



KSRCT IEEE-EMBS Student Chapter Newsletter

*(K.S.Rangasamy College of Technology
Institute of Electrical & Electronics Engineers
Engineering in Medicine and Biology Society)*



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K.S.Rangasamy College of Technology
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It gives us immense pleasure to present the fifth issue of KSRCT IEEE-EMBS Newsletter, the measure of progress. Biotechnology has engaged as on one of the most important technical revolutions in the recent past with significant impacts in the areas of health care, food, agriculture and environmental protection. The previous semester was a complete treat of mixed activities by the students and faculty members in academic, co-curricular and extra-curricular activities and research & developments as well. This will furnish us the opportunity to see the reflection of our advancement and achievements. We, the editorial board members of the KSRCT IEEE-EMBS Student Chapter are rejoiced to present the Newsletter published by the Department of Biotechnology, KSRCT.

Memorandum of Understanding

MoU was signed between Department of Biotechnology, K.S.Rangasamy College of Technology and Virtis Biolabs, Salem on 13th April 2013. Virtis Biolabs is one of the leading contract research service company currently working under the roof of Vellore Institute of Technology- Technology Business Incubator (VIT-TBI), joint initiative by VIT University and Department of Science and Technology (DST), Govt. of India. Virtis is in the process of threading new clients, where they are going to serve in the areas of Drug Development ,Clinical Trails, Toxicology studies on cell lines, Molecular diagnosis and many more . Currently they are in the process of setting up of their new laboratory in Salem. This MoU has been signed for mutual benefit of the college and the organization as a whole. The MoU laid down the terms and conditions of this joint endeavor and the responsibilities of both the parties. As an outcome of the MoU , Campus Placement drive had been conducted at the college premises last year and about 4 students were selected and given opportunities to work with them.

MoU was signed by Lion Dr.K.S.Rangasamy MJF., Chairman, KSR Group of Institutions, Dr.K.Thyagarajah, Principal, KSRCT, Dr.P.Ponmurugan, Professor & Head, Department of Biotechnology, KSRCT with Virtis Biolabs, Salem.



MoU signed with Virtis Biolabs, Salem.

Medical coding workshop

Department of Biotechnology at K. S. Rangasamy College of Technology conducted One day seminar on Medical coding and Mr. Syed from Professional Infotech Pvt. Ltd., delivered his didactic lecture on Medical coding. The Students are bestowed with knowledge about Translating medical documentation into code, Medical Transcription, Medical billing, Introduction to CPT coding and careers in medical coding. He also taught the basic credential offered by AAPC, the title of Certified Professional Coder (CPC). Besides he added about the variety of opportunities to elevate the standards of medical coding by developing training, professional certification, opportunities to network with other related medical professionals and a variety of job search database and career building opportunities.

By the end of the session we students learnt more about AAPC and the advantage of taking up the workshops, on-demand webinars,

regional and national conferences and Coding Edge to develop our skills and stand out in our field.

Technical Workshop on Forensic DNA Technology for Biotechnology Graduates

A national level Technical Workshop on Forensic DNA Technology for Biotechnology Graduates program was organized at K.S.Rangasamy college of Technology, Tiruchengode, from 17.07.2013 to 19.07.2013. It was conducted by the Department of Biotechnology. The objective of the program was to give hands on training to the young biotechnology graduates on techniques in forensic DNA technology. Dr.P.Ponmurugan, Professor & Head Department of Biotechnology welcome the gathering. Lion Dr.K.S.Rangasamy MJF, college chairman presided over the workshop. He stressed the need for the students to be trained in advanced techniques in biotechnology, exchange and sharing of knowledge. He also stated that the future of the mankind lies in the hand of the biotechnologists. College Principal Dr.K.Thyagarajah explained the programme details. He also insisted that the budding biotechnologies should bridge the gap between the industry and the scientists. Around 30 Biotech graduates, from Tamil Nadu and various states like Kerala, Andrapradesh, Karnataka, have participated in this workshop. The first day of the workshop was trained by

Mrs.B.Kalpna and Mrs.R.Arutselvi, Assistant Professor, Department of Biotechnology, KSRCT. They had given immense training on collection of blood samples, storage of blood samples, and extraction of DNA from the blood sample. Agarose gel electrophoresis was performed to check the quantity of the extracted DNA and the DNA was quantified using UV spectrophotometer. The delegates were divided into 5 groups and they performed RAPD analysis for the extracted blood sample using 10 different primer. At the end of the first day the delegates were exposed in the area of forensic DNA techdure and its analysis. They had given more emphasis on the application of TLC on forensic analysisnology by having a group discussion with the case studies on these areas.

During second day training on Thin layer chromatography and its analysis had been carried over by Mr.G.Ayyapadasan and Mr.R.Ganesh Babu, Research Scholars, Department of Bioteochnolgy, KSRCT. They trained the students how to process the samples for TLC had also the trained the delegates about the trouble shooting during TLC process. On the third day of the workshop the delegates were exposed to the Bioinformatics tools. This session was carried over by Professor Puniethaa Prabhu and Mr.I.Muthiah, Assistant Professor, Department of Biotechnology, KSRCT. The delegates were exposed to the use of softwares like iTOL, Free Tree, MODELER 9v11, Argus Lab, PyMol, PhyLip

and CLUSTAL X2. Using these softwares the delegates were trained to score the DNA gel picture into binary matrix and convert that binary matrix to phylogenetic tree. Using the tree the data were analysed. Also training was given on the theoretical structure prediction on protein and protein ligand interaction. The Valedictory function was presided over by Dr.K.Thyagarajah, Principal, K.S.Rangasamy college of Technology and Dr.P.Ponmurugan delivered the summary of the workshop. During the valedictory function the delegates were given highly positive feedback about the workshop. The delegates were awarded with three prizes based on the marks obtained on the test conducted at the end of the three days workshop. Certificates were distributed along with a complement pendrive that contains the complete laboratory manual of the three days workshop and the softwares used in the workshop for their future reference. Finally Mrs.B.Kalpana, organizing secretary delivered the vote of thanks to the gathering.



Technical Workshop on Forensic DNA Technology

Workshop on Career Opportunities in Biotechnology

The Department of Biotechnology conducted one day workshop on “Career Opportunities in Biotechnology” sponsored by Tamil Nadu State Council for Science and Technology (TNSCST), Chennai. It was conducted on 2nd August 2013. Erudite personalities were invited to deliver effective topics for the development of the participants in their career. Dr.S.A.Sheriff presided over the function a delivered a special lecture on ‘Stem cell Technologies’. The topics included were, ‘Higher studies in India and abroad’ by Mr.R.Arulvel, ‘Placement opportunities in Multinational companies’ by Mrs.B.Kalpana, Opportunities in ‘Clinical Trial Management and Medical coding’ by Mr.I.Muthiah, ‘Patent filing process in Biotechnology’ by Mr.S.Venkatesha Prabhu, and ‘Research opportunities in Biotechnology, both in India and abroad’ by Mrs.M.Ramya. Participants from various Institutions actively took part in this one-day workshop. By the end of this workshop the participants gained knowledge and awareness regarding the various opportunities available in the field of Biotechnology. Our special acknowledgement goes to TNSCST for their financial support in making this workshop to be conducted in a fruitful manner.



Workshop on Career Opportunities in Biotechnology

Inaugral function of Newmutants association

The Department of Biotechnology Inaugurated their Association “NEOMUTATNS” for the 11th year.



Principal Dr.K.Thyagarajah presenting momento Dr. P. Shilpa, Technical Director, Virtis Biolabs Salem.

Drug discovery: From bench top to bed side -DR.MANEESH PAUL

This lecture focused on the problems regarding the bacterial resistance in drug discovery and many new emerging challenges faced by pharmaceutical companies around

the globe. He gave many interesting example of novel drug molecules that are responsible for lysis of the cell wall components of pathogenic bacteria. He highlighted the core concepts of the defence mechanism that a bacterium can develop by itself whenever a new drug molecule comes into

existence. The in-built potency of the microorganism to resist against the drug molecules is highly notable such that it renders immediate response to them. He technically narrowed down the criteria that should be handled before discovering a new drug component against any pathogen. And also he added valuable information to the students about getting involved in a gentle profession. He insisted the students not to marry the salary during their career and to get fully satisfied with the needs to lead a passion-rich noble profession.



T.Madhupreetha, II M.Tech. Biotechnology, K.S.R.C.T. Title: Biophysical analysis of mutant human Gamma D



D.Aambareesh, III
B.Tech. Biotechnology,
K.S.R.C.T.
Title: Expression and
purification of HCV
envelope proteins in E.
coli bacterial system.
**Indian Institute of
Science, Bangalore.**



D.Vaishnu Devi, IV
B.Tech. Biotechnology,
K.S.R.C.T.
Title: Probiotication of
nannari syrup by using
actobacillus spp. and its
effect on human lung
cancer cells



J.Rajani Sowparnika,
IV B.Tech.
Biotechnology,
K.S.R.C.T.
Title: Ecofriendly
approach of textile dye
effluent
decolourization by
using microbial source



N.Sivaram, IV B.Tech.
Biotechnology,
K.S.R.C.T.
Title: Studies on
phytochemical aspects
of some essential oils
extracted from Indian
Medicinal Plants with
special emphasis to
Antioxidant potential.



R.Nanthini, IV B.Tech.
Biotechnology,
K.S.R.C.T.
Title: Evaluation of
Lichens as feed
additive on the overall
performance of broiler
chicks

***Student Projects Scheme offered by
TNSCST, Chennai.***

Tamil Nadu State Council for Science and
Technology, Chennai offers financial
assistance to students under Student Projects
Scheme. The following students are awarded
under this scheme for the academic year 2012-
2013.

***Funding Project Received from
AICTE towards Research
Promotion Scheme (RPS)***

Ref No: 20/AICTE/RIFD/RPS(POLICY-III)
35/2012-13, Sanctioned Amount Rs.8,600,00/-
Title of the proposal: Mass Production of
Antibiotics from *Streptomyces* spp. for
Biomedical Applications through Bioprocess
Engineering



Mr.R.Subbaiya,
Assistant Professor
Department of
Biotechnology
KSRCT

The genus *Streptomyces* belongs to actinomycetes group is a free-living bacterium that grows in the soil. The *Streptomyces* species have many gene clusters, which encode enzymes for many secondary pathways. This bacterium is one among commercially important microorganisms for its ability to produce an array of secondary metabolites including antibiotics and bioactive compounds valued in human and veterinary medicine, agriculture, and unique biochemical tools. The bioactive compounds secreted by *Streptomyces* spp. are having antibacterial, antifungal, antiviral, anticancerous and antiinflammatory properties. It is assumed that the bacterium may encompass a large variety of antibiotics. Therefore, an attempt will be made to isolate *Streptomyces* strains from soil samples collected from various agricultural fields, mountain regions and fertile lands using suitable medium by following serial dilution technique. A special attention will be given to isolate *Streptomyces* strains from rhizosphere soil samples of medicinal plants growing at eastern and western Ghats of Tamil Nadu regions. The isolated actinomycetes cultures will be identified based on morphological,

biochemical and molecular characterization methods from which an efficient isolate will be selected based on various bioassays. The cultures will be further subjected to screen for antibiotics production and subsequently tested against few human pathogenic microorganism under *in vitro* condition. The mass production of secondary metabolites containing antibiotics will be carried out using Biofermenter by following Bioprocess Engineering techniques by optimizing the basal medium and standardizing the culture conditions.

BIOSPECTRUM SURVEY IN TOP 20 BIOTECH SCHOOLS

The Department of Biotechnology at K.S.Rangasamy of Technology has an another recognition that it is **Ranked 4th among 280 Private Institutions in all over India** offering the course Biotechnology in the year 2013. It is based on the academic excellence, Workshops conducted, Conferences, Student staff ratio, Number of projects done by both staff and students. So far we have filed around 35 Patents and deposited 50 sequences at NCBI, Maryland, and USA. 65 Research papers were published in International journals and 60 were published in National journals. The department has received Rs. 26,00,000 worth of fundings as a result of collaboration with the industry. The government sponsored projects worth Rs. 86, 00,000 were also commissioned by the department.

TATA JAGRITI YATRA

Jagriti Yatra is an initiative of Jagriti Sewa Sansthan, a non-governmental organization that promotes entrepreneurship. Jagriti Yatra is an ambitious train journey of discovery and transformation that takes hundreds of India's highly motivated youth on an 15 day national odyssey. The aim is to awaken the spirit of entrepreneurship. The vision of Jagriti is to inspire young Indians living in the middle of the Indian demographic diamond (Rs 40 - Rs 120 per day) to lead development by taking to enterprise. By doing so, they can turn from job seekers to job creators. C.Monica of IV year B.Tech Biotechnology was undergone TATA JAGRITI YATRA.

CARE Club

CARE Club activities were inaugurated on 25th of July 2013 and special lecture was given by Mr.Jithesh and Mr.Guhan Kumar , alumni of Department of Biotechnology, KSRCT.

Extracurricular activities

Silver Medal was won by the students of K.S.Rangasamy College of Technology in TIES (Tamil Nadu Inter Engineering Sports)-2013 meet held at Adhiyaman College of Engineering, Hosur. N.Sivaram of IV year B.Tech. Biotechnology is one among the TIES 2013 team.



N.Sivaram, IV B.Tech. Biotechnology

It's the NEWS time!!!

Sleep Boosts Production of Brain Support Cells

Sleep increases the reproduction of the cells that go on to form the insulating material on nerve cell projections in the brain and spinal cord known as myelin, according to an animal study published in the September 4 issue of *The Journal of Neuroscience*. The findings could lead scientists to new insights about sleep's role in brain repair and growth.

Scientists have known for years that many genes are turned on during sleep and off during periods of wakefulness. However, it was unclear how sleep affects specific cells types, such as oligodendrocytes, which make myelin in the healthy brain and in response to injury. Much like the insulation around an electrical wire, myelin allows electrical impulses to move rapidly from one cell to the next.

In the current study, Chiara Cirelli, MD, PhD, and colleagues at the University of Wisconsin,

Madison, measured gene activity in oligodendrocytes from mice that slept or were forced to stay awake. The group found that genes promoting myelin formation were turned on during sleep. In contrast, the genes implicated in cell death and the cellular stress response were turned on when the animals stayed awake.

"These findings hint at how sleep or lack of sleep might repair or damage the brain," said Mehdi Tafti, PhD, who studies sleep at the University of Lausanne in Switzerland and was not involved with this study. Additional analysis revealed that the reproduction of oligodendrocyte precursor cells (OPCs) -- cells that become oligodendrocytes -- doubles during sleep, particularly during rapid eye movement (REM), which is associated with dreaming. "For a long time, sleep researchers focused on how the activity of nerve cells differs when animals are awake versus when they are asleep," Cirelli said. "Now it is clear that the way other supporting cells in the nervous system operate also changes significantly depending on whether the animal is asleep or awake." Additionally, Cirelli speculated the findings suggest that extreme and/or chronic sleep loss could possibly aggravate some symptoms of multiple sclerosis (MS), a disease that damages myelin. Cirelli noted that future experiments may examine whether or not an association between sleep patterns and severity of MS symptoms exists. This research was funded by the

University of Wisconsin-Madison Department of Psychiatry.

Mosquitoes Smell You Better at Night

In work published this week in *Nature: Scientific Reports*, a team of researchers from the University of Notre Dame's Eck Institute for Global Health, led by Associate Professor Giles Duffield and Assistant Professor Zain Syed of the Department of Biological Sciences, revealed that the major malaria vector in Africa, the *Anopheles gambiae* mosquito, is able to smell major human host odorants better at night. The study reports an integrative approach to examine the mosquito's ability to smell across the 24-hour day and involved proteomic, sensory physiological, and behavioral techniques. The researchers examined the role for a major chemosensory family of mosquito proteins, odorant-binding proteins (OBPs), in the daily regulation of olfactory sensitivities in the malarial mosquito. It is thought that OBPs in the insect antennae and mouth parts function to concentrate odorant molecules and assist in their transport to the actual olfactory receptors, thereby allowing for odorant detection. The team revealed daily rhythmic protein abundance of OBPs, having higher concentrations in the mosquito's sensory organs at night than during the day. This discovery could change the way we look at protecting ourselves from these disease-carrying pests.

The team also included Matthew M. Champion, Eck Institute for Global Health Research Assistant Professor in the Department of Chemistry and Biochemistry, who specializes in proteomics.

This study utilized mass spectrometry to quantify protein abundance in mosquito sensory organs, and electroantennograms to determine the response induced by host odorants at different times of the day. The coincident times of peak protein abundance, olfactory sensitivity and biting behavior reflect the extraordinarily fine-tuned control of mosquito physiology. Olfactory protein abundance and olfactory sensitivity are high when needed (at night) and low when not required (daytime).

Samuel Rund, a doctoral candidate in the laboratory of Duffield and a former Eck Institute for Global Health Fellow, and Nicolle Bonar, a visiting undergraduate student from Queens University of Ontario, Canada, were the lead authors on this research. The Notre Dame team also included then-undergraduate student John Ghazi, Class of 2012; undergraduate Cameron Houk, Class of '14; and graduate student Matthew Leming.

Rund noted, "This was an exciting opportunity to bring many people and techniques together to make some really fascinating findings on the mosquito's ability to smell humans, its host. Just think, during the day the mosquito is sleeping and doesn't need to smell you. But when the sun goes down, the mosquito's

olfactory system becomes extra-sensitive, and she is ready to smell and then bite you."

The project was a follow-up to their earlier work that utilized genomic tools to reveal 24-hour rhythmic patterns of gene expression, including many genes involved in olfaction.

Rund and Duffield's earlier work with collaborator James Gentile from Notre Dame's Department of Computer Science and Engineering, "Extensive circadian and light regulation of the transcriptome in the malaria mosquito *Anopheles gambiae*," helped lay some of the foundation to their findings. The paper, published in *BMC Genomics* in April, further examined the regulation of rhythms in gene expression at the molecular level, highlighted important differences in biological timing between *Anopheles gambiae* and the important dengue vector, *Aedes aegypti*, and highlighted the important role of light in organizing and modifying gene expression.

Anopheles gambiae is the primary species that is responsible for the transmission of malaria in sub-Saharan Africa, with approximately 300 million infections and 1 million deaths annually. The fact that these studies were conducted in *Anopheles gambiae* mosquitoes has important implications for the development of novel insect control methods with the potential to reduce the transmission of malaria parasites and thus the morbidity and mortality associated with malaria disease. This work provides the first comprehensive evidence of the important role of daily rhythms in the

sensory biology of *Anopheles gambiae* and the implications for developing new control methods.

Release of KSRCT IEEE-EMBS Newsletter



Release of KSRCT IEEE-EMBS newsletter

KSRCT IEEE-EMBS newsletter of volume 3, issue 2 was released by Dr.N.Mathivanan, Professor, CAS in Botany, University of Madras, Chennai and Dr.S.Arumugam, Armats Biotek, Chennai along with Dr.P.Ponmurugan, Professor & Head, Ms.S.Poornima, Assistant Professor in Biotechnology.

FORTHCOMING EVENTS OF IEEE

IEEE Madras Section Technical Meeting on "Do Engineering: Preparing Students to Design Cyber Physical Systems"

IEEE Madras Section, ISA South Indian Section & IEEE Control System Society-Madras Chapter: Presentation by lecture on "DO ENGINEERING: PREPARING

STUDENTS TO DESIGN CYBER PHYSICAL SYSTEMS" by Mr. Shekhar Sharad, Group Manager- Academic Segment, National Instruments, Austin, Texas USA on 2nd September 2013 at 5:30pm at ISTE Professional Centre, Chennai.

2014 IEEE TENSYP, 14th - 16th April 2014, Kuala Lumpur, Malaysia

The 2014 IEEE TENSYP is a Region 10 Symposium (previously known as TENCON Spring) is a sister conference to the well known TENCON conference. The first TENSYP was known as TENCON Spring and it was held successfully in Sydney, Australia. IEEE Malaysia Section are honoured to be selected as the host for IEEE 2014 TENSYP. The 2014 IEEE TENSYP will provide a forum for local and international researchers and engineers from academia and industry to present and discuss the latest technological advances and research results in the fields of theoretical, experimental and application aspect of the following tracks:

- Engineering in Medicine and Biology
- Biomedical Instrumentation & Nano/Micro Technology
- Biomaterial & Biomimetics
- Biomedical Modeling and Simulation
- Bioinformatics and
- Healthcare Information System
- Medical Robotics
- Ergonomics & Human Factors

- E/M Health and Telemedicine
- Biomedical Signal Processing and Analysis
- Biomedical Image Processing and Analysis

IMPORTANT DATES:

Full paper submission: September 15, 2013

Notification of acceptance: December 15, 2013

Registration and payment due: February 15, 2014

Camera ready paper submission due: February 15, 2014

Further information can be obtained from the conference website:

<http://ieeemy.org/tensymp/>

IEEE Spectrum

Online Master's degree in Engineering from Purdue

Purdue's College of Engineering offers full online master's degrees in Aerospace (MSAAE), Industrial (MSIE), Electrical (MSECE), Mechanical (MSME), Dual MBA and MSE, Biomedical Engineering (MSE), Engineering Management (MSE) and Computer Science (MS in CS). These online masters degrees are based on Purdue's ranking and prestige in engineering providing working professionals a graduate degree specifically designed for their unique needs.

IEEE Engineering in Medicine and Biology Society (EMBS) Mentor Program

Open to all EMBS members, the mentor program provides students and others interested in the biomedical engineering profession with access to experienced mentors who can provide valuable career guidance and advice, and contribute to your professional and personal development.

Bionic Skin for a Cyborg You

Engineers are working hard to develop electronic skin that sufficiently mimics our natural wrapping's ability to flex, stretch, and fold, and are just as sensitive and durable. When they finally create e-skin whose circuitry can stand up to the rigors experienced by your own epidermis, along with it will come a host of amazing new abilities. Among them will be real-time monitoring of muscles including your heart, and proximity sensing that will warn you of objects in front of you and people sneaking up behind you. But that's a tall order. Takao Someya, an e-skin pioneer whose research group at the University of Tokyo is a leader in bionic skin development, reports on recent advances at labs around the world and the technical hurdles that remain.

Forth coming Events

Biotechnology association (Neomutants) is planned to organize a guest lecture program entitled on 13.08.2013. Mr.Amitesh Suman, Senior Manager, Able India, Bangalore will preside over the function. Meritorious award will also be announced on the same day.

Release of Biozoom magazine

An in house magazine “Biozoom” of Volume 06, issue 01 will be released on 13.08.2013 by Mr.Amitesh Suman, Senior Manager, Able India, Bangalore.

One credit courses

In view of enhancing the students placement activity one credit courses are introduced on the areas of Clinical Research management and Molecular diagnosis and regenerative medicine. The students will be trained in these specialized areas by Point Perfect Solutions private limited, Coimbatore and Virtis Biolabs, Salem respectively.

Quotes

- You'll never be brave if you don't get hurt. You'll never learn if you don't make mistakes. You'll never be successful if you don't encounter failure.
- Love what you have and you have everything you need.
- To be a star you must shine your own light, follow your own path and don't worry about the darkness for that is when the stars shine brightest.
- Be kind, be fair, be honest, be true and all of these things will come back to you.
- Raise your words, not your voice. It is rain that grows flowers, not thunder.
- Giving your best in everything you choose to do

- Accepting others for who they are

Amazing facts

- Babies' eyes do not produce tears until the baby is approximately six to eight weeks old.
- People with darker skin will not wrinkle as fast as people with lighter skin.
- On an average, a person accidentally eats about 430 bugs in each year of his/her life.
- Everybody's tongue print is as unique as their finger print.
- If you were to start reciting the order of the ATCGs in your DNA tomorrow morning, at a rate of 100 each minute, 57 years would pass before you reached the end (provided that you did not stop to eat, drink, sleep, use the bathroom etc.,)

THESIS OF THE MONTH

Title: Evaluation of *Trichoderma* spp. isolated from southern Indian tea plantations against *Phomopsis* canker disease

Name of the Scholar: Ms.S.Anita, Assistant Professor, Department of Biotechnology, KSRCT.

Name of the Supervisor: Dr.P.Ponmurugan

Name of the University: Anna University, Chennai.

Date : 08-08-2013

Venue : Kanini Karutharangam Conference Hall, KSRCT.

FORTHCOMING THESIS

1. Title: An Efficient Visual approach for Automatic Clustering and Validation

Name of the Scholar: Ms.Puniethaa Prabhu, Associate Professor, Department of Biotechnology, KSRCT.

Name of the Supervisor: Dr.K.Duraiswamy

Name of the University: Anna University, Chennai.

Date : 23-09-2013

Venue : Cyber Dome, IT Park, KSRCT.

2. Title: Molecular characterization of *Cephaleuros parasiticus* Karst, the causal agent of red rust disease in tea plants

Name of the Scholar: Ms.M.Ramya, Assistant Professor, Department of Biotechnology, KSRCT.

Name of the University: Anna University, Chennai.

Date : 27-09-2013

Venue : Kanini Karutharangam Conference Hall, KSRCT.

Stress Management

Learn to see challenges as opportunities and stress as only a temporary problem, not a disaster. Practice solving problems and ask others help and guidance. Create small goals, make time to relax, be optimistic, believe in yourself, and deep breathe.

*THINK BEFORE
YOU SPEAK...*

T- Is it true??

H- Is it helpful??

I- Is it inspiring??

N- Is it necessary??

K- Is it kind??

Health corner

Breakfast is an important meal that gives you the energy to start the day.

A healthy breakfast can include a granola bar and milk, scrambled eggs with vegetables, low-fat yoghurt with fruit, or oatmeal with raisins and nuts. Eating a healthy breakfast will help you concentrate in class and give you energy throughout the day.

Add more physical play throughout the day.

Try to replace one hour of TV or video game time with your favourite physical activity

We're on the Web!

See us at:
www.ksrbiotech.com