Annual report of Departmental Activities 2018-19.

Department secured a pass percentage of 96 and 92 in BSc and MSc respectively during the academic year 2017-18.

The Department of Chemistry, NSS College, Nemmara organized the twoday programme 'CHEMWED 2018' - as part of the World Environment Day 2018 - Celebrations, with the financial assistance from Kerala State Council for Science, Technology and Environment, Thiruvananthapuram on 21.06.2018 and 22-06-2018. The programmes commenced with the Documentary show based on Environmental pollution conducted on 21.06.2018 by the faculties of Department of Chemistry, N.S.S College Nemmara with the leadership of Dr Ambili V K, Assistant Professor and Coordinator of the programme in the seminar hall of the college. In which students from various Departments of N.S.S College Nemmara participated. Three documentaries were included in the show. In the Essay Competition based on the theme 'Plastic Pollution and Environmental Hazards' conducted from 1.30 p.m. to 3.00 p.m. of the same day in which 20 students participated from various Departments of N.S.S College Nemmara. Gokul M, Dept. of Botany won first prize. Akshitha Ajith of Dept. of Malayalam was adjudged as second. With an aim to generate awareness among the students, academia and general public about the importance of World Environment Day, a seminar on pollution related topics was conducted on 22-06-2018. Dr K. Padmakumar, Assistant Professor, Dept. of Chemistry, Govt. Victoria College, Palakkad inaugurated the function. Dr. E B Sureshkumar, Principal NSS College, Nemmara presided over the function. The welcome address was given by Dr. Ambili V K, Coordinator and head of the Department of chemistry, NSS College, Nemmara. The head of the Department of History, Prof. Thulasi K A, Prof. Sreeja G, from Department of English gave away

the felicitations. Dr. Priya S, Assistant Professor of Chemistry accredited vote of thanks. First section commenced with a lecture on "Plastic Pollution" was given by Dr K. Padmakumar, Assistant Professor, Dept. of Chemistry, Govt. Victoria College, Palakkad. Dr R. Manu, Assistant professor, Dept. of Chemistry, Sree Vyasa NSS College, Wadakkanchery handled the afternoon session which was based on the topic "Resources and Environmental Issues".

Department Coordinated an industrial visit to Malabar Cements Limited Palakkad for the final year degree students as a part of their curriculum on 27.12.2018.

Department conducted PTS meetings for all batch students in December 2019.

Department conducted a two day seminar on 25.3.2019 and 26.3.2019 with the financial support from PTA of the college. First day of the seminar covered a detailed class handled by Dr Padmakumar K and a hands on training session handled by Dr Ramesh A R on Computational Chemistry. The topic discussed in the second day was "An interface of Scientific Research and Innovations- Indian Perspective". The class was handled by Dr R Manu.

Department also provided technical support for water analysis in Kollengode Panchayath carried out by the NSS units of the college. Important parameters monitored were hardness, iron and phosphate presence and pH of water. Analysis were carried out in the flood affected area and its premises. To study the effect of hardness on health, health survey analysis were done. Students have also conducted an awareness of health issues of using hard water.





Annual report of Departmental Activities 2019-20.

Department secured a pass percentage of 97 and 100 in BSc and MSc respectively during the academic year 2018-19. Two of our previous batch MSc student (16-18) secured UGC-NET during this year.

Department organized a one day seminar CHEMZONE in relation with ozone day celebrations 2019 with the financial support from KSCSTE on 23.9.2019. Dr Anoop S Nair was the Coordinator of the seminar. The seminar associated with two invited lectures by Dr Suja Haridas from CUSAT Cochin and by Dr Vinayakan R from N.S.S Hindu College Changanassery. A documentary show on the topic Ozone Depletion was also conducted for the students of various departments. The programme involved planting of 32 tree saplings in the college campus. It was followed by an oath taking ceremony lead by the programme coordinator.

Department Coordinated an industrial visit for the final year degree students as a part of their curriculum from 10.12.19 to 12.12.19. As part of the revised curriculum of 2019 Admission M.Sc. Chemistry Course, field visit to academic institutions or to any R&D center is made mandatory. To fulfil this, a field visit to Integrated Rural Technology Centre (IRTC), Palakkad with a team of 11 Students and 2 faculties were organized by the department.

Department conducted PTS meetings of BSC chemistry students on 27.08.2019, 14.11.2019 and 15.11.2019 for final year, first year and second year respectively. Respected Principal of NSS College Nemmara Dr S Venugopal inaugurated the meeting and addressed the parents. All department faculties interacted with parents. Parents also made comments about the student's progress.

Department also conducted CONCEPT TEST IN CHEMISTRY - CONTECH 2019-20 (2nd phase) examination for the BSc students, which was aimed to improve

their performance in national level tests. The programme was conducted in association with Association of Chemistry Teachers (ACT), C/o Homi Bhabha Centre for Science Education (HBCSE), TIFR, Mumbai. Dr Ambili V K was the coordinator of the programme and 18 students participated in the examination. All the participants got certificates from ACT according to their performances.

Department conducted a one day seminar NSD-2020 in connection with National Science Day Celebrations 2020 on 2.3.2020 with the financial support from PTA of the college. A Soap making unit was started by the Department which was inaugurated by Sri Jiju M R from S.N College Alathur. An invited talk was also delivered by him for the students of various departments. UGC- NET holders from the department were honored in the seminar.

The department put forward its steps for preventing COVID 19 spread by preparing sanitizer and distributed to various departments, labs, exam halls, office etc. We were also distributed it to the nearby bus stops, autoriksha stands, canteen, post office, hotels etc.

Department also provided technical support for making sanitizers to various charitable federations near to the college, they distributed it to hospitals, police stations, etc.

Department took initiative for online classes for both BSc and MSc students to complete balanced portions, which couldn't be completed due to lockdown. Video lectures were uploaded in the online platform created by the department.





CONTECH 2019



SCIENCE DAY SEMINAR







ഇത് ഞങ്ങൾ പരീക്ഷണാടിസ്ഥാനത്തിൽ നിർമ്മിച്ച സാനിറ്റൈസർ കൊല്ലങ്കോട് ഗവ.ആശുപത്രിയിലെ ഡോക്ടർക്ക് കൈമാറുന്നു..









24 മണിക്കൂറിൽ നെന്മാറ മണ്ഡലത്തിലെ സാനിറ്റെസറിന് ക്ഷാമം നേരിട്ട വിവിധ #ആശുപത്രികളിൽ, #പാലീസ് സ്റ്റേഷനുകളിൽ, എന്തിനേറെ പറയുന്നു -#കേരള അതിർത്തിക്ക് അപ്പുറത്തുള്ള #തമിഴ്നാട്ടിലെ പോലീസിനും, ആരോഗ്യ വകുപ്പിനും വരെ #സാനിറ്റൈസറും മഹാമാരിയ്ക്കെതിരായ പോരാട്ടത്തിൽ സർക്കാറിനൊപ്പം ചേരുകയാണ്.. ഇനിയും #പുതിയ മാതൃകകൾ സൃഷ്ടിക്കാൻ.. ഈ ഉദ്യമത്തിൽ ഞങ്ങളെ സഹായിച്ച #നെമ്മാറ #NSS കോളേജിലെ കെമിസ്ട്രി വിഭാഗം ഹെഡ് ശ്രീമതി. #അമ്പിളി ടീച്ചർക്കും, ഞങ്ങൾക്കായി കോളേജ് അനുവദിച്ച പ്രിയപ്പെട്ട

#പ്രിൻസിപ്പാളിനും ഹൃദയാഭിവാദ്യങ്ങൾ..

Technical support for sanitizer making

Annual report of Departmental Activities 2020-21.

Department secured a pass percentage of 89 and 100 for BSc and MSc respectively during the academic year 2019-20. One of our MSc student Gopika U got CSIR – Summer Research Fellowship during this academic year.

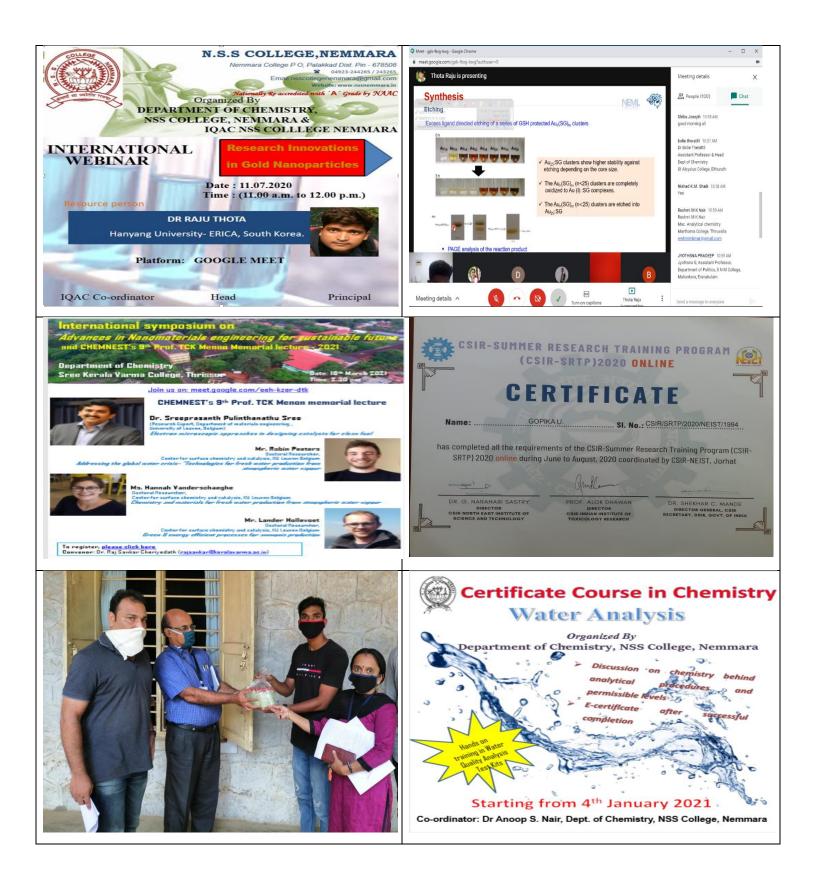
An international webinar on Research Innovations in Gold Nanoparticles was conducted by Department of Chemistry and IQAC on 11.07.2020 inorder to inculcate research aptitude among PG and UG students of Chemistry. Faculties and students from different Universities of Kerala and Tamilnadu participated in the programme. Dr Raju Totta, Post-doctoral fellow Hanyang University, Erica South Korea was the resource person. On the inaugural function Principal and IQAC Co-Ordinator emphasised the importance of research and application in the field of science. Head of department Dr Ambili V K offer Presidential address and entire programme was co-ordinated by Dr. Priya S. The entire programme was very interactive and speaker answered the queries raised by the audience. Dr. Anoop S. Nair, proposed vote of thanks.

The final year degree students and first year MSc students attended an international symposium on Advances in Nanomaterials engineering for sustainable future organized by Sree Keralavarma College Thrissur on 18.03.2021 instead of industrial visit as a part of their curriculum which is not possible due to COVID 19 pandemic situation

Department conducted PTS meetings for all batches through Google meet.

Department also provided technical support for making sanitizers to College union when the university examinations held at the college and distributed in classrooms, departments, etc. Department took initiative for online classes for both BSc and MSc students to complete balanced portions, which couldn't be completed due to lockdown. In the current academic year teaching learning process was continued through online mode. Live online classes through Google Meet and previously recorded video lectures uploaded in the Google Classrooms helped the students to overcome the obstacles.

Department offered a certificate course on 'Water Analysis' for the students from various departments which involved classes on chemistry behind analytical procedures and permissible levels of water quality parameters. The course also involved hands on training in water quality analysis test kits. Dr Anoop S Nair was the coordinator of the Certificate Course.



Annual report of Departmental Activities 2021-22.

Department secured a pass percentage of 93 and 91 in BSc and MSc respectively during the academic year 2020-21.

Department organized a webinar WED 2021 in relation with World Environmental Day 2021 on 05.06.2021. Dr Ambili V K was the Coordinator of the webinar. The webinar associated with an invited lecture on Chemistry and Environment by Dr R Vinayakan from NSS Hindu College Changanassery and an online drawing competition for students of various departments. Department organized a webinar series on research methodology of statistical thermodynamics for MSc chemistry students from 07.08.21 to 15.08.21. The programme was conducted in association with IQAC NSS College Nemmara. This webinar series involved four sessions lead by Mrs. Memsy C K from Mercy College Palakkad. Dr Ambili V K and Dr Priya S are the coordinators of the Programme.

Department of Chemistry took initiative to provide e books for students by sharing google drive link of e library created by the department as a part of Reading Day celebrations 2021 which help the students to overcome the limitations of availability of books during Covid 19 pandemic situation.

Department organized a webinar in relation with Ozone Day Celebrations on 16.09.2021. An invited talk was conducted by Dr Deepa J R, Assistant Professor, S. N College Kollam on Chemistry of Water Quality Research. Dr Anoop S Nair was the coordinator of the programme.

Department also conducted an Induction Programme for first year BSc students on 09.11.2021, which was aimed to improve research aptitude in chemistry and to discuss carrier opportunities in chemistry. Dr Ambili V K was the coordinator

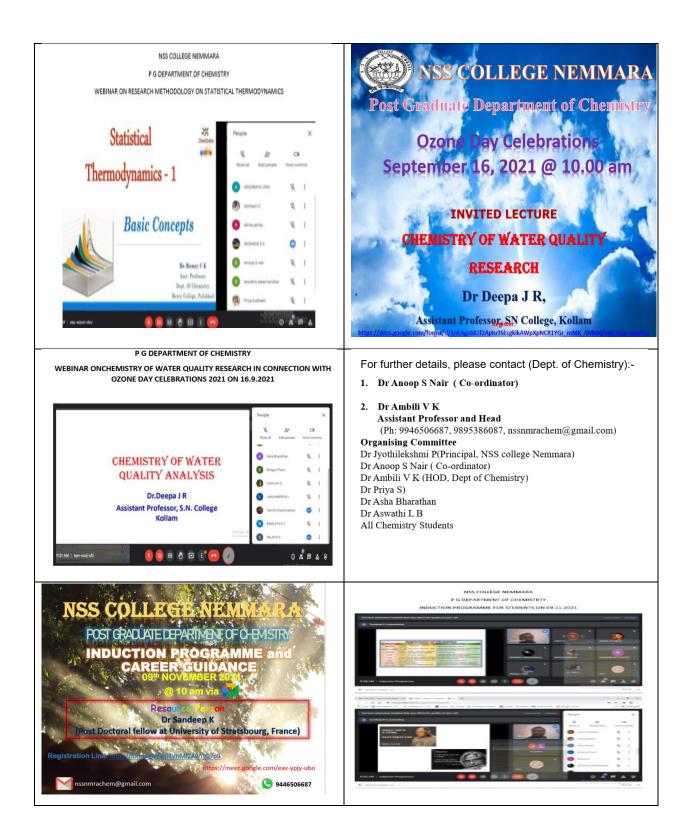
of the programme and the session was handled by Dr Sandeep K, Post Doctoral fellow at University of Stratsbourg, France.

As part of the revised curriculum of 2019 Admission M.Sc. Chemistry Course, field visit to academic institutions or to any R&D center is made mandatory. To fulfil this, a Virtual tour to Department of Applied Chemistry CUSAT Cochin was conducted by the Department on 02.03.2022. The session was handled by Dr Suja Haridas and her research scholars.

Department conducted a webinar for final Year BSc chemistry students in association with PTM Govt. College Perithalmanna on 26.3.2022 for study tour report. Online demonstration classes were carried out by Dr Leena R, Department of Applied Chemistry CUSAT on the topic Instrumental Methods for Advanced Research.

Department provided a certificate course on '**Chemistry Among Us**' for the students of various departments which involved lectures on chemistry of daily use materials. The course also involved hands on training for sanitizer making, soap making etc. Dr Anoop S Nair was the coordinator of the Certificate Course.







Annual report of Departmental Activities 2022-23.

Department secured a pass percentage of 88 and 67 in BSc and MSc respectively during the academic year 2022-23. BSc topper Kavya P J secured 9 th position in BSc Chemistry of University of Calicut.

The Department associated with an invited lecture series as part of the Prime Minister's Research Fellowship Programme, and it was conducted on 26th August, 14th September and 04th October 2022 by Abhijna Krishna R, Prime Minister's Research fellow, NIT Thiruchirappilly via online mode. The talk was performed on google meet platform. The various career opportunities that can be chosen after UG and PG programs in chemistry was thoroughly discussed.

Department conducted an Induction program on 17.11.2022 for first year BSc and MSc students with the financial support from PTA of the college. Dr Shyam S Nair, Assistant professor, Department of Chemistry Sree Keralavarma College Thrissur was the resource person. It was a lively interactive session on "Opportunities in Chemistry".

An invited talk to cover first semester PG portions in the topic "Research Methodology of Computational Chemistry" was organized and conducted by the Department of Chemistry on 31st January 2023. The meeting was inaugurated by the Principal Dr. T Sreekumar at 10 am. The invited lecture commenced at 10.20 am and was delivered by Dr. Rahul M. Ongungal, Assistant Professor, Yuvakshethra Institute of Management Studies, Palakkad. In the session, the speaker gave an overall idea about the field of computational chemistry, its applications and common tools required. He gave a hands-on experience by asking students to perform computational calculations. He also discussed the commands to execute various operations, softwares for performing computational calculations, etc.

Department conducted hands on training for soap making and distribute soaps to various departments and office.

Department conducted PTS meetings for all batch students.

Department Coordinated an industrial visit to Rainbow Pipes Udupi for the final year degree students as a part of their curriculum on 20.02.2023 to 24.02.2023.

Department also conduct water analysis in Nemmara Panchayath carried out by the final year BSc students. Important parameters monitored were hardness, acidity, alkalinity, chloride content and pH of water. Students have also conducted an awareness of health issues of using hard water.

Department also associated with NSS units of the college in various activities. Department jointly participated in Harithalayam- The Carbon Free Green Campus which involves two yearlong projects and activities for Carbon neutral and Sustainable Campus.

Department offered a certificate course on **'Water Analysis and Chemistry in Daily Life'** for the students from various departments which involved classes on chemistry behind analytical procedures and permissible levels of water quality parameters. The course also involved hands on training in water quality analysis test kits, soap making, sanitizer making etc. Dr Anoop S Nair was the coordinator of the Certificate Course.

The Department also took initiative to organize and conduct PowerPoint presentations for both UG and PG students in connection with activities under PG forum and research committee of NSS College Nemmara.

