

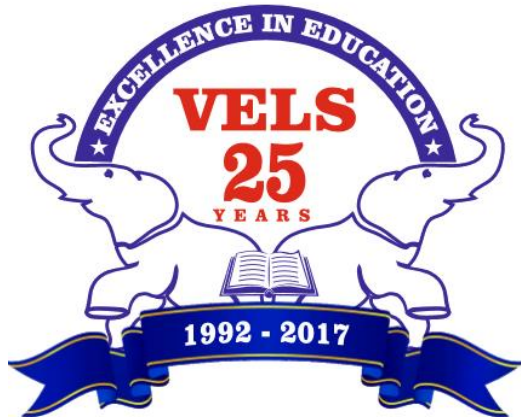


# VELS UNIVERSITY



VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)  
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)

**NAAC ACCREDITED**  
PALLAVARAM - CHENNAI - INDIA



## Industry Institute Linkage

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### Centre for Advanced Research & Development (CARD)

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25. Dr. A. R. Veeramani, Special Invitee

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## Introduction

The Economic growth of a country primarily depends on the synchronized efforts of both the Industry and the University because the Industry drives the Economic Development of nation and the University fuels it. In order to facilitate such synchronized efforts of Industry and the University, VISTAS strives to systematize and catalyze the various joint activities between the Industry and the University. In this context, University –Industry Linkage will play an important role to provide interaction platform to faculty and industry for getting industrial consultancy projects. Due to this interaction, the requirements of industry will be known to the University. Further, the industry will know the potential of University for solving some of the problems faced in industry. Thereby, the university and industry will be benefitted. Industries and institutes have been collaborating for over a century, but the rise of a global knowledge economy has intensified the need for strategic partnerships. The Institutes are imparting the basic knowledge and skill, but the Industry-Institute Interaction will enable to undertake research by staff and students relevant to the industry. The Industry-Institute Interaction is designed to run longer period for preparing the manpower of world class in the field of science and technology by inculcating the various

skills required by the industry, thereby contributing to the economic and social development at large.

With several layers of collaboration being built by the government to develop the Make in India program, the manpower needs have to be fulfilled in order to witness the required development. Though availability of manpower is abundant in India, well equipped manpower with employability skills is the need of the hour. There is a need to create avenues for a close academia and industry interaction through all the phases of technology development, starting from conceptualizing to commercialization.

To Promote Industry - Institute Linkage, the following Schemes are being undertaken:

- Students of VISTAS can undertake the final year projects with a joint supervisor from the industry
- Experts from Industry participate in curriculum design which plays a significant role in preparing the students ready for the industry
- Establishment of Industry-Institute Partnership /interaction Cell.



- Arranging visits of student and staff member to various industries.
- Professional consultancy by the faculty to industries.
- Industrial product testing by faculty & technicians at site or in laboratory.
- Collaborative degree programmes.
- Industrial problems are taken up for research.
- B.Tech. and M.Tech. Projects/dissertation work in industries under joint guidance of the faculty and experts from industry.
- Practicing professionals taking up part-time M.Tech./Ph.D. programme at VISTAS
- Short-term assignment to faculty members in industries.
- Visiting faculty/professors from industries.
- Professorial Chairs sponsored by industries at the Institute.
- R&D Laboratories sponsored by industries at the Institute.
- Scholarships/fellowships instituted by industries at the Institute for students.

- Practical training of students in industries & experiencing learning.
- Sharing the instrumental facilities / data for Research
- Organizing symposia and workshops with joint participation of faculty and industrial experts
- Facilitate industrial training to students and faculty
- Research Scholars/Project students can continuously take part in research activities which evolve continuous human resource support in the research area.
- Jointly conducting seminars, symposia and providing opportunities for research interactions to enrich the knowledge base.



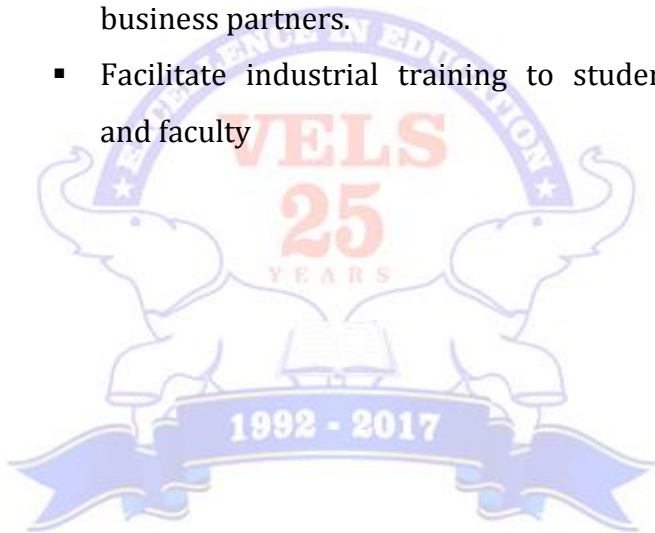


**IBM**, is a US computer, technology and IT consulting corporation head quartered in New York. It is the world's biggest technology company and the second most valuable by global brand. IBM manufactures and sells computer hardware & software and offers infrastructure services, hosting services, and consulting services in areas ranging from mainframe computers to nanotechnology.

The company has also engaged closely with its industry peers in an effort to understand and map the use of minerals in the electronics supply chain which are coming from regions of the world with social responsibility challenges.

**IBM INDIA PRIVATE LIMITED is in association with Department of Computer Science and Engineering, VISTAS in the following activities,**

- Collaborative course B.Tech IT (Cloud and Mobile based Application Development).
- Provide support for curriculum development of courses.
- Training services for the chosen modules through IBM Personnel or designated IBM business partners.
- Facilitate industrial training to students and faculty



# ICT ACADEMY

Innovate... Collaborate... Educate...

**ICT Academy** is an initiative of the Government of India in collaboration with the state Governments and Industries. ICT Academy is a not-for-profit society, the first of its kind pioneer venture under the Public-Private-Partnership (PPP) model that endeavors to train the higher education teachers and students thereby exercises on developing the next generation teachers and industry ready students. ICT Academy was started to meet the skill requirements of the industry and generate more employment especially in tier 2 and 3 towns, the rural parts of the country. The organization was formed with representations from the State Government of Tamil Nadu, leading companies in the ICT industry and National Association of

Software Services Companies (NASSCOM) in India.

With training of teachers and students as the primary objective, ICT Academy has been working through a seven pillar program in the areas of Faculty Development, Student Skill Development, Entrepreneurship Development, Youth Empowerment, Industry-Institute Interaction, Digital Empowerment and Research & Publications.

Through its various initiatives, ICT Academy has been part of strengthening the India's four important visions on Skill India, Digital India, Startup India and Make in India.

**ICT Academy is in Association with School of Computing Sciences & Engineering, VISTAS in the following activities.**

- Conducting Faculty Development Program to enrich the skills of Faculty members by the experts from various domains.

- Conducting Student centric programmes.
- Creating a platform that brings together the Industry Executives, Academic Leaders and Government Officers under one roof thereby creating a vibrant discussion forum.





**EinNel Technologies** – Research & Development Centre is an engineering solution provider in the field of Automotive, Aerospace, Energy, Oil & Gas, Bioscience and Computer Science, delivering revolutionary solutions to the world’s toughest problems through Advanced Computational Science and Information Technology.

EinNel Technologies was established in 2010 with its Technology and Innovation Centre located in Chennai, India comprising 50 employees working with several leading OEMs and Technical centers.

EinNel has a talented workforce from various reputed Universities across the globe specialized in diverse engineering domains like Mechanical, Aeronautical, Thermal, Material Science, Chemical, Bioscience, Computer Science and Information Technology.



They, as a group of technical and creative developers prioritize integrity in our business relations. They strive to be excellent communicators, creative thinkers and solution pioneers in the field of Computer Aided Engineering and Information Technology.

Teamwork undergirds EinNel Technologies and they bring in the latest technology into operation.

**EinNel Technologies is in association with Department of Computer Science and Engineering, VISTAS in the following activities,**

- Research Collaboration projects is being carried out with the guidance of Industry Experts
- Placement Assistance is being provided for the outstanding final year students.



## **Calibsoft Technologies Pvt. Ltd**

**Calibsoft Technologies Pvt. Ltd.** provides trusted, reliable and cost-effective outsourced software development and support services to small and mid-size companies, worldwide. At Calibsoft they are passionate about delivering outstanding software products and solutions with guaranteed cost savings. They focus their efforts and investments to build the right expertise, infrastructure and talent to continuously improve services and processes.

Calibsoft offer clients a low risk model to outsource software development and support or set up own offshore development team of any size without the capital investment and associated overheads.

Our fully integrated design, development, testing and offshore services provide a one-stop shop for clients and provides a dependable extension to the client's in-house development or support teams.

**Calibsoft Technologies Pvt. Ltd is in association with School of Computing Sciences & Engineering, VISTAS in the following activities,**

- Support is provided for restructuring the curriculum and development of courses which gives an Industry oriented approach.
- Placement for students is being provided.



## **NATIONAL INSTITUTE OF OCEAN TECHNOLOGY**

**The National Institute of Ocean Technology (NIOT)** was established in November 1993 as an autonomous society under the Ministry of Earth Sciences, Government of India. NIOT is managed by a Governing Council and the Director is the head of the Institute. The major aim of starting NIOT under the Ministry of Earth Sciences is to develop reliable indigenous technology to solve the various engineering problems associated with harvesting of non-living and living resources in the Indian Exclusive Economic Zone (EEZ), which is about two-thirds of the land area of India.

**National Institute of Ocean Technology (NIOT) is in association with Department of Electronics and Communication and Engineering, VISTAS in the following activities,**

- Interacting with NIOT to collect data like ambient noise, surface based oceanographic parameters for the futuristic predictions of the weather conditions and development of a best denoising hardware using the sophisticated time frequency signal process.
- Interacting with NIOT in Image Processing and underwater communication and other related fields academically.



## **IDEAL SENSORS PRIVATE LIMITED**

**Ideal sensor Private Limited** is a company, purely concentrating on the design of systems using multivariate hybrid processors for the custom made applications. At school of engineering intense research is in progress in Software defined Radio, Denoising algorithm and prediction of ocean parameters.

**IDEAL SENSORS PVT LTD is in association with Department of Electronics and Communication and Engineering, VISTAS in the following activities**

- Short-term assignment to faculty members in industries.
- Arranging visits of staff members to various industry
- Professional consultancy by the faculty to industries.



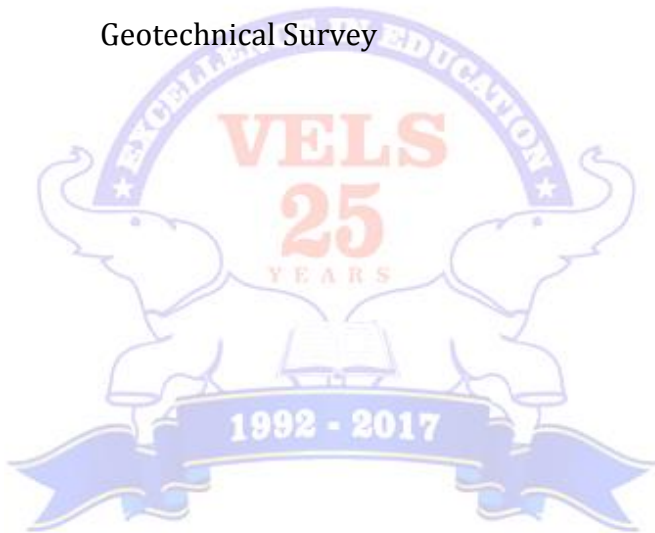
## **COROMANDEL MARINE SERVICES PRIVATE LTD**

**The Coromandel Marine Services** is in existence for the past 10 years. The manpower in particular company is well trained people in NIOT, Chennai and National Institute of Oceanography Goa. The most of the Sea men are DG shipping approved personals. They have been executing water quality management, underwater, environment engineering, geo physical survey and geo technical survey in shallow water.

With the facilities available with the above company, VISTAS has planned to work on underwater archaeology of Poombuhar & Tharangampadi port which slipped in underwater near Cauvery delta.

**COROMANDEL MARINE SERVICE PVT LTD is in association with School of Engineering, VISTAS in the following activities**

- They provide acoustic data for research projects
- They support for Geo Physical and Geotechnical Survey







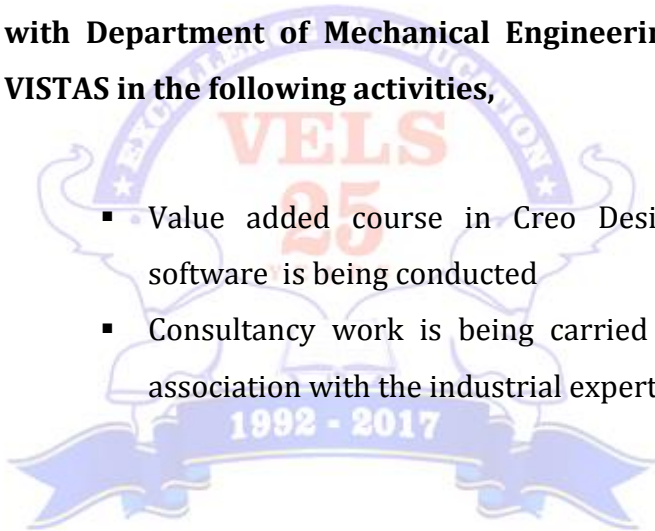
**CADDAM** is a leading CAD CAM software reseller, located in Chennai. They are an authorized reseller for CREO, ANSYS and STAAD.PRO.

CADDAM is one of the leading CAD training centers in south Chennai. They are delivering wide range of CAD software training over one and half decades. CADDAM is a ONLY Authorized training center for Nastan & Patran in Tamilnadu. Their domain based Nastan & Patran training will prove one with stand alone performance as per industrial standards. CADDAM is delivering professional courses for Mechanical, Civil, Electrical and Aerospace Engineering. They also have detailed industry base course modules in their training center. CADDAM initiates campus training for college and school students. Their in-campus training will explore the technical expertise with in the academy phase and it will

help the students to plan their career effectively. CADDAM encourages the upcoming talents, by online competency exams, which will assure the live technical experience in CADDAM Technologies.

**Caddam Technologies Pvt. Ltd is in association with Department of Mechanical Engineering, VISTAS in the following activities,**

- Value added course in Creo Design software is being conducted
- Consultancy work is being carried in association with the industrial experts.





## PAR PHARMACEUTICALS

**Par Pharmaceutical**, headquartered in Chestnut Ridge, New York, develops, manufactures and markets safe, innovative and cost-effective generic pharmaceutical products that help to improve patient quality of life. Par, among the top four leaders in the U.S. generics industry, possesses a portfolio that includes sterile injectables, alternative dosage forms and many other differentiated products. Par is advancing a research and development (R&D) pipeline of more than 200 potential new products. Par employs approximately 3,700 professionals in offices in Chestnut Ridge, New York; Irvine, California; Rochester, Michigan; Stratford, Connecticut; **Pudupakkam, Chennai, India**; Montebello, New York and Huntsville, Alabama. These locations also include over 200,000 square

feet of QC and R&D labs and 518,000 square feet of state-of-the-art distribution facilities outfitted with the most advanced automated shipping systems.

**PAR pharmaceuticals is in association with School of Pharmacy, VISTAS in the following activities**

- The Par Pharmaceuticals is associated with VISTAS in multifaceted aspects in restructuring the curriculum to meet out the current requirements of the industry.
- The professionals of this industry facilitate the hands on training and industrial visits for the students and faculty of VISTAS.
- They are also mutually benefited in exchange of expertise in troubleshooting of various processes in research and development.



## **AREETE LIFE SCIENCE PVT. LTD.**

**Areete Life Science Pvt. Ltd.** is a renowned manufacturer and exporter of superlative herbal products, ayurvedic products and nutritional products manufactured from the herbal and other natural extracts free from any sort of chemicals. Provides a health service to the world community in a market that is demanding safe and effective natural products with scientifically validated safety and health benefits

**AREETE LIFE SCIENCE PRIVATE. LIMITED is in association with School of Pharmacy, VISTAS in the following activities**

- Students of VISTAS can undertake the final year projects in Areete with a joint supervisor from the industry
- Promotes experts from Areete to participate in curriculum design which plays a significant

role in preparing the students ready for the industry

- Industrial visits by the students.
- Organizing symposia and workshops with joint participation of faculty and industrial experts
- Facilitate industrial training to students and faculty
- Research Scholars/Project students can continuously take part in Areete research activities which evolve continuous human resource support in the research area of the Areete.
- Standardization of their products ad per WHO guidelines
- Qualitative and Quantitative analysis of bioactive components by HPTLC method
- Jointly conducting seminars, symposia and providing opportunities for research interactions to enrich the knowledge base.



## **SUN PHARMACEUTICAL INDUSTRIES LIMITED**

**Sun pharmaceutical industries limited** were pioneers among Indian pharmaceutical companies to see tremendous value in investing in research & development (R&D). Their early investments in R&D, beginning three decades ago, enabled us to make technology our key differentiator and develop a basket of robust products for diverse markets across the world. Their core strength lies in our ability to excel in developing generics and technologically complex products through focused teams in formulations, process chemistry and analytical development. Company have around 2000 research scientists working in multiple R&D centres equipped with cutting-edge enabling technologies for research. Scientists have expertise in developing generics, difficult to make technology intensive products,

Active Pharmaceutical Ingredients (APIs), Novel Drug Delivery Systems (NDDS) and New Chemical Entities (NCEs).

Sunpharma is one of the very few generic companies that have products like Azelastine Nasal Spray and Sumatriptan Autoinjector in the US and Europe. The erstwhile Ranbaxy (now merged with Sun Pharma) identified and developed arterolane maleate, India's first New Chemical Entity (NCE), which was launched in India in 2012. The product, Synriam™, a fixed dose combination of Arterolane maleate 150 mg and Piperaquine phosphate 750 mg is a new age cure for Malaria. The synthetic anti-malarial combination is a non-artemisinin drug that simplifies the treatment of malaria to an effective, once-daily tablet, three-day regimen. Our R&D centres have been audited and approved by international regulatory authorities, including the US FDA and European authorities.



**SUN PHARMACEUTICAL INDUSTRIES LIMITED**  
**is in association with School of Life Sciences,**  
**VISTAS in the following activities**

- Bridge gaps between Industry and University by providing Guest Lectures ,Workshops and seminars.
- Facilitating Faculty Exchange program





## MARINA LABS

**Marina Labs** is a Private laboratory, established by the year 2006. Marina Labs have a specialty in the fields of Air Monitoring, Remediation of heavy metals, dyes of textile, leather and heavy metal industries. Further, the laboratory possess specialty on Phytocompounds and its bioactivities, In-silico toxicity analysis and Nanotechnology. To the credentials of Marina Labs, the number of patent filed is 3, followed by 50 and more publications in National and International Journals and has represented in more than 50 conferences and workshops in India and Abroad. The laboratory also possesses more than 10 innovations to its fold.

**MARINA LABS is in association with School of Basic Sciences, VISTAS in the following activities**

- Students of VISTAS can undertake the final year projects with a joint supervisor from the industry
- Hands-on training for students in industries.





## MURUGAPPA GROUP

**Murugappa Group** is amongst India's most enduring and admired corporate houses. Founded in 1900, the INR 300 Billion Murugappa Group is one of India's leading business conglomerates. The Group has 28 businesses including eight listed Companies traded in NSE & BSE. Headquartered in Chennai, the major Companies of the Group include Carborundum Universal Ltd., Cholamandalam Investment and Finance Company Ltd., Cholamandalam MS General Insurance Company Ltd., Coromandel International Ltd., Coromandel Engineering Company Ltd., E.I.D. Parry (India) Ltd., Parry Agro Industries Ltd., Shanthi Gears Ltd., Tube Investments of India Ltd., and Wendt (India) Ltd.

Market leaders in served segments including Abrasives, Auto Components, Transmission systems, Cycles, Sugar, Farm Inputs, Fertilisers,

Plantations, Bio-products and Nutraceuticals, the Group has forged strong alliances with leading international companies such as Groupe Chimique Tunisien, Foskor, Mitsui Sumitomo, Morgan Advanced Materials, Sociedad Química y Minera de Chile (SQM), Yanmar & Co. and Compagnie Des Phosphat De Gafsa (CPG). The Group has a wide geographical presence all over India and spanning 6 continents.

Renowned brands like BSA, Hercules, Montra, Mach City, Ballmaster, Ajax, Parry's, Chola, Gromor, Shanthi Gears and Paramfos are from the Murugappa stable. The Group fosters an environment of professionalism and has a workforce of over 32,000 employees.

**MURUGAPPA GROUP is in association with School of Management Studies, VISTAS in the following activities**

- Industrial visits by the students.

- Organizing symposia and workshops with joint participation of faculty and industrial experts
- Facilitate industrial training to students and faculty





## **TAMILNADU STEEL TUBES LTD.**

**TamilNadu Steel Tubes Ltd.** manufacture best quality Mild Steel Tubes, both Black and Galvanised, Square & Rectangle Pipes by employing a most modern welding technology "High Frequency Electric Resistance Welding". TNT has its Manufacturing unit located at Maraimalai Nagar, Kanchipuram District, Tamil Nadu, (India). With the help of its advanced production unit, it is able to manufacturing products in bulk quantity. With their intensive research, they have successfully enhanced the features of their products.

**TAMILNADU STEEL TUBES LIMITED is in association with School of Management Studies, VISTAS in the following activities**

- Practical training of students in industries & experiencing learning.
- Sharing the instrumental facilities / data for student project and Research.

## **STANNIS INSTITUTE OF ALLIED HEALTH SCIENCES**

**Stannis Institute of Allied Health Sciences** (formerly Stannis Institute of Paramedical Sciences) is a leading Paramedical Institute in Chennai established in the year 1998 with the purpose of enhancing the skill in paramedical technology and career opportunities for life science students. The institute offers DMLT course to students of several colleges in and around Chennai. Students receive hands-on training in the Stannis Diagnostic Centre, a leading diagnostic centre which boasts of modern diagnostic equipment.

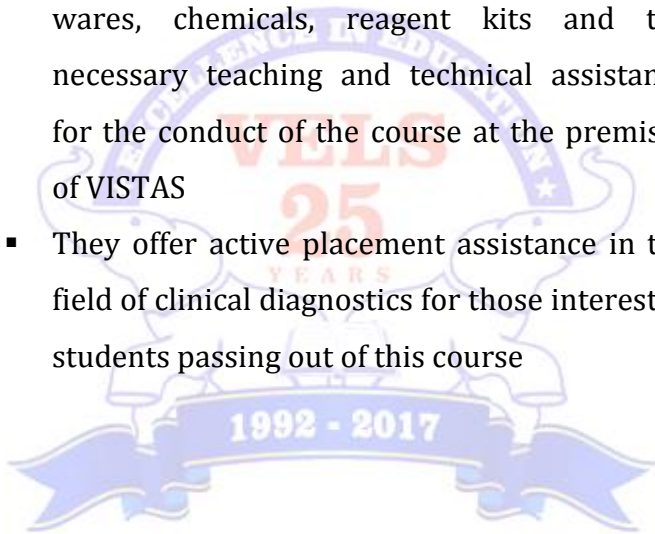
**STANNIS INSTITUTE OF ALLIED HEALTH SCIENCES** is in association with School of Management Studies, VISTAS in the following activities

- Conducting a two year DMLT (Diploma in Medical laboratory Technology) course duly



certified by Bharath Seva Samaj (NDA approved) towards the benefit of the undergraduate students of Biochemistry and other Life Science department

- They provide the necessary course materials, laboratory requirements inclusive of glass wares, chemicals, reagent kits and the necessary teaching and technical assistance for the conduct of the course at the premises of VISTAS
- They offer active placement assistance in the field of clinical diagnostics for those interested students passing out of this course





## **Collaborative Work done with JOSH Nutritions**

### **Isolation and Purification of Phycocyanin from Spirulina plantensis**

Spirulina platensis, a blue-green alga that consists of a variety of medicinal properties, is used as a dietary supplement. It is also a potent antioxidant and anti-proliferative agent as it is a rich source of tetrapyrrolic compounds that are similar to the bilirubin molecule.

#### **Objectives**

- To isolate Phycocyanine from Spirulina plantensis
- To characterize the isolated compound
- In-vitro characterization for therapeutic potentials

## **Work done**

- The test material Spirulina procured from Josh Nutritions
- Extraction and estimation of C-Phycocyanin

A 500 ml of homogenized culture was centrifuged at 4,000 rpm to obtain pellet. The pellet was suspended in 100 ml of 20 mM acetate buffer containing 50 mM sodium chloride and 0.002 M sodium azide (pH-5.10). C-Phycocyanin was extracted by repeated freezing ( $-20\text{ }^{\circ}\text{C}$ ) and thawing at room temperature until the blue color becomes in acetate buffer. Cell debris was removed by centrifugation at 5,000 rpm for 10 min and the extract thus obtained was termed as crude extract. Amount of C-PC was measured as described by Bennett and Bogard (1973) and purity was determined by using the formulae:

$$\text{Purity} = A_{620}/A_{280}$$

- Optimization made for better yield
- Purification

The crude extract was subjected to a single step precipitation using 65 %  $(\text{NH}_4)_2\text{SO}_4$  (Bio Xtra, >99 %; Sigma-Aldrich) and kept overnight at 4 °C. The pellet was recovered by centrifugation at 27,000 rpm for 15 min at 4 °C and dissolved in 10 ml of the same extraction buffer and termed as ammonium sulfate extract (ASE). Ten ml of ASE was dialyzed against the extraction buffer using dialyses membrane (Dialyses membrane-70, MWCO; 12–14 kD) procured from Hi-Media. Dialyses was performed twice against 1,000 ml extraction buffer, first at room temperature and again dialysed against 1,000 ml of extraction buffer at 4 °C overnight. The resultant extract was recovered from the dialyses membrane and filtered through 0.45  $\mu\text{m}$  filter.

DEAE-Cellulose from Sisco Research Laboratory (SRL) was used for anion exchange chromatography. A column (30 × 2 cm) was prepared for purifying the phycocyanin, and equilibrated with 150 ml of acetate buffer (pH-5.10). Dialyzed filtered sample (10 ml) was placed on the column. A linear gradient of acetate buffer with pH ranging from 3.76 to 5.10 was used to developed the column and elutes were collected in 5 ml fractions. Flow rate was kept 20 ml h<sup>-1</sup>. Absorption spectrum was also determined by scanning the sample in the range of 300–750 nm by using Specord 200 spectrophotometer (Analytikjena, Germany).

**Purity and recovery ratio of phycoyanin at each purification steps**

<b>Step</b>	<b>Volume (ml)</b>	<b>Phyco cyanin (<math>\mu\text{gml}^{-1}</math>)</b>	<b>Purity (A620/A280)</b>	<b>Recovery (%)</b>
Crude extract	200	77.4	0.7	100
Ammonium sulphate pptn	10	123.8	1.5	80
Dialysis	10	601.4	2.93	39
DEAE column chromatography	5	413	4.58	14

# SCITUS

**The School of Pharmaceutical Sciences, VISTAS, Pallavaram, Chennai** had signed MoU with **SCITUS PHARMA SERVICES** with a prime aim to address the gap in the curriculum with respect to the bioanalytical techniques. **SCITUS PHARMA SERVICES**, located at SIDCO Industrial Estate, Thirumazhisai was established in the year 2017, with a prime focus on development of new methods for estimation of drugs and metabolites in biological fluids. Its GCLP compliant state-of-the-art bioanalytical facility, trains the post-graduate and under graduate students in conducting PK studies and ANDA submission. Facilities are also available to conduct clinical portion of bioavailability and bioequivalence studies. The company has the facilities like gas chromatography, atomic absorption spectroscopy and DNA microarrays and real time PCRs which

enables the students to get trained in the various aspects of clinical research. The PG students allowed to carry out project work in this organization which are based on API to finished pharmaceutical formulation, bioequivalence studies and ANDA submission. During the course project the student will be exposed to the operational details of gas chromatography and other advanced bioanalytical instruments. At the end of the training/completion of the project work, the student learns to independently handle the bio-samples and accurately arrive the results of the studies and also to compile them to meet the regulatory needs prevailing in the international scenario. Currently FOUR students are identified for doing project work from June 2019 after scrutiny.





## **Collaborative activities with CAPE BIO LABS**

**The School of Pharmaceutical Sciences, VISTAS, Pallavaram, Chennai had signed MoU with CAPE BIO LABS with a prime aim to carryout collaborative projects and to publish/patent the outcomes. In this regard, a project entitled “FORMULATION & EVALUATION OF RANITIDINE ENTERIC COATED MUCOADHESIVE TABLETS” was initiated and currently in-process.**

**The details of the project are as follows:**

### **Aim:**

Ranitidine hydrochloride is highly hygroscopic drug in which it degrades 50% of the drug before reaching the target site (intestine) and leads to therapeutic inefficiency. So it is necessary to deliver

the drug in the target site for better action which can be achieved by formulating delayed release dosage forms (Enteric coated) by using Eudragit L 100, which delays drug release.

The main aim of present study was to formulate and evaluate ranitidine mucoadhesive enteric coated tablet as a controlled release dosage form.

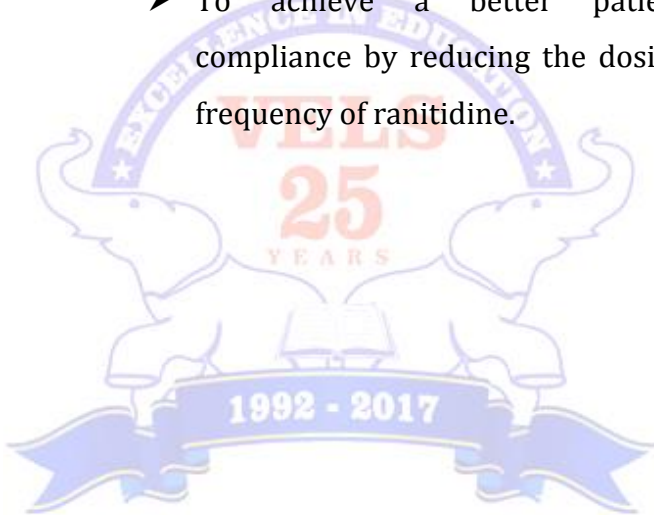
**Objective:**

The main objectives of the study are

- To develop a ranitidine enteric coated mucoadhesive tablet with better mucoadhesive properties in the intestine.
- To achieve better mucoadhesion in the intestine with parallel sustained release of the ranitidine by

choosing best bioadhesive polymer from my study.

- To improve the efficacy and safety of ranitidine through sustained release technology i.e. by reducing total dose regimen.
- To achieve a better patient compliance by reducing the dosing frequency of ranitidine.



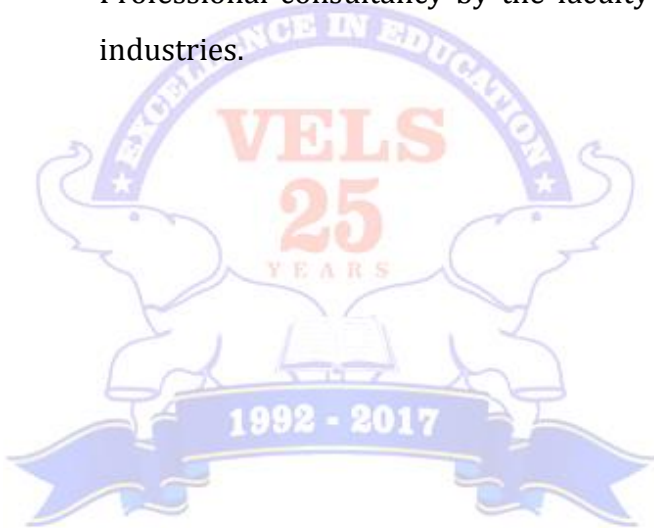


Bio Vision Medical Systems is an organization started purely concentrating on providing high quality Medical Equipments at an affordable cost. The company caters various needs of Medical Fraternity in all specialty segments and offers the best quality Medical Equipments and provide the best suited solutions and services to the Hospitals, Nursing homes, Clinics and Medical Professionals.

Bio Vision Medical Systems was established in 1999 with its Technology and Innovation Centre located in Chennai, India is committed to provide Effectuate technological excellence to bridge the community with modern medical challenges .

**Bio Vision Medical Systems is in association with Department of Biomedical Engineering, VISTAS in the following activities**

- Research Collaboration projects is being carried out with the guidance of Industry Experts
- Arranging visits of staff members to various industry
- Professional consultancy by the faculty to industries.





## **BAROLA TECHNOLOGIES**

RESEARCH | PRODUCT DEVELOPMENT | PROJECT DEVELOPMENT | INTERNSHIP

BAROLA TECHNOLOGIES – Educational, Research & Development Centre is a pioneer in the field of educational research, design and manufacturing of Aeronautical, Mechanical, Electrical, electronics, Biomedical, Marine and IT based products.

BAROLA TECHNOLOGIES is an ISO 9001:2015 Certified company established in 2010 with its Technology and Innovation Centre located in Chennai, India. They are in co-ordination with college to enhance the different areas of emerging trends such as Drones, Healthcare, Wearable Technology, Artificial Intelligence, IOT and agricultural management. The company has also engaged closely with its industry peers in

an effort to understand and map the need of drones in today's healthcare.

**Barola Technologies, is in association with Department of Biomedical VISTAS in the following activities,**

- To establish Center for Innovation in Vels Institute of Science, Technology & Advanced Studies (VISTAS) campus.
- To pursue collaborative research/study on fundamental, academic research, related to biomedical applications under Center of Innovation.
- To exchange the technical expertise such as experimental procedures, instrumental knowledge and development of new protocols in Fields.
- To facilitate industrial training to students and faculty.



# VELS UNIVERSITY



VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)

(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)

**NAAC ACCREDITED**  
PALLAVARAM - CHENNAI - INDIA

## NATURAL SOLUTIONS

**Natural Solutions** is one of the kind of an innovative civil technological start ups in Gujarat specializing in the usage of additives or admixtures to nullify the salinity of salt or saline water to be used in Civil construction activities. The company has invented a product known as Concre B14 and has obtained a patent for its usage in civil construction using salt water. The company claimed that adding this admixture to the concrete mix results in increased compressive strength, better bonding and higher split tensile strength. The company approached Civil Engineering Department, VISTAS in June 2017 to test its product for assessing the various



properties of Concare B 14. The consultancy activity has been carried out from July 2017 to December 2018 with assistance from Er. Chirag Baxi, Entrepreneur and Inventor of Concare B 14, Natural Solutions. The department tested the product and found that even when salt water is used in concrete mix preparation, the strength, acid resistance and binding properties of the concrete mix increased with the addition of Concare B14.

**Natural Solutions in association with Department of Civil Engineering, VISTAS has collaborated in the following activities**

- Performed a comprehensive performance analysis (strength parameters) on properties of concrete mix added with Concare B 14 for 7, 14, 28, 90 and 180 days
- Conducted various experiments (Rapid Chloride Penetration Test) on acid resistance properties of concrete mix mixed with Concare B 14

- They have assisted in conducting B.E. Final year Civil Engineering student projects by guiding the students on how to prepare concrete mix with Concare B14 and in testing of mixes in Half Cell Potentio meter and Carbonation chamber
- The department along with Natural solutions have arrived at a concrete mix ratio incorporating Concare B 14 for various types of salt water like borewell water and sea water
- Assisted the faculty members in performing a internal seed project on study of durability and workability properties of concrete mix added with Concare B14



### **Plasma Scientific**

Registered in 2009, Plasma Scientific has gained immense expertise in supplying & trading of Handy hematology analyzer, ldx system, lipids analyzer etc. The supplier company is located in Chennai, Tamil Nadu and is one of the leading sellers of listed products. Buy Handy hematology analyzer, ldx system, lipids analyzer in bulk from us for the best quality products and service.

Plasma Scientific is engaged in the marketing, selling and servicing of wide range of technological products which are being successfully used by Clinical Diagnostics, and Life Sciences Organizations spread all over India. Customer focus is the priority and well equipped

to rapidly pick up leadership position in the markets they operate.

**Plasma Scientifics is in association  
Department of Biochemistry, School of Life  
Sciences, VISTAS in the following activities**

- To promote and enhance academic, research interest among the students with research minds
- To provide summer internship training for the students of lifescience Discipline and research scholars during the course
- Providing professional manpower to support the undergraduate and post graduate students
- Train students in installing and servicing different brands of medical device and to provide service consultation related to pre-installation of systems or equipments and Equipment/System installation service to customers.



### **SAMHITHA MARINE**

- ❖ Samhitha Marine is a company whose business interests involve dealing with state of the art, sophisticated scientific equipment for oceanographic and marine research, marine systems for underwater autonomous robotic vehicles, deep sea mining, deep sea technologies, coastal environmental engineering and management, offshore structures, ocean observation systems etc.
- ❖ Samhitha Marine will provide their expertise for UG, PG programme and in the new areas of research in the field of marine electronics.

- ❖ Samhitha Marine will provide necessary training to students of Engineering at VISTAS to deserving students by mutually agreed by both the parties. The modalities will be decided by both the parties.
- ❖ Host or participate in technical seminars/workshop/conferences jointly with the intention to promote science and practice of engineering and allied sciences, wherein technical literature is presented in the fields of engineering, ocean engineering and technology and any applications related to such advanced underwater technologies.
- ❖ Samhitha Marine will offer student internships based on an available basis to 2 to 3 students at VISTAS in the area of ocean engineering and technology for a period of 3 months at its facility in Chennai.



## **KEYSIGHT TECHNOLOGIES**

- ❖ Keysight Technologies is a premier measurement technology company whose business interests involve, inter alia, the areas of RF, microwave, semiconductor, EDA, Nano-technology and digital electronics.
- ❖ Keysight will provide their expertise for UG, PG programme and in the new areas of research in the field of electronics.
- ❖ Keysight will provide RF certification program to students of Engineering at VISTAS to deserving students by mutually agreed by both the parties. The modalities will be decided by both the parties.

- ❖ Host or participate in technical seminars/workshops/conferences jointly with the intention to promote science and practice of engineering and allied sciences, wherein technical literature is presented in the fields of engineering and, in particular, radio-frequency, microwave, semiconductor characterization, Nano-technology and digital electronics
- ❖ Keysight will offer student internships based on an available basis to 2 to 3 students at VISTAS in the area of semiconductor design, process design, quality assurance, foundry, FPGA design, software design for a period of 4-6 months at Keysight R&D center at Manesar/Bangalore
- ❖ VISTAS will initiate to start the centre of excellence or any other research and development activities/project to execute in special areas like

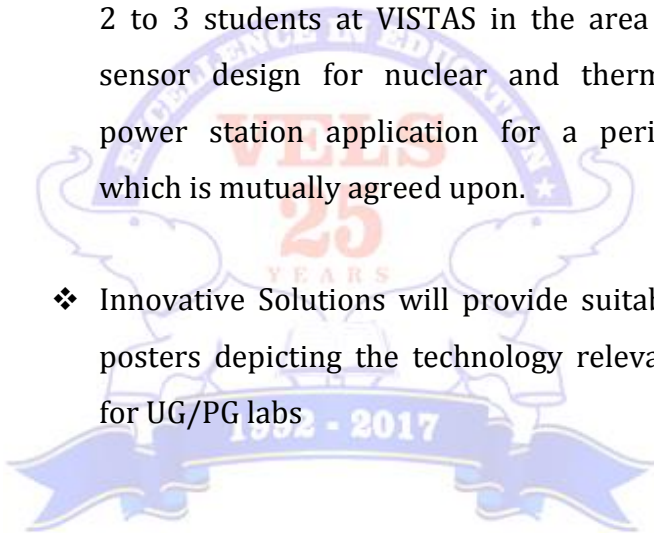


## **INNOVATIVE SOLUTIONS**

- ❖ Innovative Solutions is a company whose business interests involve design and development of sensors and its allied hardware for very special nuclear and thermal power station application.
- ❖ Innovative Solutions will participate in syllabus discussion for VISTAS undergraduate and postgraduate engineering programs.
- ❖ Innovative Solutions desires to be a part of VISTAS's research board with the intent to recommend the new areas of research in the field of electronics.
- ❖ Host or participate in technical seminars/workshop/conferences jointly with the intention to promote science and practice of engineering and allied sciences,

wherein technical literature is presented in the fields of engineering and in particular sensor design.

- ❖ Innovative Solutions will offer student internships based on an available basis to 2 to 3 students at VISTAS in the area of sensor design for nuclear and thermal power station application for a period which is mutually agreed upon.
- ❖ Innovative Solutions will provide suitable posters depicting the technology relevant for UG/PG labs





## **INTERLOGICX EMBEDDED SOLUTIONS**

### **PVT. LTD.**

INTERLOGICX EMBEDDED SOLUTIONS is a leading integrated Manufacturer and supplier of Embedded Systems and VLSI related products. The company also offers customer centric design and development for Turn-Key Electronic products to domestic and international customers.

The MOU between Interlogicx Embedded Solutions and Vels Institute of Science, Technology and Advanced Studies envisages agreed interaction, to develop specialized training programmes and courses to be offered in a collaborative

manner, Extending the expertise of the faculty / Engineers of both the institutions, Sharing the expertise, laboratory. To offer Project support to students, Placement assistance and consultancy work.

Totally twenty students from the department of Electrical and Electronics engineering have undergone In-plant Training at Interlogicx. During this period the students was given real time training in Embedded systems and Electrical Drives.

The company offered two consultancy projects to the department.

The details are

Name of the consultant	Name of consultancy project	Year	Revenue generated (amount in Rupees)
Interlogicx Embedded Systems Pvt .Ltd, Pondyicherry.	Development of Hands Free Blue Tooth Enabled on Board Device for vehicles	2018	12000
Interlogicx Embedded Systems Pvt .Ltd, Pondyicherry.	Design and Development of Water Level Transducer	2018	11000



**RRT ELECTRO POWER PVT., LTD.**

RRT Electro Power (P) Ltd has enthusiastic technocrats having good experience with strong R&D background in the field of power electronics. RRT Electro is engaged in manufacturing of customized Power Electronic Products over two decades having capability to Design, Develop, Prototyping, Regulatory Compliance testing & Certification, Manufacture, Supply, Install, Commission and provide Service after sales with AMC support. After inception Telecom Inverters and DC Power Plants were manufactured exclusively for Dept of Telecom and supplied throughout the India.

The MOU between RRT Electro Power (P) Ltd and Vels Institute of Science,

Technology and Advanced Studies envisages agreed interaction, to develop specialized training programmes and courses to be offered in a collaborative manner, Extending the expertise of the faculty / Engineers of both the institutions, Sharing the expertise, laboratory and the instrumental facilities of both the institutions, To offer Project support to students, Placement assistance and consultancy work.

Totally Eight students from the department of Electrical and Electronics Engineering have undergone In-plant Training at RRT. During this period the students was given real time training in Electrical Vehicle Charging Technology, Electrical Drives related to automotive industries and Power Electronics Systems.

The faculties also utilizing the expertise of RRT for their Research.



## GBoom Software Pvt. Ltd

GBoom Software Pvt. Ltd, OMR, Chennai was established in the year of 2010. It is a **creative agency** of artists, technologists, conceptualizes app & game developers, data & process gurus and sales enthusiasts. A comprehensive range of general and specific consultancy services by sharing knowledge in Artificial Intelligence, Mobile Application development, Web services and Big Data Analytics which includes,

- Expert Opinion and knowledge sharing in projects
- Development of software, prototype or product



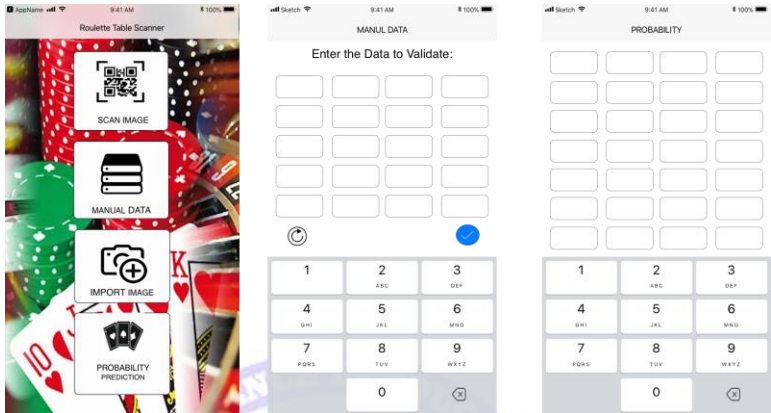
- Verification and validation of projects, software, prototype or product

### **Highlights of the MoU**

- i. GBoom Software Pvt. Ltd will utilize the expertise available at VISTAS in solving the problems in Mobile App Development.
- ii. Joint consultancy Project/Programme can be conducted.

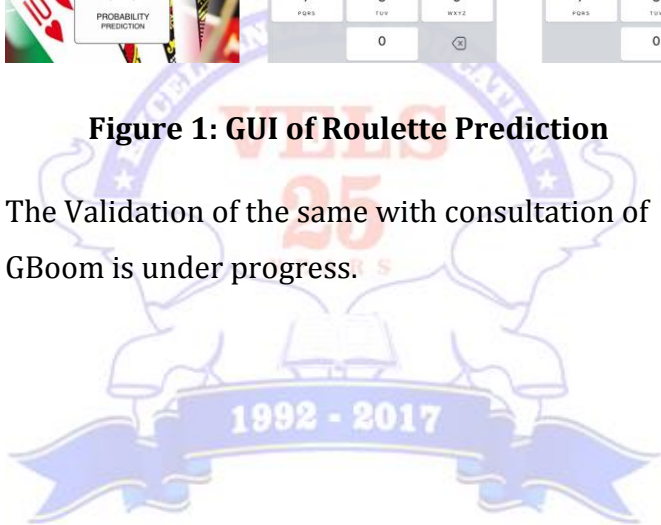
### **Activities carried out**

GBoom requested VISTAS to Design and Develop a Mobile App for Roulette Prediction. The team in VISTAS under the guidance of Dr. S. Arun designed the same as shown in Figure 1.



**Figure 1: GUI of Roulette Prediction**

The Validation of the same with consultation of GBoom is under progress.



# BIONEEMTEC

Bioneemtech is a BIOTECH based research unit devoted to the discovery and development of new pharmaceutical and agrichemical technologies based on the amazing chemical diversity of living organisms - plants, animals, and microbes. Natural products, mainly from plant-derived remedies, were the foundation for modern medical practice, and the cornerstone of biomedical research. It is a multidisciplinary lab, to discover and develop natural products and its application as pharmaceuticals, dietary supplements and agrochemicals.

**Bioneemtech is in association with Department of Computer Science and Engineering, VISTAS in the following activities,**

- Organizing Workshops, conferences and symposia with joint participation of the faculty and the industries.
- Collaborative research projects.
- To organize in-plant training for the students
- To identify the areas for executive development programmes in the areas of recent technological advances
- To assist the Departments in establishing rapport with industries for taking up mini projects and projects

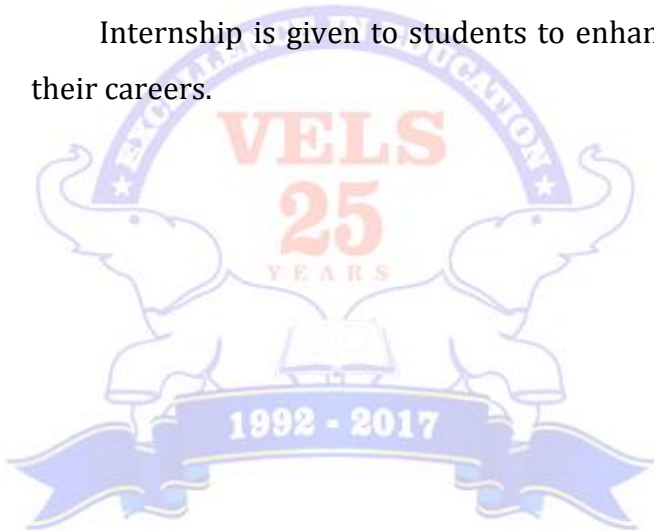




LetzConnect is an organic educational networking portal that offers 'knowledge connectivity' to students. It is a unique, collaborative platform which empowers the youth of today by bringing them closer. LetzConnect helps students enhance their knowledge base and interact effectively with faculties. In addition, it helps students realize their core potential, explore real-world opportunities and enrich their career as a whole. The state of art platform enables users to communicate, showcase, learn and share within the ecosystem. This is achieved optimally by bringing the entire student community under one umbrella.

**Letzconnect is in association with Department of Computer Science and Engineering, VISTAS in the following activities,**

- Practical training of students inletzconnectexperiencing them in developing mobile application.
- Internship is given to students to enhance their careers.



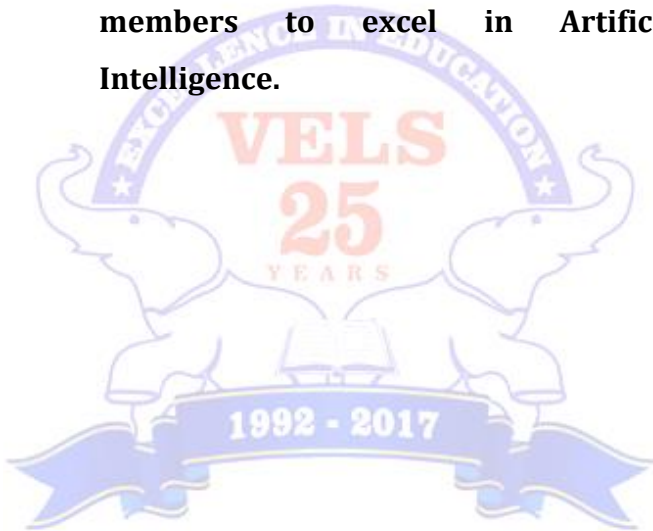


MirrAR is an Augmented Reality startup company based at Chennai, incubated through Founder Institute an early stage acceleration program. Developing an Augmented Reality Commerce Platform currently focusing on Jewelry segment and having plans to expand both horizontally and vertically catering to different domains in AR.

They also deal with research projects in the Augmented Reality and its related domains like Machine Learning, Deep Learning, Artificial Intelligence and Voice based AR, catering to programming like Python, Android (Java), React, React Native, Swift, C#, etc.

**MirrAR Innovation Technology is in association with Department of Computer Science and Engineering, VISTAS in the following activities,**

- **Internship given to students to accelerate their talent in Augmented reality.**
- **Associated with Student projects in latest technology .**
- **Collaborativeresearch with faculty members to excel in Artificial Intelligence.**







The world's leading provider of enterprise open source solutions, using a community-powered approach to deliver high-performing Linux, cloud, container, and Kubernetes technologies. They help to standardize across environments, develop cloud-native applications, and integrate, automate, secure, and manage complex environments with award-winning support, training, and consulting services.

Linux® has become the standard operating system for cloud infrastructure as well as the preferred delivery vehicle for modern applications.

Red Hat® Enterprise Linux expands on this trust and credibility by offering a supported,

hardened, enterprise environment that delivers on more efficient operational costs, better reliability and availability, and better scalability. These translate into a better return on investment (ROI) for our enterprise customers.

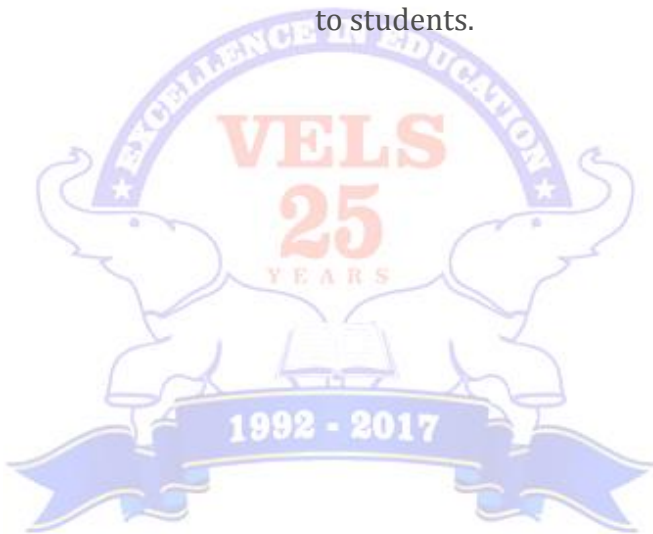
IDC's study, "The Business Value of Red Hat Enterprise Linux," interviewed 12 organizations to see how they're using Red Hat Enterprise Linux to support their business operations. These organizations reported that Red Hat provides a cost-effective, efficient, and reliable operating environment.

**Redhat Linux is in association with Department of Computer Science and Engineering, VISTAS in the following activities,**

- Visits of industry executives and practising Engineers to the Institute for seeing research work and laboratories, discussions and delivering lectures on

industrial practices, trends and experiences.

- To organize in-plant training for the students
- Provide assistance to undergo Redat Linux System Administrator certification course to students.





**नीवे NIWE**

**(ISO 9001:2008)**

**National Institute of Wind Energy (NIWE)** has been established in Chennai in the year 1998, as an autonomous R&D institution by the Ministry of New and Renewable Energy (MNRE), Government of India. Wind power generation capacity in India has significantly increased in recent years. As of 30 June 2018 the total installed wind power capacity was 34.293 GW, the fourth largest installed wind power capacity in the world. Wind power capacity is mainly spread across the South, West and North regions.

It is a knowledge-based institution of high quality and dedication, offers services and seeks to find complete solutions for the kinds of difficulties and improvements in the entire spectrum of the wind energy sector by carrying out further research.

**National Institute of Wind Energy (NIWE) is in association with Department of Computer Science and Engineering, VISTAS in the following activities,**

- Final year projects assigned to students from NIWE in developing a mobile based application on Energy Calculator.
- Organizing symposia and workshops with joint participation of faculty and industrial experts.
- Facilitate in collaborative research projects on par with government standards.





# VELS



INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)

(DEEMED TO BE UNIVERSITY Estd. u/s 3 OF THE UGC ACT, 1956)

**NAAC ACCREDITED**

PALLAVARAM - CHENNAI - INDIA

Velan Nagar, P.V. Vaithiyalingam Road, Pallavaram, Chennai –  
600 117;

Phone: 22662500,22662501,22662502 Fax: 22662513.

**DEVELOPMENT IN COLD PAD**

**BATCH BLEACHING OF**

**HUMAN HAIR UNDER UV**

**RADIATION**

Submitted to

**DIFFERENT HAIR PVT LTD**

**Plot no-  
135,1<sup>st</sup>Floor,SIDCOEstate,THirumazhisai,  
Chennai-600124**

**by**

**Dr. Raghu SubashChandrabose**

**Dr. R. A. Kalaivani**

**Dr. A. M. Shanmugharaj**

**Vels Institute of Science, Technology and Advanced  
Studies (VISTAS),**

**Centre for Advanced Research & Development/  
Department of Chemistry**

**Title:**

**DEVELOPMENT IN COLD PAD  
BATCH BLEACHING OF HUMAN  
HAIR UNDER UV RADIATION**

**Objectives:**

- ❖ **Hair bleaching process/ methodology  
developing under different conditions.**

- ❖ **Uniform bleaching of Hair samples will be studied in different condition With/Without UV radiation system**
- ❖ **To optimize/control the damaging of hair samples with suitable additives**
- ❖ **To develop/ improve the softness of the hair samples**

**Total Cost - 5.60 lakhs**

**Duration of project - 6 Months**

#### **Responsibilities of VISTAS**

*Different Hair PVT Ltd* has been collaborative working in this field for the Bleaching technology of human hair samples and its properties. VISTAS have been doing research in the development of bleaching technology. Also collaborative work of VISTAS can be carried out to study the cold bleaching under UV system.



- ❖ Bleaching technology will be carried out our VISTAS university
- ❖ Design and operation parameters will be carried out our VISTAS

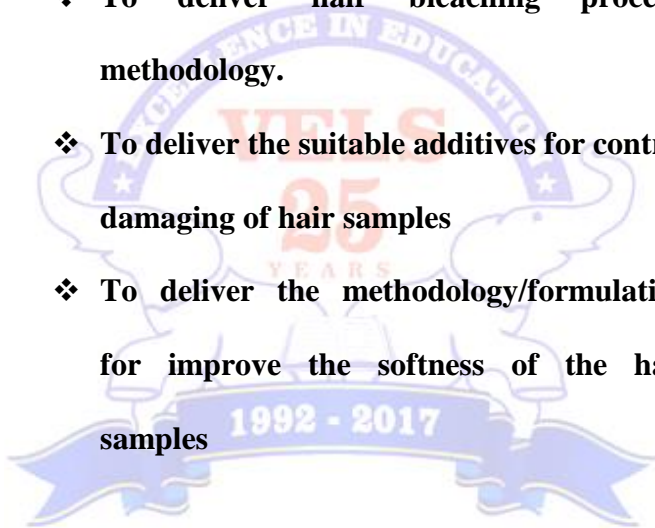
**Responsibilities of DIFFERENT HAIR PVT LTD  
(DHPL)**

- 1) DHPL shall ensure the regular supply of raw material in various forms (stage & quantity of requirement is to be defined) for all research, experimentation & application purposes.
- 2) DHPL should have the sole responsibility of conducting all fund generation activities required for commercialization & scaling of product development with respect to Industrial bleaching of hair samples.

**Deliverable:**

**Hair bleaching process / methodology will be developing with optimized cold bleaching conditions**

- ❖ **To deliver hair bleaching process/ methodology.**
- ❖ **To deliver the suitable additives for control damaging of hair samples**
- ❖ **To deliver the methodology/formulation for improve the softness of the hair samples**





## **KERRY INDEV LOGISTICS PVT. LTD.**

**Kerry Indev Logistics Pvt. Ltd.**– an integrated logistics solutions enterprise with end-to-end logistics and distribution services all under one roof. We take great pride in being Competent, Competitive and Comprehensive with all our product offerings. Kerry Indev has a strong presence across the length and breadth of India with top-of-the-line advanced infrastructural facilities - CFS, ICDs, Bonded Warehouse, 3PL Warehouse, Free Trade Warehousing Zone, Transportation Fleet, and NVOCC with self-owned containers. These services are ably supported by an International Freight Forwarding and Customs Brokerage Services. A recipient of numerous national and international awards years from its esteemed clientele and trade fraternities, Kerry Indev is a logistic solutions brand known for its

dependable, effective and efficient cargo handling services.

**KERRY INDEV LOGISTICS PVT. LTD.is in association with School of Management Studies, VISTAS in the following activities**

- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student
- Providing Professional consultancy to the faculty
- Arranging visits to student and staff member
- Arranging guest lectures to student





## **B.S.V. SHIPPING PVT. LTD.**

**B.S.V. Shipping Pvt. Ltd.**– The NVOCC division of INDEV Logistics, with 3000 Teu’s in its fleet commenced service in Dubai to offer tailor made solutions in the following areas:-1) Freight Forwarding & Clearance.

- NVOCC Operations
- Warehousing & Logistics
- Exhibition Cargo Handling
- Project cargo & Multimodal Transportation
- Airfreight

**B.S.V. SHIPPING PVT. LTD.**is in association with School of Management Studies, VISTAS in the following activities

- Providing Professional consultancy to the faculty
- Undertaking the internship to student

- Undertaking the final year projects with a joint supervisor to student
- Arranging visits to student and staff member
- Arranging guest lectures to student





**ENNORE CARGO  
CONTAINER  
TERMINALPVT. LTD.**

**Ennore Cargo Container TerminalPvt. Ltd.–**

Our commitment towards providing state of the art terminal facilities, it is our endeavor to ensure that Clients have a safe and hassle-free experience. A robust infrastructure and a dedicated team continuously strive to alleviate the environmental impact of the terminal's operations. Minimal environmental impression is one of the key directives for the business. Towards this direction the terminal has invested prudently in procurement of eco-friendly Rubber Tyred Gantry Cranes (RTGs) and many other initiatives.

Our modern Information Technology system increases productivity and efficiency through constructive and real-time communication with Clients.

With our resilient relationships and strong values, Ennore Cargo Container Terminal has been adjudged the youngest and fastest growing terminal.

Determined to be a channel for socio-economic development we have trained and employed locals residing in the nearby villages, and indirectly created various business opportunities by supporting wider development in the community. At ECCT, people who work for us take precedence over everything. To develop their skills and expand their knowledge, the company has established various training programmes.

**ENNORE CARGO CONTAINER TERMINAL PVT. LTD. is in association with School of Management Studies, VISTAS in the following activities**

- Providing Professional consultancy to the faculty
- Undertaking the internship to student



- Undertaking the final year projects with a joint supervisor to student
- Arranging visits to student and staff member
- Arranging guest lectures to student





## **DRAGON EXPRESS FREIGHTPVT. LTD.**

**Dragon Express FreightPvt. Ltd.** – We are an India - wide freight forwarding company that provides complete logistics solutions for ever burgeoning client base of customers across India and around the world.

Dragon Express is an Indian logistics organization with its Head Quarters based in Chennai, India. Dragon Express boasts with a network of 7 offices in major strategic locations across India. Our team of logistics professionals handle assignments round-the-clock. We possess all necessary national and trade affiliations. We specialize in multimodal freight forwarding. We have tried & tested EDI capabilities. Our operations arena covers 60 countries across 6 continents worldwide.

Developing solutions for our customers is the reason Dragon Express is in business. We seek to serve customers who want a mutually rewarding, profitable partnership. Our principal focus is our customer markets.

The first contact we have with a prospect begins an in-depth process to understand every aspect of operations. In our collaborative approach, we ask many probing questions at all levels of the organization. Then we evaluate the current logistics strategy and corporate goals to determine the resources needed; we then match those with our experience and skills to create appropriate, customized solutions.

"One thing we can tell you about the future—Dragon Express will be part of it, will be a leader by providing the input to shape it. Dragon Express will remain small enough to listen and be responsive, while large enough to be heard and make a difference."

We seek to create a dynamic, long-term working relationship that: Maximizes results in the best interest of our client; Creates useful management decision information; Minimizes costs and delays when crossing international borders; The accurate solutions we deliver help our clients deliver products to their clients, on time.

**DRAGON EXPRESS FREIGHT PVT. LTD. is in association with School of Management Studies, VISTAS in the following activities**

- Arranging guest lectures to student
- Arranging visits to student and staff member
- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student



**K&G DATA  
SOLUTIONS**

**Brew-Q is K&G Data Solutions' premier grain-to-glass quality software specifically designed for the brewing industry. We provide customized quality software to breweries of all sizes – from craft beer producers to large scale operations alike. We understand that consistent quality is crucial in brewing good beer and keeping customers happy. We continue to release new features which allow you to create a customized system that can capture all aspects of quality from tank cleanliness to fermentation data.**

If you have an established lab with multiple test instruments, you may also have an interest in our automatic data collection. We have an extensive and up-to-date list of test instrument drivers from a variety of manufacturers.

**K&G DATA SOLUTIONS is in association with School of Management Studies, VISTAS in the following activities**

- Collaborative course with MBA (Business Analytics)
- Arranging guest lectures to student
- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student





**Corporate Ark** are constantly engaged in designing and providing end-to-end modern age Human Resource Solutions and Staffing Services. In today's fast paced corporate world where skilled and talented resources form the cornerstone of any successful organization, retaining such resources is often a challenge that most organizations are faced with.

Ranked as one of the fastest growing, HR consulting firm, Corporate Ark offers HR services that are all set to re-define the way human resource market is catered to.

Here are top reasons why corporate ark is chosen as a preferred partner to work with:

- Corporate Ark possesses crucial capabilities to deliver results.

- Our team of consultants and recruiters is our biggest strength.
- We have the necessary infrastructure and expertise to help customers to fulfill multiple human resource requirements.
- We build and promote development opportunities and offer improved competitive benefits.
- We are quick to adapt to the changes of IT and Non IT industries.

**CORPORATE ARKis in association with School of Management Studies, VISTAS in the following activities**

- Collaborative course for HR students
- Arranging guest lectures to student
- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student





## SS RYDERS INDIA PVT LTD

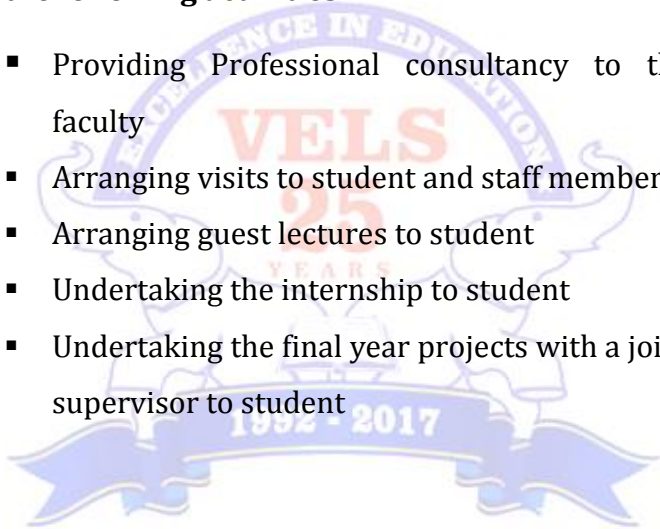
**SS Ryders India Pvt. Ltd.**, provide best international freight & logistics services. Logistics is generally the detailed organization and implementation of a complex operation. In a general business sense, logistics is the management of the flow of things between the point of origin and the point of consumption in order to meet requirements of customers or corporations.

Our Business Mission is Client's Satisfaction. The resources managed in logistics can include physical items such as food, materials, animals, equipment, and liquids; as well as abstract items, such as time and information. The logistics of physical items usually involves the integration of information flow, material handling, production,

packaging, inventory, transportation, warehousing, and often security.

**SS RYDERS INDIA PVT LTD is in association with School of Management Studies, VISTAS in the following activities**

- Providing Professional consultancy to the faculty
- Arranging visits to student and staff member
- Arranging guest lectures to student
- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student





**Raunaq Steels Trading Pvt. Ltd.** is promoted by Mr Sudarshan Rungta, a man with more than three decades of experience in the Iron and Steel trade. He is well supported by his dynamic brothers Mr Leeladhar Rungta and Mr Surendra Rungta. The rich experience and hard work of the promoters has made the Company a leader in the Steel trade. Started in the year 1991 as a proprietary company with a turnover of Rs.30 Lacs in the name of Raunaq Steel Industries, the company slowly and diligently built up a repertoire of blue chip clients. It has grown in stature to a private limited company with the turnover more than 22500 Lacs. We have been providing cost effective and value added services to our customer across India and Abroad. "Our service and product quality standard have won us accolades from a variety of esteem customers, which includes major infrastructure companies,

builders and architects. We at Raunaq Steels Trading Pvt. Ltd. believe in building relationship and the testimony to this is that our customers continue to remain with us.

Our company has always focused on customer satisfaction with uncompromising integrity. We carry products and services with the finest value and quality in the market. To meet our customer's expectations, we ensure that our sales people and customer service representatives generate enthusiasm and respond with extra efforts in addressing our customer's needs. We are always looking for new and better ways to improve our service. With our continued success and hard work what we thought we could do yesterday, today we did it and tomorrow our vision has become reality.

**RAUNAQ STEELS TRADING PVT LTD is in association with School of Management Studies, VISTAS in the following activities**

- Providing Professional consultancy to the faculty
- Arranging guest lectures to student
- Undertaking the internship to student





**TSV GLOBAL SOLUTIONS PVT LTD** is a global supplier of transport and logistics solutions. We have network offices at more than 350 Locations and international network of partners and agents, making us a truly global player that offers services worldwide.

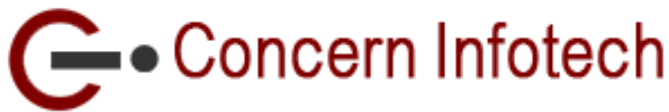
TSVGLOBAL is a global logistics company headquartered in Chennai. We satisfy the increasingly sophisticated needs of international trade through customized solutions and seamless, integrated information systems.

At TSVGLOBAL, we pride ourselves on being a solutions-based organization and take time to understand each customer's individual business needs. We have considerable flexibility when managing customers' supply chains. Due to our relationships with local suppliers and global air and ocean partners, we can provide customers

with the best routing and pricing options. Our comprehensive, flexible spectrum of services is supported by leading-edge information technology that provides a high level of visibility from end to end.

**TSV GLOBAL SOLUTIONS PVT LTD is in association with School of Management Studies, VISTAS in the following activities**

- Arranging visits to student and staff member
- Arranging guest lectures to student
- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student



**Concern Infotech Pvt. Ltd.** was launched in 2000 on the strength of an outsourced project called "Founder's Camp". This was a website carrying news of the IT industry at the that time which was booming, dotcoms were being made and bought at enormous amounts of money. Everyone wanted to dip their fingers in the startup pie. Venture funding and angel funding was at its peak. The website carried news about investors and about companies that had got funded.

Soon the website started carrying news of layoffs and cut-downs culminating in the tragic Dotcom Bust. Being an outsourced project from the USA, we were soon out of business as we were no longer required to maintain and update the website. Concern Infotech was almost closed and our CEO even joined another company as Project Manager after a hiatus. The company she worked



for inspired her to start her own portal called "thisismyindia.com". She quit her job, hired a couple of colleagues after sometime and restarted concern Infotech from her home. Slowly but surely we started with outside projects and established ourselves as a multi project IT company and have never looked back since.

Our CEO Mrs. Ishrat Akhter is a woman entrepreneur who is full of ideas and is constantly incubating ideas that have the potential to become huge. It is her vision that has given birth to ideas like [www.civilserviceindia.com](http://www.civilserviceindia.com) that is the leading online resource for IAS aspirants. Another educational portal that she promotes is [www.coachingindians.com](http://www.coachingindians.com). Her experience in this area has helped Concern Infotech to create a hugely successful portal [www.sociologyguide.com](http://www.sociologyguide.com) for one of our clients. Portals like [www.thisismyindia.com](http://www.thisismyindia.com) and [www.bhartiads.com](http://www.bhartiads.com) have been her brainchild. Our recently launched Jokes app called Jokespedia is drawing a big fan

base. A woman of multiple talents, she came to this industry not with a degree in engineering but with degrees in Literature and Sociology. Armed with multiple IT courses, she started Concern Infotech Pvt. Ltd. and has been the driving force of this company. Her masters degree in Corporate Secretaryship was an added advantage. Her grit and determination helped keep the company alive, when the first dotcom crash happened and continues to keep it going through tough times.

**CONCERN INFOTECH PVT LTD is in association with School of Management Studies, VISTAS in the following activities**

- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student



**CHOLAMANDALAM  
INVESTMENT &  
FINANCE COMPANY  
LIMITED**

**Cholamandalam Investment & Finance Company Limited (Chola)**, incorporated in 1978 as the financial services arm of the Murugappa Group. Chola commenced business as an equipment financing company and has today emerged as a comprehensive financial services provider offering vehicle finance, home loans, home equity loans, SME loans, investment advisory services, stock broking and a variety of other financial services to customers.

Chola operates from 885 branches across India with assets under management above INR 47,700 Crores. The subsidiaries of Chola are Cholamandalam Securities Limited (CSEC) and Cholamandalam Home Finance Limited (CHFL).

The vision of Chola is to enable customers enter a better life. Chola has a growing clientele of over 8 lakh happy customers across the nation. Ever since its inception and all through its growth, the company has kept a clear sight of its values. The basic tenet of these values is a strict adherence to ethics and a responsibility to all those who come within its corporate ambit - customers, shareholders, employees and society.

**CHOLAMANDALAM INVESTMENT & FINANCE COMPANY LTD** is in association with **School of Management Studies, VISTAS** in the following activities

- Undertaking the internship to student
- Undertaking the final year projects with a joint supervisor to student



**Salem Infotech Pvt Ltd** is a Private incorporated on 05 February 2013. It is classified as Non-govt company and is registered at Registrar of Companies, Chennai. Its authorized share capital is Rs. 100,000 and its paid up capital is Rs. 100,000. It is involved in Other computer related activities [for example maintenance of websites of other firms/ creation of multimedia presentations for other firms etc.]

Salem Infotech Private Limited's Annual General Meeting (AGM) was last held on 30 September 2018 and as per records from Ministry of Corporate Affairs (MCA), its balance sheet was last filed on 31 March 2018.

**SALEM INFOTECH PVT LTD is in association with School of Management Studies, VISTAS in the following activities**

- Collaborative course with MBA
- Undertaking the internship to student





**NATIONAL SMALL  
INDUSTRIES  
CORPORATION (NSIC)**

**National Small Industries Corporation (NSIC),** is an ISO 9001-2015 certified Government of India Enterprise under Ministry of Micro, Small and Medium Enterprises (MSME). NSIC has been working to promote, aid and foster the growth of micro, small and medium enterprises in the country. NSIC operates through countrywide network of offices and Technical Centres in the Country. In addition, NSIC has set up Training cum Incubation Centre managed by professional manpower.

Mission is to promote and support Micro, Small & Medium Enterprises (MSMEs) Sector by providing integrated support services encompassing Marketing, Technology, Finance and other services. Vision is to be a premier Organization

fostering the growth of Micro, Small and Medium Enterprises (MSMEs) Sector.

NSIC facilitates Micro, Small and Medium Enterprises with a set of specially tailored scheme to enhance their competitiveness. NSIC provides integrated support services under Marketing, Technology, Finance and other Support service.

**NATIONAL SMALL INDUSTRIES CORPORATION (NSIC) is in association with School of Management Studies, VISTAS in the following activities**

- Conducting entrepreneur program for MBA students
- Undertaking the internship to student





## VISTA EXPEDITION (SIAWED)



**Vista Expedition Partnered with Southern Industrial Academy For Women Entrepreneur Development (SIAWED).** An international Shipping and Forwarding company Offering end to end logistics services around the world since 2000.

Welcome to SIAWED! A not for profit women organization commenced with the objective of empowering women in our society irrespective of their age, education, social or economic considerations and to unleash the women power for good!

Our goal is to have a collective representation for empowering women to achieve greater gender equality and to gain economical self reliance.

While most Indian women are enlightened today with knowledge, education and social upbringing which has created an awareness for the need to be financially independent and to lead a successful business life, a majority of their counterpart are not so privileged to reach what they aspire for due to lack of economic and social encouragement.

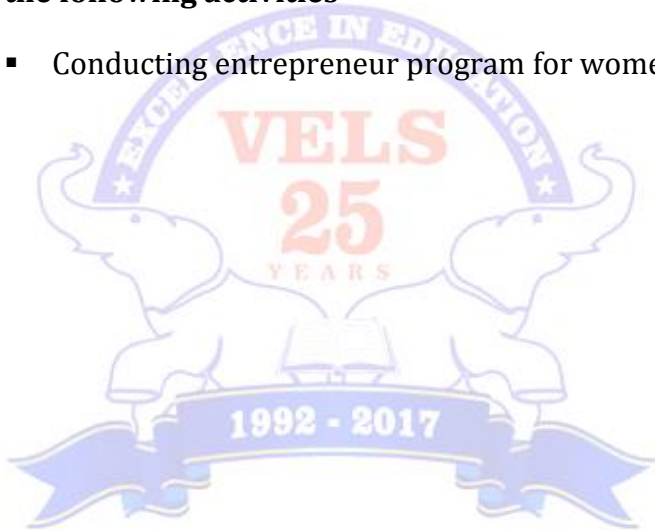
Although the inherent qualities of Indian women and their upbringing can make them successful entrepreneurs, their abilities are largely remaining dormant as they are unaware of the opportunities around them and also due to lack of proper guidance and support.

SIAWED thus aims to help such underprivileged women to come up in life with the help of successful business women who voluntarily

undertakes to contribute their share of social responsibility in achieving women empowerment.

**VISTA EXPEDITION (SIAWED) is in association with School of Management Studies, VISTAS in the following activities**

- Conducting entrepreneur program for women



## **Kausikh Therapeutics Pvt.Ltd**

**Kausikh Therapeutics Pvt.Ltd one of the leading fastest growing pharma industry in the formulation sector. Their focus is mainly on providing products for the treatment cardiovascular, infectious, Gastrointestinal, Neuropsychiatric, rheumatic, viral and other disorders. In this context VISTAS will support by means of executing collaborative research in the area of new drug discovery and drug development. The department of chemistry will support to execute the research in the synthesis lab well supported by instrumentation centre.**

## **Deepam Pallavaram Clinical Research (DPCR)**

Deepam Hospitals, an integrated Healthcare provider with 170+ beds located at the heart of south chennai(Pallavaram, chromePET, Tambaram) Deepam Hospitals reflects a brand image of excellence in the healthcare delivery system by serving all classes of the society at affordable cost.

The hospital caters to growing healthcare need of the population of South Chennai. Due to its strategic location on GST Road, this hospital brings laurels by treating emergency & trauma cases for which the first (Golden) hour is of immense importance for saving the lives.

## **Deepam Pallavaram Clinical Research**

**Deepam Pallavaram Clinical Research (Deepam Hospital) is in association Department of Biochemistry, School of Life Sciences, VISTAS in the following activities**

- To setup a virtual center for interdisciplinary research in VISTAS in collaboration with DPCR
- Training programs on state of art topics of interdisciplinary research for faculty, staff, student and technical personnel of both the organizations within the area of co-operation will be undertaken at both the institutes.
- Developing new pattern of course involving interdisciplinary research.
- Student intern/sandwich program.

- Skill oriented training and vocational course. Technology development and demonstration.
- To exchange faculty/technical personnel on full-time/part time basis for a limited period not exceeding three months at a time for the purpose of implementation of joint tasks within the areas of co-operation.

