

## HUMANITIES AND SCIENCES

### VISION

To become a Department of Excellence in Mathematical education, Physical Sciences, Research and Development and Setting the standards of Excellence in Communication skills and preparing the learners to meet the challenging trends in the professional career.

### MISSION

The Department is Committed:

- To impart high quality education in Applied Mathematics and Physical Sciences at various levels of programmes in engineering and technology.
- To build confidence in engineering students in using mathematical and scientific tools for designing industrial products and systems in a better, faster and effective way.
- To improve the Communication Skills of engineering students and make them suitable for employment.

## DEPARTMENT OF HUMANITIES AND SCIENCES

The department of Humanities and Sciences was established in the year 1997 and it has emerged as a department pursuing excellence. The department has a team of highly-qualified and well-experienced faculty members and non-teaching staff. Many faculty members are experts in some of the emerging fields of Mathematics and Physical sciences and have made significant contributions in their own fields. The aim of the department is to broadly educate aspiring engineering students in the basics of Mathematics, Physics, Chemistry & English which serve as a platform for the growth of

students in their further study of Technical subjects. The strength of the department lies in the perfect synchronization of knowledge and skills. The major motivating factor of the department is the commitment and team work that is exhibited in the teaching – learning process. Extra care is given by special coaching class during weekends and crash course closer to the University Examinations, tailor – made to suit the needs of all types of students. Adding a feather to the cap of the department is the recognition by the Anna university as a research centre in Mathematics & Chemistry.

## FACULTY ACHIEVEMENTS

- Dr. N. Hema has been nominated as Tamil Language Champion to participate in the Oxford Global Languages Programme by Oxford University Press.
- Dr. N. Hema, Professor / English has been selected by the Government of Tamil Nadu as a member for drafting syllabus in English for both secondary and higher secondary board of education, Government of Tamil Nadu.
- Mr. M. Anandraj / Physics own best oral presentation award in the National Conference “Recent Trends in Physics of Materials (NCRTPM-2018)” organized by Pachaiyappa’s Collage, Chennai during 09 – 10 Feb. 2018.
- Dr. D. Udhayakumari / Chemistry received International Women Researchers Connect and Awards. 2018 for the Highest Research paper publication in Chemistry from Arunai International Research Foundations, Thiruvannamalai.

## PUBLICATIONS

The faculty members of the department extensively involve in publishing papers in Journals of repute. Given below is sample list of publications by the faculty members.

- B. Latha, P. Kumaresan, S. Nithiyanantham & K. Sampathkumar, “Spectroscopic, Homo-Lumo and NLO studies of tetra fluoro phthalate doped Coumarin crystals using DFT method”, Journal of Molecular Structure, Vol. 1142, 19th April 2017, Impact Factor 1.78 with Scopus, PP. 255-260.
- R.Sreedevi, G.SaravanaKumar, K.Amarsingh Bhabu, T. Balu, P. Murugakoothan, T.R. Rajasekaran, “Growth, structural, optical, mechanical and quantum chemical analysis of unidirectional grown bis (guanidinium) 5-sulfosalicylate (BGSSA) single crystal”, Physica B: Condensed matter, Dec. 2017, Impact Factor 1.38 with scopus, PP: 21-28
- B. Latha, P. Kumaresan, S. Nithiyanantham & K. Sampathkumar, “HOMO-LUMO analysis of multi walled carbon nanotubes doped Tetrafluoro Phthalate crystals for nonlinear optical applications”, Journal of Molecular Structure, Vol. 1152, Jan. 2018, Impact Factor 1.78 with Scopus, PP: 351 – 360.
- B. Jothimani, S. Suresh Kumar & B. Venkatachalapathy, “Hydrophobic structural modification of chitosan and its impact on nanoparticle synthesis - A physicochemical study”, Carbohydrate Polymers, Vol. 173 (2017), 12th June 2017, Impact Factor 4.8 with Scopus, PP. 714-720.
- S. Mohandoss, S. Suresh kumar, V. Balasubramani, B. Venkatachalapathy, T.M.Sridhar, “Bioinert nano yttria stabilized zirconia coatings on 316L SS for dental applications”, Journal of Ceramic Processing Research, Vol.18, No. 4, August, 2017, Impact factor 0.28 with Scopus, PP. 313-319.
- S.Mohan, P. Navamani, K. Jayamoorthy & N. Srinivasan, “Nano-Silica Catalyzed Synthesis, Solvent Effect, NMR Spectral and DFT Studies of Some Imidazole Derivatives”, Silicon, Vol. 9 - Issue 6, August, 2017, Impact factor 0.6 with scopus, PP. 817 – 822.
- Dr. D. Udhayakumari, “Chromogenic and fluorogenic chemosensors for lethal cyanide ion. A comprehensive review of the year 2016”, Sensors and Actuators B: Chemical, Vol. 259(2016), Dec. 2017, Impact factor 5.401 with Scopus, PP: 1022 – 1057.
- V. Vasumathi, J. Santhanalakshmi, “Fluorescence Quenching of  $\beta$  - Casein by Silver Nanoparticles and Copper Nanoparticles in Presence of Sugars: A Quantitative Exploration”, Asian Journal of Chemistry, Vol. 30, No. 2, 2018, Impact Factor 0.247 with Scopus, PP- 359 – 364.