# FIRESIDE

The House Magazine of the Thermax Group Volume 44 No.3 July-September 2014

# FIRESIDE

Volume 44 No.3 July - September 2014

THERMAX

**Editor**
A.M. Roshan

**Assistant Editor**
Natasha Rodricks-Naidu

**Design**
Shashi Karmarkar

**Production & Circulation**
Vilas Bade

**Printed at**
Vyoma Graphics, Pune


## Cover

Contemporary handicrafts are the rage today – as home decor, gifts to overseas clients, or as objects of desire for the art connoisseur.

They are a testament to India's rich diversity. Across the country, crafts are a source of livelihood for thousands of nameless artisans, carrying on family traditions or struggling to keep alive art forms.

Like this artisan at the annual handicraft expo in Kolkatta, adding the finishing touches on her clay vase. Adding a splash of colour to the varied reality of India, one artifact at a time.

*Photo by neelsky / Shutterstock.com*

**BACK COVER**
**Thermax's expanding footprint in Africa**

## Comment

> Life doesn't imitate art, it imitates bad television.
>
> – Woody Allen

Printed on recycled paper




Fireside is the quarterly house magazine of Thermax Limited, Pune. For private circulation only. Company related news/features may be reproduced only with the permission of the Editor. Address : Thermax Limited,Thermax House, 14 Mumbai Pune Road, Wakdewadi, Pune 411 003, India. Tel : (020) 25542263 Fax : (020) 25541226
Fireside is also hosted on the website : www.thermaxindia.com Email : roshan@thermaxindia.com ☐ natasha.naidu@thermaxindia.com

# CONTENTS

WHAT'S NEW?

# Thermax wins orders in Africa: reinforces business ties with Dangote

*The captive power plant coming up in Zambia : gaining from customer trust*

Thermax recently bagged two orders worth Rs. 672 crore to set up captive power plants at two cement units in Africa. The first order is for a 3 x 25 MW plant in Tanzania; and the other for a 3 x 30 MW plant in Nigeria. Won against stiff global competition, the orders are testimony to the growing relationship between Thermax and Dangote Industries, Africa's leading business conglomerate with interests in cement, sugar, steel, salt, logistics and real estate.

The scope of work for both plants includes system design, manufacture, supply and supervision of erection and commissioning. The plants, to be commissioned within a time frame of 15-16 months, will utilise the latest generation AFBC (Atmospheric Fluidised Bed Combustion) boilers and high pressure steam cycle to facilitate optimal plant efficiency. State-of-the-art air-cooled condensers will ensure low water intake by the power plants.

"Our project business ventured into Africa two years ago. It is encouraging to have already gained the trust of our customers," says M.S. Unnikrishnan, MD and CEO of Thermax.

The new orders come in the wake of an earlier order that Thermax Power won in 2012 from Dangote for a 30 MW power plant in Zambia.

Besides Power, other business divisions at Thermax – B&H services, Water and wastewater – have also been working with Dangote.

B&H Services is tackling boiler related issues at their sugar unit and refinery in Nigeria. Through a host of services that include piping design at the refinery at Apapa and revamp of boilers at the sugar unit in Savannah, the Thermax team is working to ensure uninterrupted operations at the facilities. At Dangote's cement plants in Nigeria and Tanzania, WWS Division is installing water treatment systems and an effluent treatment plant.

# TBWES wins first order :

# Coal-fired boilers for a project in the Dominican Republic

*Manufacturing facility of TBWES : supercritical boilers for the Indian power sector*

Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES), the joint venture company received an export order from B&W PGG to design and manufacture two coal-fired boilers for an international project. This contract, a first for the JV, is valued at approximately Rs. 339 crore. The boilers will be installed in the Dominican Republic in South America at the Punta Catalina Power Plant of Corporación Dominicana de Empresas Eléctricas Estatales (CDEEE).

TBWES will handle the detailed engineering, manufacturing and supply of boiler pressure parts, critical piping, pulverisers and plate work for casing, ducts and hoppers. The contract also includes the supply of ancillary items, including valves, dampers, expansion joints and instrumentation items. Detailed engineering and supply of material for the two boilers are scheduled to be completed within 21 and 24 months respectively.

The boilers will be manufactured at TBWES' recently commissioned facility at Shirwal, about 50 kms from Pune. The plant is equipped with state-of-the-art machinery and infrastructure to manufacture and supply supercritical boilers for the Indian power sector. The plant layout makes use of lean manufacturing principles designed to facilitate free flow of material with optimum use of resources and minimum travel.

The contract to B&W PGG was awarded by the Italian engineering and procurement contractor Tecnimont S.p.A, one of the developers of the project. BMW P&G, a subsidiary of Babcock & Wilcox intends to leverage the cost advantage of its Indian operations in manufacturing and detailed engineering for the growth of its products and services outside North America.

# Innovative burner development helps Thermax win a prestigious order

*Energy efficient boiler : more steam from less fuel*

Thermax won a Rs. 300 crore order to supply three 220 TPH boilers to Tata Power. The boilers are for captive power generation at the Tata steel plant in Kalinganagar in Orissa.

While submitting the proposal for the boilers that will fire multiple fuels — lean blast furnace gas, coke oven gas and oil – Thermax B&H faced the challenge of a competitor claim of superior efficiency.

Efficiency of lean gas fired boilers depends critically on the right quantum of excess air. So the focus of Thermax's work centred on fine tuning the design of the burner that would make it possible to use reduced amounts of excess air for efficient combustion. The team succeeded in this venture, leading to a 0.4 % improvement in efficiency over competition. Increased efficiency would yield more steam from less fuel, equivalent of 200 kw (0.2 MW).

Convinced of these superior offerings, Tata Power awarded Thermax this first-of- a- kind order.

For the work they did, the team comprising Rahul Jejurkar, Mayuresh Joshi, Sandip Darveshi, and Zakhir Shaikh were awarded the N.D. Joshi Innovation Award, 2014 at the Technology Day celebrations at Thermax in May 2014.

# Enviro's first overseas desulphurisation system

The recent *Fireside* issue mentioned three boilers supplied by Thermax for the world's biggest sulphuric acid plant coming up in Saudi Arabia. In a contract secured from the same Canada based engineering and construction company, Enviro division will supply a Flue gas Desulphurisation (FGD) system to treat the acid gases from the auxiliary boiler.

The system will remove sulphur dioxide ($SO_2$) from exhaust flue gases and keep emissions under desired limit. As stringent environmental regulations regarding emissions have been enacted in many countries, $SO_2$ has to be removed from flue gases as a pre-condition to get the consent to operate the plant. The FGD system will clean up the boiler off gases by injecting dry sorbent in the gas path, and a bag filter helps collect disposable sulphate dust. The optimal and trouble free performance of the system has to be guaranteed when the boiler operates at different conditions.

The customer is a diversified mining company, active in gold base metals mining and infrastructure. Enviro won the contract against stiff competition from established global players in the field. This first overseas FGD order for the division is expected to be commissioned by December 2015.

# 3 MW grid-connected solar-biomass project to generate power


***Anshu Bhardwaj of CSTEP(centre) with Dr. Sonde of Thermax : aiming to scale up technology***

Thermax is partnering with India's Centre for Study of Science Technology and Policy (CSTEP) to build a 3 MW hybrid solar- thermal plant in Barun, a village in Bihar. The project is a scaled-up version of the experimental solar-biomass hybrid project set up at Shive (near Pune) by the Department of Science & Technology and Thermax with active participation from the local panchayat.

Funded by the Delegation of the European Union to India, the project is developed under the Indo European Co-operation on Renewable Energy Programme. Along with Thermax and CSTEP, the project consortium includes the Bihar State Power Generation Company Ltd., the Energy Centre of the Netherlands and French National Centre for Scientific Research.

The project will generate sustainable power for the local community by using concentrated solar parabolic troughs, and combustion- cum- gasification of rice husk. It offers a distributed power generation facility that will also be linked to the grid. The State Government will develop the necessary power purchase agreements and tariffs for the renewable energy that will flow into the grid.

"This is the first time that this technology is being used in India in a plant of this scale. Our objective is to make this technology scalable so that it can be used across India," said Anshu Bharadwaj, executive director of CSTEP at the project's inauguration. The project also will also try to create a viable business model and build a conducive policy environment for the spread of the technology.

"This clean energy project will use in both the CSP and thermal areas, components indigenously manufactured," says Dr. R.R. Sonde, who leads Thermax's Research, Technology Innovation Centre. Once completed by April 2016, the demo plant will be handed over to Bihar State Power Generation Company for operations.

'Lean' means less of everything – of human effort, space, time or investment.

Last month at a CII function, I met one of our vendor partners who praised and thanked Thermax for introducing a programme on 'Lean Management.' I was very happy to know that he was referring to a one-year Cluster Programme that our B&H division organised to enhance the competitiveness of our vendor partners, by bringing in experts from the CII Avantha Centre.

I was invited for the awards function of this programme that ended in December 2014. It was wonderful to see the contrasting photographs of each of our partners' manufacturing facilities – at the beginning of the programme and substantially changed at the end of 12 months. What started with scepticism and anxiety eventually turned out to be a resounding success. Will something like this work for a project-like business where each product is customised, was the fear in people's minds. But as the programme got under way, they realised that every project can be broken into standardised parts or components, and then, can be worked on to eliminate waste.

Today, our customers are far more demanding than ever before. They expect products or projects to be done on time – at least on time, if not in less time – at a lower cost, ensuring superior quality and high reliability, and with improved service levels. If all these are to be truly digested and converted into a significant value proposition, our entire supply chain needs to deliver seamlessly. We all know that we are only as strong as our weakest link!

The programme entailed learning, practising and achieving manufacturing excellence through 5S, 7QC tools, Poka-yoke, Kaizen, TPS, OEE, Kanban and several tried and tested Japanese concepts, simple and yet very effective. To me, these concepts are about embracing a culture: an attitudinal shift that leads to changing the mindset. Only then will it become sustainable and not a one-off initiative. It has to become a part of our DNA so that it can be applied not only when we go through a programme, but at all times, across the organisation – on the shop floor, in our offices, service functions, anywhere and everywhere.

How do we eliminate waste of any kind, so that there is an uninterrupted "flow" of the product or the process – nothing "waits" for want of material or human intervention? It needs a culture that seeks continuous improvement where we ask ourselves, 'how can I do this faster, better, smarter, more efficiently than I did yesterday?' When something goes wrong, how do we stop ourselves from jumping to conclusions and get to the very bottom of the problem, so that the root cause is eliminated and it doesn't resurface. Big results come from many small changes accumulated over time.

Some of the 5S principles remind me of large versus small spaces. In a large space one tends to accumulate things over time. Instead, in a smaller space, one tends to plan better, be more imaginative and disciplined in terms of buying only what is needed and getting rid of any old, non-moving items.

In such spaces, there is no clutter – there is a place for everything and

everything has a place. Putting back each item in the designated position once we finish with it, makes retrieval a lot easier. Such orderliness helps us to become much more innovative in the way we use space. The more money we have, the more space we tend to purchase; the more material we buy, the more clutter we create. There is truth in the old saying that necessity is the mother of invention!

'Lean' means less of everything – of human effort, space, time or investment. I was amazed to see the space reduced by many of our vendors, now utilised for something else like a canteen or a library. New jigs and fixtures have been innovatively created by the workforce to prevent bending, so that it becomes a more comfortable, healthier work environment. All this has also made working conditions safer within the premises. Moreover, getting uniforms, painting the shop floor and sprucing up the place, putting up signboards, providing bins, setting up workstations, jigs, fixtures and similar useful processes – all these have brought in a sense of pride among the workforce, which ultimately helps them to be more productive. Improvements have been continuously measured, so that success can be seen over time.

I could see that there was a lot of teamwork – within the respective vendor group and with other vendors. There were collaborative as well as competitive forces at play, a healthy tension to receive the monthly prize, as well as working with one another for improvement. It reminded me of a relay race – to win, you have to pass on the baton seamlessly which can best be done if there is a deep sense of 'trust' between players. Believing in one another, you give your best, yet you are there for the other.

My sincere thanks to all our vendor partners and their employees, the experts from the CII Avantha Centre and our entire team at Thermax B&H. As Pravin mentioned, our journey has just begun! We look forward to seeing this philosophy being absorbed, practised and improved upon day by day, month-on-month, year-on-year; to be replicated within Thermax and across our ecosystem.

Since we are about to start the New Year, may I request all of us to begin questioning ourselves, our processes and how we do what we do. Can we bring a sense of pride to the workplace and each of us take responsibility for keeping our place of work neat and tidy? Can we start questioning processes that we may have followed for years, but may not have any meaning today, especially those bureaucratic rituals that are a waste of people's time and company's resources? Let us aim to make some improvement, however small, in our daily lives, each day of 2015. Let me assure you, 365 improvements is no small change!

I'd like to take this opportunity to wish you and your families a Very Happy, Healthy, Peaceful and Prosperous New Year.

Warm regards,

**Meher Pudumjee**

EXPRESSIONS

Can we start questioning processes that we may have followed, but may not have any meaning today?

# 'One needs the patience and runner to make

Manabendra Sanyal who heads Thermax's Corporate Social Responsibility (CSR) programme talks to A.M. Roshan about his life and what it means to spend time with people in need.

UP CLOSE

When he was six years old, Manabendra Sanyal's father working in the Auditor General's office was transferred to Andamans. The ship that carried them from Calcutta to Port Blair was stranded in the sea due to a cyclone and a trip that normally takes 3 days took the family over 7 days. Does he remember the agonising wait in the middle of nowhere? He says he was too young to remember the details, but adds that he experiences that feeling of uncertainty, the sense of drift at times when some of Thermax Foundation's educational projects run into rough weather. Public private partnerships in the social sector as a concept might be the way to go, but Sanyal feels "one needs the patience and the stamina of the long-distance runner to make them happen."

Fortunately, his background seems to have equipped Sanyal for the long haul. Though he spoke Bengali at home, he grew up in Ranchi, now in Jharkhand, easily picking up Hindi and English at school. Later, he taught himself to read Bengali using a primer bought with his savings and improved his reading skills with the help of the daily Mandrake comic strips in the Ananda Bazaar Patrika newspaper at his joint family home. "I learned things mostly by observing other people. Cycling, swimming, and even moving a car out of the garage happened that way," he says.

Sanyal comes from a cricketing family. Nine of his uncles were Ranji trophy players with two of them playing as captains of Assam and Bengal teams. How come he eventually opted for a different kind of life? He pauses before saying that he always enjoyed working with his hands. "At high school, I liked to take apart my cycle, overhaul it and put it together. I had a tool kit. So, at some point of time, I had thoughts also of becoming a pilot or an engineer." But it was commerce he opted for, due to his friends' influence, and completed his B Com. Honours.

While waiting for the results he began attending coaching classes for ICWA and also applied for a Masters course in Rural Development. Eventually, he settled for the rural development study at the Xavier Institute of Social Service, Ranchi. He remembers the study camps there as very useful as they helped him understand village life. "There, I also learned to make chapattis, proper round ones, a skill I still retain."

Sanyal did a two-month internship at the Association for Sarva Sewa Farm (ASSEFA), where later, through campus placement he was selected as a Development Management Trainee. The next five years, he worked at Gaya and later at Wardha, heading community based projects in Bihar and Maharashtra.

In April 1996, Sanyal joined CII's Bhartiya Yuva Shakti Trust (BYST), spending nine eventful years there. He set up the Pune and Rural Maharashtra Chapter and extensively worked in the area of entrepreneurship development, wherein BYST extended aspiring candidates Rs. 50,000 as seed money and a mentor. Sanyal says proudly that the "Pune chapter consistently recorded the highest recovery of loans, among all the regions. "

2004-06 was an unsettled phase for him. A promotion in BYST brought him to Delhi. He felt he was stagnating in his job and so left to join the Times Foundation. That too didn't work out. It was then a friend told him about an opportunity at Thermax. He met Anu and joined Thermax in July 2006. "From the first day, the warmth and informality of the work environment here helped me settle down in my job."

Anu was in the process of establishing the Thermax Foundation to focus on primary education of poor and marginalised people in Pune. Sanyal says it is great to be part of a movement that created something

# stamina of the long distance things happen'

new – a partnership between Thermax, the NGO Akanksha and the Pune Municipal Corporation. "The experience has been truly satisfying. It helped me understand the educational context and support and help improve its quality at a very basic level." He feels that Anu's non-interfering style of leadership, focused on outcomes, has been a big factor in making his own work productive.

I ask him about the inherent fuzziness of working with the local administration which is often caught in the cross fire of local politics. "Yes, it can be difficult, but if you keep your options open it is also possible to work out win-win situations." Sanyal gives the example of his meeting with Sudhir Janjot, former School Board Chairman. "We were looking for land to build a school. When I asked if he could help, he explained that the Government didn't have the funds to start the English Medium Vidyaniketan School. Would Thermax be interested?" The company agreed to adopt existing municipal school and signed long term agreements with the Pune Municipal Corporation.

Sanyal points out that Thermax does not see CSR as a strategy to build its corporate brand. "Here the emphasis is on doing good work in one's chosen area. If your useful efforts bring lustre to the brand so be it. But we are clear CSR is not a short cut to brand promotion." However, he is quick to point out that for a company to contribute to society at large, it must perform well and create profits. "CSR cannot work in isolation from a company's performance and profits, especially as the provisions of the Companies Act 2013 makes it mandatory for companies of a certain size to set aside 2% of their profits for CSR, " Sanyal explains.

How much of the CSR passion is shared by the average employee of Thermax, I ask him. He says employees at many levels have been participating and contributing in meaningful ways. So far, they have given Rs. 74 lac via the Give India Payroll programme to various causes they themselves have chosen.

While writing out a cheque is fine, Sanyal would like to see more people giving their time. "Only when you come out and give your personal time, you can see what a real difference it makes. One day spent with people in need is more important than spending money. " He feels that we should force ourselves to take some time out for others. " It can bring a lot of insights and a positive change within us. So, we are helping ourselves too," he says.


**"CSR is not a short cut to brand promotion"**

# Thermax bags **fifth order** from **Mitr Phol group, Thailand**

*Mitr Phol and Thermax: recognition of project execution capabilities*

Thermax won an order from Thailand's Mitr Phol group for design, supply, erection and commissioning of a 125 TPH high pressure traveling grate boiler and auxiliaries. B&H's solid fuel team has to execute the job in a time frame of 18 months, by mid 2016.

This is the fifth order that Thermax has won from Mitr Phol, Asia's biggest sugar and bio-energy producer. Thermax's track record and strong project execution capabilities in South East Asia helped in winning the customer's trust.

Shekhar Kashalikar, SBU Head solid fuel and Ashish Kabra, Business Manager, South East Asia signed the agreement with the Mitr Phol group.


*Thermax's Safety team receiving the award: innovative practices*

# **Greentech safety award** for Thermax **Chichwad factory**

Thermax Chinchwad factory received the Greentech Safety Award 2014 for its innovative health, safety and environment (HSE) practices. B.K. Mathur, Corporate Head, HSC and Saheblal Shaikh from the Safety group accepted the award instituted by the Greentech Foundation at the 13th occupational health safety and fire conference held in Hyderabad.

Other participating organisations included, among others, IOC, Adani Power, Hindalco, ONGC and Birla Tyres.

# Rooftop solar installations: Thermax shares its project experience


*At the workshop : implementing solar technologies across the country*

At a recent workshop organised in Mumbai, Solar Energy Corporation of India (SECI) invited Thermax to share its experience with rooftop solar PV projects that are linked to the power grid. Thermax Solar presented details on the projects it commissioned in Bangalore and Chennai under an SECI scheme that subsidises larger capacity solar PV installations up to 500 kWp.

The participants at the workshop came from different segments of the industry including PV developers like Tata Power solar and Sun Edison. The event was organised by SECI and Maharashtra Energy Development Agency (MEDA) with the objective of developing solar technologies and implementing them across the country.

# Thermax completes DM plant in record time at Tata Steel

*Inauguration of the plant : achieving both speed and safety*

Thermax recently completed a centralised 3 x 143 $m^3$/ hour demineralisation plant and a 3 x 89 $m^3$/ hour ultrafiltration plant at Tata Steel's Kalinganagar plant, Odissa.

The WWS team completed first stream of auto commissioning within a record time of eight months. The team fabricated and erected nine storage tanks of hydraulic jack system (approx 200 MT) including blasting and painting.

The team also scored high on safety. It received a certificate from Tata Steel for achieving three million safe man hours. The site was inaugurated by the Tata Steel MD, T.V. Narendran. From WWS, Lawrance Fernandes, Ganesh Patange, S. Tripathi, Niranjan Singh and Shiva Bachhan worked closely on this project.

# L&D team of the year award for Thermax's learning and development team

*Thermax HR team with the prize : commendable effort*

Thermax's learning and development team bagged the 'L&D team of the year' award at the 6th edition of the Tata Institute of Social Sciences-LeapVault Chief Learning Officer (TISS-LeapVault CLO) awards. The team won the Gold award in the category for innovative approach, effective delivery methodologies and industry-focused content to help the organisation. The award recognises the company's commendable efforts in learning, leadership development and talent management.

The TISS-CLO awards are one of the premier platforms in India for leaders in corporate learning, coaching, organisation and leadership development. Thermax competed against 400 nominations across different industries and was chosen for the award by an eminent jury that included the Director of TISS, S. Parasuraman.

*Hemant Mohgaonkar with the participants : Exploring aspects of value*

# CMG conducts training programme on 'value factor'

The channel management group (CMG) of Thermax conducted a training programme on 'Value Factor in Selling' for its territory managers in October 2014. The workshop was designed to explore how to offer greater benefit to our customers. The training covered multiple aspects of the theme such as organisational values as well as product, service and commercial values.

The three-day workshop held from 9th to 12th October was a good platform for sharing information and also difficulties faced by the sales teams.

M. S. Unnikrishnan, Hemant Mohgaonkar, K. Chakravarthy and other senior managers were present to share their perspectives and experience.

# High capacity **Thermosyphon** for **Indonesian company**

***Thermosyphon: preferred by food and pharma industries***

Thermax has despatched a solid fuel fired Thermosyphon (SFTS) of 6 million Kcal/ hour capacity to the largest edible oil manufacturers of Indonesia. Manufactured at Savli, this is the highest capacity heater that Thermax has supplied.

SFTS is a high pressure, closed circuit, natural circulation steam-cum-hot water heater, designed for processes requiring temperatures in the range of 200° to 300° centigrade. Thermosyphon systems are preferred by food and pharma industry as they use distilled water for heat transfer and avoid any possible contamination.

Safety guidelines don't permit the use of thermic fluid in the refining process of edible oil. The edible oil plants in Indonesia find operations with Thermosyphon highly energy efficient, compared with their traditional open loop steam heating system.

# **CII kaizen award** for Thermax's vendor, **Saksham industries**


***Manish Shendkar of Saksham Industries receiving the award : improvement in the plant***

Thermax's vendor Saksham Industries bagged an award in the seventh CII-National Cluster Summit, Pune. The award was received under 'kaizen category' for improvement in the delivery process.

The B&H division had taken the initiative to enhance the competitiveness of its 10 vendors (forming a cluster). The initiative consisted of a number of Total Quality Management activities implemented at the vendors' plant. The objective was to enhance the skills of employees through proper training, job implementation and sustainable cultural change.

CII's annual summit was organised for government, small medium enterprises, corporate houses, R&D institutes, NGOs and consulting firms. Thermax vendors participated in both streams of case study presentation and kaizen. *Fireside* congratulates Saksham Industries for winning the third prize.

# LIFT celebrates children's day with employees

On 14th November, employees at Sai Chambers, Pune took time to revisit their childhood as Thermax Foundation's Leadership Institute for Teachers (LIFT) celebrated Children's Day with them.

The event began with the ringing of a school bell and employees shared their childhood memories about school fights and mischievous incidents. They voted for the naughtiest, most talkative, coolest and funniest kid awards during the programme. A cake was cut and the event closed with a dance.

For Thermax employees, the event also offered a chance to interact with the LIFT team which works to improve the quality of education by training government teachers.

# **ECT** appoints **Thermax** as EPC partner **for coal upgradation** technology

***Thermax ties up with ECT : generate steam and power from low grade coal***

Environmental Clean Technologies (ECT) appointed Thermax as EPC partner for a commercial scale demonstration of its patented Coldry technology in India. The coal upgrading technology has been developed by the Australia based company to upgrade lignite by removing most of its moisture content and raising its calorific value to generate power.

ECT is already engaging with the Neyveli Lignite Corporation (NLC), and the Coldry demonstration project will be implemented at NLC site in Tamil Nadu. The project involves localisation of the core Coldry design by Thermax followed by fabrication, and construction. Following the project, in the long- term, the companies plan to integrate Coldry technology into Thermax's existing product portfolio to generate steam and power from low grade coal.

ECT's Coldry technology, supported by Thermax's experience with waste heat recovery systems can help utilise India's lignite reserves effectively for power generation, with better environmental safeguards.

# **Honours** for **Thermax STP** and Channel partner, **Nitasha Constructions**

***Prakash Bhambhani receiving the Award : Partership with Thermax***

The sewage treatment plant (STP) commissioned at Chandmandir Cantonment in Chandigarh has won the top award of the Indian Building Congress.

Nitasha Constructions, Thermax's channel partner, has been anchoring the performance of this 9 MLD STP. Treated water is reused for the upkeep of the Cantonment's golf course and for gardening.

Parkash Bhambhani, Managing Director of Nitasha Constructions received the Award at the 19th Annual Convention held in New Delhi.

*Fireside* congratulates Mr. Bhambhani and Nitasha Constructions for partnering Thermax over the past two decades.

# **Friday spells fun** at **Savli**

***After one of the Friday sessions: Year-end on a happy note***

Savili's B&H has been organising monthly team building sessions since August. Every month, on Friday afternoons, after the Supervisors' meeting, 35 to 40 employees enjoy a cross functional experience as they engage in exciting and fun filled activities.

Thanks to these monthly sessions, other than the approaching weekend, Fridays have become exciting. And given a platform, several of the participants have been able to display their latent creativity and resourcefulness. Says Janki Thaker of HR, "With smiling faces and enough fun to go around, we are glad to touch the Year's finishing line on a happy note."

LIMELIGHT

*Balasaheb*

## Balasaheb gains his second Masters Degree

Balasaheb Sable has completed his Masters in Structural Engineering with first class from Sinhagad college of Engineering, Pune. During the course, he presented a paper on 'parametric study of eccentrically loaded RC columns reinforced with fiber composites using experimental and finite element method.'

Graduating in civil engineering from Amrutvahini College of Engineering, Sangamner in 2003, he began his career with Mahindra Ashtech and Tata Consulting Engineers. He also has an MBA degree in Financial Management. Balasaheb has been with the Power division since February 2011. He enjoys travelling and playing cricket.

## Abhishek, the college topper

Abhishek with 84% marks topped the HSC exam (commerce stream) from the Don Bosco Junior College, Pune. He has joined Ness Wadia College of Commerce and wants to become a Chartered Accountant.

Abhishek is the son of Lata and Haridas Panicker from TECC. He is fond of music, yoga and travelling.

*Abhishek*

*Amit*

## Amit, a certified PMP professional

Amit Singh from Solar division is now a certified Project Management Professional. The certification is from the Project Management Institute, USA that promotes best practices in the discipline.

With a post graduate diploma in Business Administration from Indo- German chamber of commerce, Mumbai, Amit worked for Tata Power Solar and Bosch Industries before joining Thermax in 2010.

Amit likes reading and spending time with family.

# Chaitra completes Swedish institute's Management Programme

*Chaitra receiving SIMP certificate from Jan Campbell-Westlind, Consul, Consulate General of Sweden*

Chaitra Murlidhar has completed her Swedish Institute Management Programme. She was one of 20 corporate professionals selected across India through a rigorous process for the programme.

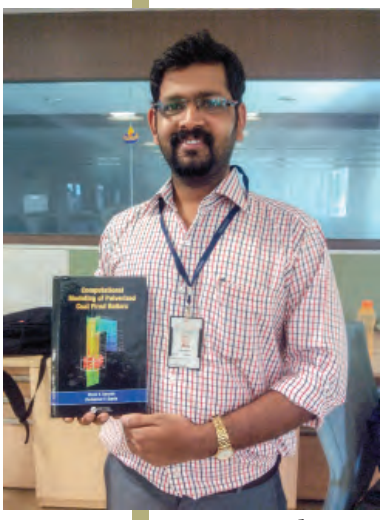
The six months long scholarship course conducted by the Swedish Institute (SI), an agency of the government of Sweden, promotes the interests of sustainability and responsible living.

The programme consists of three modules – two in India and one in Stockholm. The curriculum includes interactive theory, study visits and advanced problem solving in business projects.

An engineering graduate, Chaitra worked with Emerson India before taking up a two- year Teach for India fellowship programme. During her fellowship, she taught at St. Francis School, Pune.

Chaitra joined Thermax foundation in June 2012 and manages the Leadership Institute for Teachers. She likes trekking, reading and word puzzles.

# Dr. Gupta, Scientist and author



*Dr. Gupta with his book*

Dr. Devkumar Gupta from the Research, Technology & Innovation Centre (RTIC) is a published author. His book, *Computational modeling of pulverized coal fired boiler* is co-authored with Dr. Vivek Ranade, Deputy Director of CSIR-National Chemical Laboratory, Pune.

The book published by CRC Press, a global publisher of scientific and technical books, is based on Dr. Gupta's PhD thesis work, with Dr. Ranade as his guide. It establishes the use of computational modeling as an effective means to simulate and enhance boiler performance.

Dr. Gupta, who joined Thermax in August 2009 is Principal Scientist at RTIC. His interests include reading, trekking and music.

# Suvendu completes MBA in Marketing

*Suvendu*

Suvendu Biswas completed MBA in Marketing from Amity University. A Chemical Engineer from the National Institute of Technology, Jaipur, he joined Thermax's Chemical division in 2008 as regional sales manager.

Suvendu likes spending time with his family.

SIGNPOSTS

# Finding your Passion

Ken Robinson, English educationalist and author in his book, *The Element: How finding your passion changes everything,* presents stories of how people find the glorious space where their natural aptitude and personal passion meet. In their element, they often overcome verdicts of others about them, and go on to lead creative and satisfying lives. Excerpts from the book.

Gillian was only eight years old, but her future was already at risk. Her schoolwork was a disaster, at least as far as her teachers were concerned. She turned in assignments late, her handwriting was terrible, and she tested poorly. Not only that, she was a disruption to the entire class, one minute fidgeting noisily, the next staring out the window, forcing the teacher to stop the class to pull Gillian's attention back, and the next doing something to disturb the other children around her. Gillian wasn't particularly concerned about any of this—she was used to being corrected by authority figures and really didn't see herself as a difficult child—but the school was very concerned.

The school thought that Gillian had a learning disorder of some sort and that it

might be more appropriate for her to be in a school for children with special needs. All of this took place in the 1930s. I think now they'd say she had attention deficit hyperactivity disorder, and they'd put her on Ritalin or something similar. But the ADHD epidemic hadn't been invented at the time.

Gillian's parents received the letter from the school with great concern and sprang to action. Gillian's mother took her to a psychologist for assessment, fearing the worst. Gillian told me that she remembers being invited into a large oak-paneled room with leather-bound books on the shelves. Standing in the room next to a large desk was an imposing man in a tweed jacket. He took Gillian to the far end of the room and sat her down on a huge leather sofa. Her feet didn't quite touch the floor, and the setting made her wary. Nervous about the impression she would make, she sat on her hands so that she wouldn't fidget. The psychologist went back to his desk, and for the next twenty minutes, he asked Gillian's mother about the difficulties Gillian was having at school and the problems the school said she was causing. While he didn't direct any of his questions at Gillian, he watched her carefully the entire time…

Eventually, Gillian's mother and the psychologist stopped talking. The man rose from his desk, walked to the sofa, and sat next to the little girl. "Gillian, you've been very patient, and I thank you for that," he said. "I need to speak to your mother privately now. We're going to go out of the room for a few minutes. Don't worry; we won't be very long." …As he was leaving the room, the psychologist leaned across his desk and turned on the radio.

As soon as they were in the corridor outside the room, the doctor said to Gillian's mother, "Just stand here for a moment, and watch what she does." There was a window into the room, and they stood to one side of it, where Gillian couldn't see them. Nearly immediately, Gillian was on her feet, moving around the room to the music. The two adults stood watching quietly for a few minutes, transfixed by the girl's grace. Anyone would have noticed there was something natural—even primal—about Gillian's movements. Just as they would have surely caught the expression of utter pleasure on her face. At last, the psychologist turned to Gillian's mother and said, "You know, Mrs. Lynne, Gillian isn't sick. She's a dancer. Take her to a dance school."

Her mother did exactly what the psychiatrist suggested. "I can't tell you how wonderful it was. I walked into this room, and it was full of people like me. People who couldn't sit still. People who had to move to think."

**They have discovered their Element – the place where the things you love to do and the things that you are good at come together.**

She started going to the dance school every week, and she practiced at home every day. Eventually, she auditioned for the Royal Ballet School in London, and they accepted her. She went on to join the Royal Ballet Company itself, becoming a soloist and performing all over the world. Eventually, she met Andrew Lloyd Webber and created with him some of the most successful musical theater productions in history.

Little Gillian, the girl with the high-risk future, became known to the world as Gillian Lynne, one of the most accomplished choreographers of our time. This happened because someone looked deep into her eyes—someone who had seen children like her before and knew how to read the signs. Someone else might have put her on medication and told her to calm down.

Unlike Gillian, Matt always did fine in school, getting decent grades and passing all of the important tests. However, he found

# Finding your Passion

himself tremendously bored. In order to keep himself amused, he started drawing during classes. "I would draw constantly," he told me. "And I got so good at drawing that I was able to draw without looking, so that the teacher would think that I was paying attention." For him, art class was an opportunity to pursue his passion with abandon. "We were coloring in coloring books, and I thought, I can never color within the lines. Oh, no, I can't be bothered!" This kicked up to another level entirely when he got to high school. "There was an art class and the other kids would just sit there, the art teacher was bored, and the art supplies were just sitting there; nobody was using them. So I did as many paintings as I could—thirty paintings in a single class. I'd look at each painting, what it looked like, and then I'd title it. 'Dolphin in the Seaweed,' okay! Next!

"As my technical prowess increased, it was fun to be able to go…then I realized that my drawing was not getting much better so I started concentrating on stories and jokes. I thought that was more entertaining."

Matt Groening, known around the world as the creator of *The Simpsons,* found his true inspiration in the work of other artists whose drawings lacked technical mastery but who combined their distinctive art styles with inventive storytelling. "What I found encouraging was looking at people who couldn't draw who were making their living, like James Thurber."

His teachers and his parents—even his father, who was a cartoonist and filmmaker—tried to encourage him to do something else with his life. They suggested that he go to college and find a more solid profession. In fact, until he got to college (a non-traditional school without grades or required classes), he'd found only one teacher who truly inspired him. "My first-grade teacher saved paintings I did in class. She actually saved them…"

In his heart, Matt knew what truly inspired him. "I knew as a kid when we were playing and making up stories and using little figurines I was going to be doing this for the rest of my life. I saw grown-ups with briefcases going into office buildings and I thought, 'I can't do that.' I was surrounded by other kids, who felt the same way, but gradually they peeled off and they got more serious. For me it was always about playing and storytelling.

"I found friends who had the same interests at school. We hung out together and we'd draw comics and then bring them to school and show them to each other. As we got older and more ambitious, we started making movies. It was great...I made a decision that I was going to live by my wits."

Matt eventually placed his comic strip *Life in Hell* with L.A. Weekly, and began to make a name for himself. This led to an invitation from the Fox Broadcasting Company to create short animated segments. During his pitch to Fox, he invented *The Simpsons.* The show has been running on Fox for nineteen years as of this writing. In addition, it has generated movies, comic books, toys, and countless other merchandise.

Yet none of this would have happened if Matt Groening had listened to those who told him he needed to pursue a "real" career.

Not all successful people disliked school or did badly there. Paul was still a high school student, one with very good grades, when he walked into a University of Chicago lecture hall for the first time. He didn't realize as he did so that the college was one of the leading institutions in the world for the study of economics. He only knew that it was close to his home. Minutes later, he was "born again," as he wrote in an article. "That day's lecture was on Malthus's theory that human populations would reproduce like rabbits until their density per acre of land reduced their wage to a bare subsistence level where

an increased death rate came to equal the birth rate. So easy was it to understand all this simple differential equation stuff that I suspected (wrongly) that I was missing out on some mysterious complexity." At that point, Dr. Paul Samuelson's life as an economist began. It is a life he describes as "pure fun," one that has seen him serve as a professor at MIT, has a significant impact on public policy, and, in 1970, become the first American to win the Nobel Prize in Economics. "Never underestimate the vital importance of finding early in life the work that for you is play. This turns possible underachievers into happy warriors," he says.

## Three Stories, One Message

Gillian Lynne, Matt Groening, and Paul Samuelson are three very different people with three very different stories. What unites them is one undeniably powerful message: that each of them found high levels of achievement and personal satisfaction upon discovering the thing that they naturally do well and that also ignites their passions…

They have discovered their Element—the place where the things you love to do and the things that you are good at come together. The Element is a different way of defining our potential. It manifests itself differently in every person, but the components of the Element are universal.

Why they are special is that they have found what they love to do and they are actually doing it. They have found their Element. In my experience, most people have not. Finding your Element is essential to your well-being and ultimate success, and, by implication, to the health of our organizations and the effectiveness of our educational systems.

I believe strongly that if we can each find our Element, we all have the potential for much higher achievement and fulfillment. I don't mean to say that there's a dancer, a cartoonist, or a Nobel-winning economist in each of us. I mean that we all have distinctive talents and passions that can inspire us to achieve far more than we may imagine.

Being in our Element depends on finding our own distinctive talents and passions. Why haven't most people found this? One of the most important reasons is that most people have a very limited conception of their own natural capacities. This is true in several ways.

The first limitation is in our understanding of the range of our capacities. We are all born with extraordinary powers of imagination, intelligence, feeling, intuition, spirituality, and of physical and sensory awareness. For the most part, we use only a fraction of these powers, and some not at all. Many people have not found their Element because they don't understand their own powers.

> **"Never underestimate the vital importance of finding early in life the work that for you is play."**
>
> — Paul Samuelson

The second limitation is in our understanding of how all of these capacities relate to each other holistically. For the most part, we think that our minds, our bodies, and our feelings and relationships with others operate independent of each other, like separate systems. Many people have not found their Element because they don't understand their true organic nature.

The third limitation is in our understanding of how much potential we have for growth and change. For the most part, people seem to think that life is linear, that our capacities decline as we grow older and that opportunities we have missed are gone

# Finding your Passion

forever. Many people have not found their Element because they don't understand their constant potential for renewal.

This limited view of our own capacities can be compounded by our peer groups, by our culture, and by our own expectations of ourselves. A major factor for everyone, though, is education.

## What Is the Element?

The Element is the meeting point between natural aptitude and personal passion. What you'll find in common among the people you've met in this chapter and the vast majority of the people you will meet in the coming pages is that they are doing the thing they love, and in doing it they feel like their most authentic selves. They find that time passes differently and that they are more alive, more centered, and more vibrant than at any other times. Being in their Element takes them beyond the ordinary experiences of enjoyment or happiness. When people are in their Element, they connect with something fundamental to their sense of identity, purpose, and well-being.

How do we find the Element in ourselves and in others? There isn't a rigid formula. The Element is different for everyone. In fact, that's the point. We aren't limited to one Element, by the way. Some people may feel a similar passion for one or more activities and may be equally good at them. Others may have a singular passion and aptitude that fulfills them far more than anything else does. There's no rule about this.

The Element has two main features, and there are two conditions for being in it. The features are aptitude and passion. The conditions are attitude and opportunity. The sequence goes something like this: I get it; I love it; I want it; where is it?

## I Get It

An aptitude is a natural facility for something. It is an intuitive feel or a grasp of what that thing is, how it works, and how to use it. Gillian Lynne has a natural feel for dance, Matt Groening for telling stories, and Paul Samuelson for economics and math. Our aptitudes are highly personal. They may be for general types of activity, like math, music, sport, poetry, or political theory. They can also be highly specific — not music in general, but jazz or rap. Not wind instruments in general, but the flute. Not science, but biochemistry. Not track and field, but the long jump.

Throughout this book, you will be meeting people with a profound natural grasp for all sorts of things. They're not good at everything, but at something in particular. Paul Samuelson is naturally good at math. Others are not. I happen to be one of those others. I was never very good at math at school and was delighted to leave it behind when I finished school. When I had my own children, math reared up again like the monster in the movie that you thought was dead. One of the perils of being a parent is that you have to help your kids with their homework. You can bluff it for a while, but you know deep down that the day of reckoning is approaching.

Until she was twelve, my daughter, Kate, thought I knew everything. This was an impression I was very keen to encourage. One day when she was fourteen, she came home with a page full of quadratic equations, and I felt the familiar cold sweat. At this point, I introduced learning-by-discovery methods. I said, "Kate, there's no point in me telling you the answers. That's not how we learn. You need to work this out for yourself."

For some people, though, math is as beautiful and engaging as poetry and music is for others. Finding and developing our

creative strengths is an essential part of becoming who we really are. We don't know who we can be until we know what we can do.

## I Love It

Being in your Element is not only a question of natural aptitude. I know many people who are naturally very good at something, but don't feel that it's their life's calling. Being in your Element needs something more—passion. People who are in their Element take a deep delight and pleasure in what they do. My brother Ian is a musician. He plays drums, piano, and bass guitar.

Years ago, he was in a band in Liverpool that included an extremely talented keyboard player named Charles. After one of their gigs, I told Charles how well I thought he'd played that night. Then I said that I'd love to be able to play keyboards that well. "No, you wouldn't," he responded. Taken aback, I insisted that I really would. "No," he said. "You mean you like the idea of playing keyboards. If you'd love to play them, you'd be doing it." He said that to play as well he did, he practiced every day for three or four hours in addition to performing. He'd been doing that since he was seven. Suddenly playing keyboards as well as Charles did didn't seem as appealing.

## I Want It

Attitude is our personal perspective on ourselves and our circumstances—our angle on things, our disposition, and emotional point of view. Many things affect our attitudes, including our basic character, our spirit, our sense of self-worth, the perceptions of those around us, and their expectations of us. An interesting indicator of our basic attitude is how we think of the role of luck in our lives. People who love what they do often describe themselves as lucky. People who think they're not successful in their lives often say they've been unlucky. Accidents and randomness play some part in everybody's lives. But there's more to luck than pure chance. High achievers often share similar attitudes, such as perseverance, self-belief, optimism, ambition, and frustration. How we perceive our circumstances and how we create and take opportunities depends largely on what we expect of ourselves.

## Where Is It?

Without the right opportunities, you may never know what your aptitudes are or how far they might take you. Aptitudes don't necessarily become obvious unless there are opportunities to use them. The implication, of course, is that we may never discover our true Element. A lot depends on the opportunities we have, on the opportunities we create, and how and if we take them.

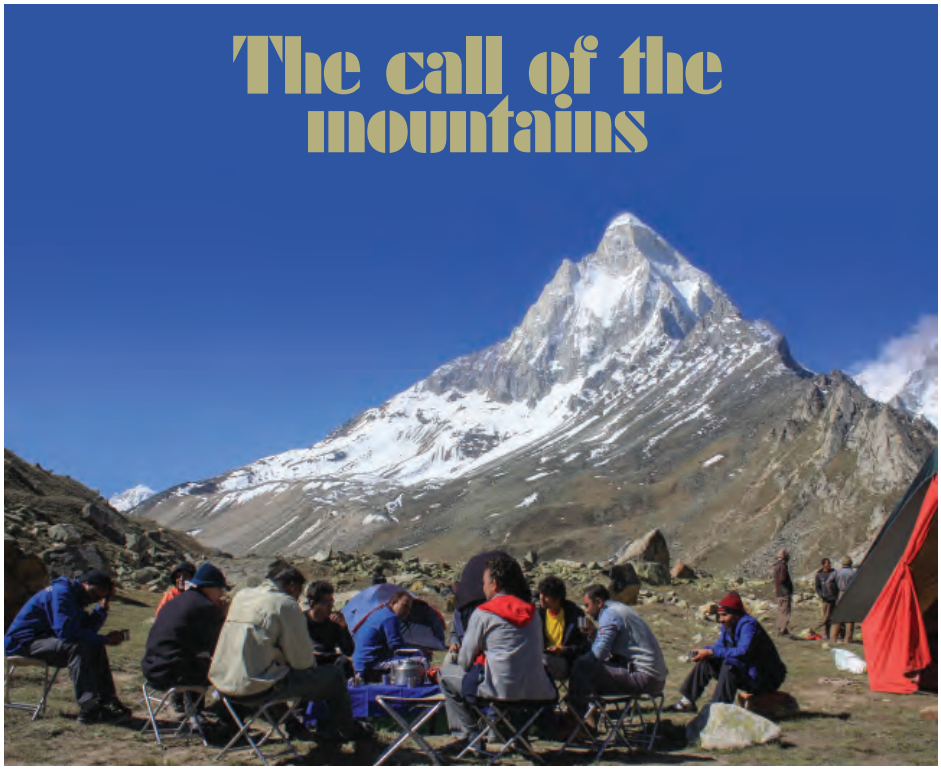
> **"I walked into this room, and it was full of people like me. People who couldn't sit still. People who had to move to think."**
>
> — Gilian Lynne

Being in your Element often means being connected with other people who share the same passions and have a common sense of commitment. In practice, this means actively seeking opportunities to explore your aptitude in different fields. Often we need other people to help us recognize our real talents. Often we can help other people to discover theirs.

My goal with this book is to illuminate for you concepts that you might have sensed intuitively and to inspire you to find the Element for yourself and to help others to find it as well. What I hope you will find here is a new way of looking at your own potential and the potential of those around you.

— From Ken Robinson's *The Element : How finding your passion changes everything* (Penguin Publishers)

# The call of the mountains



In June 2014, I went on a trek to Gomukh-Tapovan in Uttarakhand, home of many scenic places in the Himalayas. Gomukh, the snout of the Gangotri glacier, from where Bhagirathi river originates, is one of the primary sources of the river Ganga. Situated at a height of 13,200 ft Gomukh is 18 km from Gangotri.

This trek to Gomukh had been on my mind for over 24 years. Way back in 1990, I had travelled with my friends for the first time to Uttarakhand, at that time still a part of Uttar Pradesh. We did a Chardham Yatra covering Yamunotri, Gangotri, Kedarnath and Badrinath. We also visited the Valley of Flowers and Hemakund Sahib. It was a truly memorable trip as we travelled close to 1700 kms on our bikes and trekked nearly 125 kms. I repeated this trip in 2005 with my family, and of course not on bikes. So, going beyond Gangotri to Gomukh, where the Ganga originates, was a dream come true.

We reached Gangotri via Dehradun, a day's travel. On the first day of the trek, we covered a distance of about 9 kms  On the scenic route, we could see many varieties of beautiful wild flowers and spotted a few mountain goats known locally as  'bharal' – signs we were about to enter the towering Shivalik range of mountains.

We halted at Chidbasa and stayed in tents, where a three minute walk took us to the banks of the roaring Ganges. We could see the Bhagirathi peaks in the distance.

On the 2nd day we walked to Bhojbasa, a place unique for its ashrams which provide food and shelter to travelers at very modest charges.  One of the older ones, Lal Baba Kamlivale, one of the older ashrams, was established in 1962. We spent two days at Bhojbasa, living in tents.

The day after we reached, we trekked to Gomukh approximately 4 km away and returned to the camp. This is necessary for acclimatising. The route from Bhojbasa to Gomukh glacier where the Ganga originates, passes through 4 kms of dangerous landslide prone area and we had to be very careful. On the way we could see boards marking the spots where the glacier used to be and in which years – 1891 and then 1966. The boards

highlighted the fact that over the years, the Gomukh glacier had shrunk and retreated – the adverse impact of human assault on nature and the resultant global warming. Barring a small Shiva temple, open to the sky, Gomukh is barren, without trees, flowers or forms of life, except for the incessant sound of the flowing Ganga.

The following day we trekked to Tapovan. This stretch of the trek is tough as we have to cross the Gomukh glacier. The path through huge boulders and rocks is quite tiring. After crossing it, another herculean task is to climb a 1,200 ft steep mountain, virtually an 80 degree steep climb. The slope leads to the plateau of Tapovan. We also crossed the Akash Ganga, a waterfall and reached Tapovan by 2.00 pm to be greeted by the mesmerizing 'Shivling' peak and Meru Parvat.

We stayed there for two days. As the word tapovan (formed from Tapasya and van) indicates, sadhus used to come here to meditate in the tranquility of the forests. We were told that two sadhus stay in an ashram made of stones. We met one of them, who has been staying here for over seven years, now observing a vow of silence. Tapovan welcomes those who can brave the hardship of the terrain with fit and agile bodies and minds, and reach there to experience its serenity.

Though our last destination had been Nandanvan, 5 kms ahead of Tapovan, due to landslides, we had to abandon this plan and begin our return journey. On the way back, we stayed at Chidbasa for a day and returned to Gangotri the next day. In six days, we covered a distance of about 60 km.

This entire area is a part of the famous Gangotri National Park which has an area of approximately 2,39,002 hectares. Established in 1989, it is the third largest National Park in India and touches Himachal, Tehri and China.

As I travelled back to Pune, my mind was still up there in the mountains. In 2012, I had visited holy Amarnath, and now this wonderful trek to Gomukh happened in 2014. It was reassuring to know again that the years cannot take away one's love for the bracing walk into the distant hills. My heart tells me that the romance of the mountains would take me there again.

**– G. P. Kulkarni**
Corporate Legal &
Company Secretariat

# Pune to Shanghai : Home is where the heart is

After seven years at our China office, in July this year I was back in Pune. Settling down in this familiar city where I spent the first 25 years of my work life, I remembered my first year in China.

From day one, we ran into difficulties. The six-month winter was so severe, going out was almost impossible. There was only one Indian store and it took time to get things from India. The biggest challenge was going to a restaurant where the Chinese menu, even when they did give photos, could not be trusted. "You don't eat beef, you don't take chicken or fish, then what do you eat?" was the natural question that faced a vegetarian in a default non-vegetarian society. The first few times we went out for a meal, we came back, not having the courage to eat what was brought to us. China gets its milk from outside, and there are no sweets other than ice cream. It was tough, that first year.

Why in the first place, did I go then? The question takes me back to my early years with Thermax. On the very first day in 1983, I was in office up to 11 pm. I was thrilled as a company car dropped me home that night.

I had grown up in Dapoli and it was only after my Class 12, that I came to Pune for my B. Com at the Garware College. So, now after my graduation, I had a job with Thermax, and I felt confident of the future.

I was also happy as a member of the company's music group. Mr. Aga had sent 15 of us to participate in a festival in Nairobi when we had started our operations in Kenya. My job with Thermax gave me the security and satisfaction that I could wish for. Pune became our home. My wife, Maya worked as a teacher at Mahesh Vidyalaya. Our daughter Rasika was comfortable at her school.

As a Finance person, stability and predictability are things I like. So, did I ever imagine that I would move over to China, that our only daughter would learn Chinese and choose to work there? Sometimes, life takes us on roads we never dreamt of travelling.

***Madhav Performing a kirtan in Shanghai***

I did not choose China. As I had been involved in the turnaround phase of our Absorption Cooling Division during 1999-2001 period. So, when we put up a plant in China for chillers, I was asked if I could take care of the finances of the new subsidiary company there. It was not an easy decision. What about Maya's job? Rasika was about to complete Class 10, and what about her future studies? It meant saying goodbye to my colleagues and friends, the music sessions where both my wife and I performed. And of course, the non-vegetarian nightmare looming ahead!

But I thought I should take up this challenge. After all, China was where the world was setting up its business. So it was decided that we will test the waters and go there to see if we can survive.

The people in China were quite helpful. Once when the water pipe burst in our house, a neighbour rang up our landlord and explained the problem. Imagine telling someone who doesn't know your language, without even the benefit of trying to show with your hands and face. Still, as I said earlier, it was a bad first year. Maya was terribly homesick, she used to cry. At school, our daughter struggled with her Chinese, a compulsory subject at school.

Then, second year, something changed. Rasika developed a liking for Chinese, she became good at it. She put in extra efforts with the help of a Chinese teacher. In the early stages she used to go around with a translating machine which would speak out Chinese for English words. Later Rasika became good with the language. We could now go to restaurants and she would explain to the waiters what we were looking for. The Chinese were happy to see an Indian speak their language fluently.

In the 3rd year in China, Maya began working in an international school there. Our daughter decided that she wanted to study Chinese for her graduation. As a preparatory step, she took a six-month certified diploma course, and then following a test and interview she was admitted for the graduate course. She did her internship for two brief periods in two companies there.

She completed her graduation around the time I was posted back in Pune, in the Power Division.

Now, my daughter wants to work for a few years in China. She feels that if she is in India, without opportunities to speak Chinese, she would forget the new language she learned. So, she is there right now, and that means for support her mother also is staying back in China.

Is it destiny or what we choose? Or both? I know that it is wise to accept what life brings us. If we keep an open mind, and adapt as we go along, I feel that change cannot make us uneasy for long. We might even learn to look for a new day, different from the same old days that we spent all those years.

**– Madhav Agarkar**
Power Division

# Zero gravity and the sustaining aroma of life

Lunch box. Gravity. On first look, two films can't be more dissimilar than these two. Gravity opens in the limitless stretches of outer space where stars are separated by millions of miles. Lunch box is set in Mumbai, where you can't stretch your hands without touching someone. In Lunch box, lives of two ordinary people intersect, while in Gravity an astronaut finds herself utterly alone in space after an accident takes away her team mates. Ritesh Batra had only a short film to his credit before he wrote and directed Lunch box on a modest budget. Gravity is made by Alfonso Cuaron, the accomplished Mexican-Spanish film maker and the film is said to have cost more than India's Mars Mission.

But are the films – Gravity and Lunch box – really so different?

In Lunch box, Ila (Nimrat Kaur) is a young housewife, preoccupied by the grind of daily living: sending her little daughter to school, sometimes travelling to another part of the town to meet her mother who is looking after her dying husband, preparing the morning dabba for her office going husband. Ila is troubled by her husband's indifference and, guided by an elderly neighbour's voice from a window upstairs, is trying to win back her husband's affections by cooking a variety of tasty meals every day. By one of those rare mistakes that happen even to the meticulous Mumbai dabbawalas, Ila's dabba reaches Sajan Fernandes (Irfan Khan), an about-to-retire office employee who is also a widower. For Fernandes, resigned to the weariness of the daily commute and the sameness of the office job, Ila's lunch is a whiff of fresh air. Though the mistake is noticed, every day the lunch box continues to reach its wrong address. Through chits exchanged in the dabba, they talk to each other about their lives. A friendship, a certain regard develops between them.

In Gravity, in the eerie silence of the vastness of space, Dr. Ryan Stone (Sandra Bullock), a medical scientist, is on her first space mission. We learn that her four- year old daughter died in an accident. Yet to come to terms with the loss, Ryan has fled to the wasteland of space, a reflection of her frozen interior where the will to live has all but gone to sleep. A terrible accident finds her and her team mate Matt Kowalski (George Clooney) dangling precariously together at the end of a line. Realising they both can't hang on and survive, Matt lets go of the life line and drifts away. His act of 'letting go' probably brings the first thaw in her. Later, in a desperate attempt to revive failed communication lines, she tunes in to hear from somewhere a baby's cry and a man singing a lullaby. Ryan feels the stirrings of life calling her back.

Though far apart in style and ways of filming, Gravity and Lunch box are both meditations on loneliness and the need of people to find human connect. Ila and Fernandes decide to break out of their prison lives. While the dabba and its tantalizing aroma reminds us of renewal, from the desolation of space where Matt drifts away like a dying star, Ryan is drawn back by life's gravity to glorious earth. In their individual ways, both films are life affirming.

They say that Mumbai's dabbawalas make as few as six mistakes while delivering a million lunch boxes. In our teeming cities, what is the statistical probability of lonely souls finding someone, anyone, who will listen to their stories? Watching these films, I was grateful to cinema's power yet again to illuminate human hearts with a magical blend of cinematic grace and humanist vision.


**– A.M. Roshan**

SLICE OF LIFE


# When you believe you're being overpaid

A 32-year-old M Tech working with an electronics manufacturing company in Bangalore returned his pay cheque twice because he thought he was "overpaid". The guilt of drawing Rs 40,000 a month has played so much on Bhuvan's (name changed) psyche that he has plunged into depression. He might be the employee every boss hopes for, but many in the workforce are grappling with 'Schizo affective psychosis'.

Bhuvan was gripped with guilt that his salary was too much for the work he did. The recurring feeling finally led to depression and he quit his job.

Dr Vinod Kulkarni, neuro psychiatrist says, " Stress can trigger this condition. Or it is because of a dispute between unlimited ambitions and limited capabilities. This could also happen in people who want to be perfect in everything they do…even if they make a small mistake, they think they have committed an unpardonable sin and have to punish themselves for the consequences.

Bhuvan is being counselled, is receiving cognitive behaviour therapy where he is made to see his merits and has also been put on anti-depressant medication.

*– From Bangalore Mirror*

**We were all human beings**

**Until**

**Race disconnected us,**
**Religion separated us,**
**Politics divided us,**
**And wealth classified us.**

**A poster adapted from the original by musician-songwriter, Karter Zaher.**

# Aspiration as fraud

An article in New York magazine about a high school student who had earned eight figures trading stocks was a hoax, a representative for the student said Monday night.

The article appeared in the magazine's 'Reasons to Love New York' issue. No. 12 on the list was: "Because a Stuyvesant senior made $72 million trading stocks on his lunch break." The student, Mohammed Islam, 17, confirmed to New York magazine that his net worth was in the "high eight figures."

After its publication, the article spread across the world on social media. But late Monday, The New York Observer published an interview in which Mr. Islam and a friend admitted to making the whole thing up.

The boys maintain a positive outlook, according to their most recent interview : "It's not good, what we did. But we are still inspired. We still want to pursue doing business together as individuals", they stated.

On Wall Street, however, several traders argued that an ability to bluff, along with a passion to make money, are the elements of a successful trader, and wouldn't rule out the possibility that Islam could one day reach his ambitions.

*– Adapted from the Guardian and the New York Times*

# A dash of colours and helping hands

One of the highlights of the Joy of Giving Week was the mural painted for the session, Colour my World. Thermax employees, their families and children from K C Thackeray School painted on a 120-feet wide wall at Anusyabai Namdeo Waghere School, Pimpri. Together, they explored the passion for colours and spread layers of happiness.

Several employees enjoyed engaging children at the Thermax Foundation managed municipal schools during 'Teach a Class' sessions to celebrate Teachers' Day on 5th September.



# Thermax's expanding footprint in Africa

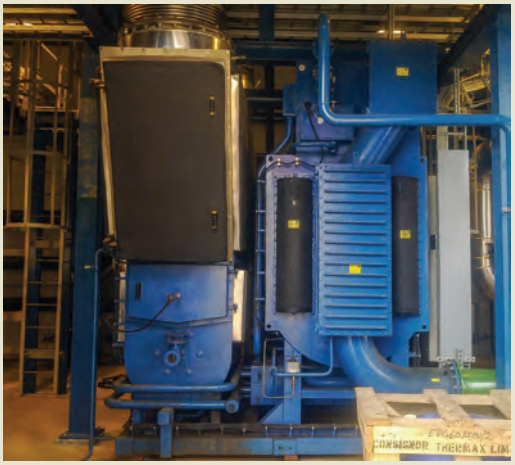
Thermax has been successfully supplying its products and crafting complex projects in Africa – co-generation boilers, heating systems, power plants, absorption chillers, oil field chemicals and waste management equipment. The company is consolidating its business presence and plans to progressively localise more facets of its value chain in Africa.

Some of the Thermax installations supporting African customers with energy and environment solutions:

*Trigeneration boiler at Bidco, Kenya. The biomass fired boiler provides 20 TPH steam, 2.2 MW power and 400 TR chilling.*


*One of the three 167 TPH floor mounted boiler supplied to Chevron, Nigeria. The boiler is fired on natural gas / tail gas.*

*Air pollution control system at Mbeya Cement Company in Tanzania. The 202127 Am$^3$/hour pulse jet bag filter cleans the raw mill waste gas.*



*Vapour absorption chiller for process cooling at Guinness Brewery, Nigeria. The 700 TR chiller is driven by exhaust gases.*

*Effluent treatment plant of 1800 m$^3$ / day at Alexandria Fabrics, Egypt.*