

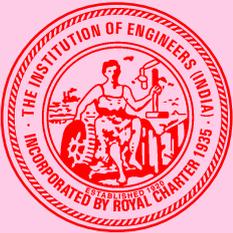
Institution of Engineers (India)

T.N. STATE CENTRE

BULLETIN

Chairman :
Er. K.P. Ramanathan, FIE

Honorary Secretary :
Er. D. Sundarasekaran, FIE



Vol. 15 : No. 2

May 2016

From the Chairman's Desk....

Dear Engineers,

In this bulletin, I would like to share some of the important Man Management skills for managing the people/work forces in any organization whether it is an Industry/ Companies/Shops/any work places.



Man management involves controlling and organizing the people who work in a business or organization. Man management skills are important to you because some of the men and women in your organisation need careful managing. And, as you may have observed, managing people is not always an easy task. Proper man management training can be defined as:

“Learning a set of personal skills that combine to allow you to inspire the best, most productive effort from every member of the team”.

Man management skills include, training to improve your abilities in the following areas: Handling difficult people, Resolving conflict within the team , Organising work and Creating and sustaining a positive mental attitude.

Handling difficult people:

Psychologist Carl Jung tells us there are at least 8 main personality types: Many of them are difficult to deal with: For example, you may know people who are: Cynical, Pessimistic, Argumentative and Cynical pessimistic and argumentative. There is only one way to deal with people like that: Can you guess what it is?

No! Not that!

It is according to the principles of reason, You must treat people, especially difficult ones, according to the principles of reason. And THAT means: Logically: which means:

1. According to the facts, not your feelings
2. According to the facts, not your opinions
3. According to the facts, not your mood, or your prejudices or personal whims.

Everyone must be treated Reasonably, Everyone must be treated reasonably, according to the rules of logic, irrespective of how difficult they are. And that is a specific skill that needs to be learned.

Resolving conflict within the team:

Man management skills include: ‘Being able to remain impartial and find working compromises between two warring factions within the team’. Teams can only function where harmony exists between its members. Disunity can fracture the working relationships and render the team useless. So managers must learn the skills of: Compromise - Finding an acceptable middle ground between two extremes. Negotiation and arbitration - Finding what are the negotiable variables that exist in any situation of conflict. Managing the emotions of others - By careful and intelligent use of language, voice tone and body language.

Organising work

All the members of a team must work in an intelligent and integrated fashion, so that their joint effort is co-ordinated to achieve their joint targets. That means the manager must be able to: Prioritise, Delegate, Make good decisions and Plan ahead. Failure to do so properly will mean that each member of the team will create their own individual ‘to do list’. And the co-ordinated team function will splinter. So ‘man management’ contains the four skills of: Prioritisation, planning, delegation and decision making. Each one is a study in itself:

- **Prioritisation:** Judging tasks according to utility and deadline pressure.
- **Planning:** organising resources in the best way that will allow for the achievement of the goal.
- **Delegation:** assigning the right task to the best person.
- **Decision making:** Picking the best option from many options, and having the courage to act on the decision, once it is made.

Failure to do any one of these skills properly will weaken the overall performance of the team.

I am sure, Engineers are most of the times are dealing with people/work forces whether they are top level/middle level/lower level in every walk of their career. Hence Engineers are to have required skills to deal with the people/work forces for getting the work done from them to achieve the goals for the best performance in any organization/work place.

Thank you,

I will meet you again.

Er K P Ramanathan
Chairman

Talk on “Model Predictive Control in Industries”

26.03.2016

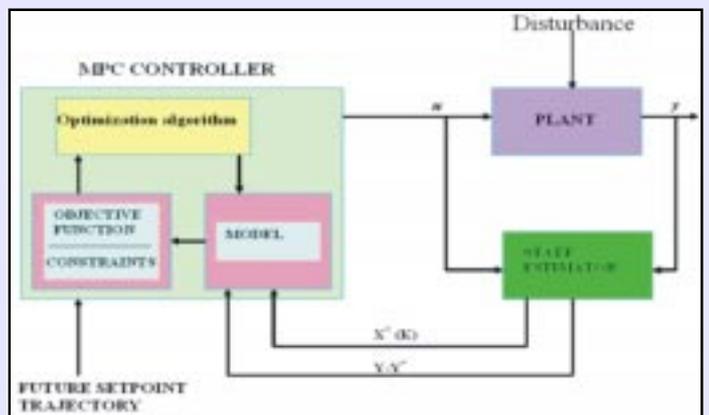


A technical guest lecture meeting was held on 26th March 2016 at 6.00 pm in IE(I), Tamilnadu State Centre auditorium. The topic of the day was on “Model Predictive Control in Industries”. Er K P Ramanathan, FIE, Chairman welcomed the gathering and introduced the Chief Guest. Dr R Senthil, Head of Department (Electronics & Instrumentation Engineering Division), KCG College of Technology, Chennai. Dr R Senthil delivered the lecture on the above topic with power point presentation.

In his presentation, he explained that MPC successful in industry. Many and very diverse and successful applications: Refining, petrochemical, polymers, Semiconductor production scheduling, Air traffic control Clinical anesthesia, Life Extending of Boiler-Turbine Systems via Model Predictive Methods. MPC is a general control methodology that has become an important research area in automatic control theory.

There are two types of MPC Linear and Nonlinear but nonlinear MPC is widely used. Nonlinear MPC is used because of the following:

- Transition Control (broad operating regions)
- Batch Control
- Need MPC valid over a non-linear region of the plant:
- Multiple linear models (more tests)
- Non linear explicit models with fast integration time
- Bounded time for non-linear optimisation part of the MPC.



Er. K P Ramanathan, FIE, Chairman presented the memento to the Chief Guest Dr R Senthil. Er D Sundarasekaran, FIE, Honorary Secretary proposed the vote of thanks. About 30 members participated in the program.

Our Respectful Homage To



Er S Daivamani

B.E , M.Sc (PH)- Public Health Engineering, FIE
(15.09.1931 - 9.04.2016)
Chairman - IE(I),TNSC - 1985 -1987

Talk on “Electricity from solar rays, a new equipment”

23rd April 2016



A technical guest lecture meeting was held on 23rd April 2016 at 6.00 pm in IE(I), Tamilnadu State Centre auditorium. The topic of the day was on "Electricity from solar rays, a new equipment". Er K P Ramanathan, FIE, Chairman welcomed the gathering and introduced the Chief Guest Er T R Jayaraman, FIE, Former CMD of South Eastern Coalfields Ltd. Er T R Jayaraman delivered the lecture on the above topic with power point presentation.

In his lecture he stressed on the urgent avoidance of power deficiency distress, In a developing country one should not just see about the current deficiency in supply but examine if we generate as much power as would be needed 5 years from now. Demand will always catch up with power and in this sector, the goal post is always shifted. The only answer now can come from a very large number of solar power installations on rooftops, though each of them may be small. Presently, the type of solar panel installations, slant on the ground as they are, cannot serve as the answer. They occupy large floor area compared to what is normally available on domestic roof tops. Thus, the roof top installations are now mostly confined to large corporate buildings and institutions. The author's idea therefore turned to a radically different approach. He sought a patent for an installation that would stand vertically. He preferred to start with a small model, test that and go in for larger installations. Concept was thus modular. A working model has been made ready and this can be built into arrays with large number.

The equipment is named as Oli Min Palahai which, in Tamil, means a plank for generation of electricity from light. This palahai now, in its small modular form, has four panels of 10 Wp poly crystalline pv cells arranged in four quarters (two rows and two columns). The panels are driven by motors controlled by one microcontroller. Twin axis solar tracking is made possible because of gimbal type action. When assembled in arrays of vertical columns and horizontal rows, this can be modeled to generate any desired power.

Uses: This can be used in a macro unit for battery charging. When in arrays, this can serve excellently as source of micro grid power. Recommended use in cities of TN is that Tangedco takes up manufacture of these palahais, install them on domestic roof tops by renting the space and take the power to the grid. Normally now we need a 9 m sq. base for generating 1450 units of power annually. This much can be generated by palahai in half the area.

When used for charging batteries, we promote battery operated vehicles. As DC is generated, hydrolysis and desalination are very purposeful uses. In open mines, this DC can be used for pumping up hydrogen and oxygen from the sumps instead of pumping water. Production of hydrogen will be useful for power generation in fuel cells. Generation from rooftops will lead to empowering the citizens.

Benefits: As the device is of versatile scalability, range of use is very wide. The main benefit arises from vastly reduced demand for land area. Currently, this is the only feasible means for rooftop power. Maintenance is easier because both sides of the panel are visible. Installation need not be cheek by jowl as is needed in the present cases.

Er. K P Ramanathan, FIE, Chairman presented the memento to the Chief Guest Er T R Jayaraman, FIE. Er D Sundarasekaran, FIE, Honorary Secretary proposed the vote of thanks. About 40 members participated in the program.

To

The Honorary Secretary
The Institution of Engineers (India), Tamilnadu State Centre
19 Swami Sivananda Salai, Chennai - 600 005

**Make your contributions
(Minimum Rs. 1000/-) through this slip**

Dear Sir,

CONTRIBUTION TO THE IEI-TNSC BUILDING DEVELOPMENT FUND

In response to your appeal, I / we enclose a Cheque/DD for Rs. (Rupees
..... only) as my / our contribution to the Institution of Engineers (India), Building
Development Fund.

Encl: Chq./DD No. Dt. for Rs. Yours faithfully,

From Address:

Memb. No.

TECHNICAL PROGRAMME FOR MAY 2016

Lecture: 6.00 p.m.

Venue: IE (I) Auditorium (*Unless mentioned otherwise*)

Tea: 5.45 p.m.

17th May 2016 World Telecommunication and Information Society Day on the theme "ICT Entrepreneurship for Social Impact".

28th May 2016 Talk on "Quality of Work Life" by Er D Kumar, FIE , Committee Member, Mechanical Engineering Division, Chennai.

FORTHCOMING EVENTS

6th June 2016 World Environment Day on the theme "Illegal Trade in Wildlife".

24th & 25th June 2016 Two days All India Seminar on "Make in India" by Er K S Ramalingam, MIE, Co-opt Member of the Mechanical Engineering Division, IE(I), TNSC.

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Posted on: 6th May 2016

Posted at: Egmore RMS (Patrika)

Bulletin

IF UNDELIVERED RETURN TO:

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