



**Dayananda Sagar**  
**University** Bengaluru

**Dayananda Sagar**  
is backed by a  
**Six-Decade**  
**Legacy**  
in Education & Healthcare

**ಸಂಶೋಧನಾ ಸಾಗರ**

**೨೦೧೭ - ೨೦೧೮**

**Samshodhana Sagara**

**2017 - 2018**



**Dayananda Sagar**  
**University** Bengaluru

**Dayananda Sagar**  
is backed by a  
**Six-Decade**  
**Legacy**  
in Education & Healthcare

**ಸಂಶೋಧನಾ ಸಾಗರ**

೨೦೧೭ - ೨೦೧೮

**Samshodhana Sagara**

2017 - 2018

Book of Research Abstracts

ಸಂಶೋಧನಾ ಸಾರಾಂಶದ ಪುಸ್ತಕ

# *Dedications*

## *Founders who crafted our Institutions*



**Late Shri. R. Dayananda Sagar**

Dayananda Sagar Institution is named in honour of its founder president Late Shri R Dayananda Sagar. He was a great, confident leader who saw no reason why, as an Indian, he could not provide education for all sections of society. Best known for his pivotal role in setting up the Mahatma Gandhi Vidya Peetha Education Trust (MGVP), Late Shri R Dayananda Sagar also played an important role in the education sector of the emerging India.

**Late Smt. Chandramma Sagar**

Wife of the founder, Late Smt Chandramma Sagar was a Doctor by profession - a Triple FRCS from London, Edinburgh and Glasgow. She was in the panel of Doctors for the President of India.



## ***Editorial Committee***

- Dr.M. K Banga, Professor & Dean-Research, DSU.
  - Dr. Srinivas A, Professor & Dean, School of Engineering (SOE).
  - Dr. Sunil S. More, Professor & Dean, School of Basic and Applied Sciences.
  - Dr. Murugan V, Professor & Dean, School of Health Sciences
  - Dr. Punith Cariappa, Professor & School of Commerce and Management.
  - Dr. Vaibhav Meshram, Professor & Chairman, Dept. of ECE, SOE.
  - Dr. B.V.N Ramakumar, Professor & Chairman, Dept. of Aerospace Engg, SOE.
  - Dr. K Vijaya Kumar, Professor & Chairman-Physics Department, SOE.
  - Dr. K. Anand Soloman, Professor & Chairman, Chemistry Department, SOE.
  - Dr. Rajagopal, Professor & Chairman, Dept. of ME, SOE.
  - Dr. Sateesh T K, Professor & Chairperson-CST Program, SOE.
  - Dr. Chandrashekar V, Professor & Chairman, Mathematics Department, SOE.
  - Dr. Sharmila J, Professor & Principal, College of Nursing Sciences, School of Allied Health Sciences.
  - Dr. V Murugan, Professor & Principal, College of Pharmaceutical Sciences, School of Allied Health Sciences.
  - Dr. Anil T John, Professor & Principal, College of Physiotherapy, School of Allied Health Sciences.
-

## ***From the Editorial Board***

This Edition of '**Samshodhana Sagara 2017-18**' is dedicated to Late Barrister Shri R. Dayananda Sagar and his better half, Late Smt. Dr. Chandramma Sagar, triple FRCS from London, Edinburg and Glasgow, the founders of Mahatma Gandhi Vidya Peetha Trust, on the eve of Centenary Celebrations of Late Barrister Shri R. Dayananda Sagar. We take this opportunity to thank, Dr. D Hemachandra Sagar, the Chancellor and Dr. D Premachandra Sagar, Pro-Chancellor who have been very supportive in bringing out this Edition and approving the same. Our sincere thanks are due to Prof. A N N Murthy, our Hon. Vice Chancellor who insists on only quality publication without exception and his encouragement in every stage of bringing out this Edition. We also thank Prof. R. Janardhan and Prof. K. Muthuchelian, the Pro Vice Chancellors for their help in this initiative. We thank profusely Prof. Puttamadappa C, the Registrar, for his constant support in various initiatives taken up by the Research Cell.

It gives me immense gratification to release the 3rd Edition of '**Samshodhana Sagara 2017-18**', the collection of research publications, during the Academic Year 2017-2018. We have attempted to include only such publications which are published in peer reviewed journals. Books and Book chapters published by the faculty members in International Publications are also made part of 'Samshodhana Sagara'. This collection also provides the list of Research projects which are funded by DST, SERB/DST, VGST and other funding agencies. There are 56 publications in International and National Journals, 26 Book Chapters. There are Five on-going Projects and Five Consultancy & Training assignments for the year.

I thank all my colleagues in the Editorial Board from various Departments, Colleges and Schools who have helped us in editing this collection and bringing out this Edition. We sincerely hope that more quality publications are accomplished by our faculty members and research scholars in the years ahead.

We will be thankful for any feedbacks and suggestions for improving the quality and look and feel of 'Samshodhana Sagara' in the future.

Dr. M K Banga,  
Dean Research - Dayananda Sagar University.

For Editorial Board.

## CONTENTS

<b>School and College/Department</b>	<b>Page No.</b>
1. School of Engineering - Department of Chemistry	1-2
2. School of Engineering - Department of Mathematics	3
3. School of Engineering - Department of Computer Science & Engineering	4-5
4. School of Engineering - Department of Electronics & Communication Engineering	6-7
5. School of Engineering - Department of Mechanical Engineering	8
6. School of Basic and Applied Sciences–College of Biological Sciences	9-11
7. School of Health Sciences - College of Pharmaceutical Sciences	12-13
8. Funded Research Projects	14
9. Consultancies & Trainings	16

**Department  
of  
Chemistry  
SCHOOL OF ENGINEERING  
JOURNAL PUBLICATIONS**

ID	Author(s)	Title of the Paper	Publication Details
CHJ-01	Nandini D., Ravikumar B.S., <b>Amaraneni S.R.</b>	Identification of atropine and scopolamine from Datura L. plant and market samples by GC-MS	Asian Journal of Chemistry ISSN: 9707077, DOI: 10.14233/ajchem.2017.206 19, (2017)
CHJ-02	<b>Ashoka S.</b> , Saleema N., Sarkar D.K.	Tuning of superhydrophobic to hydrophilic surface: A facile one step electrochemical approach	Journal of Alloys and Compounds ISSN: 9258388, DOI: 10.1016/j.jallcom.2016.10.2 94 (2017)
CHJ-03	Saravana Kumar R., Mohanbabu A., Mohankumar N., Godwin Raj D.	In 0.7Ga 0.3As / InAs / In 0.7Ga 0.3As composite-channel double-gate (DG)-HEMT devices for high-frequency applications	Journal of Computational Electronics, ISSN: 15698025, DOI: 10.1007/s10825-017-0991-x, (2017)
CHJ-04	Ramakrishna G., Nagabhushana H., Prasad B.D., Vidya Y.S., Sharma S.C., Anantharaju K.S., Prashantha S.C., Choudhary N.	Spectroscopic properties of red emitting Eu <sup>3+</sup> doped Y <sub>2</sub> SiO <sub>5</sub> nanophosphors for WLED's on the basis of Judd-Ofelt analysis: Calotropis gigantea latex mediated synthesis	Journal of Luminescence, ISSN: 222313, DOI: 10.1016/j.jlumin.2016.08.050 (2017)
CHJ-05	<b>Solomon K.A.</b> , Blacque O., Venkatnarayan R.	Molecular salts of 2,6-dihydroxybenzoic acid (2,6-DHB) with N-heterocycles: Crystal structures, spectral properties and Hirshfeld surface analysis	Journal of Molecular Structure, ISSN: 222860, DOI: 10.1016/j.molstruc.2016.12.055, 2017
CHJ-06	Prasanna Kumar J.B., Ramgopal G., Sunitha D.V., Prasad B.D., Nagabhushana H., Vidya Y.S., Anantharaju K.S., Prashantha S.C., Sharma S.C., Prabhakara K.R.	Extraction of Y <sub>2</sub> O <sub>3</sub> :Cr <sup>3+</sup> nanophosphor by eco-friendly approach and its suitability for white light-emitting diode applications	Luminescence ISSN: 15227235, DOI: 10.1002/bio.3197 (2017)
CHJ-07	Gangaiah V., Adarakatti P.S., Siddaramanna A., Malingappa P., Chandrappa G.T.	Studies on phase and morphological evolution of silver vanadium oxides as a function of pH: Evaluation of electrochemical behavior towards quantification of	Materials Research Express, ISSN: 20531591 DOI: 10.1088/2053- 1591/aa851a (2017)

ID	Author(s)	Title of the Paper	Publication Details
		Pb <sup>2+</sup> and Cd <sup>2+</sup> ions	
CHJ-08	Mohanbabu A., Mohankumar N., Godwin Raj D., Sarkar P.	Investigation of enhancement mode HfO <sub>2</sub> insulated N-polarity GaN/InN/GaN/In <sub>0.9</sub> Al <sub>0.1</sub> N heterostructure MISHEMT for high-frequency applications	Physica E: Low-Dimensional Systems and Nanostructures, ISSN: 13869477, DOI: 10.1016/j.physe.2017.05.005 (2017)
CHJ-09	Mohanbabu A., Mohankumar N., Godwin Raj D., Sarkar P., Saha S.K.	Efficient III-Nitride MIS-HEMT devices with high- $\kappa$ gate dielectric for high-power switching boost converter circuits	Superlattices and Microstructures, ISSN: 7496036, DOI: 10.1016/j.spmi.2017.01.043 (2017)

**Department  
Of  
Mathematics  
SCHOOL OF ENGINEERING  
JOURNAL PUBLICATIONS**

<b>ID</b>	<b>Author(s)</b>	<b>Title of the Paper</b>	<b>Publication Details</b>
MATJ-01	Jyothi P., Vatsala G.A., Gupta R.	Financial planning of the garbage disposal plant using mathematical model	Journal of Engineering and Applied Sciences, ISSN: 1816949X, DOI: 10.3923/jeasci.2017.9534.9 539, 2017

**Department  
Of  
Computer Science & Engineering  
School of Engineering  
JOURNAL PUBLICATIONS**

<b>ID</b>	<b>Author(s)</b>	<b>Title of the Paper</b>	<b>Publication Details</b>
CSEJ-01	<b>B. Venkateswarlu; K. Madhuri</b>	Centralized Large Data Set Storage System with File Classification Technique	IJCEM International Journal of Computational Engineering & Management, ISSN: 2230-7893 (ISSN), 2017
CSEIJ-02	G. Desai. Goutam; <b>T.M. Rajesh</b>	Analysis on Moving Object Detection	International Journal for Science and Advance Research in Technology-IJSART, ISSN: 2395-1052 (2017)
CSEIJ-03	K. Ambeshwar; <b>T.M. Rajesh</b>	A Moving Object Recognition using Video Analytics	International Journal for Scientific Research and Development- IJSRD, 2321-0613 (ISSN)
CSEIJ-04	M. Vignesh; <b>T.M. Rajesh</b>	A Survey on Guaranteed Availability of Cloud Data with Efficient Cost	International Journal for Scientific Research and Development- IJSRD, 2395-1052 (ISSN), 2017
CSEIJ-05	<b>S.G. Shaila</b> ; A. Suma; F. Fayeqa; A. Vadivel	Analysis of Human Emotions Using Computational Geometry for Nose and Lips Facial Features	International journal of Advances in Electronics and Computer Science, 2394-2835 (ISSN), 2017
CSEIJ-06	K. Ambeshwar; <b>T.M. Rajesh</b>	A Survey on Moving Object Recognition using Video Analytics	International Journal of Engineering Research & Technology-IJERT, 2278-0181 (ISSN), 2017
CSEIJ-07	<b>B. Venkateswarlu</b> ; G.V. Soumya	Large Scale Data Storage and Retrieval System using Keywords for E-governance	International Journal on Future Revolution in Computer Science & Communication Engineering, 2454-4248 (ISSN), 2017
CSEIJ-08	M. Vignesh; <b>T.M. Rajesh</b>	Guaranteed Availability of Cloud Data with Efficient Cost	International Research Journal of Engineering and Technology -IRJET, 2395-0056 (ISSN), 2017
CSEIJ-09	Praveen Kumar Kenkere Vijay Moodkonaje <b>Krishnappa Banga</b> UdayaRani Vinayakamurthy Ballekatte Mallikarjunappa Thippeswamy	ZEMDC: Zone based Energy efficient Protocols In Wireless Sensor Networks	International journal of Intelligent Engineering and System, ISSN: 20934009, 2233940X, 2017
CSEIJ-10	<b>Mallanagouda Patil</b> , Rajashekhar C. Biradar	Media Access Control in Wireless Sensor Networks using Priority Index	Indonesian Journal of Electrical Engineering and Computer Science, ISSN: 2502-4752, 2017

CSEIJ-11	<b>Dr Reeja S. R</b>	A Survey on Secure Cross user Deduplication techniques on cloud storage	International journal of Engineering Research and Technology, ISSN: 2278-0182, 2017
----------	----------------------	---	---

### BOOK CHAPTERS

ID	Author(s)	Title of the Paper	Publication Details
CSEB-01	Pagadala P.K., Vikram M., Eswarawaka R., Reddy P.S.	Join operations to enhance performance in hadoop mapreduce environment	5th International Conference on Frontiers in Intelligent Computing Theory and Applications, FICTA 2016, ISSN: 9789811031557, 2017
CSEB-02	Behera N., Jeevitesh M.S., Jose J., Kant K., Dey A., Mazher J.	Higher accuracy protein multiple sequence alignments by genetic algorithm	International Conference on Computational Science ICCS 2017, 18770509, 2017
CSEB-03	Praveen Kumar K.V., <b>Banga M.K.</b> , Rani U., Thippeswamy B.M., Vanugopal K.R.	MEBOR: Multi-constraint energy balanced opportunistic routing in wireless sensor network	2016 International Conference on Electrical, Electronics, Communication, Computer and Optimization Techniques, ICEECCOT 2016, ISSN: 9781509046973, 2017
CSEB-04	Praveen K.K.V., Udaya R.V., <b>Banga M.K.</b> , Thippeswamy B.M., Venugopal K.R.	EBDRA: Energy balanced dynamic cluster routing approach for WSN	1st IEEE International Conference on Recent Trends in Electronics, Information and Communication Technology, RTEICT 2016, ISSN: 9781509007745, 2017
CSEB-05	<b>T.M. Rajesh</b>	Multilingual Signature Identification & Verification in Forgery domain	978-620-2-01967-5 (ISBN); 6202019670 (ISBN), LAMBERT Academic Publishing (Germany), 2017
CSEB-06	<b>Dr. Tamanna Jena</b>	Cloud Security and Jurisdiction: Need of the hour	International Conference on Frontiers in Intelligent Computing: Theory and Application, Advances in Intelligent Systems and Computing (FICTA), ISSN: 978-981-10-3153-3, 2017
CSEB-07	<b>Dr Rajesh T.M</b>	A Survey on Moving Object Recognition using Video Analytics	ICPCN – 2017, ISSN: 2278-0181, 2017

**Department  
Of  
Electronics and Communication Engineering  
School of Engineering  
JOURNAL PUBLICATIONS**

ID	Author(s)	Title of the Paper	Publication Details
ECEJ-01	Arun Samuel T.S., Arumugam N., Chandra S.T.	Analytical approach and simulation of GaN single gate TFET and gate all around TFET	ECTI Transactions on Electrical Engineering, Electronics, and Communications, ISSN: 16859545, 2017
ECEJ-02	K. Ezhilarasan; D. Jayadevappa; <b>S. PushpaMala</b>	PERFORMANCE ANALYSIS OF IMAGE COMPRESSION BASED ON FAST FRACTIONAL WAVELET TRANSFORM COMBINED WITH SPIHT FOR MEDICAL IMAGES	ICTACT Journal on Image and Video Processing, ISSN: 0976-9102, 2017
ECEJ-03	Manjunatha K.N., <b>Meshram V.A.</b>	Design and FPGA implementation of power efficient turbo decoder for 4G LTE standards	International Journal of Applied Engineering Research, ISSN: 9734562, 2017
ECEJ-04	P.L. Shreenidhi; <b>C. Puttamadappa</b>	Distributed Efficient Channel Allocation technique for Multi radio Multi Channel Interference aware Multi path routing protocol in Wireless mesh Networks	International Journal of Scientific Engineering and Technology, ISSN: 2277-1581, 2017
ECEJ-05	<b>Basavaraj R.B.</b> , Nagabhushana H., Prasad B.D., Sharma S.C., Venkatachalaiah K.N.	Mimosa pudica mediated praseodymium substituted calcium silicate nanostructures for white LED application	Journal of Alloys and Compounds, ISSN: 9258388, 2017

**BOOK CHAPTER**

ID	Author(s)	Title of the Paper	Publication Details
ECEB-01	Anil Kumar B.K., Ananthaprasad M.G., Gopalakrishna K.	Effect of Cryogenic Chill on Dendrite arm spacing, Ultimate tensile strength and Hardness of ASTM A 494 M Grade Nickel Alloy Metal Matrix Composites	Materials Today: Proceedings, ISSN: 22147853, 2017
ECEB-02	Padmavati S., <b>Meshram V.</b> , Jayadevappa	PERFORMANCE ANALYSIS OF A hardware implementation of discrete wavelet transforms for compression of a natural image	2017 International Conference on Algorithms, Methodology, Models and Applications in Emerging Technologies, ICAMMAET 2017, ISSN: 9781509033782, 2017
ECEB-03	<b>Meshram V.A.</b>	Automatic segmentation of brain MRI images and tumor detection using morphological techniques	2016 International Conference on Electrical, Electronics, Communication, Computer

ID	Author(s)	Title of the Paper	Publication Details
			and Optimization Techniques, ICEECCOT 2016, ISSN: 9781509046973, 2017
ECEB-04	Belavadi S.S., Malik V., Udayakumar T., Srinivas A., Mohan R.	IoV based dynamic batch formation and scheduling technique for driverless vehicles	TENSYP 2017 - IEEE International Symposium on Technologies for Smart Cities, 2017 IEEE International Symposium on Technologies for Smart Cities, TENSYP 2017, ISSN: 9781509062553, 2017

**Department  
Of  
Mechanical Engineering  
School of Engineering  
JOURNAL PUBLICATIONS**

<b>ID</b>	<b>Author(s)</b>	<b>Title of the Paper</b>	<b>Publication Details</b>
MEJ-01	Anil Kumar B.K., Ananthaprasad M.G., Gopala Krishna K.	Fractography of cryogenic chill casted ASTM A 494 M grade nickel alloy metal matrix composites	International Journal of Mechanical Engineering and Technology, ISSN: 9766340, 2017
MEJ-02	Anand Kumar S., Satish Kumar P., Ganesh Sundara Raman S., Sankara Narayanan T.S.N.	Influence of SMAT Parameters on Microstructural and Mechanical Properties of Al-Mg-Si Alloy AA 6061	Journal of Materials Engineering and Performance, ISSN: 10599495, 2017
MEJ-03	Kumar R.E., Kamaraj M., Seetharamu S., S. A.K.	A pragmatic approach and quantitative assessment of silt erosion characteristics of HVOF and HVAF processed WC-CoCr coatings and 16Cr5Ni steel for hydro turbine applications	Materials and Design, ISSN: 2641275, 2017

**BOOK CHAPTER**

<b>ID</b>	<b>Author(s)</b>	<b>Title of the Chapter</b>	<b>Publication Details</b>
MEBC-01	Anand Kumar S., Sundar R., Ganesh Sundara Raman S., Gnanamoorthy R., Kaul R., Ranganathan K., Bindra K.S.	Effects of laser peening on fretting wear behaviour of alloy 718 fretted against two different counterbody materials	Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, ISSN: 13506501, 2017

**College of Biological Sciences**  
**SCHOOL OF BASIC AND APPLIED SCIENCES**  
**JOURNAL PUBLICATIONS**

<b>ID</b>	<b>Author(s)</b>	<b>Title of the Paper</b>	<b>Publication Details</b>
BIOJ-01	Janardhan, B., Shrikanth, V. M., Dhananjaya, B. L., Gautham, S. A., More, S. S., & Uday, M.	In vitro and in vivo screening of antivenom activities of Vipera russelli venom by Azima tetracantha ethyl acetate extract	Journal of Pharmacy Research, ISSN: 0974-6943, 2017
BIOJ-02	Lincoln, L., & More, S. S.	Agro-Wastes as Substrates for Extracellular Beta-D-Fructofuranosidase production from Soil Aspergillus Sp.	Research Journal of Pharmaceutical, Biological and Chemical Sciences, ISSN: 0975-8585, 2017
BIOJ-03	Lincoln, L., & More, S. S.	Screening and Enhanced Production of neutral invertase from Aspergillus sp. by utilization of Molasses–A by-product of Sugarcane industry	Advances in Bioresearch, ISSN: 2277-1573, 2017
BIOJ-04	Mahesh, N.M., & Sharma, A	Identification and characterization of bacteria isolated from the gut of metal treated earthworms	International Journal of Scientific and Research Publications, ISSN: 2250-3153, 2017
BIOJ-05	Das, J., Dey, P., Chakraborty, T., Saleem, K., Nagendra, R., & Banerjee, P.	Utilization of marine industry derived collagen hydrolysate as peroxide inhibition agents in lipid-based food	Journal of Food Processing and Preservation, ISSN: 1745-4549, 2017
BIOJ-06	Mukherjee, N., Vayeda, D. R., Spoorthi, B. C., & Maiti, A. K.	Neurotherapeutic efficacy of nutraceuticals in combating Parkinson's disease: A promising alternative.	Journal of Pharmacy Research, ISSN: 0974-6943, 2017
BIOJ-07	Jayanna, S. K., Kushalatha, M., Nayak, M. M., & Gautham, S. A.	Biodegradation of PCB congener (2,4, Dichlorophenyl) by Micrococcus sp. Isolated from transform oil contaminated soil	European Journal of Biomedical and Pharmaceutical Sciences, ISSN: 2349-8870, 2017
BIOJ-08	Ramesh, G., Joshi, P. S., Packiyam, J. M., & Jayanna, S. K.	Biosynthesis and characterisation of silver nanoparticles from grape (vitis vinifera) seeds and study on antibacterial activity	INTERNATIONAL JOURNAL OF CURRENT RESEARCH IN CHEMISTRY AND PHARMACEUTICAL SCIENCES, ISSN: 2348-5221, 2017
BIOJ-09	Manjunatha K.S., Manu C.P., Satyanarayan N.D., Vinay K.N., Vineetha M.S., Sunil More S.	Acetylcholinesterase inhibitory effect of 3-(1h-indol-3-yl)-1, 3-diphenylpropan-1-one derivatives	Asian Journal of Pharmaceutical and Clinical Research, ISSN: 9742441, 2017
BIOJ-10	Choudhari S., Habimana O., Hannon J., Allen A., Cummins E., Casey E.	Dynamics of silver elution from functionalised antimicrobial nanofiltration membranes	Biofouling, ISSN: 8927014, 2017

BIOJ-11	Banerjee P., Das J.	Biomimetic synthesis of nanocrystalline hydroxyapatite from sharkskin collagen	Bioinspired, Biomimetic and Nanobiomaterials, ISSN: 20459858, 2017
BIOJ-12	Das J., Dey P., Banerjee P.	Redesigning nature: To be or not to be?	Current Science, ISSN: 113891, 2017
BIOJ-13	Shwetha V., More S.S., Uday M.	Screening, optimization and production of a novel $\beta$ -cyclodextrinase by <i>Bacillus flexus</i> MSBC 2	Current Trends in Biotechnology and Pharmacy, ISSN: 9738916, 2017
BIOJ-14	Dhara K., Saha N.C., Maiti A.K.	Studies on acute and chronic toxicity of cadmium to freshwater snail <i>Lymnaea acuminata</i> (Lamarck) with special reference to behavioral and hematological changes	Environmental Science and Pollution Research, ISSN: 9441344, 2017
BIOJ-15	Jose G., Suresha Kumara T.H., Sowmya H.B.V., Sriram D., Guru Row T.N., Hosamani A.A., More S.S., Janardhan B., Harish B.G., Telkar S., Ravikumar Y.S.	Synthesis, molecular docking, antimycobacterial and antimicrobial evaluation of new pyrrolo[3,2-c] pyridine Mannich bases	European Journal of Medicinal Chemistry, ISSN: 2235234, 2017
BIOJ-16	Vineetha M.S., Janardhan B., More S.S.	Biochemical and pharmacological neutralization of Indian saw-scaled viper snake venom by <i>Canthium parviflorum</i> extracts	Indian Journal of Biochemistry and Biophysics, ISSN: 3011208, 2017
BIOJ-17	Lincoln L., More S.S.	Bacterial invertases: Occurrence, production, biochemical characterization, and significance of transfructosylation	Journal of Basic Microbiology, ISSN: 0233111X, 2017
BIOJ-18	Reddy S.V., More S.S., Annappa G.S.	Purification and properties of beta-cyclomaltodextrin glucanotransferase from <i>Bacillus flexus</i> SV 1	Journal of Basic Microbiology, ISSN: 0233111X, 2017
BIOJ-19	Maiti A.K., Saha N.C., More S.S., Panigrahi A.K., Paul G.	Neuroprotective Efficacy of Mitochondrial Antioxidant MitoQ in Suppressing Peroxynitrite-Mediated Mitochondrial Dysfunction Inflicted by Lead Toxicity in the Rat Brain	Neurotoxicity Research, ISSN: 10298428, 2017
BIOJ-20	Cascon H.R., Choudhari S.K.	Pervaporative transport mechanisms in phosphonium ionic liquid-based supported liquid membrane and its stability with actual fermentation broth feed	Separation Science and Technology (Philadelphia), ISSN: 1496395, 2017

## BOOK CHAPTERS

BIOB-01	Anil Kumar M.R., Nagaswarupa H.P., Prashantha S.C., Channakeshavalu K., Anantharaju K.S., Nagabhushana H., Sharma S.C., Vishnu Mahesh K.R.	UV - Sun light Photocatalytic and photoluminescence Studies of Rare-Earth-Doped (Sm <sup>3+</sup> ) MgO nanopowders by Aloe Vera gel	Materials Today: Proceedings, ISSN: 22147853, 2017
BIOB-02	Shashikala B.S., Premkumar H.B., Darshan G.P., Nagabhushana H., Sharma S.C., Prashantha S.C., Nagaswarupa H.P.	Synthesis and Photoluminescence Studies of an Orange Red Color Emitting novel CaAl <sub>2</sub> O <sub>4</sub> : Sm <sup>3+</sup> nanophosphor for LED Applications	Materials Today: Proceedings, ISSN: 22147853, 2017
BIOB-03	Udayabhanu, Nagabhushana H., Suresh D., Rajanaika H., Sharma S.C., Nagaraju G.	Hydrothermal Synthesis of TiO <sub>2</sub> -rGO by Green Chemical Method	Materials Today: Proceedings, ISSN: 22147853, 2017
BIOB-04	Ashwini K.R., Premkumar H.B., Darshan G.P., Nagabhushana H., Sharma S.C., Prashantha S.C., Nagaswarupa H.P.	Synthesis and Photometric Properties of SrAl <sub>2</sub> O <sub>4</sub> : Gd <sup>3+</sup> Nanophosphors via Solution Combustion Method	Materials Today: Proceedings, ISSN: 22147853, 2017
BIOB-05	<b>Maiti, A; Linden, S</b>	Vasoactive Intestinal Peptide Protects Mitochondria in Colon Epithelia Against Proinflammatory Cytokines in Citrobacter Rodentium Infection: Implications in Inflammatory Bowel Disease	Advances-in-Inflammatory-Bowel-Diseases-Crohn's-and-Colitis Foundation's National Clinical and Research Conference, ISSN: 1078-0998, 2017
BIOB-06	<b>Anu Sharma</b>	Encyclopaedia of Animal Cognition and Behaviour, edited by Jennifer Vonk and Todd K. Shackelford, Springer Nature Publications.	Assortment, ISBN: 978-3-319-55064-0, 2017
BIOB-07	<b>Anu Sharma</b>	Encyclopaedia of Animal Cognition and Behaviour, edited by Jennifer Vonk and Todd K. Shackelford, Springer Nature Publications.	Allele sharing, ISBN: 978-3-319-55064-0, 2017

**College of Pharmaceutical Sciences**  
**SCHOOL OF HEALTH SCIENCES**  
**JOURNAL PUBLICATIONS**

<b>ID</b>	<b>Author(s)</b>	<b>Title of the Paper</b>	<b>Publication Details</b>
PHSJ-01	Rekha S, Chandrashekhara S.	Antioxidant activity of 5-(substituted benzylidene) thiazolidinedione derivatives	World Journal of Pharmaceutical Research, ISSN: 2277-7105, 2017
PHSJ-02	B. Shanaz; V.L. Ashokababu; L. Jenita. Josephine; K.B. Premakumari; D. Manjula	Preliminary phytochemical screening and evaluation of anti-inflammatory activity of methanolic extract of Barleria cristata Linn. Roots in experimental animals	Der Pharma Chemica, ISSN 0975-413X, 2017
PHSJ-03	S. Rekha; S. Chandrashekhara	Novel substituted thiazolidinedione derivatives as anti-diabetic agents	European Journal of Pharmaceutical and Medical Research, ISSN 2394-3211, 2017
PHSJ-04	F. Jaferi; P. Pandit; K.M. Geetha; R. Susheela; S. Bhavana; R. Aarathi	A prospective study on gastric bleeding and drug interactions associated with anticoagulant therapy at cardiology department of a tertiary care hospital	Indo american journal of pharmaceutical sciences, ISSN 2456-2165, 2017
PHSJ-05	K.B. Premakumari; V. Murugan; V. Ezhilarasan; S.R. Joseph	Simultaneous Determination of Paracetamol, Aceclofenac and Chlorzoxazone in Pharmaceutical Dosage Form by UHPLC Method	Journal of Chromatography and Separation Techniques, 2157-7064 (ISSN), 2017
PHSJ-06	Rekha S., Chandrashekhara S.	Insilico proportional molecular docking study and analysis of insulinotropic activity of TZD derivatives by PPAR $\gamma$ activation	Journal of Pharmaceutical Sciences and Research, ISSN: 9751459, 2017
PHSJ-07	S. Chandrashekhara; S. Rekha	Comparitive antioxidant activity of three herbal extracts	World Journal of Pharmaceutical Research, ISSN 2277-7105, 2017

## BOOK / BOOK CHAPTERS

PHSB-01	Shanaz Banu	Analgesic activity studies on the root of <i>Ecbolium viride</i> (Forssl) Alston	8th Asian Association of Schools of Pharmacy conference, 2017
PHSB-02	Dr.K.B. Premakumari	Simultaneous determination of moxifloxacin and loteprednol etabonate in pharmaceutical dosage form by UHPLC method	UGC sponsored seminar on Emerging trends in pharmaceutical and life sciences, 2017
PHSB-03	Dr.K.B. Premakumari	RP-UPLC method for the simultaneous estimation of paracetamol and zaltoprofen in combined dosage form	1st Pharmaceutical Sciences Congress, Bengaluru-Connecting Pharmaceutical Sciences and knowledge Advancement, 2017
PHSB-04	P. Sivakami Sundari	Chemical composition and anti-diarrhoeal activity of seeds of <i>Gauzuma ulmifolia</i> Lam.	Indian Association of Colleges of Pharmacy's 1st Pharmaceutical Science Congress-2017
PHSB-05	Dr. B. Wilson	Formulation and in vitro evaluation of albumin nanoparticles of oxaliplatin	8th AASP Conference, 2017
PHSB-06	Dr. Kalpana Divekar	Synthesis of new pyrazolines as possible cytotoxic agents	8th AASP Conference, 2017
PHSB-07	Dr. Geetha KM	Antiepileptic activity of a bioactive compound isolated from <i>Viscum articulatum</i> Burm in experimentally induced convulsions in rats	8th AASP Conference, 2017

## Funded Research Projects

SL. NO	Project Title	Funding Agency	Principal Investigators	Project Duration	Total (Estimated in lakhs)	Dept. / School
1	Investigations on reduced graphene oxide in the aspect of its possible application for the development of a radiation sensor.	SERB	Dr. Baishali Garai	2016-17 (3.5 Years)	35.98	SOE-PHYSICS
2	Design and development of a miniaturized low-cost graphene-based radiation detector for space applications	ISRO-RESPOND	Dr. Baishali Garai	2017-18 (3 Years)	18.94	
3	Functionalized meso/microporous nanostructured metal oxides sensor for screening dispersed heavy metal ions: One-shot disposable sensor strips.	DST-SERB	Dr. Ashoka S	2017-18 (3 Years)	26.45	SOE-CHEMISTRY
4	Crystal Engineering Of Nutraceuticals As New Chemical Entities	DST-SERB	Dr.K. Anand solomon	2016-17 (3 Years)	30.98	
5	Immobilized microbial consortium for pesticide bioremediation in ginger cultivated soils of Karnataka	Vision Group on Science and Technology - KFIST Level (1)	Dr. Shobha K. Jayanna	2017-18 (2 Years)	20.00	SBAS
<b>Total Funding: INR 132.35 Lakhs</b>						

## Consultancies & Trainings

<b>Sl. No.</b>	<b>Name of the Faculty</b>	<b>Consultancy Awarded Agency</b>	<b>Type of work</b>
1.	Dr. Sreenivasa Rao Amaraneni	BRAQUA CHEMS	Development of water testing kits for the seven-water quality parameters includes BIO TEST KIT
2.	Dr. Sreenivasa Rao Amaraneni	Aquamark	Water Quality Monitoring in Bangalore
3.	Dr. Sreenivasa Rao Amaraneni	Aqua diagnostics Ltd Bangalore	ANALYSIS OF CALCIUM & MAGNESIUM
4.	Payal Varma	E&CE	Electronics and communication systems
5.	Jasma Balasangameshwara	KVAFSU	Educational technology in CSE

## Summary of Publications, Sponsored Projects & Consultancies

**2017-2018**

<b>Schools</b>	<b>School of Engineering</b>	<b>School of Basic &amp; Applied Sciences</b>	<b>School of Allied Health Sciences</b>	<b>TOTAL</b>
Journal Publications	29	20	07	56
Book Chapter(s)	12	07	07	26
Sponsored Projects	<b>05</b> <b>ISRO: 01</b> <b>DST: 03</b> <b>VGST: 01</b>			<b>05</b>
Consultancies Trainings	<b>03</b> <b>02</b>			<b>05</b>