRC-Activity for youth

Ms. Anushi J.D., K.C. College: Determination of B.R.I. of Thyroid hormones in healthy adult Indian population.

Ms. Nandini Desai, K.C. College: Engaging pedagogies in Teaching.

Ms. Meghna Chotaliya, National College: Tax Reforms in India – Goods and Service Tax

Ms. Meghna Basu Thakur, National College: To study the impact of sedentary lifestyle & exercise on social physique anxiety & self compassion of women & adolescents in Mumbai.

Ms. Prabha P., K.C. College: Micro biology laboratory –a microcosm for studying nosocomial infections.

Ms. Amruta K., K.C. College: P.C.O.S awareness: study of current scenario.

Ms. Sharon K., K.C. College: Study of Ethnobotanical plants in Maharashtra & their health benefits.

Dr. J.P. Shastri, K.C. College: Green Synthesis of Antimicrobial Nano Silver Paints.

Dr. Satish Kolte, K.C. College: Use of Banana flower as progesterone regulators in Females.

2016-17

VIII. In-House Research Volume: Jigyaasa SHP Magazine: Volume XI, 2016

SHP student Ms Avanti Mhatre presented poster in Jigyasa.

SHP student Ms. Anjali Mer presented a poster in Jigyasa.

SHP student Ms. Saloni Agarwal won first prize in poster presentation at Jigyasa.

X. 'ANUBHAV 2017'

Research forum for teachers was organized by research committee on 16th January, 2017.The Chief Guest and Keynote Speaker was **Dr. D.N. Shastri** who spoke on 'Research Ethics in Data Collection'. Participants from various Arts, Science and Commerce Colleges presented their research papers at this forum.

Name	College	Title
Dr. Jayesh Rana	MMK	A study of consumer behavior in fast moving
	College	consumer goods 'Detergent goods'
Dr. S Annapurna	St. Zaviers	Estimating parameters of a bivariate geometric
	College	distribution and its application
Ms. Meghna B.	National	To study the impact of loneliness procrastination
Thakur	College	amongst teenagers living in urban Mumbai
Dr. Shaila Wagle	K.C. College	Non- isothermal Crystalization of thermoplastics and
		nanocomposites
Dr. Jyotsna Pandey	K.C. College	Vickers microhardness and thermal studies of an
		organic-NLO crystal
Dr. Sonal Dasani	K.C. College	Setting up a small business venture – Preparation of
		herbal shampoo
Mr. Sagar Talreja	K.C. College	Social media banking
Ms. Anushi Jain	K.C. College	Weeds: The blacksheep of botanical family
Ms. Nandini Deasi	K.C. College	Mangroves: The roots of the sea
Ms. Sharon K	K.C. College	Meandering through the woods of western ghats: An
		ethnobotanical survey
Ms. Amina D	K.C. College	The unknown world of caffeine
	Dr. Jayesh RanaDr. S AnnapurnaMs. Meghna B.ThakurDr. Shaila WagleDr. Shaila WagleDr. Jyotsna PandeyDr. Sonal DasaniMr. Sagar TalrejaMs. Anushi JainMs. Nandini DeasiMs. Sharon K	Dr. Jayesh RanaMMK CollegeDr. S AnnapurnaSt. Zaviers CollegeMs. Meghna B. ThakurNational CollegeDr. Shaila WagleK.C. CollegeDr. Shaila WagleK.C. CollegeDr. Jyotsna PandeyK.C. CollegeDr. Sonal DasaniK.C. CollegeMr. Sagar TalrejaK.C. CollegeMs. Nandini DeasiK.C. CollegeMs. Sharon KK.C. College

LIST OF RESEARCH PAPER PRESENTATIONS:

14.	Dr. Sejal Rathod	K.C. College	Prevalence of ESBL mediated cephalosporin	
			resistance amongst gastrointestinal pathogens	
15.	Dr. Pratibha Shah	K.C. College	Co-production of ESBL and Amp C in gram negative	
			pathogens causing skin infections	
16	Mrs. Rajitha Satish	K.C. College	Isolation of Mycobacteriphage: Novel tool to treat	
			mycobacterium Spp	
17.	Ms. Nidhi Borana	K.C. College	Gender identity disorder	
18.	Dr. Aashu Vajpai	K.C. College	An attempt to design sustainable feed for aquaculture	
19.	Dr. Suvarna Sharma	K.C. College	The study of isolation of stress resistant genes from	
			aloe vera	
20.	Dr. Anupama	K.C. College	Tabla: A pedagogical tool for inclusive teaching	
	Harshal			

2017-18

IX. ANUBHAV 2018 - RESEARCH FORUM FOR TEACHERS

Anubhav, the sharing of research experiences by faculty members is an initiative of the research committee was held on 15th January, 2018. The key note speaker **Dr. Harish Shetty** spoke on 'Mental Health Soldier'. Sixteen researchers from various colleges such as Sophia College, R.D National College and K.C College presented their research findings and research related experiences. Each presentation was followed by question answers, discussions, feedback and suggestions. These sessions sowed the seeds for fresh research topics and also further in- depth research in the areas presented. **Dr. Rakhi Mehta,** Coordinator.

Details of the presentations at a glance-

Ms. Rashna Poncha, Sophia College: A Study of Frere Town Bombay.

Ms. Ivan Mathew John, Sophia College: The Gay Movement in Mumbai: Moving Towards Greater Visibility.

Ms. Meghana Chotaliya, R.D National College: Goods & Services Tax (GST)-A game Changer in Indirect Tax Reforms.

Dr. Archana Thite, K.C College: Organ donation-Facts and Myths.

Ms. Sharon Kadirvelu, K.C College: Comparative Photochemical Study of Ixora Chinensis from Karwara (Karnataka) and Mumbai.

Dr. Suvarna Sharma, K.C College: Challenging the Central Dogma.

Ms. Durga Shinde, K.C College: CSF-Neopterin, Biopterin and 5 MTHF Levels in Neurological Disorders from Indian Patients.

Ms. Amruta Kothare, K.C College: Anticancer Potential of Bromelain Enzymes.

Mrs. Rajitha Satish, K.C College: Properties of Mycobacteriophage: A Novel Tool to Inhibit and Treat Mycobacterium.

Mr. Sagar Talreja, K.C College: A Study to Understand Consumer Behaviour in the Context of Social Media Marketing by Banks.

Mr. Tejas Pai, K.C College: Portfolio Choice and Behavioural Bias.

Dr. Sejal Rathod, K.C College: Extradiction and Detection of Antimicrobial Effect of Plant Based dyes.

Mr. Karun Sodha, K.C College:Multifunctional Envelope Nano Device,

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

Intercollegiate Research Scholars Meet is an annual feature of Jigyaasa KCC, where SHPians showcase their research outcomes along with many participants from outside colleges in Mumbai. This year IRSM was held on 17th February, 2018. **Dr. Nishigandha Naik**, Director of Haffkine Institute, Parel was the Chief Guest of Inauguration ceremony. **Dr. Hemlata Bagla**, I/C Principal of K.C College praised Jigyaasa-SHP teachers and the students, for taking up challenges and wished that all of them come out as winners. **Dr. Sagarika Damle**, Convener detailed out various research achievements of SHP students. There were more than 150 registered student participants and 66 projects were presented at IRSM 2018. They belonged to different science categories from Computer Science to Biotechnology and represented a total of 13 colleges across Mumbai and beyond. The list of presentations is given below:

Ms. Ashwini Kumar, Ms. Kanchi Jain, Ms. Nadera Dada and Ms. Amina Dholkawala*: Green Synthesis of Silver Nanoparticles Using Soil Bacterium.

Ms. Samrin Shaikh, Ms. Mayuri Iyer, Ms. Anushi Divan* and Dr. Sejal Rathod*: Prediposition of ADHD (Atlentio and Deficit Hyperactivity Disorder) Among Secondary School Children.

Mr. Bayaan Sarang, Ms. Smital Shinde, Mr. Abhijay Joshi, Ms. Samrin Shaikh, Mrs. Sharon K.and Ms. Anushi Divan*: Analysis of Different Water Samples from Railway Stations around Mumbai.

Ms. Bushra Khan, Ms. Ramya Sindhyan, Dr. Sejal Rathod* and Ms. Anushi Divan*: Extraction of Natural Dyes and their Application.

Mr. Sagar Talreja and Dr. Hasina Sayed*: A Study to Understand Consumer Behavior in Context of Social Media Marketing by Banks.

Note: (* Name of the Research Guide)

2018-19

IX. ANUBHAV 2018 - RESEARCH FORUM FOR TEACHERS

ANUBHAV-(Dr. Rakhi Mehta, Co-ordinator)

Anubhav –a forum for sharing research experiences organized by Research Committee of K.C College was held on 15th January, 2019. The forum provides a platform for sharing of research experiences by faculty members of KC College and other esteemed institutions of Mumbai. It creates an invigorating environment for deliberations, discussion & suggestions regarding the nuances of research.

The keynote speaker was **Dr. UshaVijailakshmi**, Associate Professor and Head, Department of History at the PatkarVarde College. The topic was Methodological issues in History. She discussed her first-hand experience at field research leading to an enriching and thought provoking session of question answers by the packed audience.

A total of fifteen presenters from various colleges such as K.C College, National College, KMK Pharmacy College presented their work. The topics were as diverse as Internet of things, Development of criminal justice system in India-A historical perspective, Role of optimism & forgiveness in enhancing wellbeing to name a few. Participants were awarded certificates for their participation.

Sr.No	List of Participants and College	Topics Presented	
1.	Prof.Sambeeta	Development of Criminal Justice System in India:	
	Dabral,NariGursahani Law	A Historical Perspective	
	College		
3.	Dr.MeghnaBasu Thakur &Ms.	Superstition and its Influence on Perception	
	Bhavna D Suleria, R.D. National		
	College		
4.	Prof.Navanitha Sachin	Protection of Geographical Indications under the	
	Warrier, NariGurshani Law	International Legal Regime	
	College		
5.	Dr.Meghna Chotaliya, R.D. &	Corporate Frauds in India	
	S.H.National College		
6.	Ms. RuhiBajaj, Thadomal Shahani	i Internet of Things Adoption by Indian	
	Engineering College	Organizations	
7.	Dr.Vandana Panda, Principal	Novel Dietary Interventions to Power the Aging	
	K.M.Kundnani College of	Muscle in Sarcopenia	
	Pharmacy		
8.	Ms. Sharon K, K.C College	Comparative Antioxidant Activity of	
		MeynaSpinosaRoxb.Ex. From Mumbai and Nasik	
9.	Dr.Sagrika Damale, K.C College	Microscopy Studies of Catunaregamspinosa	
		(Thunb.) Triveng from Goa and Mumbai	
10.	Dr.Mansha Kotwani,	The Study of Calcium Dynamics in Fibroblast Cell:	
	ThadomalShahani Engineering	A Mathematical Perspective	
	College		
11.	Ms.Rajitha Satish, K.C College	Isolation and Study of Mycobacteriophage	

12.	Ms.Poonam	A Mathematical Model to Study Fluoride	
	Soni, Thadomal Shahani	Contamination of Soil	
	Engineering College		
13.	Dr. Jyotsna Pandey, K.C College,	Growth and Characterization of Oxalic Acid Doped	
		Potassium Dihydrogen Phosphate Crystals by Slow	
		Evaporation and Gel Technique.	
14.	Dr.Satish Kolte, K.C College	Application of Method Validation Technique to	
		Prove Larvicidal Activity of some Plant Material	
		Extract	
15.	Ms. Vimlarani, K.C College	Internet of Things - Architectural Elements of	
		Applications	

X.JIGYAASA –SHP-Undergraduate: Research Activity@KCC, Batch XIV IRSM- 19

"NURTURING YOUNG MINDS from lab to life."

Jigyaasa- intercollegiate Research Scholars Meet is an annual feature of KCC, where SHpians showcase their research outcomes along with many participants from different colleges in Mumbai. This year IRSM XI was held on 25th Feb 2019. **Dr. Swarup Shah** was the Guest of Honour, who is a senior molecular Scientist-HumanGenetics at Hinduja Hospital. In the inauguration ceremony, **Dr. HemlataBagla**, Principal, K.C.College praised Jigyaasa SHP mentors and students for taking up challenges and wished that all of them come out aswinners. **Dr. SagarikaDamle**, convener detailed out various research achievements of SHP students. In IRSM XI, 41 teams and 90 students registered. Out of which 18 were in house teams with 40 students. In all 41 presentations were given by students .They belonged to different science categories from Computer Science to Biotechnology.The List of presentations is given below. The distinguished panel of judges included **Mr. Wilson Rao, Mr. SajuVerghese George, Dr. Nikita Naik, Dr. Shanti Upadhye, Dr. ShwetaPatil, Dr. Manish Hate, Dr. MadhuraGhayal** and many more, who are senior academicians and administrators from reputed academic and research institutes who congratulated participants for their excellent presentations and also offered good suggestions for improving their projects.

IX. AVISHKAR RESEARCH CONVENTION

AVISHKAR is Inter-University Research Convention. 14thAvishkar was conducted by Mumbai University. K.C College had taken the responsibility to host the University level round. Dr. Satish Kolte was the coordinator for Avishkar. Under the guidance of Dr. Hemlata Bagla, Principal, a team of teachers organized this mega event behalf of Department of Student's Development, University of Mumbai.

Before sending the students to district level round, K.C College had provided the training to the participants. Dr. Mrs Roopa Shah, Assistant professor from Nirmala Niketan College of Home science, former Gold medalist of Avishkar was invited to guide and encourage maximum students for Avishkar 2020. Further, "Mock Avishkar" was arranged on 12th December, 2019 in which 28 teams from different departments of Science, Arts and Commerce had participated. In this Mock Avishkar judges from different streams were invited. Dr. Leena Pujari and Dr. Nandini Sengupta for Humanities and Social Sciences, Dr. Fatima from Sophia College and Dr. Anjali Puranik from Sheth JN Paliwala College, Pali, district-Raigad (Gold medalist of Avishkar 2019) had judged all the posters and guided our students. The District level round was at Ramnarain Ruia College on 14th December, 2019 in which 35 teams participated in Undergraduate, Post Graduate and Ph.D categories. Five teams were selected for University Level Round.

Kishinchand Chellaram College hosted university level round on 4thJanuary, 2020. Around 205 teams from different colleges of University of Mumbai from Palghar, Thane, Mumbai, Raigad, Ratnagiri and Sindhudurg District participated in the final round. A team of 42 judges from various branches had taken up the responsibility of judging and guiding the participants. At K.C. the final round for four Categories, C1 (Humanities, Languages and Fine arts) C-2 (Commerce, Management and Law) C-3 (Pure Science) C-4 (Agriculture and Animal Husbantary) and four levels was held. These 4 levels were- Under Garduate, Post Graduate, Ph.D students and teachers. The final round included Poster presentation in the first half and power point and oral presentation in the second half.

The Achievers were felicitated in the Valedictory function in the KC College Auditorium. Dr.Suhas Pednekar, Vice Chancellor of University of Mumbai was the Chief Guest. The function was witnessed by the entire core Committee members of 14th Inter University Research Convention to mention a few of them- Dr. Sunil Patil, Director, DSD, University of Mumbai, Dr. Minakshi Gurav, OSD Avishkar Research Convention 2019-20, Dr. George Abraham, Coordinator, Dr. Vrushali Kaneri, District Coordinator, Dr. Roopa Rao, District Coordinator.

From Kishinchand Chellaram College one team was selected for the final State Level round that was held at University of Mumbai Kalina campus. The team guided by Dr. Kulvinder Kaur received the Silver medal; the participants were Miss. Wadher Mitali and Miss. Maheshwari Grishma from S.Y. B.A. under the category Commerce, Economics and Law at under graduate level- **Report by Dr. Satish Kolte, Coordinator, Avishkar 2019-20.**

BIOTECHNOLOGY

2015-16

International Conferences and Seminars

Department of Biotechnology

 Ms. Anushi Jain presented a poster at the 6th Research meet, KONAR Kheld at Wilson College. An abstract titled "Determination of Thyroid hormones in healthy Adult Indian Population" was published in the proceedings.

BIOTECHNOLOGY	Dr. Anupma Harshal	Rs. 4,50,000/-
---------------	--------------------	----------------

2016-17

I.INTERNATIONAL RESEARCH PAPERS

DEPARTMENT OF BIOTECHNOLOGY

9.Ms. Anushi Jain published a research paper 'Evaluation of in-vitro cytotoxic and antioxidant activity of methanolic extracts of ipomoea carnea and alternanthera sessilis' International Journal of Bioassay, Vol 5, Issue 8, pp 4763-4766, ISSN 2278-778X, July 2016. **10.Ms. Sharon Kadirvelu** co- authored a research paper 'Study of isolation of stress resistant gene from aloe vera' published in the Proceedings of the International Conference on Emerging technologies for sustainable agriculture, ISBN 978-81-923628-4-7, 2016.

II.NATIONAL RESEARCH PAPERS

DEPARTMENT OF BIOTECHNOLOGY

Dr. Anupama Harshal had the following research publications co-authored with-

1.**Mr. Adarsh Chlake, Ms. Jareena Jacob, Mr. Anand Sharma,** 'Nucleotide Sequences of novel Pseudomaonas aeruginosa from oral tobacco consumers', Accession Bank SUB1391942 Sequenceid1 KU937106, Released on 4th April, 2016.

2.Ms. Maryam Alfa-Wali, Ms. Deepika Jadhav, Ms. Prachi Jhaveri, Ms. Sanchita Ahluwalia, Mrs. Shailaja Rane and Mr. Anand Sharma, 'A Qualitative Assessment of

Breast Cancer Awareness in an Urban Indian City', Journal of Cancer Prevention & Current Research, Volume 6, Issue 4, ISSN: 2373-633XJCPCR, 2016.

3. Ms. Rama Ramesh Singh, 'Effects of cooking on content of Vitamin C in green leafy vegetables. Scholars Journal of Agriculture and Veterinary Science', Vol 3, Issue 6, pp 416-423, ISSN 2348-8883, e-ISSN 2348-1854, 2016.

VI.UNIVERSITY/STATE LEVEL CONFERENCE/SEMINAR/MEET/SYMPOSIUM DEPARTMENT OF BIOTECHNOLOGY

Ms. Sharon K. presented a research paper at SFEC International Congress of Ethnocopharmocology, Bardoli, Gujarat, 2017.

VII.RESERCH GRANTS- MINOR RESEARCH PROJECTS

DEPARTMENT OF BIOTECHNOLOGY

Dr. Anupama Harshal received a URG Minor Research Project 'Screening and characterization of salivary markers in oral tobacco consumers.'

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM),

Department of Biotechnology

Ms. Susmita Sarkar, Ms. Suman Rathore, Ms. Shrushti Babrekar, Ms. Anshupriya Singh and Ms. Anushi Divan*: Phytochemical Analysis and Antimicrobial Analysis of Leaf Extract of Urticadioica and Justicia Adhatoda.

Ms. Namrata Singh, Ms. Sana Boblai and Ms. Nandini Desai*: Fabrication and Potential Use of Conjugated Immobilisedazotobacter and Azadirachtaindica (Neem) Extract as a Biofertilizer and Biopesticide.

Ms. Prachi Pawar, Ms. Saloni Samant Dr. Pratibha Shah* and Ms. Nandini Desai*: Identification and Characterization of Endophytic Fungi Isolated from Leaves of Avicennai Marina and Soil Analysis of Mangroves Ecosystem.

Mr. Ajay Narayanan, Ms. Manali Kadu, Ms. Pranita Rane, Dr. Anupma Harshal* and

Ms. Nandini Desai*: Study of Oral Microflora and Quantification of Salivary Biomakers in Smokeless Tobacco Consumers.

IX.POSTER PRESENTATIONS

DEPARTMENT OF BIOTECHNOLOGY

Ms. Anushi Jain and Ms. Sharon Kadirvelu

1. Presented poster at Jigyaasa RSM at K. C. College, and at National Indian Youth Congress Seminar.

Ms. Anushi Jain

1. Published her abstract in the proceedings of Intercollegiate Sajjan Gupta –Konark Memorial Award Research Meet, Swami Vivekanad College, Mumbai, 18thJanuary, 2017.

2017-18

I. INTERNATIONAL RESEARCH PAPERS

Department of Biotechnology

Ms. Anushi Divan: 1. 'Allelopathic Potential and HPTLC Analysis of Ipomoea Carnea', International Journal of Life Science and Scientific Research, Vol 3, Issue 5, pp 1278-1282, September 2017.

2. 'Factors Associated with consumption of Alcohol and Hookah Smoking Among the Youth of Mumbai, A Cohort Study', International Journal of Innovative Research in Science, Engineering and Technology, Vol 6, Issue 12, December 2017.

Ms. Nandini Desai: 'Prevalence of Polycystic Ovary Syndrome among Women in Mumbai and Association of its Symptoms with Work Hours' International Journal of Innovative Research in Science, Engineering and Technology in an International Journal, Vol 6, Issue7, P-ISSN no 2347-6710, E-ISSN no 2319-8753, IF- 7.089, July 2017.

II. NATIONAL RESEARCH PAPERS

Department of Biotechnology

Ms. Anushi Divan: 'Study of Total Phenol, Flavonoid Contents and Phytochemical Screening of Methanolic Crude Extracts of Two Weed Plants,' Annals of Plant Science, Vol 6, Issue 6, pp 1645-1648, ISSN no 2287-688X, June 2017.

VII. NATIONAL LEVEL POSTER PRESENTATIONS

Department of Biotechnology

Ms. Anushi Divan: 'Allelopathic Properties of Few Weed Plants in Mumbai' won the Best Paper award under PG category at National Level Poster Conference on 'Advances in Biological Sciences', Rizvi College held on 3rd February 2018.

VIII. MINOR RESEARCH PROJECTS

Department of Biotechnology

Dr. Sejal Rathod completed URG Minor Research Project 'Extraction and Detection of Antimicrobial Effect of Plant Based Dyes' funded by University of Mumbai with grant of Rs 30, 000/-

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

Department of Biotechnology:

Ms. Mayuri Iyer, Ms. Samrin Shaikh, Prachi Pawar, Saloni Samant, Ms. Anushi Divan*, Dr. Pratibha Shah*, Ms. Nandini Desai* and Dr. Sejal Rathod*: Predisposition of Attention Deficit Hyperactivity Disorder (Adhd) Among Secondary School Children.

Ms. Manali Kadu, Mr. Ajay Narayanan, Ms. Pranita Rane, Dr. Anupma Harshal* and Ms. Nandini Desai*: Study of Oral Microflora and Quantification of Salivary biomarkers in Smokeless Tobacco Consumers.

Ms. Prachi Pawar, Ms. Saloni Samant, Dr. Pratibha Shah* and Ms. Nandini Desai*:

Antimicrobial and Enzymatic Activity of Endophytic Fungi Isolated from Leaves of Avicennia Marina and Characterization of Mangroves Soil.

Ms. Bushra Khan, Ms. Ramya Sindhyan, Ms. Anushi Divan* and Dr. Sejal Rathod*: Extraction of Natural Dyes and its Applications.

Ms. Namrata Singh, Ms. Sana Boblai, Dr. Sejal Rathod^{*} and Ms. Nandini Desai^{*}: BIO-Modelling of Conjugated Immobilised Nitrogen Fixer and Neem Extract and its Potential Use as a Biodegradable Agrochemical.

Ms. Srika A., Ms. Aanchal B., Ms. Aradana M., Ms. Somya B., Ms. Neha K. and Ms. Kruti P.: Invitro Extraction, Partial Purification and Characterization of Collagen from Biowaste Material and Study of its Applications in Dermaceutical Products.

Ms. Shah Hiral, Ms. Shah Jefali, Ms. Kapoor Meghna, Ms. Priyanshi Desai and Mr. Sarmad Sonde: Antifungal Properties of Costus Pictus.

Mr. Viraj V., Mr. Vibhav K., Mr. Sanjay J., Mr. Hrishikesh A., Mr. Ashwin S. and Ms. Kruti P.: Isolation and Genetic Analysis of Marinebioluminescent Bacteria and Agrobacterium Mediated Transformation of Plants with Lux Genes for Study of Novel Applications.

Ms. Drishya U. and Ms. Kruti P.: Evaluation of Phytomedicinal Property of Carica Papaya, Cordia Dichotoma, Coccinia Grandis, Phyllanthus Emblica, and Abelmoschus Esculentus.

Ms. Meghna Kapoor, Ms. Jefali Shah and Ms. Hiral Shah: Novel Method of Salvaging Discarded Media and Wet Waste for Plant Growth Amelioration.

Mr. Dishanand Sawant: To Reveal Genetic Diversity in Garcinia Gummi-Gutta Using Molecular Marker-Issr and Rapd Markers.

XI. <u>SHP- IN HOUSE RESEARCH JOURNAL PUBLICATION: JIGYAASA: VOLUME</u> <u>XII, 2017-18</u>

Department of Biotechnology

Ms. Jareena Joseph and Dr. Anupma Harshal*: Comprehensive Study of Altered Oral Microbiome, Salivary Biomarkers in Smokeless Tobacco (Slt) Consumers.

Mr. Adarsh Chalke and Dr. Anupma Harshal*: Study of the Physiochemical Characteristics of Commercially Available Smokeless Tobacco Products.

Ms. Shreshtha Shah, Ms. Anushi Jain* and Dr. Anupma Harshal*: Hplc Analysis and Comprehensive Evaluation of Antimicrobial Properties of Two Weeds Formulation of Herbal Lotion.

Ms. Shaba Parpia, Mr. Rohit Halder, Ms. Anushi Jain*, Mrs. Shailaja Rane* and Dr. Anupma Harshal*: Factors Leading to Rise in the Consumption of Alcohol and Hookah Smoking Among Youth, A Cohort Study.

Ms. MadhuKumari, Ms. Rutuja Walavalkar, Ms. Madiha Shaikh, Ms. Nandini Desai*, Mrs. Shailaja Rane*and Dr. Anupma Harshal*: Association of Polycystic Ovarian Syndrome Symptoms With Work Hours of Mumbai Women.

2018-19

X.JIGYAASA - SHP-Undergraduate: Research Activity@KCC, Batch XIV IRSM-19

"NURTURING YOUNG MINDS from lab to life."

Department of Biotechnology

Mr. Shubhankar Dube, Dr.Pratibha Shah*and Ms.Hajra.As.Gupta*: Production of Lactic Acid via Fermentation of Leaves of Amaranthus Species.

Mr. Janav Ananmay, Mr. Panchal, Dr. Sejal Rathod* and Ms. Amina Dholkawala*: Comparison of Culture Independent and Culture Dependent Techniques to Estimate the Most Probable Number of Microorganisms from Water Samples in Mumbai.

Ms. Samrudhi KailashPingle, Dr. Sejal Rathod*and Ms. Amina Dholkawala*:Isolation of Keratin Degrading Organisms and their Characterization.

Ms. Jakhad Sushma, Ms. Kothari Neeti, Ms. Rampurawala Sarrah, Dr. Pratibha Shah* and Ms. Hajra As. Gupta*:Isolation of Siderophore Producing Bacteria from Soil Sample and Optimisation of Siderophores Detecting Dye.

Mr. RitikBaviskar and Ms. VaibhaviBhanushali: Developing EiseniaFetida (Earthworm) as a Model Organism for Ventral Nerve Cord.

Mr. KudaleGaurav, Ms. SarafNamrata and Ms. Hajra.As.Gupta*:Regeneration Formulation of Cost-Effective Protein Powder.

Ms. Nayana G, Ms. Gayatri Raul and Mr. Ameya Thakur:Characterization of D.Melanogaster Park 13 Mutant to Study the Progression and Expression of Parkinnson's Disease.

2019-20

Nil

CHEMISTRY

2015-16

International Research Papers

Department of Nuclear and Radio Chemistry

Dr. Hemlata Bagla had the following publications with-

- Mr. Roshan Khilnani, "Role of HSAB concept in understanding biosorptive behaviour of various metal ions employing green biosorbent - Dry Cow Dung Powder", Geophysical Research Abstracts, Vol. 17, EGU2016-6446, European Geosciences Union General Assembly, Vienna, Austria, April 17-22, 2016.
- Mr. Roshan Khilnani, "Kinetics of biosorption of hazardous metals by green soil supplement" Geophysical Research Abstracts, Vol. 17, EGU2016-13003, European Geosciences Union General Assembly, Vienna, Austria, April 17-22, 2016.
- **3.** Invited as Observer Scientist to Scientific-Discussion Meet in Diamond Detection Exhibition & Symposium (DDES), at Gemological Institute of India, 14th December 2015.

Dr. Hemlata Bagla and Mr. Roshan Khilnani "Removal of Co (II) from waste water using dry cow dung powder: a green ambrosia to soil", NASA Astrophysics Data System, 2015.

Department of Chemistry

Dr. Satish Kolte had the following publications with-

14. Mr. Rohit Soda and Mr. Sidhesh Gaonkar 'Antibacterial and Antifungal Activity of Crude Coconut Shell Oil', International Journal of Biological Sciences, November 2015

15. Ms. Kavita Gala, 'Application of Banana Flower extracts in Simple Titrimetric Techniques as an Indicator'. Analytical Chemistry, ACAIJ, Vol 16, Issue 1, pp 44-47, 2016.

16.Mr. Rajendra Prajapati and Mr. Sidhesh Gaonkar 'Larvicidal Activity of Fractionated extract of Clerodendram Inerem Leaves', International Journal of Scientific Research, July 2015.

17. Mr. Rajendra Prajapati and Mr. Sidhesh Gaonkar, 'Larvicidal activity of roasted coconut shells extracts' International Journal of Scientific Research, January 2016.

Dr. Parul Khurana published 5 research papers in Elsevier refereed journals.

18. Agcore–Aushell bimetallic nanocomposites: Gold shell thickness dependent study for SERS enhancement, Microchemical Journal 124, pp 819–823, I.F: 3.011, 2016.

19. Trace colorimetric detection of Pb²⁺ using plasmonic gold nanoparticles and silica–gold nanocomposites, Microchemical Journal 124, pp 104–110, I.F: 3.011, 2016.

20. Plasmonic detection of Cd²⁺ ions using surface-enhanced Raman scattering active coreshell nanocomposite, Talanta, 134, pp 568-575, I.F: 3.545, 2015.

21. Development of promising surface enhanced Raman scattering substrate: Freckled SiO₂@Au nanocomposites, Microchemical Journal, 122, pp 45-49, I.F: 3.011, 2015.

22. Highly selective visual monitoring of hazardous fluoride ion in aqueous media using thiobarbituric-capped gold nanoparticles, Talanta, 132, pp 278-284, I.F: 3.545, 2015.

National Research Papers

Department of Chemistry

Dr. Sheela Valecha had the following publications with Ms. Anushi Jain -

1. 'Synthesis and characterization of Schiff base derived from 4-Benzoyl-3-methyl-1-phenyl pyrazol-5-one and p-anisidine', Acta Chemica and Pharmaceutica Indica, Vol 5, Issue 2, pp 55-59, ISSN no. 2277-288X, 2015.

2. 'Synthesis and characterization of complexes derived from Schiff base derived from pyrazolone and 4, 4'-oxy dianiline', Asian Journal of Research in Chemistry, ISSN no. 0974-4169.

3. Mixed ligand chelates of transition metal ions with 2-hydroxy naphthaldehyde as a secondary ligand (stability studies), Entire Research, Issue II, ISSN no. 0975-5020, April 2015.

4. Synthesis and characterization of chelates of mixed ligand Mu II. Co II, Ni II, Cu II and Zn II with 2', 3' dimethyl aniline derivative, Asian Journal of Research in Chemistry, Vol 8, pp 693-696, ISSN no. 0974-4169, November 2015.

Books

Department of Chemistry

Dr. Sushil Puniyani published 3 books:

- 1. Post Graduate Practical Organic Chemistry Part II
- 2. College Organic Chemistry S.Y.B.Sc.
- 3. College Practical Chemistry S.Y.B.Sc.

and has revised the following:

- 4. Post Graduate Practical Organic Chemistry Part I.
- 5. College Practical Chemistry F.Y.B.Sc.
- 6. College Practical Chemistry T.Y.B.Sc.
- 7. College Organic Chemistry F.Y.B.Sc.

Dr. Rajesh Samant published the following books with Himalaya publications:

- 8. Practical Handbook for Anlaytical Chemistry- M.Sc. Part II.
- 9. Environmental Chemistry for Engineering Semester I.
- 10. Applied Chemistry for Engineering Semester I.

National Conferences and Seminars

Department of Nuclear and Radio Chemistry

Dr. Hemlata Bagla presented the following papers with-

- Mr. Nilesh Dubey and Mr. Roshan Khilnani, "To Study the Spatial Distribution of Anthropogenic Heavy Metals in Mumbai City employing Active Biomonitoring", National Conference on Cryptogam research in India: Progress and Prospects, L-066, pp. 63-64, CSIR-National Botanical Research Institute, Lucknow, 28th – 29th September, 2015.
- 2. Mr. Santosh Tiwari, "Spatial Distribution of Heavy Metals in South Mumbai using Moss as Bioindicator", National Conference on Cryptogam research in India: Progress and

Prospects, B-024, CSIR-National Botanical Research Institute, Lucknow, 28th -29th September 2015.

University/State Level Conference/ Seminars/Meets

Department of Nuclear and Radio Chemistry

1.Dr. Hemlata Bagla and Mr. Roshan Khilnani, " Adsorption Studies Using Eco Friendly Sorbent on Simulated Low Level Waste", 28th Research Scholars' Meet, 19, pp. 28, Thakur College of Science and Commerce, Kandivali, Mumbai, 12th-13th February 2016.

National Collaborations

Nuclear and Radiochemistry Department of K. C. College has collaboration with Gemological Institute of India (GII), Mumbai.

Minor Research Projects

Ms Mridula Gupta University Minor Research Project Rs 25,000/-

2016-17

I.INTERNATIONAL RESEARCH PAPERS

DEPARTMENT OF NUCLEAR AND RADIO CHEMISTRY

Dr. Hemlata Bagla had the following research publications with-

1. **Mr. Roshan Khilnani**, 'Role of HSAB concept in understanding biosorptive behaviour of various metal ions employing green biosorbent- Dry Cow Dung Powder', NASA/Astrophysics Data System, 2016.

2. Mr. Roshan Khilnani, 'Kinetics of biosorption of hazardous metals by green soil supplement', NASA/Astrophysics Data System, 2016.

DEPARTMENT OF CHEMISTRY

12.Dr. Sheela Valecha published a research paper 'Analysis of specific parameters of selected food products' in Asian Journal of Research in Chemistry, Volume 09, Issue 8, pp 349-365, ISSN Number 0974-4169, eISSN 0974-4150, August 2016,

13.Dr. Sunetra Chaudhari published a review paper 'Agneya Kandam of Samveda: The Concept of Agni', International Journal of Research in Economics and Social Sciences, Vol 6, Issue 5, pp 74-85, ISSN 2249-7382, May 2016.

II.NATIONAL RESEARCH PAPERS

DEPARTMENT OF NUCLEAR AND RADIO CHEMISTRY

Ms. Nisha Bhatt and Dr. Hemlata Bagla, published a research paper 'Sustainable remediation of Hg(II) from wastewater by combo humiresin- dry cow dung powder', Journal of Environment and Biotechnology Research, Vol. 6, Issue 1, pp 168-178, ISSN 2455-0833, 2017.

Dr. Satish Kolte had the following research publications co-authored with-

Mr. Rajendra Prajapati and Mr.Sidhesh Gaonkar, 'Larvicidal activity of roasted coconut shells extracts', International Journal of Scientific Research, Vol.2, Issue 1, pp 137-139, ISSN 2454-1362, January, 2016.

Ms. Kavita Gala 'Application of Banana Flower extracts in Simple Titrimetric Techniques as an Indicator', Analytrical Chemistry, ACAIJ, Vol 16, Issue 1, pp 44-47, ISSN 0974-7419, 2016.

Mr. Bansari Rao, 'Awareness of Dental Care amongst People Visiting Dentist', International Journal of Science and Research (IJSR), Vol 5, Issue 3, ISSN 2319-7064, March, 2016.

III.BOOKS/ ARTICLES PUBLISHED IN NEWSPAPERS AND MAGAZINES

DEPARTMENT OF CHEMISTRY

Dr. Sheela Valecha co-authored the T.Y.B.Sc Inorganic Chemistry and F.Y.B.Sc Inorganic Chemistry text book published by Sheth Publications.

Dr. Sushil Puniyani co-authored following books:

- 1. College Organic Chemistry for F.Y.B.Sc
- 2. College Organic Chemistry for T.Y.B.Sc
- 3. College Practical Chemistry for F.Y.B.Sc
- 4. College Practical Chemistry for T.Y.B.Sc
- 5. College Practical Chemistry Drugs and Dyes for T.Y.B.Sc.

IV. INTERNATIONAL CONFERENCES AND SEMINARS

DEPARTMENT OF NUCLEAR AND RADIO CHEMISTRY

Dr. Hemlata Bagla presented and published following research papers with-

1.**Mr. Roshan Khilnani**, 'Role of HSAB concept in understanding biosorptive behaviour of various metal ions employing green biosorbent - Dry Cow Dung Powder', Geophysical Research Abstracts, Vol. 18, EGU2016-6446, eISSN 1607-7962, EGU General Assembly, Vienna, Austria, April 17-22, 2016.

2.**Mr.Roshan Khilnani**, 'Kinetics of biosorption of hazardous metals by green soil supplement', Geophysical Research Abstracts, Vol. 18, EGU2016-13003, 2 EGU General Assembly, Vienna, Austria, April 17-22, eISSN 1607-7962, 2016.

VI.UNIVERSITY/STATE LEVEL CONFERENCE/SEMINAR/MEET/SYMPOSIUM DEPARTMENT OF NUCLEAR AND RADIO CHEMISTRY

Dr. Hemlata Bagla presented and co-authored following research papers with-

1.**Ms. Sabrina Shaikh and Mr. Roshan Khilnani** "Thermodynamic and Kinetic Studies for understanding the dynamics of biosorption of ⁶⁵Zn(II) on eco-friendly biosorbent", 13th DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), KIIT University, pp 534-535, ISBN 81-8372-080-3, February 06-10, Bhubaneswar, Odisha, 2017.

2.**Ms. Asma Khan, Ms. Sajida Sayed and Mr. Roshan Khilnani** "Biosorptive Profile of ¹³⁷Cs(I) using novel biosorbent – Dry Cow Dung Powder", 13th DAE-BRNS Nuclear and Radiochemistry Symposium (NUCAR-2017), KIIT University, pp 536-537, ISBN 81-8372-080-3, February 06-10, Bhubaneswar, Odisha, 2017.

VII.RESERCH GRANTS- MINOR RESEARCH PROJECTS DEPARTMENT OF NUCLEAR AND RADIO CHEMISTRY

Dr. Hemlata Bagla submitted Elsevier Project – 'Global Soil'- 'Water Pollution Humus is the Noble Solution.' She also received a URG Minor Research Project 'Improvements in the chemical etching properties of tracks in the commercially available Solid State Nuclear Track Detectors (SSNTDs)' funded by University of Mumbai for the financial year 2016-17, Project No. 339, Grant Amount: Rs.30,000/-

DEPARTMENT OF CHEMISTRY

Dr. Sheela Valecha completed the minor research project as a mentor and co investigator with Ms. M.Gupta.

Ms. Mridula Gupta completed minor research project, University of Mumbai.

2017-18

I. INTERNATIONAL RESEARCH PAPERS

Department of Chemistry

Ms. Anjali Mer, Mr. Rajesh Samant and Mrs. Prabha Padmanabha*: 'Characterization of Commercial Detergents and Natural Cleaning Agents with Comparison of their Potential for Biodegradability', International Journal of Advanced Chemistry, Vol 6, Issue 1, pp 1-7, 2018.

Dr. Sheela Valecha*, Ms. Krisha Desai and Ms. Jayshree Sonagra: 'Qualitative Analysis of Various Adulterants and Microbes Milk Samples Collected from Different Areas of Mumbai', International Journal of Innovative Research in Science, Engineering and Technology, Vol.6, Issue 7, July 2017.

II. NATIONAL RESEARCH PAPERS

Department of Nuclear and Radiochemistry

Mr.G. K. Mishra, Mr. N. Dubey, Dr. Hemlata Bagla*, Mr. R. Bajpai, and Mr. S. Nayaka: 'An Assessment of Lichens Diversity from Bhimashankar Wildlife Sanctuary, Maharashtra, India', Cryptogam Biodiversity and Assessment, Vol. 2, Issue 2, pp 11–17, December 2017.

III. BOOKS/ ARTICLES PUBLIHED

Department of Chemistry

Dr. Sunetra Chaudhari published a book 'Practical Chemistry for SYBSc' with Himalaya Publication, Mumbai, July 2017.

IV. INTERNATIONAL CONFERENCES AND SEMINARS

Department of Nuclear and Radiochemistry

Mr. Mahesh P. Gaonkar, Mr. Naveen Chauhan, Mr. Vinayak Kumar, Mr. Bhavik P. Joshi, Mr. Sandesh N. Mane, Mr. M. K. Bhide, Dr. Hemlata K. Bagla* and Mr. M. D. Sastry: 'Effect of SiV⁻ Centres on the Fluorescence and Phosphorescence of CVD grown diamonds: Photoluminescence (PL) and Thermoluminescence (TL) Studies', The 68th Diamond Conference 2017, Warwick, England, pp O16.1-O16.3, July 10-13, 2017.

Dr. Hemlata K. Bagla*, Ms. Asma Khan, and Ms. Sajida Sayed: 'Treatment of Low Level Radioactive Waste Employing Biosorptio', Geophysical Research Abstracts, Vol 20, EGU2018-17030, EGU General Assembly, Vienna, Austria, April 08–13, 2018. **Department of Statistics**

Mr. Jain Jimit, Mr. Karani Hardik, Mr. Sen Milankumar and Dr. Asha Jindal*: 'Sentiment Analysis of Twitter Data', International Conference on Commerce, Banking, Economics, Management, Law, Social Sciences and Environmental Concerns at SEMT's M. B. Harris College of Arts and A. E. Kalsekar College in association with Indo Global Chamber of Commerce Industries and Agriculture, 27th January 2018.

VI. UNIVERSITY/STATE LEVEL CONFERENCE/ SEMINARS/MEETS

Department of Nuclear and Radiochemistry

Mr. Mahesh P. Gaonkar, Mr. Bhavik Joshi, Mr. Naveen Chauhan, Mr. Vinayak Kumar, Mr. Rajendra Ardalkar, Mr. Sandesh Mane, Mr. M.K. Bhide, Dr. Hemlata K. Bagla* and Mr. M.D. Sastry: 'Thermoluminescence (TL) and Optically Stimulated Luminescence Studies of CVD Diamonds Role of Silcon Based Centre in Luminescence of Diamonds', National Conference on 'Luminescence and its Appications (NCLA-2018)', organized by Lumescence Society of India (LSI) and National Institute of Interdisciplinary Science and Technology, Trivandrum, pp 106-107, February 14-16, 2018.

Mr. Bhavik Joshi, Mr. Ranjendra Ardalkar, Mr. Nandadeep Keer, Mr. Dharmendrakumar Chauhan, Mr. Yogesh Salunkhe, Mr. Reginald Sequeira, Mr. Sandesh N. Mane, Mr. Mahesh P. Gaonkar, Dr. Hemlata K. Bagla*, Mr. M.K. Bhide and Mr. M.D. Sastry: 'Temperature Dependent Phosphorescence of Diamonds: A New Diagnostic Method for Detecting Non-Ilb Natural Diamonds among those Exhibiting Phosphorescence',

National Conference on 'Luminescence and its Applications (NCLA-2018)', pp. 106-107, organized by Lumescence Society of India (LSI) and National Institute of Interdisciplinary Science and Technology, Trivandrum, February 14-16, 2018.

Mr. Sandesh N. Mane, Mr. M.K. Bhide, Mr. Bhavik P. Joshi, Mr. Mahesh P. Gaonkar, Mr. Srinath Patel, Mr. Shripal N. Desai, Dr. Hemlata K. Bagla and M.D. Sastry: 'Photoluminescence and Raman Studies of Diamond Coated Cubic Zirconia and MoissaniteSiC", National Conference on 'Luminescence and its Appications', (NCLA-2018)', pp 106-107, organized by Lumescence Society of India (LSI) and National Institute of Interdisciplinary Science and Technology, Trivandrum, February 14-16, 2018.

Mr. Nilesh Dubey and Dr. Hemlata K. Bagla*: 'Active Biomonitoring of Urban Anthropogenic Air Pollution Using Transplanted Lichen: An Assessment of Heavy Metal Concentration in Mumbai City', National Conference on 'Current Developments and Next Generation Lichenology', organized by Indian Lichenological Society(ILS), Lucknow, pp 39-40, January 27-28, 2018.

Ms. Sushma S. Chavan, Mr. Amol M. Mhatre, Mr. Ashok K. Pandey, Dr. Hemlata K. Bagla: 'Study on Development of Uniform Alpha Tracks in CR-39 using Different Chemical Etching Conditions', 20th Conference on 'Solid State Nuclear Track Detectors and their Applications (SSNTD-20)' organized by VidyaVikas Institute of Engineering and Technology, Mysuru, pp 78, October 26-28, 2017.

Ms. Sushma S. Chavan, Mr. Amol M. Mhatre, Mr. Ashok K. Pandey, Dr. Hemlata K. Bagla*: 'New chemical etchant for measurement of alpha track registration efficiency from solution media and its applicability in alpha particle energy identification in CR-39', 20th Conference on 'Solid State Nuclear Track Detectors and their Applications (SSNTD-20)' organized by VidyaVikas Institute of Engineering and Technology, Mysuru, pp 136, October 26-28, 2017.

VIII. MINOR RESEARCH PROJECTS

Department of Nuclear and Radiochemistry

Dr. Hemlata K. Bagla completed URG Minor Research Project 'Improvements in the Chemical Etching Properties of Tracks in the Commercially Available Solid State Nuclear Track Detectors (SSNTDs)' funded by University of Mumbai with grant of Rs 30, 000/-

Dr. Hemlata K. Bagla UGC-DAE-CSR project 'Utilization of Nuclear Analytical Techniques for Forensic Applications' in collaboration with BARC, Mumbai was approved with grant of Rs 45,000/-

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

Department of Chemistry:

Ms. Mamta Sundesha and Dr. Yogita Shinde*: Chemical and Microbial Analysis of Translucent Face Powders.

Mr. Pratik Shettye: Heavy Metal Content in the Leafy Vegetables from Village farms and Railway Track Farms.

Ms. AnkitaPatil and Dr. Satish Kolte*: Study of Antimicrobial Activity of Fractionated Extract of Cleodendrum Inerme Leaves.

Mr. Pundlik Ware, Ms. Rupali Kharate, Ms. Joha Ansari and Dr. Pradip Shimpi*: Reinforcement and Characterization of Green Waste in Synthetic Polymer.

Mr. Pundlik Ware, Ms. Ankita Chauhan, Ms. Ankita Jadhav, Ms. Shweta Gulvi and Dr. Tanaji Bansode*: Economical Production of Bioethanol by Green Waste.

Mr. Pundlik Ware, Ms. Rinkal Rathod, Ms. Sonali Gupta, Mr. Dhiraj Panchal andDr. Kalpana Patankar Jain*: Production and Characterization of Biodiesel from IndianNon-Edible Seed Sources.

Ms. Priyanka Mishra: Detection of Chemical Properties of Soil.

Ms. Iqra Ansari and Ms. K.Srilatha Srinivas: Phytochemical Evaluation and Comparison of Antioxidant Activity of Dried Leaf Extracts of Psidium Guajava and Glycyrrhiza Glabra by Dpph Method.

Mr. Pushkara Chavan and Ms. K. Srilata S.: Preparation of Herbal Photo Protective Formulation and their Evaluation.

Ms. Manaswi Dekate and Mr. Hrushikesh Bendale: Developing Eisenia Fetida(Earthworm) as a Model Organism For Cancer Biology.

Ms. Priyanka Shah and Dr. Bhavna Daswani*: Effects Of Moringa Olifera on Heartbeat of Daphnia.

Mr. Shloka Shukla and Ms. K.Srilatha Srinivas: Bioconversion of Waste Paper Materials to Biofuels.

Ms. Dhruvi Mehta, Mr. Daya Gohil, Ms. Sonali Maniar and Mr. Kshiteej Patel:

Analysis of Marketed Samples of Turmeric Powder By Tlc.

Mr. Nishaat Shaikh and Ms. Apurva A. Shivalkar: Molecular and Phytochemical Insights into the Genetic Diversity of Garcinia Species.

Ms. Sunita Shailajan, Mr. Mayuresh Joshi, Mr. Suraj Mishra, Mr. Aditya Gadkari and
Ms. Aditi Talgaonkar: Marker Based Evaluation of Ethanolic Extract of Leaves of Butea
Monosperma – A Medicinally Important Ayurvedic Plant.

Ms. Shalmali Takane and Ms. Yogita Walke*: To Synthesize Biodegradable Nano particles from Waste.

XI.<u>JIGYAASA</u>

Department of Chemistry

Ms. Agarwal Saloni and Dr. Shinde Yogita*: Soil Testing and Determination of Heavy Metal Concentration in Soil.

Ms. Anjali Mer, Dr. Rajesh Samant* and Mrs. Prabha Padmanabha*: Characterization of Commercial Detergents and Natural Cleansing Agents with Comparison of their Potential for Biodegradability.

Ms. Avanti Mhatre and Mr. Karun Sodah*: Determination of Heavy Metals in Various Brands of Lipsticks.

Mr. Devesh Tejwani and Dr. Sushil Puniyani*: Comparative Study of Matting Agents in Nail Lacquers Using Titanium Dioxide and Fumed Silica.

Ms. Affan Karel, Ms. Kavita Gala and Dr. Satish Kolte*: Estimation of Metallic Elements Present in Banana Inflorescence Essential for Progesterone Regulation.

Ms. Krisha Desai, Ms. Jayshree Sonagra and Dr. Sheela Valecha*: Qualitative Analysis of Various Adulterants and Microbes in Milk Samples Collected from Different Areas of Mumbai.

XII. <u>AVISHKAR- INTER-COLLEGIATE RESEARCH SCHOLAR'S MEET, 11TH</u> <u>DECEMBER 2017-18</u>

Department of Nuclear and Radiochemistry

Mr. Mahesh Gaonkar and Dr. Hemlata Bagla*: Photoluminescence Vs Optically Stimulated Limunescence: Interesting Case of UV Photolized CVD Diamonds.

Mr. Nilesh Dubey and Dr. Hemlata Bagla*: Assessment of Anthropogenic Metal Contamination in Mumbai Employing Lichen Biomonitoring Technique.

Ms. Sabrina Shaikh and Dr. Hemlata Bagla*: Bioremidiation of Heavy Metals from Contaminated Sites Using Ecofriendly Biosorbent.

Ms. Sajida Sayed and Dr. Hemlata Bagla*: Adsorption Study of Cs (I)-137 and CO (II)-60 from Low level Waste on Basis of HSAB Theory.

Mr. Sandesh Mane and Dr. Hemlata Bagla*: Radiolytic Colouration and Colour Stability in E- Beam Irradiated Al₂O₃ Doped with Fe^{3+:} Evidence of Photo Induced Charge Transfer From Deep Traps.

Mr. Santosh Tiwari and Dr. Hemlata Bagla*: Application of Mss as Bioindictor for Heavy Metal Analysis of Mumbai by Employing Biomonitoring Technique.

Ms. Sushma Chavan and Dr. Hemlata Bagla*: Track Etching Characteristics of CR-39 and its Application to Alpha Energy Determination from Radioactive Sources.

Ms. Asma Khan and Dr. Hemlata Bagla*: Green Chemistry for Remediation of Metallic Pollutants.

Department of Chemistry

Mrs. Mridula Gupta* and Dr. Sheela Valecha*: Synthesis and Characterization of New Yttrium Complexes Derived from Beta Diketones and Diamines.

Mr. Vijay Gurav and Dr. Rajesh Samant*: Bioadsorbtion of Heavy Metal Ions from the Effluent Using Waste Fish Scale.

Ms. Payal Kalwar and Dr. Satish Kolte*: A Progesterone Rich Banana Inflorescence Health Supplements.

Mr. Rajendra Prajapati and Dr. Satish Kolte*: A New Natural Source to Combat Mosquitoes.

Ms. Pooja Jain and Dr. Satish Kolte*: Effect of Air Conditioner Water on Kota Tiles.

Department of Computer Science

Mr. Rohan Biswal, Ms. Mahenoor Mansurion and Mrs. Vimala Rani*: Home Automation System Using Raspberry Pi.

2018-19

I. INTERNATIONAL RESEARCH PAPERS

Department of Nuclear and Radiochemistry

Dr. HemlataBagla, Mr. Mahesh P. Gaonkar, Mr.Bhavik P. Joshi, Mr. Rajendra M. Ardalkar, Mr.Sandesh N. Mane and **Mr. M. D. Sastry**: 'Electronic Absorption, OSL, TL and PL studies of Deep UV Excited CVD Synthetic Diamonds: Evidence of Dominant Role of Silicon Vacancy Complex in Luminescence Quenching', Diamond Conference 2018, Warwick University UK, July 09-12, 2018.

Dr. HemlataBagla, Mr.Sandesh N. Mane, Mr. Rajendra M. Ardalkar, Mr.Rakesh Gupta, Mr.Bhavik P. Joshi, Mr. Mahesh P. Gaonkar and Mr. M. D. Sastry: 'Phosphorescence of Synthetic Diamond Exhibiting Ia Nitrogen Aggregation', Diamond Conference 2018, Warwick University UK, July 09-12, 2018.

Dr. HemlataBagla, Mr.RajendraArdalkar, Mr.Bhavik P Joshi, Mr.Sandesh Mane, Mr. Mahesh Gaonkar and **Mr.M.D.Sastry**: 'Photoluminescence (PL) Investigation of Ni & Co Impurity Complexes in Diamond Under Multiple Laser (405, 532, 633, 785 & 830) Excitations', ICLA 2019, Raipur, January 07-10, 2019. **Dr. Hemlata K. Bagla, Ms. Sajida Sayed** and **Ms. Asma Khan**: 'Biosorption for Selective Separation of Cs'', Bioresource Technology for Bioenergy, Bioproducts and Environmental Sustainability, BRTX2018-0420, Sitges, Spain, September 16-19, 2018.

Dr. Hemlata K. Bagla, Ms. Sabrina Shaikh and **Ms.Asma Khan**: 'Equilibrium and Kinetics of Sorption for Precious Metal Recovery', Bioresource Technology for Bioenergy, Bioproducts and Environmental Sustainability, BRTX2018-0430, Sitges, Spain, September 16-19, 2018.

Department of Chemistry

Ms.Mridula Gupta, Co Author- Dr. Sheela Valecha: 'Synthesis and Characterization of Ruthenium(III) Complexes from Schiff Base Synthesized from 1-phenyl-3- methyl-4- acetyl/benzoic-5- parazolone with 4,4' diaminodiphenyl methane and 4,4'- diaminodiphenylether', IJARSET, Vol 6, Issue 1, January 2019.

II. NATIONAL RESEARCH PAPERS

Department of Nuclear and Radiochemistry

Dr. Hemlata K. Bagla and **Ms.Sushma S. Chavan**: 'Alpha Track detection on CR-39 from Granite waste employing Tetraethyl Ammonium Bromide as New Chemical Etchant', DAE-BRNS 14th Biennial Symposium on Nuclear and Radiochemistry (NUCAR-2019), BARC, Mumbai, January 15-19, 2019.

Dr. Hemlata K. Bagla and **Ms.Sushma S. Chavan**: 'Comparative studies of CR-39 for Alpha Track detection Employing Tetraethyl Ammonium Bromide as New Etchant', DAE-BRNS7thInterdisciplinary Symposiumon Materials Chemistry (ISMC-2018), pp. 254, BARC, Mumbai, December 04-08, 2018.

Dr. Hemlata K. Bagla, Ms.Sushma S. Chavan, Mr.Amol M. Mhatre and **Mr. Ashok K. Pandey**: 'Alpha Track Detection Employing Tetraethyl Ammonium Bromide (TEAB) as New Chemical Etchant of CR-39', International Conference on Applications of Radiotracers and Energetic Beams (ARCEBS-2018), pp. 125-126, organized by Saha Institute of Nuclear Physics, Kolkata, November 11-17, 2018.

Dr. Hemlata K. Bagla and **Ms.Asma Khan**: 'Application of Tracer Technique in Remediation of Sr(II) Polluted Waters', International Conference on Applications of Radiotracers and Energetic Beams (ARCEBS-2018), pp. 105-106, organized by Saha Institute of Nuclear Physics, Kolkata, November 11-17, 2018.

Dr. Hemlata K. Bagla and **Ms.SajidaSayed**: 'Removal of Co(II) from Simulated Low Level Waste by an Eco-Friendly Biosorbent', International Conference on Applications of Radiotracers and Energetic Beams (ARCEBS-2018), pp. 103-104, organized by Saha Institute of Nuclear Physics, Kolkata, November 11-17, 2018.

Dr. Hemlata K. Bagla and **Ms. Sabrina Shaikh**: 'Comparative Study of ^{110m}Ag(I) Removal from Aqueous Media by Humic Substances', International Conference on Applications of Radiotracers and Energetic Beams (ARCEBS-2018), pp. 101-102, organized by Saha Institute of Nuclear Physics, Kolkata, November 11-17, 2018.

Dr. Hemlata K. Bagla and **Ms.Asma Khan***:'Application of Tracer Technique in Remediation of Sr(II) from Simulated Low Level Radioactive Waste', Journal of Radioanalytical and Nuclear Chemistry [Accepted].

Department of Chemistry

Dr. Sheela Valecha: 'Analysis of Specific Parameters of Selective Food Products', Journal of Entire Research, Vol 11, Issue 1, January 2019.

Dr. Rajesh. A. Samant, Mr. Vijay. L. Gurav*: 'A Biosorption of Heavy Metal Ions from Effluent using Waste Fish Scale', Asian J. Research Chem. Vol 11, Issue 5, pp 775-777, 2018.

Department of Microbiology

Ms. Bushra Khan,* Ms.Ramya Sindhya,* Ms.Anushi Divan and Dr.Sejal Rathod: 'Extraction, Characterization and Applications of Natural Dyes', Annals of Plant Sciences, Vol 7, Issue 11, pp 2463-2467. 10.21746/aps.2018.7.11.4. ISSN: 2287-688X, 2018.

J. Shah*, M. Agarwal*, S. Gore*, S. Rathod: 'Study of Drug Resistance Organisms from Fomites', Research Journal of Life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences, 4 (NCIFEH-2018), pp 61-66, ISSN 2454-6348, 2018.

III. BOOKS/ ARTICLES PUBLIHED

Department of Chemistry

Dr.Sheela Valecha: Published text book for F.Y.B.Sc, S.Y.B.Sc and T.Y.B.Sc., Inorganic Chemistry, Seth Publications, 2018.

Dr.Sunetra Chaudhari: Published Practical handbook for S.Y.B.Sc,Semester-III and Semester-IV- Chemistry, Himalaya Publications, 2018.

Dr. Rajesh Samant: Practical handbook for M.Sc Semester III and IV, Analytical Chemistry, ISBN 978-93-5299-448-9, 2018.

VIII. MINOR RESEARCH PROJECTS SANCTIONED AND COMPLETED

Department of Nuclear and Radiochemistry

Dr. Hemlata K. Bagla: 'Utilization of Nuclear Analytical Techniques for Forensic Applications' in collaboration with BARC, Mumbai, Amount sanctioned: Rs. 45,000/-UGC-DAE-CSR, Approved.

X.JIGYAASA - SHP-Undergraduate: Research Activity@KCC, Batch XIV IRSM-19

"NURTURING YOUNG MINDS from lab to life."

Department of Chemistry

Ms. Pooja Jain: Effect of A/C Water on Kota Tiles.

Ms. Shireen Siddiqui and Dr. Sheela Valecha*: Study of Textile Dyes.

Mr. Sohrab Feroze Sethna:Qualitative and Quantitative Analysis of Organic Juices and Industrial Beverages.

Ms. Mansi Mistry, Ms. Hitakshi Vyas, Ms. Vaishnavi Sawant and Dr. SangeetaParab*:Determination of Sodium Content of Potato Chips.

Ms. Aanchal Singh, Ms. Pratiksha Shetty and Ms. Aqeela Sattar:Comparative Study of Antioxidant and Antibacterial Properties of Orange and Malta.

Department of Life Sciences

Ms. Mayuri Chavan:Bioaccumalation of Heavy Metal Lead Acetate in Leguminous Plants Fenugreek and Study its Adverse Effect on the Morphology of Plants.

Mr. Siddhant Naicker and Ms. Niloufer K. Kotwal*: A Comparative Study of the Potential of Various Microalgal Species as Biofuel Energy Crop.

Ms. Saloni Bagkar, Ms. Yogita Walke*: Isolation and Screening of Antibiotic Producing Actinomycetes from Soil.

Ms. Zainab Bharmal and Ms. Yogita Walke*:Effectiveness of Chitosan as Naturally Derived Antimicrobial.

Ms. Pooja Gupta and Dr. K Srilatha*:Synthesis of Biodegradable, Biopolymeric Films as an Alternative to Plastic (A Novel and Eco- Friendly Approach for the Utilization of Citrus Waste).

Ms. Tasneem Kapasi and Ms. Niloufer K. Kotwal*: Study of Co-Resistance of Metal Tolerance and Antibiotic Resistance in Escherichia Coli.

Mr. Burhanuddin Khambati and Ms. Niloufer K. Kotwal*: Antioxidant Protection against Ultraviolet Radiation in Staphylococcus Aureus and Escherichia Coli.

Ms. Sukaina Abbas, Ms. MaitriTrivedi, Dr. TejashreeShanbhag* and Ms. AmrutaKothare*:Comparing the Efficacy of Commercial Products Against Acne Treatment and Extracting Protein from Pineapple Waste and Studying its Properties.

Mr. Aravind, Ms. AtmayaVartak and Dr. SagarikaDamle*:Phytochemical Analysis and Antioxidant Property of Fruits of Cannonball Tree.

Ms. Nidhi Solanki, Ms. Sophia Samuel and Ms. Ashwini Chakor:Morphological Description of Starch Grains Using Light Microscopy.

Mr. Akshat Amrit Mohanani, Mr. SirajAyub Khan and Ms. Yogita Walke*:Water Purification using the Bio Absorptive Properties of Algae (Chlorella SacrophiliaScenedesmusSp) and Coconut Shell Charcoal and the Antimicrobial Activity of Drumstick (MoringaOlifera).

Ms.PoojaAjaygilitwala, Mr. Abdul Rahim Siddique and Ms. Yogita Walke*: Anti-Bacterial Activity of Plant Extracts of N.NuciferaonE.Coli&S.Aureus.

Mr. Krishnendu Nair, Ms. Sanjivani Goyani and Dr. K. Srilatha*: Antimicrobial Activity of Selected Medicinal Plants against Some Selected Human Pathogenic Organisms.

2019-20

I.INTERNATIONAL RESEARCH PAPER PUBLICATIONS

Department of Chemistry

Dr. Mridula Gupta 'Synthesis of New Palladium (II) Schiff Base Complexes derived from Beta Diaketones and Diamines', Asian Journal of Chemistry, 29th April, Dr. SheelaValecha her guide is a co- author, Volume 32,No.5, pp 1039-1042, 2020.

Dr. Rajesh Samant's student **Mr.Vijay Gurav** 'Removal and Recovery of Hazardous Metal Ions from the Industrial Effluent Using Waste Fish Scale Impregnated Polyurethane Foam' Voltammetric method', International Journal for Research and Applied Science and Engineering Technology'' Volume 8, No 1, January 2020.

Dr. Rajesh Samant's student **Mr.Vijay Gurav** 'Bio Synthesis of Calcium Oxide Nano Particles using Ocimum Sanctum (Tulsi) Leaf Extracts and Screening its Anti-Microbial Activity', Asian journal of Nano science and Materials on January 11 2020.

II.NATIONAL RESEARCH PAPERS PUBLICATIONS Department of Chemistry

Dr. Sunetra Chaudhari's student **Mr. Tejas Joshi** 'Herbal Extract Mediated Green Synthesis of Nano Particles, its Characterization and Study of its Properties', IJSRR, Volume 8, No 2, pp 4359-4368, 2019.

Dr. Sunetra Chaudhari's student **Mr. Tejas Joshi** 'Extract Mediated Green Synthesis of Copper Nano Particles, its Characterization and Study of its Properties', IJSRR, Volume 8, No 30, pp 323-330, 2019.

Dr.Sunetra Chaudhari's student **Ms. Kavya Shah** 'Mechanical Properties of Soya fatty – Acid Based Unsaturated Polyester Resin with Different Glycols', IJSRR, Volume 8, No 3, pp 373-382, 2019.

III.BOOKS/ ARTICLES PUBLISHED IN NEWSPAPERS AND MAGAZINES

Department of Chemistry

Dr. Sheela Valecha T.Y.B.sc Inorganic Chemistry text book by Sheth Publications.

Dr. Sheela Valecha S.Y.B.sc Inorganic Chemistry text book by Sheth publications.

Dr. Sheela Valecha F.Y.B.sc Inorganic Chemistry text book by Sheth publications.

Dr. Sunetra Chaudhari Practical Hand-Book for S.Y. B.Sc. (Sem-III and Sem-IV) Chemistry by Himalaya Publication, ISBN: 978-93-5202-716-3.

V.NATIONAL CONFERENCES / SEMINARS/ WORKSHOPS

Department of Chemistry

Dr. Satish Kolte's student **Ms. Payal Kalwar** presented paper 'Banana Inflorescence: A health Supplement for Women', National level Conference "World Congress on Women 2019, Celebrating the Past, Planning for the Future" at Indian Institute of Science, Banguluru on 8th September 2019.

Mr. Karun Sodah presented paper 'Eco friendly Green Chemistry', in Anubhav K.C.College January 2020.

COMPUTER SCIENCE

<u>2015-16</u>

Nil

2016-17

Nil

2017-18

XI. <u>SHP- IN HOUSE RESEARCH JOURNAL PUBLICATION: JIGYAASA: VOLUME</u> <u>XII, 2017-18</u>

Department of Computer Science

Ms. Mansi Dalvi and Mrs. Vimala Rani*: An Approach to Design and Development of a Mobile Application for Projecting Images Using Hologram.

Ms. Sonia Deora, Ms. Mansi Pawar, Ms. Geeta Brijwani* and Mrs. Vimala Rani*: Hand Gesture Recognition of English Alphabets.

2018-19

X.JIGYAASA - SHP-Undergraduate: Research Activity@KCC, Batch XIV IRSM- 19

"NURTURING YOUNG MINDS from lab to life."

Department of Computer Science

Mr. Yagnesh Vakharia and Ms.Geeta Brijwani*: Smart Mirror and Automation.

Mr. Rohan Biswal, Ms.Mahenoor Mansuri, and Mrs.Vimala Rani. R*:IoT Based Smart Home using Raspberry Pi.

Note: (* Name of the Research Guide)

2019-20

II.NATIONAL RESEARCH PAPERS PUBLICATIONS Department of Computer Science

Ms.Geeta N. Brijwani 'Analytical Study of Blockchain Applications in Indian Context' in Aegaeum Journal, an UGC-CARE Approved Group II Journal in Volume 8, Issue 3, March 2020, ISSN NO: 077-3808, pp no 918-920, 23rdMarch, 2020.

V.NATIONAL CONFERENCES / SEMINARS/ WORKSHOPS

Department of Computer Science

Ms. Geeta N. Brijwani and Mr.Santosh Bhashani presented their research paper on 'Blockcahin and its Applications', National Conference on 'Influence of Information Technology of Society' held at KC College, Colaba Campus, Mumbai on 29th September 2019. **Ms.Geeta N. Brijwani and Mr.Aditya Srivastava** presented their research paper on 'Heart-Beat Measuring Analysis' in the National Conference on 'Influence of Information Technology of Society' held at KC College, Colaba Campus, Mumbai on 29th September 2019.

VI.UNIVERSITY/STATE LEVEL CONFERENCE/SEMINAR/MEET/SYMPOSIUM Department of Computer Science

Ms. Geeta N. Brijwani presented research paper titled 'Analytical Study of Blockchain Applications in Indian Context' in International Conference on Advances in Physical, Chemical & Mathematical Sciences (ICAPCM-2020) on 14th February, 2020 organized by Department of Physics, Chemistry, Mathematics, Statistics and Computer Science of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur during 13th-16th February, 2020. She won 2ndBest presentation prize in the conference.

BSC IT AND MSC IT

<u>2015-16</u>

<u>Nil</u>

2016-17

I.INTERNATIONAL RESEARCH PAPERS

DEPARTMENT OF MSc. IT

11.**Ms. Rakhi Gupta** published a research paper "Common vulnerabilities and risk analysis in messaging applications in social media with special reference to Whatsapp" International Journal of New Innovations in Engineering and Technology Journal, Volume 5, Issue3, ISSN 2319-6319, July 2016.

IV. INTERNATIONAL CONFERENCES AND SEMINARS

DEPARTMENT OF MSC. IT

Ms. Rakhi Gupta presented a research paper 'Crime mitigation at Twitter using Gig Data Analytics', 2nd IEEE International Conference on "Recent Advances and Innovations in Engineering", poornima College of Engineering, Jaipur, 23rd - 25th December, 2016.

2017-18

XII. <u>AVISHKAR- INTER-COLLEGIATE RESEARCH SCHOLAR'S MEET, 11TH</u> <u>DECEMBER 2017-18</u>

Department of Information Technology Department B.Sc (IT)

Ms. Katyani Mehra, Ms. Kavita Khicha, Ms. Seema Rohra, Mr. Mahdi Lalani and Mrs. Rakhi Gupta*: Bus Tracking System.

Ms. Manisha Talreja, Ms. Riya Mulchandani, Ms. Mausam Rani, Ms. Shweta Patwal and Mrs. Rakhi Gupta*: SQL Injection Attacks.

Department of Information Technology Department M.Sc (IT)
Mr. Jay Dave and Mrs. Rakhi Gupta*: Secured and Robust Hybrid Cryptography.
2018-19

Nil

2019-20

I.INTERNATIONAL RESEARCH PAPER PUBLICATIONS Department of Information Technology (IT)

Dr. Rakhi Gupta and Ms. Nashrah Gowalker

i. Risk Monitoring and Quantitative Results of Various Attributes of Machine Learning Algorithms with a Time Series Data', International Journal of Innovative Technology and

Exploring Engineering Exploring Innovation,(IJITEE) Reg .No. 65021/BPL/CE/12 published by BEIESP, volume-8, issue-11,September-2019, scopus journal ISSN:2278-3075(online), IF:5.15.

ii.'Quantitative Comparison between Naïve Bayes and Hand Rolled Naïve Bayes under sentiment Analysis', International Journal of Advanced and Innovative Research, volume 6,issue 3 July-Septembert,2019, ISSN 2394-7780.

iii. 'Predicting Risk in Sentiment Analysis using Machine Learning', IJEAT, volume-9 Issue-1,October-2019, SCOPUS, ISSN 2249-8958.

Ms. Pragati Thawani 'A Survey on Iot Elements, Layered Architectures and Security Issues' in International Journal of Advance and Innovative Research, volume 6, Issue 3 (V), pp. 53 - 60, July - September 2019, ISSN 2394 – 7780.

II.NATIONAL RESEARCH PAPERS PUBLICATIONS Department of Information Technology (IT)

Ms. Pragati Thawani

i. 'Use of Machine Learning Techniques' in IoT' in Aegaeum Journal ISO7021:2008, volume 8, issue 3, ISSNNO:0776-3808, pp 291-298, 15 March 2020 DOI:16.10089.AJ.2020.V8I3.285311.2938.

ii. Analytical Study of Blockchain Applications in Indian Context' in Aegaeum Journal ISO 7021:2008, volume 8, issue 3, ISSN NO: 0776-3808, pp 918-920, 15 March 2020 DOI:16.10089.AJ.2020.V8I3.285311.3067.

IV. INTERNATIONAL CONFERENCES/ SEMINARS/WORKSHOPS

V.NATIONAL CONFERENCES / SEMINARS/ WORKSHOPS Department of Information Technology (IT)

Ms. Pragati Thawani presented a research paper titled 'A Comparative Analysis on Architecture of Internet of Things' At CyProbe – A National Conference on Advanced Research in Computer Science and Information Technology at PTVA's Mulund College of Commerce, Mumbai held on 18th January, 2020.

VI.UNIVERSITY/STATE LEVEL CONFERENCE/SEMINAR/MEET/SYMPOSIUM Department of Information Technology (IT)

Ms. Pragati Thawani presented research paper titled 'Use of Machine Learning Techniques in IoT' in International Conference on Advances in Physical, Chemical and Mathematical Sciences (ICAPCM – 2020) organized by Department of Physics, Chemistry, Mathematics, Statistics and Computer Science of Rashtrasant Tuadoji Maharaj Nagpur University, Nagpur 13th -16th February,2020.

LIFE SCIENCES

2015-16

I.International Research Papers

Department of Life Sciences

- 4. Ms. Asmita Kamble and Dr. Shanbhag Tejashree published a research paper titled 'Isolation of Plastic degrading Micro-organisms from Soil samples collected at various locations in Mumbai, India', International Research Journal of Environmental Science (International Science Congress Association), Vol.4(3), 77-85, ISSN 2319-1414, March 2015.
- 5. Dr. Sagarika Damle and Mr. Atul Kotian published a research paper titled 'Elemental Phytochemical and Antimicrobial Analysis of Amorphophallus commutatus Linn'-International Journal of Recent Scientific Research-, Vol 6, Issue 5, pp 4308-4311, ISSN no.0976-3031, Impact factor 5.114, May 2015.

6. Ms. Shivangi Dave, Ms. Asma Khan, Ms. Yogita Kamble, Dr. Vijay Dabholkar and Dr. Sagarika Damle published a research paper titled 'The Comparative study of Antioxidant activity of Monsoon plant Clerodendrum serratium, Linn'-International Journal of Engineering Science invention, Volume 4, Issue 2, pp 12-15, ISSN no. 2319-6734, February 2015.

Mrs. Anupma Harshal published 4 research papers in peer reviewed journals with-

7. Ms. Amruta Kothare, Ms. Priyanka Agarwal, Ms. Niddhi Gada, Ms. Shailaja Rane, 'Correlation of PCOs with lifestyle habits' International Journal of Scientific Research and Education, Vol 3, Issue 6, pp 3584-3590, ISSN No 2321-7545, I.F: 3.59, 2015.

8. Ms. Amruta Kothare, Mr. Sachitesh Devrukhkar, Ms. Shailaja Rane, "Inter-relationship of polycystic ovarian syndrome with BMI and diabetes", International Journal of Scientific Research, Vol. 6, Issue 5, pp 4023-4026, I.F: 5.1, May 2015.

9. Ms. Amruta Kothare, Ms. Chandni Jaisinghani and Ms. Shailaja Rane, 'Inter-Relationship of PCOS with BMI, Obesity and Exercise'. International Journal of Health Science and Research, Vol 5 Issue 6, pp 545-553, ISSN: 2249-9571, I.F: 3.5, 2015.

Ms. Sharon K UGC project fellow and now an Assistant Professor, published a gene sequence (Principal Investigator-**Dr.Suvarna Sharma**, Co-Investigator **Dr.Anupma Harshal**) entitled: *Aloevera* isolate Aloe KCHVA22-likeprotein mRNA, partial cds. ACCESSIONKP076225 which released on1stMarch 2015.

II.National Research Papers

International Conferences and Seminars

2. Dr. Shalini Rai presented a paper at a 3- day International Conference at Thakur college entitled "Climate change and Sustainability" from 21-23rd December 2015.

National Level Poster Presentations

Department of Life Sciences

1.Dr. Sagarika Damle presented a poster at Research Symposium at NIRRH, Mumbai on 22nd August 2015 along with Ph.d research students, **Ms. Durga Shinde.**

2.Dr. Shalini Rai, Dr. Aashu Vajpai and **Dr. Suvarna Sharma** presented posters on "Conserve to Preserve" at National Conference on 'Energy Audit for Educational Institutions during 7th and 8th January 2016 organized by Department of Life Sciences, K.C. College.

Research Grant

Department of Life Sciences

Dr. Archana Thitte - Recipient of URG project entitled ' A Comparative study of green synthesis of silver and copper nano particles using selected seasonal and all season plants of Western Maharashtra' from University of Mumbai for the year 2015-16.

In House Research Volume: Jigyaasa SHP Magazine : Volume X, June 2015-16

1. *Dr.Sagarika Damle Mr. Kotian Atul, Phytochemical analysis, antimicrobial and antioxidant analysis of Amorphophallus Commutatus Linn, pp 65-70.

2. *Dr.Shanbhag Tejashree, Ms. Kamble Asmita, Isolation of plastic degrading microorganisms from soil samples, pp 56-64.

3. *Dr. Yamini Tayal, *Dr. Aashu Vajpai, Ms. Perumalla Sheetal, Formulation of fish feed and it's nutritional analysis, pp 71-76.

4. *Dr. Suvarna Sharma, Ms. Sharon K. Ms. Janhavi Sawant, Study of homologs of plant stress-response genes from bacteria, pp 6-10.

2016-17

I.INTERNATIONAL RESEARCH PAPERS

DEPARTMENT OF LIFE SCIENCES

6.Dr. Sagarika Damle published a research paper 'A comparative study of green synthesis of silver and copper nanoparticles using smithiasensitiva (Dabzell),Cassia tora (L.) and colocasiaesculenta (L.)', International Journal of Pure and Applied Biosciences, Vol 4, Issue 4, pp 275-281, Impact factor 6.939, ISSN 2320 – 7051, August 2016.

7.Dr. Tejashree Shanbhag published a research paper 'An overview of purification and activity of Bromelain', International Journal of Recent Scientific Research Vol. 7, Issue, 8, pp 12860-12865, Impact factor 5097, ISSN 0976-3031, August 2016.

8.Dr. Aashu Vajpai co-authored a research paper with **Dr. Shalini Rai** "Alternative feed from aquaculture from desquamated organic material" published in IJRSR, Vol.7, Issue 5, pp 10820-23, ISSN 0976-3031, 2016.

II.NATIONAL RESEARCH PAPERS

DEPARTMENT OF LIFE SCIENCES

18.Dr. Sagarika Damle published a research paper 'Green synthesis of silver and copper nano particles using leafy vegetables', National Seminar proceedings entitled, 'Plant Biology- New Frontiers', organized by Department of Botany & Bhavan's Botanical Society, at Bhavan's College, Mumbai, 7th March, 2016.

III.BOOKS/ ARTICLES PUBLISHED IN NEWSPAPERS AND MAGAZINES

DEPARTMENT OF LIFE SCIENCES

Dr. Archana Thite published article titled 'Wanaspatinche Paani Wyawasthapan', in Loksatta, Marathi Newspaper on 3rd October, 2016.

IV. INTERNATIONAL CONFERENCES AND SEMINARS

DEPARTMENT OF LIFE SCIENCES

Dr. Suvarna Sharma presented a research paper 'Study of isolation of stress resistant genes from aloe vera' 'International Conference on 'Emerging technologies for sustainable agriculture', Bandodkar College, Thane, pp 25-30, ISBN 978-81-923628-4-7, 6th-7th January, 2017.

V.NATIONAL CONFERENCES AND SEMINARS

DEPARTMENT OF LIFE SCIENCES

Dr. Sagarika Damle contributed in paper presentation, along with **Dr. Sonal Dasani** 'A Model system to study early plant growth', National Conference on Know your Pulses organized by Guru Nanak College, Mumbai on 31st August, 2016.

Dr. Sonal Dasani presented a research paper 'A Model system to study early plant growth' at a National Conference on Know your Pulses organized by Guru Nanak College, Mumbai on 31st August, 2016.

Dr. Shalini Rai presented following research papers-

1.'Dental cosmetics: an extension of dental health and oral hygiene under professional category', co-authored with **Dr. Sonal Dasani**, International Conference "Picassa III" organised by ISCC in collaboration with Department of Cosmetics and Perfumery KET'S VG Vaze College, Mumbai on 2nd September, 2016.

2. Co-Authored a research paper entitled "Alternative feed from aquaculture from desquamated organic material" published in IJRSR, Vol.7, Issue 5, 10820-23, 2016.

VI.UNIVERSITY/STATE LEVEL CONFERENCE/SEMINAR/MEET/SYMPOSIUM

DEPARTMENT OF LIFE SCIENCES

Dr. Sagarika Damle

1. Published a research paper 'A Comparative study of green synthesis of silver and copper nano particles, using edible plants', Conference proceedings of DLLE, University of Mumbai and Guru Nanak College organized at Guru Nanak College, ISSN : 2394-4560, Special Issue Vol. 2, No. 2 : Part 1, Mumbai on 19th April, 2016.

2. Presented a research paper 'Thin layer chromatography finger printing of ethnobotanically important plants from different geographical locations in Western Ghats' at 4th International Congress of the Society of Ethnopharmacology, UK TARSADIA University, Bardoli, Gujrat, 23rd - 24th February, 2017.

VII.RESERCH GRANTS- MINOR RESEARCH PROJECTS DEPARTMENT OF LIFE SCIENCES

Dr. Tejashree Shanbhag received a URG Minor Research Project 'Bromelain: Possible phyto remedy for breast cancer' funded by University of Mumbai for the financial year 2016-17, Project No.388, Grant Amount: Rs.30,000/-

Dr. Suvarna Sharma received a URG Minor Research Project 'Cloning of Myb gene from Aloe vera' funded by University of Mumbai for the financial year 2016-17, Project No.389.Grant Amount: Rs.25, 000/-

Dr. Shalini Rai received a URG Minor Research Project 'Study of L- asparginase enzyme production, isolation and purification from Halophiles,' funded by University of Mumbai for the financial year 2016-17, Project No. 385, Grant amount: Rs 30,000/-

Dr. Aashu Vajpai is the Co- Investigator for a URG Minor Research Project entitled 'Study of L- asparginase enzyme production, isolation and purification from Halophiles,' funded by University of Mumbai for the financial year 2016-17, Project No. 385, Grant amount: Rs 30,000/-

IX.POSTER PRESENTATIONS

DEPARTMENT OF LIFE SCIENCES

Dr. Sagarika Damle

 Poster presentation at Bhavan's College, entitled, 'Green synthesis of silver and copper nanoparticles using leafy vegetables', National Seminar on 'Plant Biology- New Frontiers', organized by Department of Botany & Bhavan's Botanical Society, Mumbai, 7th March 2016.
 Guided students to present a poster entitled 'Coffee consumption in urban population and estimation of caffeine from different coffee brands' at 9th Intercollegiate Research Scholars Meet, at K.C. College, on 15th February, 2017.

3. Guided students for making and presenting the posters at a National Conference entitled 'Know your Pulses' at Guru Nanak College, Mumbai on 19th April, 2016.

a. 'Seeds of Knowledge' - The Protein Pulse of India.

b. 'Daawat-E-Pulses' – A Pulse Pod, Natures Protein Basket.

4. Guided students for poster presentation at 9th Intercollegiate RSM, under the category of UG and PPG, at K.C. College, 15th February, 2017.

Dr. Tejashree Shanbhag

1. Presented poster at Intercollegiate Sajjan Gupta –Konark Memorial Award Research Meet, Swami Vivekanad College, Mumbai, 18thJanuary, 2017.

2. Participated at Avishkar, Unversity of Mumbai, got selected for poster and oral presentation.

3. Participated in poster presentation at ICMR sponsored National Symposium on Current scenario of Pharmacological experimentation & Interpretation, KMK college of Pharmacy, Mumbai.

Dr. Archana Thite

1. Presentation poster and abstract in the conference proceedings, at a National Conference entitled 'Know your Pulses' at Guru Nanak College, Mumbai on 19th April 2016.

a. 'Seeds of Knowledge' - The Protein Pulse of India.

b. 'Daawat-E-Pulses' – A Pulse Pod, Natures Protein Basket.

2017-18

I. INTERNATIONAL RESEARCH PAPERS

Department of Life Sciences

Dr. Sagarika Damle and Ms. Sharon Kadirvelu: 'Phytochemical Studies of Ixora Coccinea Linn-An Ethnobotanical Plant from Karwar District', International Journal of Biology, Pharmacy and Allied Sciences, Vol 6, Issue 7, pp 1403- 1415, IF- 1.022(ISI), July 2017.

Ms. Sharon Kadirvelu and Dr. Suvarna Sharma: 'Cloning of HVA22 Homolog from Aloe Vera and Preliminary Study of Transgenic Plant Development', International Journal of Pure and Applied Biosciences, Issue 12, December 2017.

Mr. Pranay Aggarwal, Mr. Chandan Das, Ms. Olivia Dias and Dr. Tejashree Shanbhag*: 'Antimicrobial Property of Capsaicin', International Research Journal of Biological Sciences, ISSN no 2278-3202, July 2017.

Ms. Amruta Kothare, Ms. Vinal Pardhib, Ms. Prajkta Chivteb, Dr. Sakharam Muley* and Dr. Tejashree Shanbhag*: 'Purification, Partial Characterization and Activity Profiling of Bromelain Protease' International Journal of Pharmacy and Biological Sciences, P- ISSN no 2321-3272, E-ISSN no 2230-7605, Vol 7, Issue 3, pp 1-9, July-September 2017.

Dr. Indraneel Mittra, Ms.Urmila Samant, <u>Dr. Suvarna Sharma</u>*, Mr. Gorantla Raghuram, Ms. Tannistha Saha, Mr. Pritishkumar Tidke, Ms. Namrata Pancholi, Ms. Deepika Gupta, Ms. Preeti Prasannan, Ms. Ashwini Gaikwad, Mr. Nilesh Gardi, Mr. Rohan Chaubal, Mr. Pawan Upadhyay, Ms. Kavita Pal, Ms. Bhagyashree Rane, Ms. Alfina Shaikh, Mr. Sameer Salunkhe, Ms. Shilpee Dutt, Mr. Pradymna Mishra, Mr. Naveen Khare, Mr. Naveen Nair and Mr. Amit Dutt: 'Cell-free Chromatin from Dying Cancer Cells Integrate into Genomes of Bystander Healthy Cells to Induce DNA Damage and Inflammation', Research Paper in Cell Death Discovery, Nature Publication, Vol 3, Article number 17015, 2017.

V. NATIONAL CONFERENCES AND SEMINARS

Department of Life Sciences

Dr. Rai Shalini*, Dr.Vajpai Aashu*, Ms. Poojari Jyoti and Ms. Mehta Ayushi: 'Effect of Herbal Extract on Diet Induced Obesity in Zebra Fish' (Abstract), National Conference 'Bioinnova' organized by Thakur College of Commerce and Sciences in association with Department of Biotechnology, University of Mumbai pp 105, 10th February 2018

VIII. MINOR RESEARCH PROJECTS

Department of Life Sciences

Dr. Tejashree Shanbhag completed URG Minor Research Project 'Bromelain: Possible Phytoremedy for Breast Cancer' funded by University of Mumbai with grant of Rs.30, 000/-

Dr. Shalini Rai Principal Investigator and **Dr. Aashu Vajpai** Co- Investigator completed URG Minor Research Project 'Study of L-Asparginase Enzyme Production, Isolation and Purification from Halophiles' funded by University of Mumbai with grant of Rs.30, 000/-

Dr. Suvarna Sharma completed URG Minor Research Project 'Study of Cloning of Myb Gene from Aloevera' funded by University of Mumbai with grant of Rs.25, 000/-

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

Department of Life Sciences:

Ms. Dhanashri. B, Ms. Samta Veera and Dr. Sagarika Damle^{*}: Study of Phytochemical and Antioxidant Activity from Different Plants Belonging to Malvaceae Family.

Ms. Panchal Heenal, Dr. Suvarna Sharma*and Dr. Archana Thite*: Study of Expression of Stress Resistant Gene Hva22 Homolog from Aloe Vera in Saccheromyces Cerevisae.

Ms. Bhurat Daksha, Ms. Ramesh. Anuradha, Mr. P. Huzaifa, Dr. Aashu Vajpai* and Dr. Rai Shalini*: Effect of Commercially Available Food Colour on the Development of Chick Embryo.

Ms. Sheetal Shenoy, Mr. Pratik Shetye, Ms. Reshmi Sagar, Ms. Heena M., Mr. Brijesh Bulsara, Dr. Sonal Dasani^{*} and Dr. Sagarika Damle^{*}: Survey on Legislation of Homosexual Marriages in India.

Ms. Rachana Rao, Ms. Daniel Miranada, Ms. Shivangi Bendre, Mr. Idris Ahmed and Dr. Aditya Akerkar*: Study Of Avian Diversity of Palghar District.

Ms. Avni Rao*, Ms. Divya Goel* and Ms. Niloufer K. Kotwal: Study of the Effect of Copper, Mercury and Lead on Bioluminescence of Photobacterium Leiognathi.

Ms. Sukaina Abbas, Ms. Maitri Trivedi, Ms. Amrutha Kothare*and Dr. Tejashree Shanbhag*: Study Of Antimicrobial Activity Of Pineapple.

Mr. Gandhar Tendulkar and Mr. Yash Sawant: Development of a Rapid Detection Kit for Analyzing Quality of Milk: Doorstep Dairy.

Ms. Konka Aishwarya, Ms. Shaikh Mariyam and Dr. Mukesh Pimpliskar*:

Biosynthesis of Ag Nanoparticles from Pineapple and Effect on Angiogenesis Using Chicken Model.

Ms. Nikita Zade, Mr. Abhijit Bhagat and Dr. Shilpa Jadhav*: Detection of Adulterants in Milk.

Ms. Sunita Chahar, Ms. Meenakshi Choudhari and Ms. Bhagyalaxmi Chundawat*: Floral Phenology of Stachytarpheta Indica and its Floral Visitors.

Ms. Harshita Bhanushali: Developing Drosophila as a Model System for Studying Some Aspects of Evolution.

Mr. Armaan Mistry and Dr. Bhavna Daswani*: Easy and Inexpensive Water Filters for Rural Areas: Biochemical and Microbiological Aspects.

XI. <u>SHP- IN HOUSE RESEARCH JOURNAL PUBLICATION: JIGYAASA: VOLUME</u> <u>XII, 2017-18</u>

Department of Life Sciences

Ms. Urmi Dhamnaskar and Dr. Tejashree Shanbhag*: Development, Formulation and Evaluation of Herbal Teeth Whitening Toothpaste Containing Cinnamomumtamala.

Ms. Devika Mahimkar, Ms. Sharon Kadirvelu and Dr. Suvarna Sharma*: A Study of Isolation of Myb Gene from Aloe Vera.

Mr. Chandan Das, Mr. Pranay Agarwal, Ms. Olivia Dias and Dr. Tejashree Shanbhag*: Antimicrobial Property of Capsaicin.

Ms. Sawant Uttara, Ms. Thakur Nikita and Dr. Damle Sagarika*: Coffee Consumption in Urban Population and Estimation of Caffeine from Different Coffee Brands.

Ms. Nair Pooja and Dr. Rai Shalini*: Isolation and Characterization of L-Asparaginase Producing Micro-Organisms.

Ms. Shirke Vaidehi, Mr. Ashok Kumar Manasa and Dr. Vajpai Aashu*: Screening of Flowers of Peltophorum Pterocarpum for Different Biological Activities.

Ms. Supriya Adak, Mr. Jayesh Sawant and Dr. Archana Thite*: Health Problems of Traffic Police Officers in Mumbai.

XII. <u>AVISHKAR- INTER-COLLEGIATE RESEARCH SCHOLAR'S MEET, 11TH</u> <u>DECEMBER 2017-18</u>

Department of Life Sciences

Ms. Atmaya Vartak and Dr. Sagarika Damle*: Green Corridors in Urban Areas.

Ms. Sukaina Abbas, Ms. Maitri Trivedi, Dr. Tejashree Shanbhag* and Mrs. Amruta Kothare*: Antimicrobial Activity of Pineapple Wastes.

Ms. Dhanashri Bothare, Ms. Samta Veera, Mrs. Sharon K.* and Dr. Sagarika Damle*: Study of Phytochemical and Antioxidant Property of Plants Belonging to Malvaceae Family.

2018-19

I.INTERNATIONAL RESEARCH PAPERS

Department of Life Sciences

Dr.Sagarika Damle, **Mr.Gaurav Bingi***, **Ms.Harshi Shah* and Ms. Kritika Sharma*:** 'Synthesis and Characterization of AgNPs AND CuNPs using Leaf Extracts of Hibiscus Cannabinus (L.) and Colocasiaesculenta (L.) SCHOTT', International Journal of Biology, Pharmacy and Allied Sciences, Vol 7, Issue 9, pp 1767-1776, ISSN no 2277-4998. IF1.02, September, 2018.

Dr. Sagarika Damle and K. Sharon: 'Antioxidant Activity, TLC and HPLC–ESI-Q-TOFF-MS Fingerprinting of Catunaregamspinosa(Thunb.) Trieng', Journal of Pharmacognosy and Phytochemistry, Vol 7, Issue 4, pp 2119-2124, NAAS rating: 5.21, 2018.

Ms. K.Sharon and Dr.Sagarika Damle: 'Location Specific Phytochemical and Antibacterial Analysis of Methanolic Extracts of Catunaregamspinosa(Thunb.)Trieng- International Journal of Biology Research, Volume 3, Issue 2, pp 75-80, IF 5.22, April 2018.

Dr. Suvarna Sharma and Ms.K.Sharon: 'A Study of Nucleotide Binding Domain of Glycerol Kinase Gene from Aloe Vera', International Journal of Scientific Research in Biological Sciences, Volume 6, Issue 1, pp. 243-248, February 2019.

IV. INTERNATIONAL CONFERENCES AND SEMINARS

Department of Life Sciences

Dr. Sagarika Damle, Dr. Tejashree Shanbhag and **Dr. Archana Thite** attended a five day International Symposium, entitled, '5th International Mediterranean Symposium on Medicinal and Aromatic Plants' at Cappadocia Turkey from 24th to 28th April, <u>2019</u> presented their papers and also chaired a session each at the International Symposium. **Dr. Sagarika Damle**: 'Seasonal Vegetable plants of Maharashtra, India: A Potential Medicinal Treasury'.

Dr. Tejashree Shanbhag: 'Bromelain: A Possible Phytoremedy towards Breast Cancer'.

Dr. Archana Thite: 'Elemental Analysis of Leafy Vegetables as Nutritional and Medicinal Benefactors'.

VI. UNIVERSITY/STATE LEVEL CONFERENCE/ SEMINARS/MEETS

Department of Life Sciences

Ms.Sharon K., Dr. Sagarika Damle, Mr.Akhilraj Pillai: 'Antimicrobial Analysis and LC-MS Studies of Meynaspinosa (Roxb.) Ex. Leaf Methanolic Extracts from Surgana, Nasik', research paper presented at International Interdisciplinary Conference on Recent Trends in Science, organized by J.S.M. College, Raigad on 8th and 9th March, 2019.

VII. NATIONAL LEVEL POSTER PRESENTATIONS

Department of Life Sciences:

Ms.Rasika Bhujbalrao, Dr.Sagarika Damle and Mr.Vinesh Kharade: 'Use of Ecological Base Maps for Efficient Waste Management System in Rural India' at 'Paryavarnam- A Journey towards Environmental Sustainability' National Seminar organized by B. K. Birla College, Kalyan on 12th March, 2019.

Dr. Sagarika Damle and Ms.Sharon K.: 'Determination of Genetic Diversity between Ethnobotanically Important Plants belonging to Rubiaceae by RAPD analysis', University of Mumbai, Fort Campus, Minor Research Project presentation, 11thMarch, 2019.

Dr. Aashu Vajpai and Dr.Shalini Rai: Presentation of Poster for the URG entitled 'Preparation of Alternative Feed and Study its Demographic Parameters on Zebra Fish' University of Mumbai, Fort Campus on 11th March, 2019.

VIII. MINOR RESEARCH PROJECTS SANCTIONED AND COMPLETED

Department of Life Sciences

Dr. Sagarika Damle and Ms. Sharon K.: 'Determination of Genetic Diversity between Ethnobotanically Important Plants Belonging To Rubiaceae by Rapd Analysis', Amount sanctioned: Rs.50, 000/- University Research Grant, University of Mumbai (2017-18).

Dr. Aashu Vajpai and Dr. Shalini Rai: 'Preparation of Alternative Feed and Study its Demographic Parameters on Zebra Fish', Amount sanctioned: Rs.30,000/-University Research Grant, University of Mumbai (2017-18).

2019-20

I.INTERNATIONAL RESEARCH PAPER PUBLICATIONS Department of Life Sciences

Dr Tejashree Shanbhag 'An overview of Clinical Applications of Bromelain', Issue 27 Volume 1, Tejashree Shanbhag, Sukaina Abbas, Amruta Kothare, American International Journal of Research in Formal, Applied and Natural Sciences, June-August 2019, ISSN(Print):2328-3777, ISSN (Online):2328-3785, ISSN(CD-ROM):2328-3793.

VII.RESERCH GRANTS- MINOR RESEARCH PROJECTS

Department of Life Sciences

Dr. Tejashree Shanbhag and Dr. Amruta Kothare received University Minor Research Grant of Rs. 55,000/-for the project 'Bromelain from pineapple waste in cancer treatment and its application towards Targeted Drug delivery', 2019-20.

Dr. Shalini Rai and Dr. Aashu Vajpai received University Minor Research Grant of Rs. 53,000/- for the project, Effect of Mentha Piperita and Musa Acuminata Leaves on Basic Demographic Parameters of Zebra Fish', 2019-20.

Dr. Suvarna Sharma received University Minor Research Grant of Rs. 30,000/- for the project 'Study of Plastic Degradation using Herbs, Spices and Essential oils', 2019-20.

The following faculties submitted the report for Minor research projects and presented a poster at University of Mumbai for the same during a Poster presentation meet at University of Mumbai.

Damle Sagarika and Sharon K.: "Determination of Genetic Diversity between Ethnobotanically Important Plants Belonging to Rubiaceae by Rapd Analysis." Amount sanctioned : Rs.50,000/-, 2018-19.

Dr. Aashu Vajpai and Dr. Shalini Rai: "Preparation of Alternative Feed and Study its Demographic Parameters on Zebra Fish", Amount sanctioned: Rs.30, 000/-, 2018-19.

VIII. POSTER PRESENTATIONS

Department of Life Sciences

Dr. Sagarika Damle: Guided Ms.Akanksha Kulkarni and Ms.Tasneem Nawab for University Level Poster Presentation, Avishkar for the project entitled "Creating a Bioinformatics Learning Aid". Coguided Jasmine John and Vikas Gurudu for a project entitled, 'Comparative study of different spices of the Curcuma family for its properties

Dr. Tejashree Shanbhag: Guided Avani Nevrekar and Manasi Prabhu for a project entitled, 'Making Paper from Waste'. Guided Jasmine John and Vikas Gurudu, for a project, 'Comparative study of different spices of the Curcuma family for its properties

Dr. Shalini Rai: Guided Ms.Bhakti Tari and Ms.Niharika Gupta for National Level Poster Presentation for the topic entitled "Extraction of enzyme L-Asparaginase from Extremophiles" at Azim Premji University,Bangalore on 5th December 2019. Guided Ms.Bhakti Tari and Ms.Niharika Gupta with Dr.Shalini Rai for University Level Poster Presentation, Avishkar for the topic entitled "Extraction of enzyme L-Asparaginase from Extremophiles from salt pans of bhayander".

Dr Aashu Vajpai: Co –Guided Ms.Bhakti Tari and Ms.Niharika Gupta with Dr.Shalini Rai for National Level Poster Presentation for the topic entitled "Extraction of enzyme L-Asparaginase from Extremophiles" at Azim Premji University,Bangalore .

Also Co –Guided Ms.Bhakti Tari and Ms.Niharika Gupta for University Level Poster Presentation, Avishkar for the topic entitled "Extraction of enzyme L-Asparaginase from Extremophiles from salt pans of bhayander" Co –Guided Ms.Akanksha Kulkarni and Ms.Tasneem Nawab for University Level Poster Presentation, Avishkar for the topic entitled "Creating a Bioinformatics Learning Aid"

Dr. Suvarna Sharma: Guided Himakshi Vartak and Insiya Seliafor National level poster presentation, titled 'Herbal Juices' at Azim Premji University.

MICROBIOLOGY

2015-16

I.International Research Papers

Department of Microbiology

Dr. Prabha Padmanabha published three papers entitled:-

10. Biodegradation of polyaromatic hydrocarbons by novel organism *Sphingomonasanadarae* PP1 in International journal of Scientific Research, Vol 4, Issue 6, 2015.

11. Isolation of novel organism *Stenotrophomonaskoreensis* strain AK1 with potential of PAHs degradation in Global Journal of research analysis, Vol 4, Issue 5, May 2015.

12. 'Antibacterial and anti fungal activity of crude coconut shell oil' in International journal of biological sciences, Vol 4, Issue 11, pp 16-20, 2015.

13. Dr. Sejal Rathod published a paper titled 'Antibacterial Activity of Green Tea Extract in Combination with Cefotaxime on Diarrhea Causing Esbl Producing *E.coli* 'in International Journal of Pharmacy and Pharmaceutical Sciences, Vol 7, Issue 6, 2015.

2016-17

I.INTERNATIONAL RESEARCH PAPERS

DEPARTMENT OF MICROBIOLOGY

Dr. Pratibha Shah, Mr. Williamson Manita and Dr. Sejal Rathod had the following research publications-

4.'Antibacterial effect of methanolic neem leaf extract on ESBL, Ampc and MBL producers from skin and soft tissue infections', International Journal of Pharmaceutical Research and Biosciences ,Vol 5, Issue 3, 2016.

5. Antibacterial activity of aqueous garlic extract on beta-lactamase producing acinetobacter isolates from skin and soft tissue infections, Asian Journal of Pharmaceutical and Clinical Research, Vol 9, Issue 6, 2016.

II.NATIONAL RESEARCH PAPERS

DEPARTMENT OF MICROBIOLOGY

Ms. Kshitija Mirkar, Mr. Abhishek Rawat and Mrs. Rajitha Satish published a research

paper 'Effect of environmental factors on biofilm formation', Indian Journal of Life Sciences,

Vol 5, Issue 2, pp 53-64, ISSN2277-1743, eISSN : 2278-7879, 2016.

IV. INTERNATIONAL CONFERENCES AND SEMINARS

DEPARTMENT OF MICROBIOLOGY

Mrs. Prabha Padmanabha presented a research paper 'Evolving microbes: a golden journey', International Conference organized by Department of Microbiology, Sophia College, Mumbai, 6th January, 2017.

VII.RESERCH GRANTS- MINOR RESEARCH PROJECTS DEPARTMENT OF MICROBIOLOGY

Dr. Sejal Rathod received a URG Minor Research Project "Extraction and detection of antimicrobial Effect of plant based dyes," funded by University of Mumbai for the financial year 2016-17, Project No.256 Grant of Rs. 30,000/-

IX.POSTER PRESENTATIONS

DEPARTMENT OF MICROBIOLOGY

Dr. Sejal Rathod and Dr. Pratibha Shah

1. Presented a poster at National Seminar on Diabetes at Kundnani College of pharmacy, January, 2017.

Dr. Pratibha Shah

1. Won a 3rd prize at poster competition in National Seminar on Diabetes at Kundnani College of pharmacy, 27th January, 2017.

Mrs. Prabha Padmanabha

1. Presented a poster along with student in Intercollegiate Sajjan Gupta –Konark Memorial Award Research Meet, Swami Vivekanad College, Mumbai, 18th January, 2017.

Mrs. Rajitha Satish

1.Presented a poster winning Istprize at National level Research Meet " Sajjan Gupta –Konark Memorial Award" on 18thJanuary, 2017.

2. Presented a poster entitled "Phage therapy using Mycobacteriophages" at Intercollegiate poster competition "Jigyaasa" 2017 on 15th February, 2017 at K.C. College, Mumbai.

2017-18

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

Department of Microbiology:

Ms. Aishwarya Pande, Ms. Ankita Rathore, and Mrs. Prabha Padmanabha*: Study of Bacteria Causing Spoilage of Dairy Products.

Ms. Janvi Shah, Ms. Minu Agarwal, Ms. Shraddha Gore and Dr. Sejal Rathod*: Study of Drug Resistant Organisms from Fomites.

Ms. Urvi Shah, Ms. Sharmila Chaudhary, Ms, Akanksha Singh, Dr. Pratibha Shah* and Mr. Vijay Thigle*: Screening of Beta Lactum Resistant Organisms from Raw and Drinking Water Sources in Mumbai.

Ms. Aditee Ashar, Ms. Runali Jagtap, Ms. Diksha Sawant, Dr. Pratibha Shah*: A Study On Bacterial Decolorization Of Azo Dyes.

Ms. Leena K. Shah: Study of Response of Microbe Isolated from Water Bodies and Increasing Concentration of Nutrients.

Ms. Nipurna Murkar and Mr. Shabib Khan: Extraction of Melanine Pigment from Azotobactor Spp and its Application as a Protective Agent Against Uv.

Ms. Shreeya Mhade and Ms. Nidhi Parekh: Development of Rapid Detection Kit for Bacteriology Analysis of Waste Water Sample.

Ms. Shreya Manoj Nair, Ms. Divya A. Nikumb and Mr. Shabib Khan*:

A Study on Sensitivity of Bacterial Culture Towards Microwave Radiation.

B. Saikia, L. Kandothankandy., L. Fereira, R. Chandavarkar and S. Pinto: Effect of Plant Growth Promoting Rhizobacteria (Pgpr) in Consortia on the Growth of Moong (Vigna Radiata).

Ms. Purva More and Ms. Komal Chaudhari: Development of Kit for the Detection of Heavy Metals in Water (Kit's Name: Biosanctity).

Ms. Aanchal Singh and Ms. Pratiksha Shetty: Currency Notes as Potential Fomites.

Ms. Niyanta Donda and Ms.Princy Donda: Isolation of Lypolitic Bacteria from Marine Environment and Study of Effect of Ph and Salt Concentration on Lipase Production.

XI. <u>SHP- IN HOUSE RESEARCH JOURNAL PUBLICATION: JIGYAASA: VOLUME</u> XII, 2017-18

Department of Microbiology

Ms. Mudaliar Neha, Mr. Nitesh Kanojia, Mr. Kaiful Shaikh, Dr. Sejal Rathod* and Mrs. Prabha Padmanabha*: Detection of Drug Resistant Organisms From Natural Water Bodies.

Ms. Shinde Yashodhara, Ms. Kumari Bhumika, Dr. Shah Pratibha*and Mr. Thigle Vijay*: Antibacterial Activity of Tinospora, Cordifolia and Cinnamon.

XII. <u>AVISHKAR- INTER-COLLEGIATE RESEARCH SCHOLAR'S MEET, 11TH</u> <u>DECEMBER 2017-18</u>

Department of Microbiology

Ms. Rajitha Satish and Mrs. Anita Dsouza*: Study Of Mycobacteriophage: A Novel Tool to Inhibit and Heat Mycobacterium Spp.

Ms. Urvi Shah, Ms. Akanksha Singh, Ms. Sharmila Chaudhary, Mr. V. Thigle* and Dr. Pratibha Shah*: Screening of Beta Lactam Resistant Organisms From Raw and Drinking Water Sources.

Ms. Ankita Rathore, Ms. Aishwarya Pande and Mrs. Prabha P*: Study Of Bacteria Causing Spoilage of Dairy Products.

Ms. Shraddha Gore, Ms. Minu Agarwal, Ms. Janvi Shah and Dr. Sejal Rathod*: Study of Drug Resistant Organisms from Fomites.

Ms. Aditee Ashar, Ms. Runali Jagtap, Ms. Diksha Sawant and Dr. Pratibha Shah*: A Study on Bacterial Decolorization of Azo Dyes.

2018-19

I. INTERNATIONAL RESEARCH PAPERS

Department of Microbiology

Dr. PratibhaShah: 'Synergistic Activity of Calendula OfficinalisPetal Extract with Cefotaxime on ESBL Producing Escherichia Coli', International Journal of Pharmacy and Biological Sciences, Volume 8, Issue 2, pp 409-418,ISSN: 2321-3272 (Print), ISSN: 2230-7605 (Online), 2018.

Mrs. R. Satish and A.Desouza: 'Isolation of Mycobacteriophage Novel tool to Treat Mycobacterium spp', International Journal of Scientific Research in Biological Sciences, 5. pp 46-50. 10.26438/ijsrbs/v5, ISSN:2347-7520 (Online), 2018.

X.JIGYAASA – SHP-Undergraduate: Research Activity@KCC, Batch XIV IRSM-19

"NURTURING YOUNG MINDS from lab to life."

Department of Microbiology

Ms. Chonkar Purva, Ms. Jain Siddhi, Mr. Devkate Radhika, Mr. Thigle Vijay*and Mrs. Satish Rajitha*: Isolation and Characterization of Lytic Coliphage as its Application as Biocontrol Agents in Food Industry.

Ms. AeshaAgrawal, Ms. Anagha Nair, Ms. PratikshaChavan and Dr. SejalRathod*:Screening of Antioxidant and Antimicrobial Activity of Plant Extracts for Formulation of a Cosmetic Product.

Mr. Gaurav Sriram, Ms. Uzma Shaikh, Ms. Vaidehi Shrestha and Dr. Pratibha Shah*: Analysis of Biodegradation of Azo Dyes.

Ms. Abhisri.R.Palan, Ms. RuchiR.Modgekar and Ms. HarshitaBhanushali:Developing Drosophilla Melanogaster as a Model Organism and Natural Selection Studies.

Ms. KalpitaMulye, Ms. Jayashree Pawar, Ms. Manali Neman, Ms. Saee Joshi, Ms. Komal Gavas and Ms. Himadri Kale: Microbial Recovery Dynamics and Isolation of Novel Pgpr from Vermiwash.

Ms. Snehal Poojary, Ms.Latikaa Chandra, Ms. Jayashree Pawar*, Dr.Kalpita Mulye* and Ms. Zahera Momin: Novel and Eco-Friendly Staining Method for Proteins Separated By Polyacrylamide Gel Electrophoresis.

2019-20

I.INTERNATIONAL RESEARCH PAPER PUBLICATIONS

Department of Microbiology

Satish Rajitha and Desouza Anita 'Effect of Combinations of Mycobacteriophages and Drugs against Mycobacterium Spp', Global Journal of Science Frontier Research, volume 19, no 3, pp. 1029-1040, 2020.

Satish Rajitha and Desouza Anita 'Study of the Characteristics of Mycobacteriophage – A Novel Tool to Treat Mycobacterium spp", International .Journal of Mycobacteriology., volume 8, no 2, pp.170-174, 2019.

II.NATIONAL RESEARCH PAPERS PUBLICATIONS

Department of Microbiology

Shah Pratibha, Malik Ruchi 'Green Synthesis of Silver Nanoparticles using Aqueous Cranberry Fruit Extract and its Antibacterial Activity', Journal of Drug Delivery & Therapeutics, Volume 9(4-s), pp. 991-995, 2019.

VII.RESERCH GRANTS- MINOR RESEARCH PROJECTS

Department of Microbiology

Dr. Sejal Rathod was sanctioned a university minor research project titled 'Antibiotic susceptibility profile of organisms isolated from dairy cattle and sheds (Sanctioned amount - 60,000/Rs).

Dr. Pratibha Shah completed a minor research project titled 'Screening of Antimicrobial activity of fruit and vegetable peel extract and its application in synthesizing bioactive packaging material' sanctioned by University of Mumbai. (Sanctioned amount -25000/Rs)





II.National Research Papers

Department of Physics

Dr. Jyotsna R Pandey

5. Published in Proceeding of National Conference on 'Recent Advances in Material Sciences and Technology, Rajasthan, ISBN No-978-81-930586-02, December 22-23, 2015.

6. Published a Research Paper in the peer reviewed "Rasayanan journal of Chemistry."

Minor Research Projects

University Minor Research Grants details are provided in the table.

UNIVERSITY MINOR RESEARCH GRANTS		
Department	Faculty	Amount
PHYSICS	Dr. Jyotsna R. Pandey	Rs. 32,000/-

2016-17

II.NATIONAL RESEARCH PAPERS

DEPARTMENT OF PHYSICS

Dr. Shaila Wagle, Mr. Laxman Jathar, Mr. Dilip Achalwat, Mr. Jayraj Rane, Ms. Aparna Deshpande, 'Photo-physical properties of Stilbine-3(STB-3) laser dyes embedded in sol gel glasses, New Journal of Glass and Ceramics, Vol 6, pp 64-74, ISSN 2161-6554, 2016.

V.NATIONAL CONFERENCES AND SEMINARS

DEPARTMENT OF PHYSICS

Dr. Jyotsna Pandey presented a research paper 'H- NMR Spectral analysis of an organic NLO crystal', National Seminar 'Exploring Emerging Trends and innovations in Research in Commerce', N.S.S. College, Tardeo, 11th February, 2017.

Dr. Shaila Wagle presented a research paper 'Thermal characterization of PBT nanocomposite', National Seminar 'Exploring Emerging Trends and innovations in Research in Commerce', N.S.S. College, Tardeo, 11th February, 2017.

Dr. Jyotsna Pandey presented a research paper 'Growth and comparative analysis of structural, vibrational and thermal properties of an organic NLO material' National Conference

on 'Emerging Trends in science', N.G.Acharya and D.K.Marathe College, Mumbai, 4th March, 2017.

Dr. Shaila Wagle presented a research paper 'Memory switching in Selenium glassy material', National Conference on 'Emerging Trends in science', N.G.Acharya and D.K.Marathe College, Mumbai, 4th March, 2017.

2017-18

I. INTERNATIONAL RESEARCH PAPERS

Department of Physics

Dr. Shaila Wagle and Dr. Jyotsna Pandey: 'Vicker's Microhardness Studies and 1H-NMR Spectral Analysis of an Organic Material', International Journal of Advance Research and Innovative Ideas in Education, Volume 2, Issue 5, E-ISSN no 2395-4396, pp 1433-1440, November 2017.

V. NATIONAL CONFERENCES AND SEMINARS.

Department of Physics

Dr. Jyotsna Pandey: 'Crystallization and Etching Characteristics of a New Nonlinear Optical Crystal', National Conference on 'Advanced Analytical Tools for Material Characterization', at Birla College held on 28th February 2018.

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

Department of Physics:

Mr. Tanmay S. Chandane, Dr.Shaila Wagle* and Dr. Jyotsna Pandey*: C Tester Using 8085 Microprocessors.

Mr. Rohan Gautam, Dr. Shaila Wagle* and Dr. Jyotsna Pandey*: Radio Frequency Detector.

Mr. Abhijeet Mishra, Dr. Shaila Wagle*and Dr. Jyotsna Pande*: Resistivity of Semiconductor by Four Probe Methods at Different Temperatures.

Mr. Kaushick Parui and Mr. Rajesh Singh*: Image Restoration and De-Blurring Using Inverse and Wiener Filtering.

Ms. Ruchira Sawant and Mr. Mahevash Khan: Growth of Crystals Using Gel Technique and Evaporation Method.

Ms. Shaikh Mahetaba, Mr. Md. Zakir and Dr. Tarannum Attar*: Lego Detector and Gravitational Waves.

Ms. Momin Aayesha, Mr. Md. Arif, Ms. Rangari Rubina Alauddin and Ms. Tonwin Ashrafi*: Thermodynamics Laws of Physics in Light of Quran.

Ms. Chaudhay Sana Fatema, Mr. Md. Kalim, Ms. Ansari Sadequa Irshad Ahmad and Dr. Anek Shrivastava*: Force Due to Radiation.

Ms. Afreen Patel and Dr. Tarannum Attar*: Nanotechnology in Cosmetics.

2018-19

V. NATIONAL CONFERENCES AND SEMINARS

Department of Physics

Dr. Jyotsna Pandey: 'Photoconductivity and Nonlinear Optical Studies of an Organic Crystal', at National Seminar on Smart and Photonic Material, Birla College, 28th February, 2019.

Dr.Shaila Wagle: 'Kinetic Analysis of Nanocomposites using Avrami, Kissinger and Takhora Model', ICONN, 2019.

X.JIGYAASA – SHP-Undergraduate: Research Activity@KCC, Batch XIV IRSM-19

"NURTURING YOUNG MINDS from lab to life."

Department of Physics

Ms. PratikshaGijare: Dancing LEDs.

Mr. Ankit Vishwakarma, Ms.Divya Varunkar, Ms. Mansi Dua and Mrs. Sangeeta Anilkumar Nirmal*:Compressied Air Energy Storage System and its Advantages.

Mr. SurajTiwari, Mr. Edmund Vazhappilly* and Dr. S. S. Pimpale*: Space and Time.

Ms. Monika Singh, Mr. AnkitVishwakarma and SangeetaAnilkumarNirmal*:Water of Well or City.

Mr. Tushar Chavan, Ms. Apurva Shelar, Ms. Nandita Jaiswal, Mr. Roshan Sahu and Mrs. Sangeeta Anilkumar Nirmal*: Nanotechnology: Boon or Curse?

Department of Statistics

Ms. SumeetaDwivedi, Ms. ZaibaSayyed, Ms. KrinaParmar and Mrs. Shailaja J. Rane*: Study of Empowerment of Women in Urban and Rural Areas.

Ms. Dhara Sankhla, Ms. Divya Srivastav, Ms. Anam Fatima Shaikh and Ms. Pratiksha Kadam*:Comparison and Analysis of Bollywood Movies of Year 2008 and 2018.

Mr. Abhay Deshpande and Dr. Asha Jindal*: Case Study on Statistical Assessment of Selection of Candidate for a Post.

2019-20

Nil

STATISTICS

2015-16

National Conferences and Seminars

Department of Statistics

3. Dr. Asha Jindal in a two-day UGC sponsored National Conference titled "Application of Statistics in Commerce, Economics and Social Sciences" of Rizvi College, presented a paper titled "Obtaining Decision Variables using Simple Approach in a Deterministic Inventory Control Models" on 8th January 2016. The paper has been accepted for publication.

STATISTICS	Dr. Sakharam Muley	Rs. 1,71,000/
------------	--------------------	---------------

2016-17

I.INTERNATIONAL RESEARCH PAPERS

DEPARTMENT OF STATISTICS

3.Dr. Asha Jindal and Dr. Pankit Gandhi published a research paper 'Obtaining decision variables through simple approach in deterministic inventory control models', International Journal of Research, Vol 5, Issue 2, pp 119-121, ISSN No.2231-6125, Impact factor 4.011, 2016.

II.NATIONAL RESEARCH PAPERS

DEPARTMENT OF STATISTICS

Mr. Rajendra Chavhan and Mr. Ramkrishna Shinde had the following research

publications-

16.'Stochastic mortality modeling and forecasting for Indian population with applications in Actuarial Science', Stochastic Modeling and Applications, Vol.20, Issue 1, pp 67-78, ISSN 0972-3641, June 2016.

17.'Social security life insurance scheme Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY): Actuarial insight based on Indian mortality', SAARJ Journal on Banking & Insurance Research, Volume 5, Issue 6, pp 68-74, ISSN 2319-1422, 2016.

V.NATIONAL CONFERENCES AND SEMINARS

DEPARTMENT OF STATISTICS

Ms. Pratiksha Kadam presented a research paper 'A note on a result of Harell II- Kroger-Kurata', UGC sponsored National Conference on Confluence of Emerging Trends in Multidisciplinary Areas to Mathematics (CETMRAM) held at Kirti College, Mumbai, 2016. **VI.UNIVERSITY/STATE LEVEL CONFERENCE/SEMINAR/MEET/SYMPOSIUM**

DEPARTMENT OF STATISTICS

Ms. Pratiksha Kadam presented a research paper 'On the extrema of the fundamental eigenvalue of a family of schrodinger operators' in the National Symposium on Mathematics and Applications (NSMA) held at Department of Mathematics, IIT Madras, Chennai.

2017-18

I. INTERNATIONAL RESEARCH PAPERS

Department of Statistics

Mrs. Shailaja R. "Factors associated with Consumption of Alcohol and Hookah smoking among the Youth of Mumbai, A Cohort study" in, International Journal of Innovative Research in Science, Volume 6, Issue 12, December 2017, P- ISSN no 2347-6710, E-ISSN no 2319-8753, IF-7.089, 2017.

II. NATIONAL RESEARCH PAPERS

Department of Statistics

Dr. Asha Jindal was the Editor of 'Analyzing and Visualizing Big Data with R Software- A Practical Manual', ISBN No. 978-93-80788-71-5.

Dr. Asha Jindal*, Mr. Jain Jimit, Mr. Karani Hardik, Mr. Sen Milankumar: 'Sentiment Analysis of Twitter Data', Genius, Volume 6, Issue 1, pp 56-63, ISSN no 2279-0489, IF- 4.248, August-January 2018.

Mrs. Pratiksha Kadam* and Mr. A.R Aithal: 'On the Extrema of Fundamental Eigen Value of a Family of Schrodinger Operators' was selected for publication in the Journal of Ramanujan Mathematical Society, P-ISSN no 0970-1249, E-ISSN no 2320-3110, September 2017.

Mr. Shinde R. L. and Mr. Chavhan R. N: 'Markov Chain Modeling of Stochastic Process Defined on Daily Minimum Temperature and its Applications in Weather Based Crop Insurance Scheme for Banana', Mausam, Vol 69, Issue 1, pp 156-160, 2018.

X. JIGYAASA: INTERCOLLEGIATE RESEARCH SCHOLARS MEET(IRSM), 17TH FEBRUARY, 2018

Department of Statistics:

Mr. Yahya Sait, Ms. Tanya Sharma and Dr. Sakharam Muley*: Impact of Imports and Exports on the Economy of India.

Mr. Soham Wani and Ms. Shailaja Rane*: Analyzing the Importance of Weather Forecasting and Study of Agriculture in Maharashtra.

Mr. Aman Shrivastava, Mr. Amey Dixit and Ms. Shailaja Rane*: To Analyze and Estimate Non Performing Assets of Banks.

Mr. Abhay Deshpande: Do Prices At 0.99, Instead Of 1.00, Result in More Sales?

Ms. Alsaba Abdul Kadir, Mr. Karyal Mitsu Jitendre, Mr. Umer Farooque: Volume of Water in a River Using Numerical Integration

Ms. Shaikh Anam Fatima, Ms. Divya Srivastav and Ms. Dhara Sankhla: Safer Mumbai, Better Mumbai: Study of Mumbai City.

XII. <u>AVISHKAR- INTER-COLLEGIATE RESEARCH SCHOLAR'S MEET, 11TH</u> <u>DECEMBER 2017-18</u>

Department of Statistics

Mr. Aman Srivastav, Mr. Amey Dixit and Mrs. Shailaja R.*: To Analyze and Estimate N.P.A of the Boules.

2018-19

I. INTERNATIONAL RESEARCH PAPERS

Department of Statistics

Mrs. Pratiksha Kadam: 'On the Extrema of the Fundamental Eigenvalues of a Family of Schrodinger Operators', International Journal of Ramanujan Mathematical Society, Vol 33, Issue 3, ISSN(P) : 0970-1249, ISSN (O): 2320-3110, 2018.

2019-20

I.INTERNATIONAL RESEARCH PAPER PUBLICATIONS

Department of Statistics

Abhay Deshpande and Dr. Asha Jindal 'Market Basket Analysis: A Consumer Based Approach using Apriori Algorithm', International Journal of Research, UGC Approved Journal No. 63072, pp 7-16, 2019, IF : 6.67.

III.BOOKS/ ARTICLES PUBLISHED IN NEWSPAPERS AND MAGAZINES

Department of Statistics

Chapters contributed in Analyzing and Visualising Data using free Open Source Software: Python Programming with Case Studies, **Dr. Asha Jindal (ed.)**, ShailajaPrakashan and K. C. College, 2019-20.

Dr. Asha Jindal, Optimisation Strategy in Python--I (Linear Programming Problem and Integer Programming Problem using Pulp), Chapter 3.

Mrs. Pratiksha Kadam, Graphs and Diagrams (2D and 3D using python), Chapter 5.

Mrs. Mrunal Hardikar (Department of Mathematics*), Factorization of Polynomials over a Finite Field, Chapter 6.

Mr. ShubhamNiphadkar, Descriptive Statistics, Chapter 7.

Dr. Asha Jindal, Anova Procedure: One Way and Two Way, Chapter 11.

Mr. Shubham Niphadkar, Ancova Procedure, Chapter 12.

Dr. S.B. Muley, Non-Parametric Test, Chapter 16.

Ms. Anjali Sutar and Ms. PriyankaChataule, Case Study on Polio in Greater Mumbai, Chapter 17.

Mr. Rajesh Kalal and Mr. Shubham Gupta, Analysis of Air Pollution in New Delhi, Chapter 18.

Mr. SatvikTandon, Mr. AlpeshRathod and Mr. Gaurav Jadhav (students*), Analysing Happiness Development Index using Python, Chapter 19.

Mr. Aditya Shrivastava and Mr. Hruturaj Nikam(students*), Analysis of Diabetes, Chapter 20.

VII.RESERCH GRANTS- MINOR RESEARCH PROJECTS

Department of Statistics

Dr. S. B. Muley completed UGC-Minor Research Project.