B.M.S. COLLEGE OF ENGINEERING, BANGALORE-19

(Autonomous College under VTU)

DEPARTMENT OF CHEMISTRY

Activities of the Year 2019

1. Dr. Sampath Chinnam & Mrs. S. Sangeetha Assistant Professor, Department of Chemistry, Attended the Youth Convention on "Effectiveness of Education" organized by Sri Ramakrishna Students' Visvesvarapura, Bengaluru as part of Centenary Celebrations on 02 August 2019.
2. The department of Chemistry and Biotechnology, in association with FET MJP Rohilkhand University organized two days national symposium on 'Recent Developments in Infectious Diseases-REDIND-2019' on August 23-24, 2019. This event was inaugurated by Prof. Dr. Utpal Tatu, Professor of Biochemistry, IISc, Bengaluru and concluded by Dr. Shama Bhat, Chairman & Managing director, Bhat Biotech (P) Ltd, Bengaluru. The symposium witnessed 154 participants, 9 oral presenters and eight delegates including premier institutes and industry who spoke on several aspects related to infectious disease research, vaccine development, Government initiatives, diagnostic kits and new modalities on emerging/re-emerging infections.

3. M. S. Dharmaprakash Professor Department of Chemistry published a research paper titled "Influence of reactive SiO_2 and Al_2O_3 on mechanical and durability properties of geopolymers" published in Asian Journal of Civil Engineering Building and Housing, ISSN 1563-0854, Asian J Civ Eng., DOI 10.1007/s42107-019-00167-5.
4. PhD – Thesis defense, viva voce examination of Mr.Dinesh H T, Research Scholar was held on 23rd Aug'2019; Thesis title;"Characterisation, Alkali activation & Engineering Application of pozzolanas for producing Geopolymers" under the guidance of Dr. M S Dharmaprakash.
5. Dr. M S Dharmaprakash, Professor Department of Chemistry published a research paper titled "Synthesis of Cerium-Doped Zirconia Nanoparticles for the Electrochemical Detection of Dopamine by Modified Carbon Paste Electrode" journal name Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim *ChemistrySelect Year July* 2019, vol: *4*, Pg no. 5839–5844
6. Dr. Madhu G, Assistant Professor, Department of Chemistry, has reviewed a manuscript titled "High diastereoselective four-component synthesis of polysubstituted 2-piperidinones with three and four stereogenic centers" in 'Research on Chemical intermediates', published by Springer, an SCI journal with impact factor of 2.06 on 26 July 2019.

7. Dr. G. S. Ananthnag, faculty, Department of Chemistry published a research paper titled “Nonlinear reverse saturation absorption, self-defocusing behavior and structure-property relationship of a novel 2,3,4-trimethoxy-4'-nitrochalcone single crystal” in the “Journal of Molecular Structure” web of science indexed journal with impact factor 2.12 published by Elsevier. Year: 2019, Vol: 1193, Pages: 177-184.
8. Dr. M S Dharmaprakash, Professor, Department of Chemistry attended one day review of project activities of Institutes of expenditure, accreditation, performanve benchmarks etc, conducted at Dr. AIT, Bengaluru on 22nd July, 2019.
9. Dr. Kalyan Raj, Associate Professor and HOD and Dr. M S Dharmaprakash, Professor, Department of Chemistry deputed as a resource person for Induction programme organized by our mentee Institute FET MJP Rohilkhand University, Bareilly on July 28th to 31st 2019.
10. Dr. Madhu G, Assistant Professor, Department of Chemistry has reviewed a journal manuscript titled "Design, synthesis and in vitro anti-tumor activity evaluation of 3,5-Diamino-N-substituted benzamide derivatives as novel GSK-3β small molecule inhibitors" in 'Chemistry & Biodiversity' published by Wiley-VHCA on June 18, 2019"
11. Mrs. Madhuri P. Rao, PhD student in the department of Chemistry and Dr. Madhu G, Assistant Professor, department of Chemistry participated in 'one day workshop on “ Research Methodologies and Latex” organized by VTU e-learning centre, Mysuru from 19th -21st June 2019 @ Don Bosco Institute of Technology, Bengaluru.
12. 'Mrs. Madhuri P. Rao, PhD student in the department of Chemistry and Dr. Madhu G, Assistant Professor, department of Chemistry participated in 'one day NMR symposium and users meeting' organized by Sophisticated analytical instrument facility (SAIF), IISc, Bengaluru held on June 27, 2019 and delivered a talk titled 'Diastereoselective [3+2]-cycloaddition of oxindoles with a,b-disubstituted nitroethylenes: regioreversed spiropyrrolidines posed potent MRSA activity.
13. Dr. K L Nagashree, Assistant Professor Department of Chemistry, published a research Paper title "Electrochemical detection of nitrite at $NiFe_2O_4$ nanoparticles synthesised by solvent deficient method" Journal name- Electrochimica Acta, volume-317, year-June 2019, page numbers-701-710
14. Dr. Srinidhi R, Assistant Professor Department of Chemistry, published a research Paper title “High-sensitivity detection of H_2S by In_2O_3/C composite prepared by inert-ambient sealed-tube pyrolysis” Journal name - Applied Sciences, volume-1, year-June 2019, page numbers-719
15. Dr. Srinidhi R and Smt. S Sangeetha, Assistant Professor Department of Chemistry, published a research Paper title “Electrochemical sensing and photocatalytic degradation of methylene blue (MB) dye by cobalt-beta hydroxy benzoate complex” Journal name - Materials Science in Semiconductor Processing, volume-101, year-June 2019, page numbers- 164-173.

16. Dr. Ananthnag G. S., faculty, Department of Chemistry published a research paper titled “Catechol and 1,2,4,5-tetrahydroxybenzene functionalized cyclodiphosphazane ligands: synthesis, structural studies, and transition metal complexes” in the Journal “Dalton Transactions” a Q1 journal with impact factor 4.052 published by Royal Society of Chemistry, London. Year: June 2019, Vol: 48, Page: 3610-3624.
17. Dr.Ananthnag G. S. faculty, Department of Chemistry published a research paper titled “Nonlinear reverse saturation absorption, self-defocusing behavior and structure-property relationship of a novel 2,3,4-trimethoxy-4'-nitro chalcone single crystal” in Journal of Molecular Structure, 2019, Vol-1193, Page-177-184, May 2019 publisher Elsevier B.V.
18. Dr. K L Nagashree, Assistant Professor Department of Chemistry, attended Group Monitoring meeting of the project (ECRA of SERB) present the progress and outcomes of the project held on 07.05.2019 at Victor Menezes Convention centre, IIT Bombay.
19. Dr. Kalyan Raj, Associate Professor Department of Chemistry, nominated to attend Professional development training programme (PDT) held at IIM, Udaipur during May 27-31, 2019.

20. Dr.Kalyan Raj, Associate Professor, Department of chemistry has delivered a guest lecture on the topic “Application of Science in Engineering on 10-4-2019 at T.John Institute of technology, Bengaluru.

21. Dr. Kalyan Raj and Suresha N, Research Scholar, presented a research paper title “Mechanistic chemistry of oxidation of prilocaine hydrochloride by chloramine – Bin presence of $HclO_4$ & NaOH (catalyzed by O_5O_4) kinetic appliances” an 2nd National Conference on “Material science and applications” held on 4th May 2019 organized by the Department of Chemistry, SJB Institute of Technology, Bengaluru.
22. Dr. C Sampath , Asst Professor, Department of chemistry, published a research article “An analysis of spectroscopic signatures, DFT calculations, and anti-bacterial activity of newly synthesized Cu(II) and Pd(II) complexes of 2-aminoquinolin-8-ol and 2-(naphthalen-1ylmethyl)-4,5-dihydro-1H-imidazole”. J. Indian Chem. Soc. Vol 96, May 2019, pp-1-8.
23. Dr. C Sampath, Asst Professor, Department of chemistry, published a research article “An efficient one-pot green synthesis, and anti-viral activity of novel Alpha-Diaminophosphonates. Phosphorus, Sulfur, Silicon and the Related Elements. Available online 2019.
24. Dr. Vijayendra S. Shetti of Chemistry department published a research article " Telluraporphyrinoids: an interesting class of core-modified porphyrinoids" in Dalton Transactions (Volume 48, page 4444-4459) published on April 2, 2019 (Q1 journal, Clarivate Analytics).
25. Dr. M S Dharmaprakash, Professor, Department of Chemistry has been accorded permission for having conducted student learning assessment held from 26.03.2019-28.03.2019 at Dr. B R Ambedkar Institute of Technology, Pahargaon, port Blair, Andaman & Nicobar Islands as a 3rd party proctor assigned by NPIU, TEQIP.
26. Dr. Dharmaprakash M S, Professor was deputed as a resource person to conduct the “Three days Technical Seminar/workshop on Materials, Material Characterization and Processing” on February 14-16, 2019 at the TEQIP-III mentee institute MJP Rohilkhand University, Bareilly, UP.

27. February 15, 2019: Dr. Dharmaprakash M S, Professor, Department of Chemistry delivered a special talk on “Nanomaterials Synthesis Techniques” as a resource person in “Three days Technical Seminar/Sessions on Materials, Material Characterization and Processing” in the mentee institute, MJP Rohilkhand University, Bareilly, UP.
28. February 16, 2019: Dr. Dharmaprakash M S, Professor, Department of Chemistry delivered a special talk on “Characterization of Nanomaterials using XRD, SEM and TEM” as a resource person in “Three days Technical Seminar/Sessions on Materials, Material Characterization and Processing” in the mentee institute, MJP Rohilkhand University, Bareilly, UP.
29. February 16, 2019: Dr. M S Dharmaprakash, Professor, Department of Chemistry, BMSCE and Dr. Murugendrappa M V, Associate Professor Head, Department of Physics, BMSCE and interacted with HOD-Chemistry and HOD-Physics along with other faculty members of MJP Rohilkhand University, Bareilly for possible collaboration of research.

30. Department of Chemistry in association with Physics and Mathematics department celebrated National Science day on 28.02.2018, by Scientific talk with the titled :“ Glimpses of the journey of Science” by Dr. H S Nagaraja, Founder director BASE Bengaluru.