The fire never dies . . .

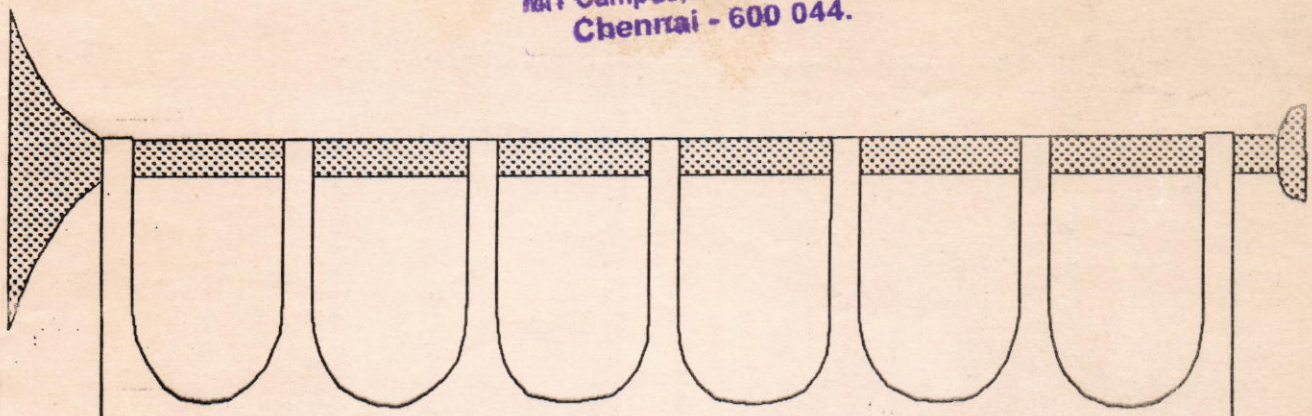
MITMAG '94

MADRAS INSTITUTE OF TECHNOLOGY
ANNA UNIVERSITY, MADRAS - 44

The Tradition continues...

With the Best
Compliments
of

A WELL WISHER

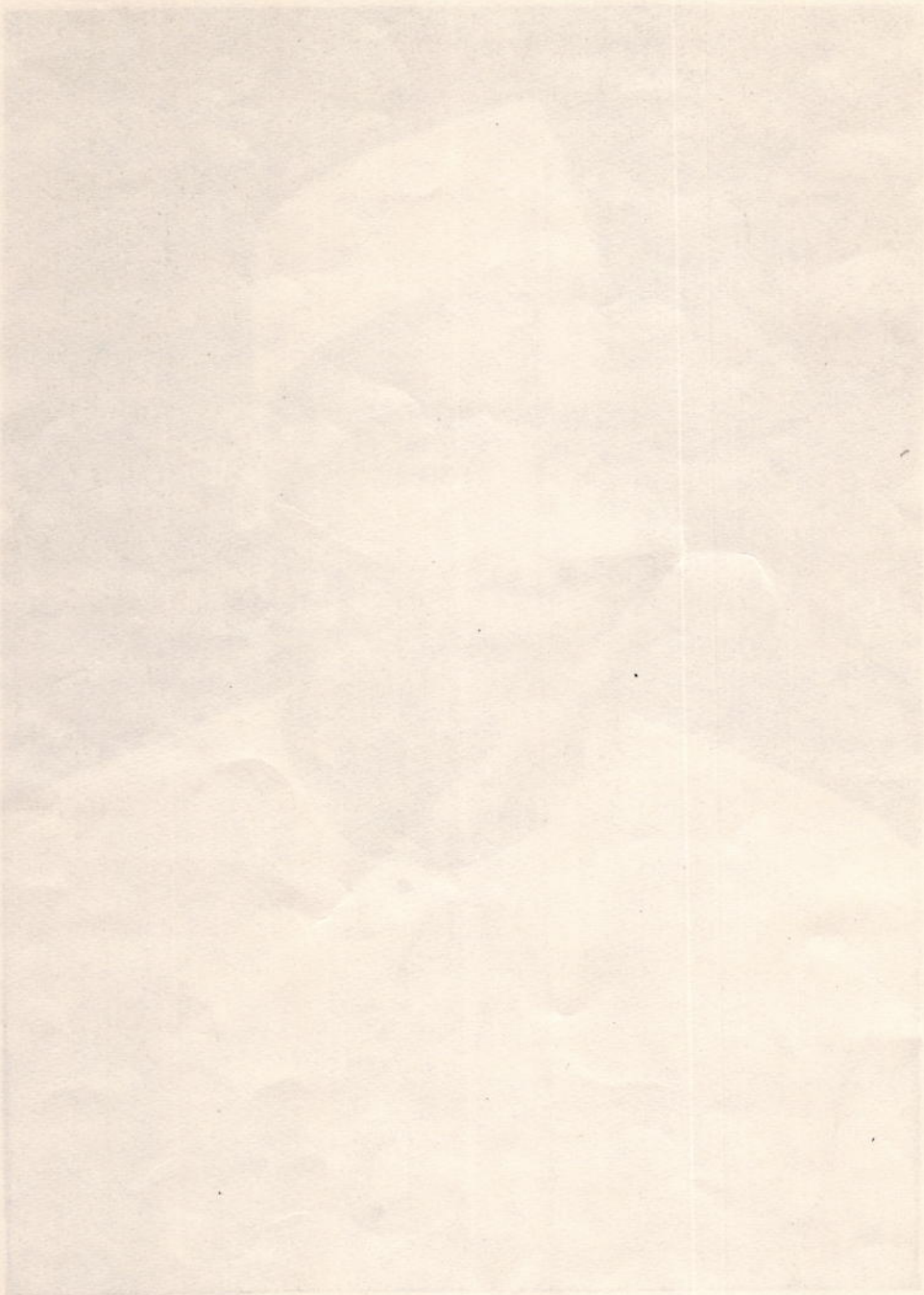


CONTENTS

Thiru C. RAJAM (1882-1955)

FOUNDER

Thou lit us dawn
amidst groping dark
'A soul of vision'-
We salute thee with revere



ANNA UNIVERSITY

Dr. M.ANANDAKRISHNAN
B.E., M.S., Ph.D.,
Vice Chancellor

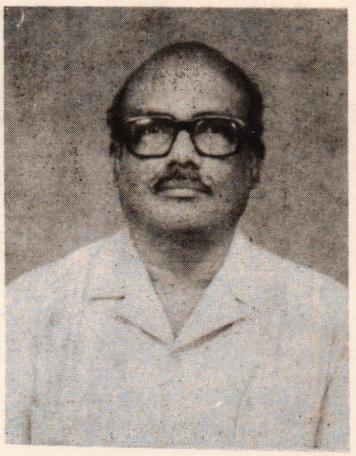
MESSAGE

The students of Madras Institute of Technology, Anna University, have established a commendable tradition of producing MITMAG every year highlighting their achievements and aptitudes. The College Magazine has always received favourable attention not only from the student community but also from the Alumni.

As a vehicle for expression of talents and ideas I hope MITMAG'94 would continue with its excellent traditions.

Dr. M. ANANDAKRISHNAN
VICE-CHANCELLOR

Dr. A. MATHIALAGAN
(Dean - MIT)
President Athenaeum
Patron MITMAG '94



MESSAGE

I am happy that the present students of MIT bring out the Students Annual Magazine 'MITMAG' during this year as their seniors have done in the past.

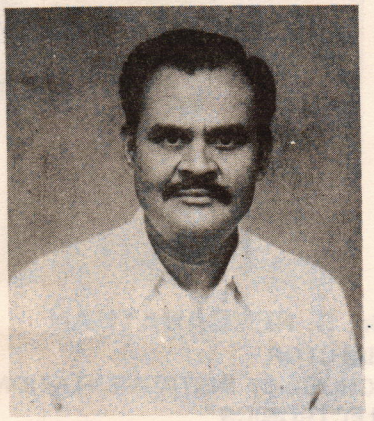
The curricular, co-curricular, extra-curricular activities are the essential components of student life in educational institutions. MITMAG is one of the forums for the students to exhibit their intrinsic extra-curricular talents. As staff advisor, MITMAG in the past, I had the privilege of reading and editing the materials to be published. I am sure that the quality of the articles in MITMAG 94 also will be equally good or even better.

I wish success to my dear students in their efforts to release MITMAG'94 well in time with well maintained qualities.

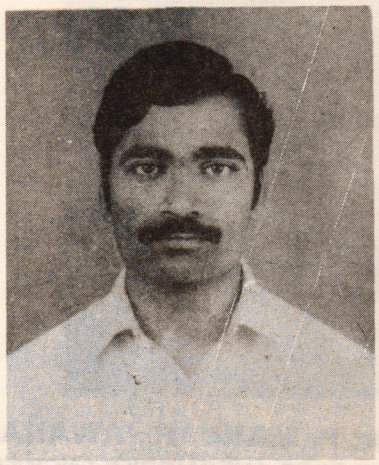
(A.MATHIALAGAN)
DEAN - M.I.T.
18/4/94

Dr.A. MATHIALAGAN
DEAN - MIT

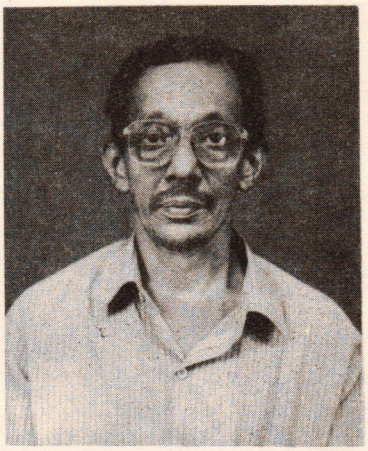
STAFF OFFICERS



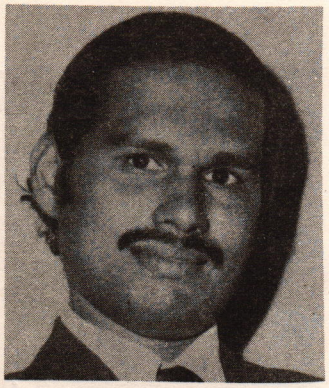
Mr. G. RAMACHANDRAN
Vice President, Athenaeum
Staff Advisor
MITMAG 94



Dr. S. SHANKAR , SIVARANJANI



Prof. K.V. NARAYANAN
Training & Placement Officer

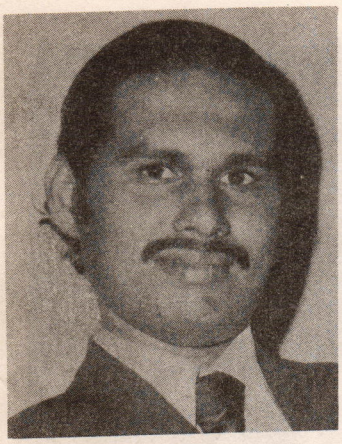


Dr. P. MANNAR JAWAHAR
Executive Warden

HEADS

Dr. K. PADMANABHAN
Dept. of Aeronautical Engineering

Dr. S. RENGANATHAN
DIRECTOR
SCHOOL OF INSTRUMENTATION & ELECTRONICS



Dr. P. MANNAR JAWAHAR
DEPT. OF AUTOMOBILE ENGINEERING

Dr. S. GANAPATHY
DEPT. OF PRODUCTION TECHNOLOGY

Dr. S. VENKATASAMY
DEPT. OF RUBBER TECHNOLOGY

Dr. A. RAMAKRISHNAN
MATHEMATICS

Prof. A. NAGARAJAN
Senior Workshop Superintendent

Rotaract club organised AIDS awareness camp conducted by Deepam Educational Society for Health DESH on 4th February 1994 which was fruitful to students of M.I.T.

Rotaractors of M.I.T. enthusiastically participated in the Polio Plus programme jointly organised by the Rotaract club and Rotary International where information regarding Polio disease and Polio virus were discussed.

Eye donation seminar was one among the activities of Rotaract club under the directorate of community service, various Rotaractors donated their eyes for a better tomorrow through the vision of Rotaract.

Pen friend club was organised by the Rotaract of M.I.T. under the wing of international service. President C.Soman was the first person to pioneer this club as he exchanged letters regarding various topics from Rotaractors in Denmark. The highlight of the penfriend is to invoke the students regarding campus abroad.

The major highlights and spectacular limelight was the Rotafest 94 conducted on 4th and 5th of March 94. Rotaractors from various clubs participated besides various competitions a grand cultural night was a part of the great Extravaganza Movie Mogul G. Venkateswaran was the chief guest of the valedictory function Cini actress Kaveri distributed the prizes. Rotafest 94 really set ablaze a moving evolution in the campus.

R.J. Vijaya Raghavan,
Secretary.

What you do not want others to do to you, do not do for others
- Confucius

Every obstacle gives you opportunity to develop strong will and to grow in strength

First doubt, then inquire, then discover. This has been the process with all great thinkers - H.T. Buckle

When a man assumes a public trust, he should consider himself as public property.

He who has no honey in his house should supply it with his tongue - Moroccan Proverb

The end of all knowledge must be building of character. - Gandhiji

M.I.T. AMATEUR RADIO SOCIETY

'WHERE TECHNOLOGY MEETS HOBBY'

It is my privelege to present the annual report of the activities of M.I.T. Amateur Radio Society (MITARS) for the year 1993-94.

The activities for this year were inagurated on 3rd September 1993 by our former Director Dr. N.S. Venkataraman. Mr.Charuhasan, famous cine actor and senior most HAM and Mr. A. Mohanaraj, Officer-in-charge, International monitoring station DOT, madras gave special address. The chairman outlined the plans for the coming year.

Any HAM or SWL, who really loves Amateur Radio wants to promote his wonderful, unique, fascinating, informative and scientific global hobby. It was on 8th July 1989 MITARS baby born out of M.I.T. A developing country like India needs a better communication system. Amateur Radio operators who establish successful communication links effectively under adverse circumstaances like natural disasters (Maratuwada earthquake), are real assets to our nation. MITARS is designed to perform a similar task from a different angle.

Class for Morse code language practice were conducted in the evenings on the premises of the School of Instrumentation and Electronics with the kind permission of its director Dr. S. Renganathan. Our members attended Hamfest '93 held at Salem on 25th and 26th September 1993.

The ASOC (Amateur Station Operators Certificate) Examinations were held at Saidapet International monitaring station on the 25th of April 1994. The following students were appeared for the examination.

Mr. C.K. Ravindran	III I.E.	Grade I
Mr. C. Raman	II I.E.	Grade I
Mr. B.T. Saravanan	II I.E.	Grade I
Mr. R. Sreenivasan	II I.E.	Grade I
Mr. Balaji	II I.E.	Grade II
Mr. Jaishankar	II Auto	Grade II
Mr. Gopi	I I.E.	Grade II
Mr. Arun	I I.E.	Grade II
Mr. Venkatachalam	I I.E.	Grade II
Mr. Ramakrishna	I I.E.	Grade II
Mr. Senthil kumar	I I.E.	Grade II

But its activity purely based on practival living with wireless communication equipments. Mr. D.R. Ramachandran, former staff of M.I.T. has kindly accepted to present a wireless transciever once MITARS gets its club station.

Before I conclude, I would like to thank our patron president, society advisor and all other teaching and non-teaching staffs for their help and cooperation.

C.K.R. Rajkumar
Chairman

All mankind is divided into three classes: those who are immovable; those who are movable; and those who move
- Benjamin Franklin

A happy life must be to a great extent a quiet life, for it is only in an atmosphere of quiet that true joy can live - Bertrand Russell

'INNOVATIONS'

- Projects & Research of MIT

P. NATARAJAN 17511

'INNOVATIONS'

- Projects & Research of MIT

P. NATARAJAN (751)

ELECTRONICS ENGINEERING

B.TECH	M.E.
1. Fractal Image Generatin using Transputers 2. Un interrupted Power Supply 3. Data Acquisition System 4. Mind Machine 5. Implementation of Image Processing using Transputers 6. PC Based Yarn Imperfection Indicator 7. Bit Error Rate Meter 8. Simulation and DSP implementation of Modulation and Coding 9. Digital Dashboard 10. Transputer Based fuzzy Logic Controller for Target Tracing 11. Video Digitizer for PCs 12. Transmission of Non-video Signals on TV Channels 13. A Digitally Programmable Temperature Controller using PLL 14. Implementation of Kalman Algorithm on TMS 320 C 25 15. Switched Mode Power Supply 16. Electrically Isolated RS 232 Interface 17. BCS Quality Control Software for Cement Manufacture	1. Implementation on end to end layers for ethernet/cheapernet Lan 2. Routing in Networks with changing Topology 3. Simulation study of carrier and timing recovery schemes 4. Dialled pulse/tone decoder using ADSP 2105 5. Implementation of file server for transputer system under MS-WINDOWS 6. A connectionist approach to schematic case-role classification in natural language sentences 7. Implementation of TCP/IP on transputer systems 8. Transputer implementation of fractal image compression 9. Implementation of Cheapernet LAN in DOS environment 10. Real Time animated interaction with CNC machines using MS WINDOWS 11. Signal Processing using TMS 320C25 for multilingual transmission 12. Transputer implementation of motion compensation second order geometric transformation.

INSTRUMENTATION ENGINEERING

B.TECH	M.E.
1. Electronic Accident Analyser (White Box) 2. Auto Tuned Control System 3. Fibre Optic Displacement Sensor System 4. Bi-Directional Flow Measurement 5. PC Based PH Titrator 6. An Olfactory System using Artificial Neural Network 7. Combined Effects Flowmeter 8. Fibre Optic Torque Meter 9. Fibre Optic Temperature Sensor 10. Leakage Detection in Pipe Lines using Cross-correlation Technique 11. Implementation of Fuzzy Logic Control in Temperature Process 12. PC Based Fault Detection using Redundant Sensors 13. Acoustic Flowmeter 14. Temperature Control using Neural Network 15. An Electronically Switched Flowmeter and Temperature Sensor employing a single Thermistor probe 16. Optical Fiber Sensor for Vibration Amplitude Measurement 17. Sub-Ambient Temperature Controller using Micro-controller	1. Fault Tolerant Computing 2. Adaptive Control using Transputer 3. Air Temperature control using Fuzzy Logic Constant Temperature air chamber 4. Parameter identification of tactical missiles 5. Thyristorised battery driven vehicles 6. Fault detection in a continuous process using petrol. 7. Adaptive acoustic noise canceller using TMS 320C25/TMS320C30 8. Area Measurement by image processing technique 9. Neural network controller for inverted pendulum 10. Fuzzy logic control of inverted pendulum 11. Cross correlation flow meter 12. Adaptive control package 13. A neural newtork controller for a thermal process 14. PC based closed loop control of robot

AERONAUTICAL ENGINEERING

B.TECH	M.E.
1. Experimental Investigation of 2-dimensional impinging jet on a wedge.	1. Thermal Hydraulic Analysis of Liquid Metal Fast Breader Test Reactor problems using FEM.
2. Wind Tunnel work on water tank model	2. Environmental study on composite structures.
3. Study on Repaired Composites	3. Effect of some fuel injection parameters on continuous combustion.
4. Design and Fabrication of a Vibration Absorber	4. Preliminary studies on Aerodynamic Heating
5. Stress analysis of Laminated Composites	5. Response studies of a nonlinear dynamical system
6. Effect of different surface smoothness on flow past steps	6. Study on repaired composited structures.
7. Experimental study of wall temperature on flat please under forced convection	7. Large on amplitude vibrations of a cantilevered plate
	8. Development work on a Supersonic wind tunnel
	9. Analysis of a circular fuselage frame with loaded cross beam using FEM'
	10. Positional Influence of a rectangular cylinder on a Ramp

AUTOMOBILE ENGINEERING

B.TECH	M.E.
1. Inventory Management (Binny Engg. Ltd.)	1. Optimisation of vehicle chassis frame join by FEM 1-deas
2. A Cost Reduction Approach to a General Engineering (Binny Engg. Ltd.)	2. Fabrication of test fig for dynamic response studies of a vehicle model
3. Stress Analysis of Automotive Vehicle Leaf Springs	3. Design optimization and development of gear box for 350 cc diesel engine
4. Vehicle Aerodynamics	4. Computer simulation and analysis of heat transfer in low heat rejection direct injection diesel engine using multizone modelling
5. Hybrid Car Solar Power and Electronic Control	5. Computer simulation for determination of steering effort for a commercial vehicle
6. Alternate Fuel (Ethanol) Application in Surface Ignition Engine	6. Prediction of pollutants from a diesel engine using four zone combustion model
7. Two Stroke Engine Performance Improvement	7. Development and testing of float and needle valve assembly for a carburettor
8. Analysis of Automotive Components Using FEM	8. Emission control system for a 4 stroke SI engine.
9. Stress Analysis of Frames	9. Computer simulation of scavenging process in two stroke crank case scavenged spark ignition engine
10. Diesel Fuel Spray Characterstics	10. Torsional vibration analysis of an automotive epicyclic gear box.
	11. Development and testing of Fuel-cutoff assembly for carburettor
	12. Performance analysis of a two stroke SI engine with air supplementation through reed value.
	13. Analysis of stresses in passenger car leaf springs.
	14. Diesel fuel spray dynamics - an experimental study using photographic technique
	15. Experimental investigation of performance characteristics of a low heat rejection engine.

BETTER BE STUPID

Prof. N.S. Venkataraman

To be or not to be stupid, that is the question. I say "Better be stupid". Yes, I here voices of protest and denial; but I assure you, you shall be convinced when you have finished reading this.

To be stupid is difficult. to become stupid is more difficult. Stupidity is almost a gift and a rare gift at that.

When we peep into the past, we find that those whom the world admired as great personalities were very stupid and dull-headed in the prime of their youth. Ludwig, the geometrician, Hume, the intellectual athlete, R.B. Sheridan, the best orator and parliamentarian of his age, were all uncommonly weak minded in their youth. Edward Gibbon, the author of "The Decline and Fall of the Roman Empire", was dreadfully dull in his boyhood. Glorious John Dryden, the greatest of English satirists, was accounted a great numskull. Oliver Goldsmith's fame was grafted on to a boyhood of wholly unrecognized capabilities. Walter Scott was denounced as the boy who had the thickest skull in the school. Napoleon was at best esteemed a plodder. The Duck of Edinburgh and Sir Winston Churchill were both supposed to be hopelessly deficient in mental ability in their youth. Isaac Barrow second only to Isaac newton and Master of Trinity College, Cambridge, was so dunderheaded that once his father said, "If God takes away any of my children, I trust it will be Isaac as I fear he will never be fit for anything in the world".

I can give another example to convince you of the same truth. Sir Isaac newton had a cat and a kitten as his pets. The animals used to stay at night outside the house. When winter came, they suffered much on account of the extreme cold. One morning, Newton made two holes in the door of the house in order that the animals might seek shelter inside house, he replied that the bigger hole was for the cat and the smaller onefor the kitten to enter into the house! He was so stupid as to forget that it was enough to have the bigger hole alone, for the kitten also could entre through it easily. Yet it was this Isacc Newton who established and proved the laws of motion.

In this sense, the modern generation students may well pray for the fit of stupidity. I know fully well that many of the modern students do have that gift; but all I want to tell them is to develop that gift to the maximum extent possible! Better be stupid now, so that in future at least, if not in the present, you may become a great man like one of the persons mentioned above. BLESSED ARE THE STUPID !

PRODUCTION TECHNOLOGY

B.TECH	M.E.
1. Analysis reduction of spur gear noise in engines.	1. CADD of cutting tools
2. Surface texture analysis on milled surface	2. Rheology studies on glass fibre filled poly phenylene sulfide
3. Low cost automation in clutch plate assembly at API, Madras	3. Weldability studies on electroslag refined modified 15CDV6 steel
4. Design and fabrication of hydro-pneumatic damping for horizontal boring machine	4. MRP for railway coach shells
5. Semi automation of diode assembly	5. Design and development of system for lacquering line for metal containers
6. Study of upsetting process in hydraulic press	6. CADD on cane juice evaporator
7. Software for tool path simulation and component weight estimation	7. Acoustic emission technique applied to CNC milling of composite materials
8. Design of CNC profile cutting machine	8. Study of machining of non metallic and composite material using acoustic emission technique
9. Corrosion studies on exhaust valve	9. Development of a DNC (Direct Number Control) Software for machining steering gear
10. Relayout and modified material handling system for a piston industry	
11. Development of software for designing a gating system	

Also a design project namely **"LOW COST AUTOMATION IN SOAPNUT GRINDING"** was successfully designed and fabricated by our students **K. Ravishankar, S. Govindaraj, R. Karpagam,** under the guidance of **Mr. Jothilingam** at M/s. Mayil Mark Nilayam, Madras, at the latter's request through the CUIC, (AU). The industry complimented the students with a certificate and a cash prize of Rs. 1,000/-.

RUBBER TECHNOLOGY

B. TECH
1. Optimisation of ENR Tread compound
2. Development of Rubber Based Artificial Limb
3. Thermoplastic polyurethane - PVC Blends and their studies
4. Liquid NR as a processing aid
5. Development of Footcounter based on TPNR

The sea, in spite of its vastness observes its limits

The actions of men are like the index of a book; they point out what is most remarkable in them. - Thomas

TECHNOLOGICAL ADVANCES AND NEW APPROACHES TO PRODUCTION MANAGEMENT

Dr. S. Ganapathy and Dr. S. Venkataswamy
Professors of Production Technology
Madras Institute of Technology, Madras - 44

INTRODUCTION

The concept of Production Engineering and management has undergone a sea change over the past decade. This is mainly due to the challenge posed by the japanese industries. Production now has to be at the lowest possible cost at the required quality (so as to withstand international competition). The production line has to be extremely flexible capable of handling a wide variety with minimum lead time; so that the customer is not only "satisfied", but also "delighted". The production line in quite a number of Indian Industries now are capable of handling about 50 to 60 varieties of products with change over possibility in a matter of a few hours. NC/CNC machines and innovative management concepts have made this possible.

PRODUCTIVITY

Quite a few decades back, the main aim in production shop is to utilise the men and machines fully, no matter what is produced. Work study, method study and micro-motion study, Man-Machine charts etc., were those the main tools for achieving this objective. All these aim at reducing the processing time of the job. Having standardised in these areas, the focus now is on Total Productivity Management (TPM). The aim here is to reduce the throughput time and to reduce the total cost of production.

INVENTORY CONTROL

Inventory holding cost is nowadays a substantial portion of total production cost. Appropriate plant layout and cell concept in production have made it possible to practice 'Just In time' (JIT). The concept here is to make the item only when there is a demand for it; sell the item and then make the next item. Most industries have greatly reduced the inventory from about 4 months to just one day. A majority of items are subcontracted so that supplies are received almost everyday. Some of the public sector undertaking like Railways hold inventory for about 10 to 12 months: Product layout with pull type Kan-bon system has reduced the work-in-process inventory (WIP) to almost nil. The stock turn over ratio (which is the ratio between the total annual turn over divided by the cost of the inventory held at any point of time) is an indicator of the level of inventory. Most industries have improved this ratio to 8 at present from a value which was as low as 1.5 a few years back.

SCRAP REDUCTION

Workmen training and their involvement in production through Quality Circles have resulted in reduction of scrap rate. Also better tooling and metrology systems have helped in reducing the scrap. while a scrap level of 55 is accepted in most industries, quite a few industries have achieved a scrap rate lower than 1%.

IMPROVED PRODUCTION TECHNIQUES

Multi-machine manning by Nagare Cell and continuous improvements (Kaizen) have enabled better utilization of manpower in production shifts. The ratio of Indirect to direct labours has been brought down to about 1.5 to 2.0 from a previously existed value of about 3 to 4. For a cell to work satisfactorily with a single operator sharing his time with a number of machines, the system should be fool-proof (poke-yoke) with adequate number of interlocks (so that no operation will be missed in a sequence) and safety. The flexibility offered by NC/CNC machines, better material handling systems (through LCA and Robots) along with Single Minute Exchange of Dies (SMED) and total change -over have greatly reduced the lead time needed for production.

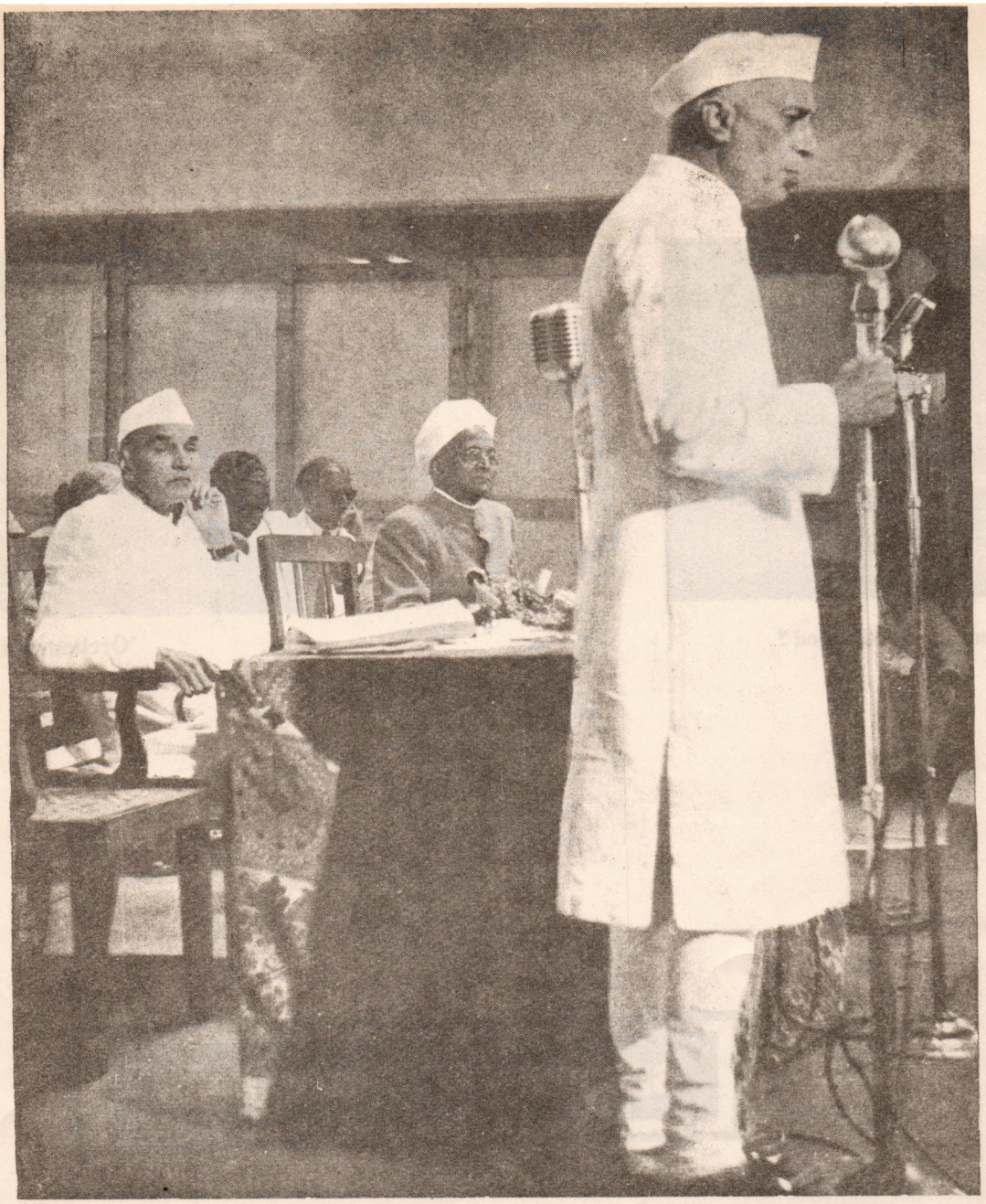
The operator today is well trained and is better utilized. He is no more sitting idle in front of a machine and just watching a process (for a possible mal-function so - check the dimensions and quality of the product - calculate the process capability index and is able to maintain the process himself. Also fault diagnostic and annunciation systems, planned maintenance and conditions monitoring has ensured the "availability" (not unexpected break down) of machines when required.

COMPUTER AIDS IN PRODUCTION ENGINEERING

Computer has helped in all avenues of production Engineering viz. design (CAD), reverse engineering for design, Production Planning (CAPP), machining (CAM), inspection (CAI), and management information systems (MIS). NC machines and computers have enhanced the accuracy and reliability of production. Computer also enables quicker and better management decisions.

We get so much in the habit of wearing a disguise before others that we eventually appear disguised before ourselves

War and conflicts begin in the minds of men, and peace, therefore, has to be established there.



SHRI PANDITJI

at the first convocation in 1952

" Anyhow, the most impressive fact of this young and growing Institute is that you, having started from small beginnings, are making good progress more with your own efforts, than what you could have if you had an easier time, having all things put before you."

Invoke whom ....; the Rain god ?

`Orchestra' in full swing

SIVARANJANI - INAUGURAL

An ex..cited - ex..cellent singer ?

After a `dispersion ' of our activities - `SPECTRUM' Arises

Dr. M.S. Udhayamurthy releases the 1st copy

The galaxy on the dais (from L to R)

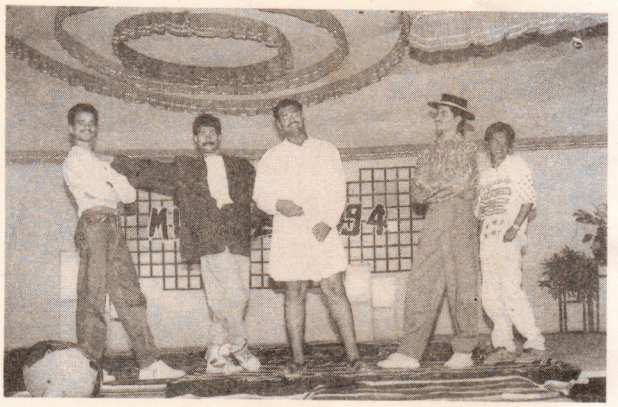
Nasser, Dr NSV, Hon'ble Minister, Arangasamy, Bharathiraja, Mr. Kanappan & Dr AM

THE MEGA EVENT - MITAFEST '94

His master's Voice ! - Abdul Hameed at the fest

Ms. Shoba Ravishankar ..... in pursuit of `Homely girl'

Born Dancers (?) - Hats off !



Skit'ting on stage

All smiles .....! Ramesh Prabha and Dr AM leads the group at an hour of wit

'Daddy,, Let's come to MITAFEST next year also, pa... please' ...- 'Nasser the small'

TO SIR/SERVE WITH LOVE

by

Prof SESHAYANAN, MIT

"Sir! shall I have the pleasure of receiving an article from you for MITMAG - 94? "

The Junior KRS (K. RAVISHANKAR) is not a person who will take a, "No," for an answer. But alas, the senior KRS (K.R. SESHADRI) doesn't have the time and energy at this point of time to put his pen to paper.

But then, what is the expansion for KRS?

"Kindly, Reply Sir."
KRS's (I mean the junior) smile, patience, perseverance and single minded devotion - all these are on one side and the other KRS's never before such a situation in his life type of thing, prolonged indispostion, bereavements in friends', relatives homes etc. have not given him time and energy to sit and write.

But, then KRS' role model is Thomas Alva Edison. Therefore, he would not mind the 99% perspiration in Agni Nakshatram days of the Madras heat. He keeps on visiting the rooms of the various faculty members with the fond hope of collecting their sparks from their anvils.

True to the adage, " The mind is willing, but the flesh is weak, "still it was not possible to sit at the desk, brisk with ideas. Time passed on, as time and tide wait for none.

But, how about our KRS? He must have read somewhere that"; Time must have a stop."
So, the time for releasing the MITMAG - 94 seemed to have stopped and KRS went on from the pillar to post, (or from MIT to the Printing Press) to make MITMAG - 94 have a high quality, being trained in TQM and full of ideas of ISO 9000.

So, the result is he joined the ranks of Robert Bruce, Abraham Lincoln and the other celebrities who saw light only at the end of long and dark tunnel.

Who ever thought that what was given on the 18th June 1994 could still find a place in MM-94 except ofcourse our dear youngster with the motto, "Ungalal mudiyum Anna!" That was it. Here I am with my pen and paper. A beautiful and colourful card from MIT alumnus, J.V. Narasimha Rao (not, P.V.) says beautifully.

"All the wonders you seek are within yourself."

Yes, that will be our message to the MIT students. Turn yoursearch light inward and meet the most important person in your life. Please, don't write like a good MIT'ian did when the remarked," Sir, I haven't yet met the most important person in my life!",

Can you beat it? Is the most important person in your life some body else?
Have you not seen him?

Then, you have never looked at any reflecting material, starting from the mirror on the wall!
While, all of us faculty members appreciate the love and affection of the MIT students, who keep on sending greeting cards, to 'Sir with love' which inspire us to reciprocate, to serve with love, we will nonetheless make an appeal to all the students through the pages of MITMAG - 94, to look sharp, pull up the socks and burn the midnight oil and leave the portels of this beautiful alma mater as Abdul Kalams, Agarwals, Lakshmi Menons, Swarnalathas and John Jacobs.
We will be your partners in achieving this goal.

K.R. SESHADRI + K.V. NARAYANAN = SESHAYANAN

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KRS's (I mean the junior) smile, patience, perseverance and single minded devotion - all these are on one side and the other KRS's never before such a situation in his life type of thing, prolonged indisposition, bereavements in friends', relatives homes etc. have not given him time and energy to sit and write.

But, then KRS' role model is Thomas Alva Edison. Therefore, he would not mind the 99% perspiration in Agni Nakshatram days of the Madras heat. He keeps on visiting the rooms of the various faculty members with the fond hope of collecting their sparks from their anvils.

True to the adage, " The mind is willing, but the flesh is weak, "still it was not possible to sit at the desk, brisk with ideas. Time passed on, as time and tide wait for none.

But, how about our KRS? He must have read somewhere that "; Time must have a stop. "
So, the time for releasing the MITMAG - 94 seemed to have stopped and KRS went on from the pillar to post, (or from MIT to the Printing Press) to make MITMAG - 94 have a high quality, being trained in TQM and full of ideas of ISO 9000.

So, the result is he joined the ranks of Robert Bruce, Abraham Lincoln and the other celebrities who saw light only at the end of long and dark tunnel.

Who ever thought that what was given on the 18th June 1994 could still find a place in MM-94 except ofcourse our dear youngsters with the motto, "Ungalai mudiyum Annai" That was it. Here I am with my pen and paper. A beautiful and colourful card from MIT alumnus, J.V. Narasimha Rao (not, P.V.) says beautifully.

"All the wonders you seek are within yourself. "

Yes, that will be our message to the MIT students. Turn yoursearch light inward and meet the most important person in your life. Please, don't write like a good MIT'ian did when the remarked, " Sir, I haven't yet met the most important person in my life!".

Can you beat it? Is the most important person in your life some body else?
Have you not seen him?

Then, you have never looked at any reflecting material, starting from the mirror on the wall. While, all of us faculty members appreciate the love and affection of the MIT students, who keep on sending greeting cards, to Sir with love which inspire us to reciprocate, to serve with love, we will nonetheless make an appeal to all the students through the pages of MITMAG - 94, to look sharp, pull up the socks and burn the midnight oil and leave the portals of this beautiful alma mater as Abdul Kalams, Agarwals, Lakshmi Menons, Swaminathans and John Jacobs.
We will be your partners in achieving this goal.

K.R. SESHADRI + K.V. NARAYANAN = SESHAYANAN

FROM THE MINDS . . .
AND THE PENS . . .

FROM THE MINDS ...
AND THE PENS ...

LIFE THOUGHTS

Into this space of no peace
Having come on a lease,
For the span of a bubble,
Is it to give others always some trouble.

Here we Prattle and Battle
Just for morsel and mantle,
Fair or not, we may end up this life game,
but not forgotten is one's blame.

So let us not fill this so journ
With the wrong doings of our own,
Actings as humans, without any fare
Let us help those who needs double care.

Let us live commemorating each hour
grabbed off from the Eternal power;
and strive hard to make a name
that may propagate, after conquest, our fame.

R. SRINIVASAN
43224

SUCCESS STORY

'What is the secret of success?';
asked the sphinx.
'Push' said the Button.
'Never be led' said the pencil.
'Take pains' said window.
'Always keep cool' said the Ice.
'Be up-to-date' said calendar.
'Never lose your head' said the Barrel.
'Make light of everything' said the Fire.
'Do a driving business' said the hammer.
'Be sharp in all your dealings' said the knife.
'Find a good thing and stick to it' said the Glue.

T.No.15514

In Broken Images

He is quick, thinking in clear images;
I am slow, thinking in broken images.
He becomes dull, trusting to his clear images;
I become sharp, mistrusting my broken images.
Trusting his images, he assumes their relevence;
Mistrusting my images, I question the relevence.
Assuming the relevence, he assumes the fact;
Questioning their relevence, I question the fact.
When the fact fails him, he questions his senses;
When the fact fails me, I approve my senses.
He continues quick and dull in his clear images;
I continue slow and sharp in my broken images.
He in a new confusion of his understanding;
I in a new understanding of my confusion.
Say what endurance gives or death denies us.

M. Senthil Vasan
II P.T.
16526.

The Greatest Things

The best day	-	Today
The greatest sin	-	Fear
The best gift	-	Forgiveness
The meanest feeling	-	Jealousy
The greatest need	-	Common Sense
The most expensive indulgence	-	Hate
The greatest trouble maker	-	Talking too much
The greatest teacher	-	One who makes you want to learn
The cleverest man	-	One who does what he thinks right
The worst bankrupt	-	The Soul that has lost its enthusiasm
The cheapest,stupidest and easiest thing to do	-	Finding fault
The best part of one's religion	-	Gentleness and Cheerfulness

Adapted by
O.E. Ramesh
17519.

CANDLE

Oh Candle! Thou art the dispeller of darkness
lifting our souls from sorrow to happiness
But how long thy glow, steady can be?
Only as long as the wind fails to be.
Once the wind, through the windows blow
Your flame struggles even to keep aglow
Struggling to keep steady, like our minds it does wander
Struggling to keep steady, we seek solace in God,, our maker
But as time passes, so do you
Our lives too are temporary just like you
Seldom does man ponder or think
That you teach us so much - Oh little thing!

C. KALPANA
45317

"I've two falcons to tame,
two rabbits from running away,
two hawks to manage,
a snake to watch,
a lion to chain and
a sickman to tend and wait upon".

These are the words from a oldman, who worked hard and so felt tired and wornout in the evening.

Explanation from him for the above phrase. The 2 falcons are my two greedy eyes, which I must constantly guard,the 2 rabbits are my 2 feet which I must check from running into wrong directions, the 2 hawks are my two hands which I must use for doing something useful to earn my bread, the snake is my tongue which I must hold otherwise it will speak ill of others, the lion is my mind with which I have continuous fight to control it from desiring undesirable things and the sickman is my whole body which always needs my loving and tender care.

Doing all these makes me wornout. Thus if you have controlled your sense and physical organs, you can raise yourself to the status you want to become.

SUDHA. S
16528

ENGLISH - THE FUNNIEST LANGUAGE

We will begin with box, and the plural is boxes, but the plural of ox should be oxen not Oxes; Then one fowl is a goose but two are called geese, yet the plural of mouse should never be meese!

You may find a lone mouse or a whole set of mice. But the plural of house is houses, not hice. If the plural of man is always called men, why should not the plural of pan be called pen?

If I speak of a foot and you show me your feet, and I give you a boot, would a pair be called beet? If one is a tooth, and a whole set are teeth, why should not the plural of booth be called beeth?

Then, one may be that, and three may be these, yet hat in the plural would never be hose; And the plural of cat is cats and not cose.

We speak of a brother and also of brethren, but though we say mother , we never say mothern. Then the masculine pronouns are he, his and him, but imagine the feminine - she, shis, shim!

So English, I fancy, you all will agree, is the funniest language you ever did see.

HISTORY OF NOBEL PRIZES
ALFRED F. NOBEL(1833 - 1896)

Nobel prizes in science are accepted as the most prestigious, all over the world. The same prizes given in the fields of literature, peace and economics have often been controversial and said to be politically motivated.

The prize-winners are announced in October every year and prizes are awarded by the Royalty of Swedan in December. No more than three persons can share an award in a single subject. The amount of prize money varies from year to year.

This year it was U.S. $600,000 per prize. It is accompanied by a Gold medal on which Nobel's face profile is engraved and a citation describing the contribution for which the award has been made. The awards are not given posthumously(after death).

The award winners deliver oration before an invited audiance and the prize-giving is followed by a banquet and dance.

The prizes are named after Alfred F. Nobel, a swedish scientist who born in October 1833, near Stockholm in Swedan.

He was an inventor, writer, entrepreneur and a philanthropist. He is best known for his modification of an explosive, popularly known as dynamite. By manufacturing it on an industrial scale he became a wealthy man. Initially dynamite was used to dig trenches and construct tunnels but later during the wars that followed, it was used for destruction and thus was responsible for death of hundreds of thousands of men during the wars.

The people blamed Nobel for this and because he had become a wealthy man by selling dynamite, they sarcastically called him a " merchant of death ". This caused him great distress and he died a lonely and unhappy man in December 1896.

Influenced by his life-long girl friend, Nobel, willed 2 million pounds of his personal fortune to establish international prizes to be awarded annually for contribution most beneficial to humanity in the fields of physics, chemistry, physiology, medicine, peace and literature. Since 1969, a prize for economics has been added.

The first ever Nobel prize was awarded in 1901 to William Roentgen of the Netherlands for his discovery of x-rays.

O.E. Ramesh
I P.T.
17519

R.J. Vijaya Raghavan
II. P.T.

READ AND ENJOY

Accident	:	A condition in which presence of mind is good,absence of body is better
Alcohol	:	The social lubricant
April First	:	The day we are reminded of what we are the other 364 days.
Campus Interview	:	One who knows about interviewer.
Death	:	The reward for living
Female	:	A fee for the male
January	:	The beginning of disappointment
Kiss	:	A constraction of mouth due to enlargement of heart.
Marriage	:	A three ring circus engagement ring, wedding ring and suffering.
Skeleton	:	A strip teaser who overdoes it.
Zoo	:	A place devised for animals to study the habit of human being.

ROSE **R.J. Vijaya Raghavan**
II.P.T.

I am a flower of peace;
I am born everywhere,
Loved by young and old;
I have little fragrance.
Hence loved by mortals.
"Love" in this world would have born from me.
My colours are beautiful;
But my heart is wonderful;
Which I didn't give to none
The wicked humans love my hues.
Not my heart in Manner,
They love the Rich hate the Poor
That's the secret why
I haven't given my heart to prides.
So I am Born and Born and Born

MIT **R.J. Vijaya Raghavan**
II.P.T.

It took birth by Fixing
the Bearing of MITians
On the Shaft of Engineering
Connecting the coupling of Intimacy
Adopting the Jig of Guidance
Sticking to the Fixture of Stability
Engaging the clutch of facilities
For transmitting the power of Harmony
to discover the vision of Sir Rajam.

WHY NOT DO-IT-YOURSELF?

B. KOTHANDARAMAN, Lecturer, RT

An electronic consumer product broke down in my neighbour's house. They rang up to the supplier ie. the manufacturer - their Service Engineer (who is in all possibility, a B.E.) said, a coil not functioning - replacement cost Rs. 350/-. My neighbour then called their TV Technician (a Diploma holder) - he checked up, said that the gadget needed a mere soldering and he did it for Rs.25/- the unit worked. For the practical purpose, the Diploma holder proved to be better than the Degree Holder.

My grand father (a Civil engineer by practice) used to comment years ago - what B.E.'s (Civil) they are - they do not even know how to hold a spirit level. The above two are just two examples which expose the weakness of our Engineers and Technologists to hold higher degrees.

True, our B.E. Electronics students study and work out projects on advanced topics like Artificial Intelligence, Fibre Optics etc, but when their own TV set breaks down only a very few of them will dare to investigate this. Does holding a B.E. degree gives them a feeling that repairing a simpler thing like a TV or Radio set make them inferior?

Just see who repairs your TV/Radio set-most probably he may not hold a degree but has learnt to repair electrical gadgets out of sheer interest.

Similarly how many of the Automobile Engineers are ready to repair their own vehicles?

Your water pipe (metal or PVC) leaks - you try to call your plumber to set it right. Often he does not oblige you easily even if you are prepared to pay him more - he is too busy. Cracks on your walls? Your Scooter seat torn? Your plastic name board broken or letters come off? Well any one can repair them easily - Especially a polymer Scientist or a Technologist has studied in books - X is the correct adhesive for this purpose etc. why can't he do it himself then?

In the west, Do it yourself (DIY) - was considered inferior a few decades before, but now is fashionable - one reason is economics - the plumber, the tution teacher (ie one outside the class) are all too costly - people try to work out themselves. Futurologist Alvin Toffler predicts that do it yourself will spread more and more in future.

Most of the D-I-Y situations require only application of fairly simple concepts of Engg. which we have learnt. Hence, let us, the intellectual elites, start this D-I-Y habit. We will not only save money but also get a satisfaction of having something in the otherwise dreary lives most of us are leading/going to lead.

யாருக்கு?

ஒரு நொடியில்
நூறு யுகம்
வாழ முடிந்தவனை - ஆயுள்
அதட்ட முடியாது.
வாழ்க்கை - எந்தக்
கவுரவத்தையும்
எதிர்பார்த்து உன்னிடம்
வரவில்லை - நீ
வாழ்கிறாயா என்பத மட்டும்
பார்த்துபோக
ஆசைப்படுகிறது!

★ ★ ★

முடிவுகளைக்
கடந்துபோங்கள் உங்கள் முன்
முடிவில்லா முடிவுகள்
நீங்கள்
நடப்பதே எதையும்
கடப்பதற்காக அல்ல
எதையும்
அடைவதற்குத்தான்

★ ★ ★

இயற்கை ஓர்
அரும்புக்குள் இருந்து
எப்படி அதை மலராக ஊதுகிறது?
நீங்களும்
ஆன்மாவுக்குள் அமர்ந்து
அன்பை - அதன்
அர்த்தத்தை
விரியுங்கள்
சிறிதாய், சிறிதாய்
நிரந்தரமாய்.

★ ★ ★

இமை விளிம்பில்
இதழ்க் கரையில் - ஓர்
ஓடையாக
ஓயாது
அலை விரிக்கட்டும்
தாங்களின் அன்பு-

M. கோவிந்தராஜ் (16509)
Associate Editor - MITMAG '94

யார் அந்த சிறுவன்?

ஆங்கிலக் கவிஞரான லார்டு டென்னிஸன் உலகப் புகழ்பெற்ற கவிஞர்களில் ஒருவர். ஒரு சமயம் டென்னிஸனிடம் அவரது நண்பர் கேட்டார்.

'நீங்கள் கலைஞனாக வேண்டும் என்ற ஆசை, யாருடைய கவிதையைப் படித்தும் உங்களுக்கு ஏற்பட்டது?'

''ஐந்து வயது சிறுவன் ஒருவன் எழுதிய கவிதை ஒன்றைப் படித்த பிறகுதான் எனக்கு இந்த ஆசை ஏற்பட்டது'' என்று பதில் தந்தார் டென்னிஸன்.

''யார் அந்த சிறுவன்'' என்று ஆர்வமாகக் கேட்டார் நண்பர்.

''நான்தான்'' என்றார் டென்னிஸன் சிரித்துக் கொண்டே.

-சுவாமி துணுக்கானந்தா

வேலை அப்படி ஓய்வு இப்படி

புகழ்பெற்ற ஸ்பானிஷ் எழுத்தாளரான பியோபரோஜா என்பவர், தமது அடுத்த புத்தகத்தின் கருவைப் பற்றிச் சிந்தித்தபடி தமது வீட்டின் மொட்டை மாடியில் அமர்ந்து இருந்தார்.

அப்போது அந்த வழியாக ஒரு விவசாயி சென்றார். எழுத்தாளரைப் பார்த்து ''என்ன ஓய்வு எடுக்கின்றீர்களா'' என்று கேட்டார்.

''இல்லை வேலை செய்கிறேன்'' என்றார் எழுத்தாளர்.

சில நாட்கள் சென்றன. கடும் சிந்தனைக்குப் பிறகு இரண்டு அத்தியாயங்கள் எழுதி முடித்தார். தம் வீட்டின் தோட்டத்துக்குச் சென்று மண்வெட்டியுடன் வேலை செய்து கொண்டிருந்தார். அப்போது அந்தப் பக்கம் வந்த அதே விவசாயி, 'என்ன வேலை செய்கிறீர்களா?' என்று கேட்டார்.

''இல்லை ஓய்வு எடுக்கிறேன்'' என்றார் எழுத்தாளர்.

-சுவாமி துணுக்கானந்தா

அழுக்காறு அவாவெகுளி இன்னாச்சொல் நான்கும்
இழுக்கா இயன்றது அறம்.

வையத்துள் வாழ்வாங்கு வாழ்பவன் வானுறையும்
தெய்வத்துள் வைக்கப் படும்.

பாரதியோடு (சுப்பிரமணிய) நான்

Inplant Training முடித்து வீட்டிற்கு சென்று, மீண்டும் M.I.Tற்குத் திரும்பும்போது, ''பார்த்துப்படி கண்ணு, அங்கேயே வேலை வாங்கணும். Prof. ஜோசப் & Prof. பால்ராஜ் எல்லாம்கூட இதைத்தான் சொல்றாங்க.'' எப்பவும் இப்படி பேசாத அப்பா இப்படி சொன்னார். எனக்கு இரண்டு கப் (அரியர்ஸ்) இருப்பதை அதுவும் Maths-இல் இருப்பதை நான் எப்படி அவர்களுக்கு சொல்வது!

ஒளி படைத்த கண்ணினாய் வா வா வா
உறுதி கொண்ட நெஞ்சினாய் வா வா வா

M.I.T.யில் வந்து இறங்கினேன். என் கண்ணில் பட்டது மெஸ் ஊழியர்கள். அவர்களில் அர்ஜுன்தான் தொடுத்தார். ''என்ன சார் டிரெயினிங் முடிச்சி வந்துட்டீங்க. மெலிசா வேற ஆயிட்டீங்க. நல்லா சாப்பிட்டு வேலை வாங்குங்க, எங்கிட்ட சாப்பிட்டு வேலை வாங்கினபிறகு ஒருத்தரும் கண்டுக்கிறதில்ல. நீங்களாவது கண்டுக்கங்க.'' ''அட போங்க அர்ஜுன், Toppers எல்லாம் இருக்காங்க! எனக்கு எங்க கிடைக்கப்போது'' என்று மனசில் ஓடியதை, ஒரு அசட்டுச் சிரிப்பாய் சிரித்து நகர்ந்தேன்.

அச்சம் தவிர் அச்சம் தவிர் அச்சம் தவிர்

என்னைப் பார்த்து புன்னகைத்தவர்கள் எல்லாம் 'சார்' போட்டு அழைத்தார்கள். சினேகமாய் அழைக்கும் டோபி ராமச்சந்திரன் ''என்ன சீனியர் சார்'' என்றார். சுளீரென்று இடி இறங்கி சென்றது.

வகுப்புக்குச் சென்றோம். Visiting faculty Prof. KRS (செல்லமாய் பெரிசு) ஆக்ஸ்போர்டு ஆங்கிலத்தில் ஆரம்பித்தார். இந்த வருட முக்கிய குறிக்கோள் வேலை வாங்குவது தான்! என்று பேசிக்கொண்டே போக... நான் இரத்தம் வராமல் அறுபட்டேன். நெருப்பில் பட்ட ரப்பராய் எரிந்தேன்.

ஆறுமாதம் வேகமாய் உருள, என்னவள், (பெரிய ஹீரோ என்று முடிவு செய்து தன்னுடைய பரந்த வசந்த வாழ்க்கையை எனக்குள் அடக்கி அணைத்துக் கொண்டவள்) தன் உதடு நோகாது லேசாய், என் நெற்றியில் முத்தமிட்டாள். தலையைக் கோதினாள். நெஞ்சோடு அணைத்து தன் வார்த்தைகளால் செருகினாள். ''நாளை TVS - Srichakra இன்டெர்வியூ நன்றாக செய்யுங்கள். வேலையை வாங்குங்கள். இல்லையெனில்...'' நிறுத்தினாள்... அணைத்துக் கொண்டாள். தொடர்ந்தாள்... ''நம்ம திருமணம் நடக்கறது கஷ்டம்'' என்று சொல்லி சட்டென்று விலகினாள். என்னவள், என்னைப் புரிந்து கொண்டவள் இவ்வாறு சொன்னது எனக்கு சுருக்கென்றது.

காதல் காதல் காதல்
காதல் போயின் சாதல் சாதல்

வேலை வேலை வேலை! வேலை போயின் சாதல் சாதல் சாதல்.

வேலை வேலை வேலை இதுதானா வாழ்க்கை. தலை கனத்தது. நண்பர்கள் எல்லாம் வந்து வாழ்த்துக்களை என் மேல் இறைத்துச் சென்றார்கள். முகம் கழுவ லேசாய் மனத்தின் கனமும் கழுவப்பட்டது.

தெய்வம் நமக்கு துணை பாப்பா
ஒரு தீங்கு வரமாட்டாது பாப்பா

இரவு 11 மணி. ஏதோ அரசல் புரசலாய் ரப்பரை பார்த்து (படித்துக்) கொண்டிருந்த எனக்கு நண்பர்கள் கதவைத் தட்டினார்கள். என்னோடு ஒரு மூலையில் ரப்பரில் யாகம் நடத்திக் கொண்டிருந்த ராம்ஸ் எழுந்தான் - கதவைத் திறந்தான். வந்தவர்கள் உள்ளே புகுந்தார்கள். எல்லோராலும் டாப்பர்ஸ் என்றழைக்கப்படும் அந்த இருவர் தான் முதல் வெட்டை வெட்டினார்கள். ''ராம்ஸ் நாளைக்கு நீ இன்டெர்வியூக்கு போகக்கூடாது. அப்படியே சென்றாலும் வேலை வாங்கிவிடுவாய். வாங்கின கையோடு வேலையை விட்டுவிட்டு வெளிநாடு செல்வாய். ஆனால் எங்களுக்கு இது வாழ்க்கைப் பிரச்சனை. எங்களை விடு!... எங்களால் உன்னோடு போட்டிபோட முடியும். ஆனால் கீழே இருக்கிறவர்களை நினைத்துப்பார். அவர்களுக்கு இதுதான் வாழ்க்கை.'' ஒனாய் ஆட்டிற்காக அழுதது. ''அவர்களெல்லாம் வந்து எங்ககிட்ட அழறாங்க'' என்று தொடர்ந்தார்கள். கசப்பான அந்த நிமிடத்தில் கூட எனக்கு சிரிப்பு வந்தது. சிரிக்கவில்லை... எரிந்து கொண்டிருந்தேன்.