COIMBATORE MARINE COLLEGE

Approved by
Directorate General of Shipping,
Govt. of India

Annual Magazine 2019 - 2020

WE CREATE COLUMBUS

EDITORIAL BOARD MESSAGE

Literary club of CMC launches a live mirror of CMC in the form of CMC Annual Magazine -2020, which will be remarkable in the history of CMC.

CMC Annual Magazine includes all the events and celebrations of CMC occurred in the year 2019. If you look closely, you will notice the energy of inspiration is all around in the CMC Annual Magazine. The best part is that every day is a chance of captures this inspiration to seek out all of life's possibilities. The power of imagination makes us infinite. Great things happen to those who don't stop believing, trying, learning and being grateful, follow your bliss and the universe will open doors when there were only walls.

Success is not measured by what you accomplish,

But by the opposition you have encountered, and the courage

With which you have maintained the struggle against

Overwhelming odds.

BOARD OF DIRECTORS.

Photographs of former and present principal.

Cadets of CMC.

Greetings.

CMC Vision and Mission.

Presentations and articles.

CMC celebrations.

Photographs of former and present officers.

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CDR. GOPINATHAN
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(B.Tech Marine Engineering)

C/E B.K. KUMAR
(GME)

S. SENTHILKUMAR
(Management Department)

C/E J.W. JEYAPAL
(ETO)

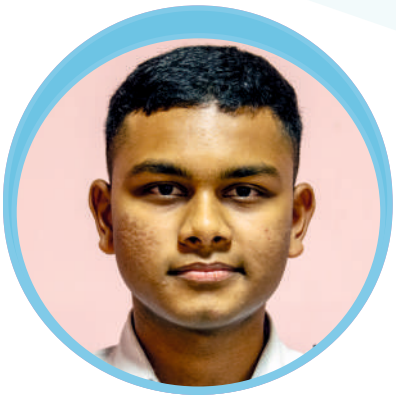
V.L. SHENOY
(GP Rating)

PHOTOGRAPHS OF TEACHING FACULTY & NON TEACHING STAFF

PHOTOGRAPHS OF OVER ALL ACADEMIC TOPPERS

ASLAM ALAM
(B.Tech 16 Marine Engineering)
77.52%
PH: 9461075181

VISHNU KUMAR
(B.Tech 17 Marine Engineering)
83.4%
PH: 7808886662



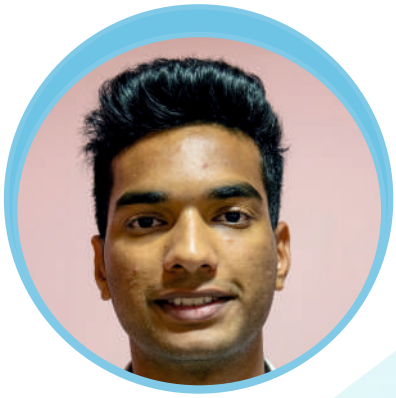
ABHINAV .S
(B.Tech 18 Marine Engineering)
83%
PH: 8300643484

R.S. BHUVAN ADITHYA
(B.Tech 19 Marine Engineering)
83%
PH: 7022004899

KUMAR GAURAW
(B.Sc 17 Nautical Science)
80.5%
PH: 9566438796

K. NANDHAKUMAR
(B.Sc 17 Nautical Science)
81%
PH: 9597970507

ARTHA. V. RAI
(B.Sc 18 A Nautical Science)
80.9%
PH: 7899331235



VISHNU BABURAJ
(B.Sc 19 B Nautical Science)
73.5%
PH: 8606840561

SRINEEVASAN.T
(B.Sc 18 B Nautical Science)
80.5%
PH: 9751987366

PHOTOGRAPHS OF OVER ALL ACADEMIC TOPPERS

JEFFERSON.A.D
(B.Sc 19 A Nautical Science)
78%
PH: 8870201905

SAM JOSE.M
(B.Sc 19 B Nautical Science)
73.5%
PH: 6374687480

KINGSLY CHARLES
(MBA - 1st Year)
70%
PH: 8508471643

HARIHARAN.K
(BBA - 1st Year)
70%
PH: 9003764756

GP Rating - 1 Passing Out Ceremony

B.Tech 16 Passing Out Ceremony

B.Sc 17 Passing Out Ceremony

GME 32 Passing Out Ceremony

GME 34 Passing Out Ceremony

ETO 18 B Passing Out Ceremony

ETO 18 C Passing Out Ceremony

ETO 19 B Passing Out Ceremony

ETO 19 C Passing Out Ceremony

ETO 19 D Passing Out Ceremony

BBA 19 Batch - Group Photo

MBA 19 Batch - Group Photo

MESSAGE FROM - CHAIRMAN

When we think of Marine the following facts are amazing. With a worldwide fleet of over 97,000 ships move vital goods ranging from grains, consumer articles, coal, petroleum products and crude oil accounting for nearly 90% of world merchandise trade by volume.

With a gross tonnage of 9.68 million, Indian shipping is ranked 17th in the world. India has positioned itself as a major supplier of efficient and cost-effective manpower to the shipping world with a market share of around 7%. India's port capacity has augmented more than 1 billion MT. The shipping corporation of India is set to acquire 118 ships by 2020.

We at Coimbatore Marine College have always maintained high standards of training and discipline making our cadets physically and mentally prepares for the hard and challenging career ahead. With around 10 years of experience in the field of maritime education, we have been ranked as one of the pioneering institutes in marine education in India.

C/E. S.I. NATHAN
(Chairman)
CMC Group of Institutions

MESSAGE FROM - ACADEMIC DIRECTOR

I am grateful to the providence to confer this honour up on me. I am elated to have one of the rare privileges of guiding future mariners in this disposition. I remain thankful to the Management which identified, supported and allowed me to do various experiments in teaching methodology.

My very high regards to Directorate General of Shipping and Indian Maritime University who helped to precipitate all my experiences and ideas in such a format to train the Mariners with the emerging technology.

Regular contact with shipping companies has helped us to tone the attitude of young mariners.

Thus, with all the input from the above marine fraternity we are able to churn out bold and proud mariners who have learnt to locate their sails in any kind of weather and direction of wind to reach their destination in the predicted ETA.

This academician position is challenging as you have to stretch to your limits to make students to dwell in creativity, to make them understand that knowledge is only past tense and future requires creations and innovations.

"Imagination is more powerful than knowledge" – Albert Einstein.

Imagination which is bestowed on every human being, which they fearlessly used in their childhood got clipped or blanketed during the few years of formal education, has to be rekindled to become innovative leaders.

Many scientists discovered the ignorance of certain universal laws (which existed even before finding) are called discoveries. This helped us to make principles, laws, formulas and equations by which we could invent new things.

Future requires mariners who could understand the discoveries and laws to create a new Marine World which has become the base of our teaching in CMC.

C/E.T. NEDUMARAN (9942212396)
(Academic Director)

MESSAGE FROM - PLACEMENT DIRECTOR

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C/E. B.C. GOPALAKRISHNAN
(Placement Director)

MESSAGE FROM - PRINCIPAL

It is my privilege to hold the charge of the Training Institute when CMC is in its 24th year of growth in building Mariners and social improvement. As I am associated from the beginning of this institution I could recall from the stage of its embryo when it had its first few post sea courses in the year 1996 and then up graded to conduct GME course and in the year 2004 meticulously and meritoriously graduated to start the full-fledged degree courses for Marine officers in its own campus Ship T.S Clarissa.

The Coimbatore Marine College which has its own ship in campus is located on the Coimbatore-Pollachi National High Way. It is located in a scenic Kerala pass of Western Ghats hills. By virtue of its location here we have a Mediterranean like climate throughout the year. It also produces serene and conducive atmosphere for education and learning.

This many years of long journey and valour march has been moulded by the noble thought conceived by our Chairman, , able support of our directors and CEO, the noble work of my predecessors, the relentless efforts from the in-house Marine Nautical and Engineering professionals, and experienced Internal and External faculties.

I am proud to announce the Mammoth position we reached is due to my team which comprises of teaching and non-teaching staff, office bearers and administrators, HODs and professors, parents and aspiring cadets and the contagious energy and enthusiasm of all these above disciplines.

It's indeed rare to have such unique staff who possess the following traits of teachers, trainers, tutors, mentors, coachers, guides and gurus and to top it with role model qualities all amalgamated in each one of them.

With great pride its revealed that CMC has produced more than 3900 Mariners who reached different positions in the Shipping Industry nationally and globally. The quality of establishment is judged by the products they send out. In that aspect we are proud to state that our cadets continue to do well in all walks of life.

Established in 2001, CMC has grown healthy and has come of age. CMC was subjected to all trails and tribunals, has passed the fire test and emerged strong, like well-tempered steel. CMC as whole commit to all Shipping communities that with our continued spirit and endeavour will deliver high quality Seamen by which the whole nation shall be proud of.

CMC is aware that cadets are responsibilities entrusted on us by the providence. We teach them that the wonder is not on the similarities but on the uniqueness in each one of them.

"Character cannot be developed in ease and quiet. Only through experience of trail and suffering can the soul be strengthened, ambition inspired, and success achieved". – Helen Keller.

All our cadets know that strength of character is born out of the obstacles overcome and thus are moulded in to Able Sailors.

C/E. T. NEDUMARAN (9942212396)
(Principal)

CMC

VISION & MISSION

1

OUR VISION

- Aim for 100% success trainees in qualifying Examination.
- Professional touches with harmonious approach in solving complaints / grievances ensure a pleasant and happy family environment in college campus.

2

OUR MISSION

- To provide Goal-oriented, Quality-based and value added Education through State-of-the-Art Technology at par with international Standards.
- To prepare the students with high professional skills and ethical values.
- To impart knowledge through best practices.
- To undertake continuous assessment and remedial measures.

3

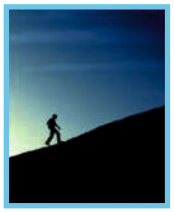
QUALITY POLICY

To set an immaculate and continued record in offering quality training to make the prospective Marine not only professionally sound and superior but also innovative, imaginative and inquisitive in their attitude and mindset to have clarity in thinking, service to society, courage in moral conduct.

C/E. T. NEDUMARAN
Mob: 9942212396
(Principal)

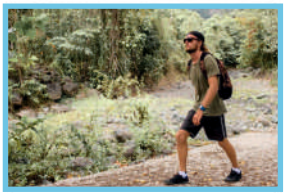
WORK = EXRESSED LOVE

(An article by C/E T. Nedumaran to imbibe Attitude for Excellence)



TO REACH THE
SUMMIT

WHAT SHOULD YOU CHECK
AT THE BASE



I love Steve Jobs; No, I never knew him personally, but I love him for the incredible products and technology that he gave this world and a whole new way of living that he had left behind. The pride that people carry, in just holding the products of his brand, does not have a parallel. No, all his customers are not his best friends or his family members or his acquaintances, but he lives in all their hearts as if they knew him and own him. And all he did was he gave his extreme best in his field of expression, which otherwise called as work. The way he worked, that extra mile he walked in spite of knowing his illness 25 years before taking his heavenly abode, earned him all the glory and all the love from millions of people.

In day-to-day life I come across many such inspirational personalities from whom I keep learning and growing and at the same time I carry a lot of love for them in my heart. Most of them I do not know personally, but I know them because of the excellence they have produced in their fields of expression. I know them and love them only because of the high standards they have set and the benchmarks they have created.

For mother Teresa it was her service to the sick and needy. Once when she approached a rich person and opened her hand asking for help to feed her people, the man spitted in her palms. She calmly wiped it in her sari and dared to walk the extra mile. She again opened her palms and said that the first one you gave was for me and now please give for my people something to live with, which fetched her the love of whole world and made her to get sainthood.

For Dr. Abdul kalam it is his technological brilliance and his dream to make this country self-sufficient and stand with strength in this world. Even after coming out from the highest post (The President of India) he followed his passionate work defying his age factor that of preaching and interacting with school kids to college students to impart knowledge. This walking of extra mile made him the enviable human being by the whole world, who stood above cast and creed and made each teacher to aspire for a similar death like his, which is to die while delivering their passionate work (he died while delivering a speech at IIM Shillong).

For Mahendra Singh Dhoni, apart from playing well, it is the drive to give a new definition to captaincy and leadership. And that's why right from his gestures, to his expressions, to his speech and body language, the way he can take the onus of the entire team on his shoulders with absolute ease and grace, everything is being noticed and admired by
the entire world. His willingness to walk the extra miles to practice and adhere to his discipline and conviction earned him the highest sports award and an honorary Major designation in India Army.

His extra commitment to his leadership, brought him to such a level that once his leadership quality was to become a lesson in management classes.

For Captain Radhika Menon the full commitment in her work gave her the courage to walk the extra mile and save the fisher men's life. This earned her the bravery award from IMO. She is the first woman Captain in the whole world to get such honour, for which whole sailor community is proud of.

For Oscar award winner A.R. Rehman, his walking of extra mile by staying and practicing hours together even after all his co-trainers left the training hall, which eventually culminated in he getting the Oscar award and made the entire nation proud.

As I think of it, from industrialist to sports person, to singers, to dancers, to painters to artists who are loved by the world, they are actually loved for the extra bit they put into their work.

Even when I visit the bank, I like to get my work done from that one employee who is always willing to help the customers with a smile and respect.

I like to buy vegetables from that vendor who takes that extra effort to maintain cleanliness, arrange the vegetables in an attractive manner and greet his customers with love.

I like to be trained by that particular instructor/teacher because of the extra care and inputs that I get in every session.

They all seem to be putting so much love in what they do, don't they? And that comes back in manifold as return from the world, love.

Hence to elevate myself I stand to ask myself a question. If my work is my only way to reach out in the world, if my work is the only way through, I can inspire, if my work is the only way I can create a benchmark in my field, then should not my work be my first devotion? Shouldn't there be an element of love in my efforts, and when love and devotion are blended, excellence is just a by-product. Then where is the question of complaining about work, where is the question of being bored in work, where is the question of Monday morning blues?

One thing I definitely picked up from all these people is either I do what I love doing the most, or whatever I do, I do it with a lot of love and devotion. This is the only way I can make 'Providence' a part of what I do and allow the 'Almighty' to carry me higher.

I did some extra work while preparing this article. Though I conceived this concept and idea for this article, I turned through many books and magazines to put apt words and sentences in this article, so that it can convey my intended meaning and effect on readers. I remain grateful to all authors for their articles.

By walking the extra mile in whatever you do, not alone the world will acknowledge, the self (inner soul) will feel proud and honored for achieving its purpose of existence through your life.

MICROPLASTICS IN THE SEA A GROWING THREAT

TO

HUMAN HEALTH

Article Primed by:

C/E. B.C. GOPALAKRISHNAN

If you are 'Fantastic' then do something 'Drastic' to cut the 'Plastic' awareness and response among and from public, respectively, were very dawdling. Environmental Scientists say "Over five trillion pieces of plastic are floating in the world's oceans".

However, they stress that our estimates are highly conservative, and may be considered minimum estimates.

"Their estimates of macroplastic are based on a limited inventory of ocean observations … they also do not account for the potentially massive amount of plastic present on shorelines, on the seabed, suspended in the water column, and within organisms."

Trillion of tons of tiny debris from plastic bags, bottles and clothes in the world's oceans present a serious threat to human health and marine ecosystems.

This is the stark warning issued by the United Nations in a report on the most dangerous environmental problems facing the world today.

We all knew that Global plastic production was increasing, particularly, between 2004 and 2014, dramatically, but we had no concern, until such time Nutritionist had liberated their concern when they were known that More than a quarter of all fish now contain plastic particles, according to a recent study which analysed the guts of fish sold at markets in Indonesia and California.

And poor waste disposal means when we have finished with our takeaway containers, cigarette butts and party balloons, they are worn down into trillions of ever-smaller particles by the waves.

There is a growing presence of these microplastics, particles of under 5mm in length, in the world's oceans.

This was the first slogan ever raised by United Nation back in early 2009 itself, but In 2010, between 4.8 million and 12.7 million tons of plastic was washed into the seas and has since shown up in the stomachs of whales, plankton and other marine life.

There is some evidence that microplastics can cause harm to organisms, confirmed by experts in marine biology.

Laboratory experiments, replacing one per cent of the sediment in a worm tank with plastic had a negative effect on the worms' ability to store energy.

"If we carry on with business as usual – it's not uncomparable – then we are going to reach those thresholds," There may be places in the world's oceans that have not yet been discovered where microplastics are particularly concentrated.

More than a quarter of all fish now contain plastic, according to a recent study which analyzed the guts of fish sold at markets in Indonesia and California.

Scientists fear that chemicals in plastics and also chemicals which attach themselves to plastic in the natural environment could cause poisoning, infertility and genetic disruption in marine life, and potentially in humans if ingested in high quantities.

"The presence of microplastic in foodstuffs could potentially increase direct exposure of plastic-associated chemicals to humans and may present an attributable risk to human health.

People could even be breathing in plasticmicroparticles suspended in the air, with the risk of a noxious effect on the lungs similar to car fumes.

Some areas of the world have higher concentrations of microplastics than others. East Asia is one of the worst affected places, with 27 times more plastic.

found in the seas around Japan than else where in the world.

A vast "plastic soup" of waste floating in the Pacific Ocean, Known as the Great Pacific Garbage Patch, could stretch to twice the size of Texas. Similar patches are found in the other oceans.

The impact is global, with microplastics found in places as far-flung as a Mongolian mountain lake and in deep sea sediments.

Last year, volunteers on 30 boats travelled to the area where the waste is said to be, and reported that most of the waste there was large rather than microscopic.

"It was a good illustration of why it is such an urgent thing to clean up, because if we don't clean it up soon, then we'll give the big plastic time to break into smaller and smaller pieces."

Mr Slat, 21, is a Dutch student who has developed a technology he says could sift dangerous plastic particles out of the ocean, and sell them on for profit. He is continuing to work on it, still.

Students are so, so... kind: We've had wasters and entrepreneurs. But the new generations of youth are big into philanthropy. Hence, everyone particularly concern with Marine Environment are highly hoping that Mr Slat should come up with great successful.

Other environmental concerns are includes the surge in epidemics of diseases passed from animals to humans, such as Zika, Ebola and bird flu,

The warning that drought and rising temperatures related to climate change can result in toxic contamination of essential crops.

As we all aware of now that It is being predicted that a 2°C rise in global temperatures would cause an increase in fungal toxins on these crops – which can cause cancer and stunt the growth of foetuses – warning this could become a food safety issue around world. Worries over the use of 'microbeads', small plastic pieces used as an exfoliating agent in soap and make-up, has caused a number of cosmetics companies to pledge to remove them from products.

Synthetic fibres released into the world's waters through tiny fibres from artificial fabrics like fleeces and polyester in washing machines are also one of the biggest causes of plastic pollution in the ocean.

Therefore, entire world, particularly, The Marine Conservation Society and The Environmental Investigating Agency is focusing on plastic bags and other items labelled as 'biodegradable' may seem a good solution, in most cases they will only

break down in temperatures over 50 Deg C – much lower than the conditions found in the sea, where many end up.

Lots of Ban on Plastic awareness programmes are being initiated hence people may avoid using products with microbeads, and to make sure they disposed of all plastic products in an appropriate way, by recycling if possible.

Here are 17 Ways to Reduce Your Plastic Waste:

1. Stop using plastic straws, even in restaurants. If a straw is a must, purchase a reusable stainless steel or glass straw.

2. Use a reusable produce bag. A single plastic bag can take 1,000 years to degrade. Purchase or make your own reusable produce bag and be sure to wash them often!

3. Give up gum. Gum is made of a synthetic rubber, aka plastic.

4. Buy boxes instead of bottles. Often, products like laundry detergent come in cardboard which is more easily recycled than plastic.

5. Purchase food, like cereal, pasta, and rice from bulk bins and fill a reusable bag or container. You save money and unnecessary packaging.

6. Reuse containers for storing leftovers or shopping in bulk.

7. Use a reusable bottle or mug for your beverages, even when ordering from a to-go shop.

8. Bring your own container for take-out or your restaurant doggy-bag since many restaurants use styrofoam.

9. Use matches instead of disposable plastic lighters or invest in a refillable metal lighter.

10. Avoid buying frozen foods because their packaging is mostly plastic. Even those that appear to be cardboard are coated in a thin layer of plastic. Plus you'll be eating fewer processed foods!

11. Don't use plasticware at home and be sure to request restaurants do not pack them in your take-out box.

12. Ask your local grocer to take your plastic containers (for berries, tomatoes, etc.) back. If you shop at a farmers market they can refill it for you.

13. The Environmentalist estimates that 7.6 billion kgs of disposable diapers are discarded in the world each year. Use cloth diapers to reduce your baby's carbon footprint and save money.

14. Make fresh squeezed juice or eat fruit instead of buying juice in plastic bottles. It's healthier and better for the environment.

15. Make your own cleaning products that will be less toxic and eliminate the need for multiple plastic bottles of cleaner.

16. Pack your lunch in reusable containers and bags. Also, opt for fresh fruits , vegetables, veggie (eating a balanced diet of fruits and veggie, whole grains, fish, and a little meat) and bulk items instead of products that come in single serving cups.

17. Use a razor with replaceable blades instead of a disposable razor.

Conclusion

what is Plastic Doing to our Bodies?

Marine Environmental Researchers are not saying this is problematic in and of itself. What they're saying is that the realm of what we do not know about plastics and what they do to our bodies is so vast, that coupled with our constant exposure to it, we can't help but be very concerned.

Plastic is Killing

At this stage, plastic has become ubiquitous in our world. It is common knowledge that its presence in the environment poses an immense risk to wildlife. But what about us? Isn't it logical that if the excess of plastic is killing dolphins and turtles, that it could be disastrous for humans as well?

More Research Needed

This may not entail us trapped in six-pack plastic rings or choking on straws. It's the toxic additives and constant unwitting exposure to plastics that we need to be concerned about. We need more research, and in the meantime, we need to

drastically cut down on our reliance on plastic it's everywhere, putting our planet and our bodies at stake.

References

1. Dr Richard Thompson, professor of marine biology at Plymouth University.

2. The United Nations Environment Projectreport presented at the UN Environment Assembly in Nairobi.

3. Scientists Mr Jacquie McGlade and Boyan Slatat a recent UN conference.

4. https://www.independent.co.uk/environment

5. http://www.greeneducationfoundation.org

6. https://www.reefrelief.org

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10. https://www.plastichealthcoalition.org

AS I LOOK BACK - MY SECOND INNINGS OF MY PROFESSIONAL LIFE WITH CMC.

KOFFEE WITH

C/E T.B. RAMKUMAR

B.Sc., B.Sc (Engg)., C.Eng (I)., FIE, FIMarE.

I used to read a lot during my sailing days. Most of the ships I sailed had good libraries and lot of books to read. Seamen's societies and some Seamen's clubs used to provide free books to read, especially in the U.S and U.K.ports which, we could exchange for free in another port. In one of the books I happened to read a sentence which struck a chord deep inside me. It was this- "in trying to make a living, you forget to live". Wasn't that happening to me, I asked myself? My wife could no more sail with me, having so many things to look after at home. She was having a tough time, although she never complained. She had to manage a homespick and span as she would like to maintain, manage the education of my two teenage daughters, one in the high school in Palghat and the other in Amrutha Viswa Vidyalaya at Ettimadai, Coimbatore, and now she had to look after her ailing father too.At that very moment I made up my mind to stop sailing. I wanted to help my wife in the affairs of the family more, I felt with a feeling of guilt.

I signed off from my last ship of my Sea career, at Perth,Australia , on New year Jan 1st 2oo1.That night I flew by "Quantas", the Australian airlines nonstop Perth-Mumbai. Being New Year, Champagne was flowing, dinner was sumptuous and cakes were galore. I only hoped the Captain and his Co- pilot won't drink. I enjoyed every bit of it. After an intense 6 months sailing,who wouldn't ? I reached Mumbai with a jet lag and a hang- over. There is a time lag of 5 hrs 30 minutes between Australia and India. My company had booked a domestic flight by Indian Air Lines to Coimbatore where,my family waited to receive me and to take me back home to Palghat.

I had indicated already to my company that I was planning to settle and would not be joining back. But, after a couple of months, they started calling me. It is difficult for a Marine Engineer to remain idle, especially for a person who has been at sea for almost 30 years, having passed my Mechanical Engineering Degree in 1970 and joining as a Trainee Marine Engineer with SCI soon after. It is said there will be more salt in the blood of a seaman, which will tempt him to sail again. I was getting tempted to sail, because there was not enough physical activity or any other engagement for me, which I could usefully indulge in and I was getting bored. Then, my wife reminded me of my decision I had taken. Both daughters said in one voice – "papa, you are not sailing anymore". That settled the matter.

One day, as I was reading the daily newspaper in mid -morning, the postman brought mail. There was only a periodical. It was OCEANITE, the mouthpiece magazine of MUI (Maritime Union of India), the strong maritime union of Merchant Navy officers. When I was casually turning the pages of "OCEANITE" magazine, my eyes fell on an advertisement by a Coimbatore Marine Centre, Trichy Road, Coimbatore. That advertisement decided my career for the next 18 years and counting. The advertisement said, they were going to start a Marine Engineering Training Institute in Coimbatore and wants Chief Engineers. I wondered, a marine training Institute in Coimbatore, of all the places!!! A place where one cannot show not even a river to a trainee, forget about the sea, or a ship.!!! Somehow, I had connected marine training and training workshops close to sea or river or alongside a river leading to sea. I have seen this in many places in India and abroad. I was born and brought up within 3-5 kms distance, as the crow flies, from the Arabian Sea at Cochin, Cochin Port, harbor and also from the Cochin Shipyard and a few boat buildings yards. What would they do, if the trainees have to be shown a ship or a boat? The subsequent years will prove that I was wrong and would convince me that a determined and resolute man can do anything.

I read the advertisement again, the training institute was being planned in Coimbatore only. If it is true, I thought I must congratulate the daring person who conceived this plan of starting the institute in Coimbatore. So, I wrote a letter to him mainly to congratulate him. But then one Mr.Nathan called me and told me to come to his office at Marvarasi Complex in Trichy Road, near Chungam, Coimbatore. I met him and he was planning to start various training courses. One Mr.Sriram, Chief Engineer was there helping Mr. Nathan.

He was getting ready to join back ship. We were together for a week or so and then he left .I assisted him whatever I could. Then he left. Soon, Upgradation course for Chief Engineers and Second engineers was ready to be commenced. Mr. Nathan offered me the job as the Course Director for these courses. We started the course with a dozen second engineers and Chief Engineer. One day Nathan sir came to me saying he was going to sail for a few months and told me to take care, gave me an appointment letter as the Course Director and left, making his younger brother in-charge of the Institute, the then Coimbatore Marine Center.

had an accident and had a prolapse of my vertebral disc and I had to take bed rest for over a month. Doctor advised against travel for some more time. This was the second time I was injuring

my back, the first when I almost fell through an open manhole of a deep tank of a ship at sea. I was in touch with CMC ,while bed ridden and the number of candidates had trickled down and ultimately, the course came to an end. Nathan sir came back after sailing, and he called me, saying we were ready to start GME course, permission being granted by D.G.Shipping. A classroom was taken on lease by Nathan Sir at Karpagam Polytechnic College. A batch of 20 Graduate Mechanical Engineers joined. That was the maximum permitted, I think, then.

During lunch break, 20 cadets, 3 members of teaching faculty, including me and a driver would cram into a van and go to LIC colony, somewhere on the way to Ukkadam to a house ,which was the hostel for these cadets. Most of them were from Kerala. They were all eager to join ships as Marine Engineers. I was fresh from ships and eager to fit into a teaching career in my 'second innings'. I started taking classes using white chalk on black board. I took different subjects, mainly Marine Diesel Engines, although I covered many auxiliaries and part boilers. I had already restricted my travel and restricted my days at college to 3 days, taking my doctors advice. I remember, there was a Chief Engineer Mr.Krishnan, followed by Chief Engineer Paul John, C/E Veda Nayakam and afterwards our ownB.K.Kumar sir who used to take classes between sailings. I don't remember the names of others. There were a few retired ERAs from Navy as instructors, who also took some classes.

The official inauguration of the then COIMBATORE MARINE CENTRE was done by Mr. Thirunavakkarasu, Minister of Shipping and Transport in the then BJP government. Guest of honour was M.P. of Coimbatore Mr.Radhakrishnan and a host of dignitaries attended. First time in my life I attended a function, lasting about 90 minutes, in Tamil, not understanding fully well what was being said . I clapped my hands when others clapped, I laughed when others did. Nobody noticed. First time I Well, I was talking about taking classes with chalk and black board. We did not have a library. I was part of CMC now. CMC was struggling to establish. We handed over even the stub of a chalk to the next person after the class. Trying to avoid waste, the A/O will roll his eyes when asked for any extra. I had to cooperate, being the first to join and I had taken upon myself the responsibility to lead. Only some books were available. I had some books of my own. Paul had some. I got some books from Bombay sent by a friend. Gave them to the trainees .They took photo copies of them. They read the pages before they came to the classes. I will mention to them the sketches to be drawn. They will do it and show me in the next class. No notes were given. The first few batches all were selected and sent to ships .I was very happy to see a Chief Engineer as external examiner last semester , who was a GME student of mine.

The initial batch of a handful of teaching faculty had undergone lot of struggles. After a couple of years in Karpagam ,when we shifted to the present site, classes were in the present A Block. Classes with blackboard and chalk continued along with OHP. The A/O used to give a few number of transparencies, only when asked. What I got was hardly enough for my needs for the subjects I was handling. Those days,I used to commute to and from Palghat by bus. Hence, I used to get out early from college after my classes,take a bus toUkkadam. Then I had to take another bus to get down somewhere in Oppanakkarastreet,togo to a side road from where I used to buy transparencies. After coming to Palghat, I had to take the concerned text books and go to a Photostat shop and get the various sketches and drawings copied to these transparencies in order to teach the students next day. I do not know what others did. Things changed,when B.S (Marine Engg) was started. B.Sc (Nautical Science) followed. Number of students and staff increased.We started looking like a regular college. Things improved. I was told to take B.S. (Marine Engg) classes .Sometime before that our college name was changed from COIMBATORE MARINE CENTRE to COIMBATORE MARINE COLLEGE. Early batches of GMEs and B.S.marine boys used to be sent to Cochin Port for a two weeks training. Some

were sent to Chennai too. There was no present ship- in- campus, although it was being planned .Then as per the D.G requirement, we had to make a ship- in- campus since there were not sufficient centres, where all the cadets from various training institutes could be sent for training, as the number of training institutes increased. Initially, we had got the design from IIT Khraghpur, of a Ship-in-campus. But since the cost was prohibitive, our Nathan sir boldly took the decision to get one built by ourselves and he employed a Civil Engineer and built our own, saving lot of money. CMC progressed very well. Because of high demand, permissions were obtained for doubling the seats in B.S.Marine and B.Sc(Nautical Science) too. As we progressed MBA course was started, followed by ETO and, BBA courses and some post - sea courses too. From 11th batch onwards, our Marine Engineering Degree course was affiliated to Indian Maritime University and called B.Tech and R.Sasikumar of this batch made us all proud by winning the First Rank in the IMU and a Gold Medal for the year.

Well,lot of wind has blown through the Palakkad Pass and the geography of Palakkad –Coimbatore road changed from just an old ordinary National Highway to a well planned 6 lane NH. Coimbatore-Pollachi road too changed and the main land mark in this road changed for many from mere 'Gosalii road' to 'Kappal college' road.

Recently, CMC Management has taken the decision to introduce digitilization and E-learning , a forward looking process in the march ahead. Thus CMC is trying to enter into a digital era from the Blackboard-chalk era. I am happy to note such a change taking place during my tenure in this institution. All the best CMC,continue sailing till your intended port of call and beyond to other destinations you may dream of.

Looking back,I have had an eventful, rewarding and hence exceptionally satisfactory teaching career spanning about 18 years in CMC

To end, may I quote an American author ,poet and editor.
"I have seen the sea when it is stormy and wild,
When it is quiet and serene,
And in all its moods, I see myself"

MARTIN BUXBAUM.

INDIAN SHIPPING INDUSTRY - ARE WE IN THE RACE?

CAPT. SUNIL BALAGOPALAN
(Faculty - Nautical Science)

Events of half a century ago may seem remote, almost ancient history. Yet events in the global shipping markets happening in 1967, and several trends then under way, shaped the future we see today.

Momentous changes occurring in the global and Indian shipping market merit a review of aspects of maritime history. These have some parallels in, and possible lessons for, changes currently taking place which, in turn, have implications for the next half century ahead.

What were happening in the shipping industry fifty years ago that connects to today's markets? Where do our Indian Shipping & Ship owners stand amidst the world shipping Industry is worth to be noted. Some noteworthy changes were taking place, and hindsight enables these to be seen in a longer term context of trends and patterns:

♦ Liner trade containerisation: affected both liner (regular services) and tramp (bulk commodity shipments) markets, because fully-cellular container ships were specialised and not interchangeable between the two markets as previous liners and tramps had been.

♦ Dry cargo tramp replacement: a perceived need to replace old Liberty ships.

♦ Bulk carriers (and ore carriers): displaced traditional dry cargo tramp ships.

♦ Tankers: led the efficiency improvements and rapid advance in ship sizes.

♦ Combination carriers: evolved into a prominent sector (eventually disappearing).

♦ Jumboisation and Ship sizes: Truly amazing to see larger ships out at sea.

♦ Shipping market cycles: were erratic, occasionally distorted by unforeseen local & global events.

♦ Maritime regulations: after notable tanker disasters & accidents became tighter.

♦ Maritime bunker: quality & cost rose and very volatile.

♦ Maritime & Cyber security: issues especially Indian ocean HRA and West coast of Africa.

♦ LNG fuelled ships and energy efficient ships: talk of the decade.

♦ Role of shipping in global climate change: for meeting sustainable development goals.

♦ Race between Man & Machine: Massive automization.

♦ Women empowerment: More women entry into maritime field.

♦ Doubtful knowledge transfer of Maritime Education: Lower standards .

One lesson underlined by history is difficulties involved in assessing shipping market cycles, still an essential analytical exercise. Both future demand for, and supply of, shipping capacity was often hard to forecast. Despite great improvements in the availability of up-to-date information and enhanced analysis techniques, predicting market movements correctly – whether in the short or longer term – frequently remains elusive.

Semi-permanent features were constantly disrupting market cycles. Adoption of technological advances is sometimes much quicker than foreseen. Linked with such upheavals is the hazard of investing in what proves to be yesterday's model. Changing aspects of shipping economics & government's policies were accompanied by changing maritime policies both international, national and local. Market sentiment and psychology, notoriously difficult to anticipate, is likely to have a big influence on the estimated outcomes.

India is strategically located close to the Trans Pacific and Europe Far East liner shipping routes and the intra Asia North South trade lanes. Almost all global shipping lines have their presence in India to exploit the growing market opportunities and derive advantage of the strategic location.

Ports Growth:

Ports are economic and service provision units of a remarkable importance since they act as a place for the interchange of two transport modes, maritime and land, whether by rail or road. Therefore, the essential aspect of ports lies in their intermodal nature.

India has a coast-line of over 7517 Kms with 12 major ports and 205 notified non-major (minor/intermediate) ports along the coast-line and sea-islands. Pipavav in Gujarat being the first private port. Out of these 205 Non-major ports, only some ports are well developed and provide all weather berthing facilities for cargo handling.

The Major Ports are under the purview of the Centre while the Non-Major Ports are under the purview of the States. In spite of India having an extensive road and rail network connecting the gateway ports to hinterland destinations the coefficient of connectivity is low and has to be improved upon.

Key Performance Indicators For a Port:

The key performance indicators for the major / non major ports across India has to be closely monitored and reviewed which includes the following:

Capacity utilization.

Cargo traffic targets.

Average turn round time.

Average pre berthing detention time.

Average output per ship berth day.

Port facilities & services.

Drafts.

Dredging.

Ongoing formulation , implementation of private sector / capative/ JV port projects on major / non major port projects.

Areas of Private Investment in Ports is a Big opportunity:

The following areas which are indicative in nature have been identified for participation/investment by private sector:

(a) Leasing out existing assets of the Port.

(b) Construction/creation of additional assets, such as:

Construction and operation of container terminals.

Construction and operation of bulk, break bulk, multipurpose and specialized cargo berths.

Warehousing, container freight stations, storage facilities and tank farms.

Carnage/handling equipment.

Setting up of captive power plants.

Dry docking and ship repair facilities.

(c) Leasing of equipment for port handling and leasing of floating crafts from the private sector.
(d) Pilotage.
(e) Captive facilities for port based industries.

A new scheme for setting up of coastal berths at Major Ports has been approved.
A New Central Sector Scheme has been formulated to provide financial support by way of grant to:

(1) Major Ports/ Non-Major Ports for

(a) Construction/ up-gradation of

(b) Exclusive coastal berths for coastal cargo.

(c) berths/Jetties for passenger ferries.

(d) Construction of platforms/ jetties for hovercrafts/ seaplanes in port waters and

(2) State Governments concerned for construction of berths/jetties in National Waterways.

a. Sagarmala Project (port Led National Development)

The project has been launched with an objective of modernising the ports along India's Coastline and achieving rapid expansion of port capacity and development in land and coastal navigation. The initiative aims at supporting port led development through appropriate policy and institutional interventions, port infrastructure enhancement including modernisation and setting up of new ports and efficient evacuation to and from hinterland. The work under the project will be done in close coordination with Maritime States/ UT governments. It provides a boost to economy , more job opputunity and faster turn around.

K.S. RAJESWARY. M.A., M.Phil.,
M.B.A.

Presented At: A One Day National Conference on Regional Literature on Translational Studies at Hindusthan College of Arts And Science, Coimbatore.
College: Coimbatore Marine College

NOTE OF MODERNITY IN EMILY DICKINSON'S POETRY

Abstract

Modernism is a period in literary history which started around the early 1900s and continued until the early 1940s. Emily Dickinson and Walt Whitman are thought to be the mother and father of the movement because they had the most direct influence on early Modernists. Emily Dickinson is a great American poet of the nineteen century. She was "the most perfect flower of New England Transcendentalism", an anticipator of metaphysical poetry, a smeller of modernity and an upholder of romanticism. In her wit she was Meta physical, in her attitude she is a romantic, in her poetics she was a modern.

Emily Dickinson's poetic insight into the nature of death may be regarded as one of her unique contribution to American literature, nearly one third of her poems are concerned with the theme of death, which had attracted the Americans. Allen Tate says "one of the perfect poems in English is "The Chariot" if the world means great in anything in poetry, this poem is one of the greatest in English language". In this poem death becomes one of the greatest characters of literature. The poetess visualizes death as a person whom she knew and trusted, or believed that she could trust. Death here is not a fearful image. It is a king and friendly gentleman. Her modernity lies when she presents death as a drive, death takes us to the end of life but also beyond due to the presence of immortality. Death is not something that we have to fear but something that we have to expect and live with all our lives.

I died for beauty is a strange metaphysical poem using the themes of death, beauty and truth. Emily's modern thoughts about death and immortality have been brought out in this poem.

The modern literature is marked by a variety of brilliant imagery, subject matter, and experimental form, all of which illuminate our most inner and out most public lives. Modern poetry embraces a great variety of styles, images and language. Miss. Dickinson possessed a high degree linguistic, virtuosity, rhythmic control, and resourcefulness of metaphor, the capacity to refresh the language and create a genuinely new music. Her love of colloquialism and wit, her feeling for precision and her tendency toward the analytic her habitual economy of form all these qualities invite comparison with the closely knitform and mode of the modern lyric.

K.S. RAJESWARY
M.A., M.Phil., M.B.A.
(Author)

K. JOTHISWARI
B.E., M.E..,
(Co-Author)

ARTIFICIAL INTELLIGENCE IN BUSINESS AND MANAGEMENT WITH REFERENCE TO LOGISTICS

AI is the power of a machine to copy and learn from intelligent human behaviour.

Abstract

Artificial Intelligence plays an important role in the development of a country. AI is used in all fields in the management. AI helps in cost reduction and very effective. The use of AI reduces errors. AI is revolutionizing Global Logistics and Supply chain Management. AI takes up an important role in global logistics and supply chain management. AI selects large quantities of data that is collected from logistics and supply chain. These data are analyzed to get results that can process complex functions. Many organizations have been benefitted by using artificial intelligence. The efficiencies of planning, accurate demand forecasting, operation cost, avoid risks, etc are the benefits of AI. Robots are used in the supply chain to track, locate and move inventory within warehouses.

The AI has inserted with required data in particular fields, especially on management to take decisions in critical situations also. In this presentation, we discuss the factors and possibilities in future of the AI in the field of logistics and around it.

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Maritime knowledge contains vast information about Marine engineering, Navigation, Amendments, Rules and Regulation of IMO, SOLAS, MARPOL and latest technology in Marine Industry.

Maritime knowledge is powered by Virtual Guru owned by our prestigious CMC Group of Institution.

P. VIJAYALAKSHMI. M.A.
(Author)
College: Coimbatore Marine College

CULTURE AND IDENTITY THROUGH THE PLIGHT OF WOMEN IN A THOUSAND SPLENDID SUNS BY KHALED HOSSEINI

Abstract

"I know you're still young, but I want you to understand and learn this now… marriage can wait, education cannot," as I have quoted it from A Thousand Splendid Suns by Khaled Hosseini, while reading this, it will bring out the important of education in our mind. In the view of feminist, we need to prove ourselves to the world, like who we are? Because, no one could have their own voice and rights. This novel has written by Afghan born American writer khaled hosseini, as a second one. Mostly, the novel has dealt about plight of women in the society especially under the rules of Taliban in Afghanistan.

This paper would analyze the culture and language has been used by the author in the novel A Thousand Splendid Suns. These things were mostly based on their religion especially Islam in Afghanistan. In Afghanistan, they have been using Persia as an official language. But the author had moved from his native to US, so he has using English in the novel. According to Islam, it recognized that we should give priority for women as have men in the world. But in Afghanistan women have some restrictions like, education, expressing their thoughts. In this novel, the story situated in Kabul, mainly focusing two women were from different backgrounds of families, they have been started their life in loveless marriage and too dominated by their husband Rasheed, who is the villain of the story.

After the soviet war, the Taliban has emerged there. In the month September, 1996, Mariam has got a message by flyers that Taliban has established restrictions for women, like they should forbidden to be in working fields, from attending schools, cosmetics, jewelry, charming clothes and even painting the nails also. Commonly, if we have these kind rules in our society, we might follow it. In houses, we can avoid these, but in the novel Rasheed put more rules than the Taliban. While thinking about him, he was a cultural idiot. Always he had behaved as a dominating role among the female characters in the novel, especially on Mariam and Laila, as a saver of culture. This kind of nature might lead his and his wives life could be a pathetic. And it might lead them to do the action of killing their husband in the end of the story.

SHUBHAM BHAGAT
(Co-Author)
Mob: 6355561015

PROF. MANGESH V. L.
(Author)
Class: B.Tech 16

MUSKAAN CHAUHAN
(Co-Author)
Mob: 8979089758

Department of Marine Engineering,
College: Coimbatore Marine College
Bhagatshu@gmail.com

SHIP WRECKS, ITS EFFECTS ON ENVIRONMENT AND SUSTAINABLE SHIPPING

Abstract

In this paper we will review about the causes, its effects on environment and how to prevent shipwrecks which ultimately leads to sustainable shipping. Human, ships and the ocean have always been bound together for ages and sometimes the ocean can be an unforgiving place which inevitably leads some voyages to end up as shipwreck. A shipwreck is the remains of a ship that had wrecked, which are found either beached on land or sunken to the bottom of a water body. It may be deliberate or accidental. It can cause damage to the underwater environment through oil spill, deposit hazardous materials and can damage coral and natural reefs. The recent global directives suggest an urgent need for a better understanding of causes and effects of ship wreck and find measures to counteract its ill effects. Despite modern bridge equipment, new technologies, and improved safety measures, maritime accidents still occur, and an analysis of their causes is essential in preventing future accidents. Ship groundings are one of the most frequent types of accidents encountered. MARPOL, SOLAS and various new technologies have given policies for safety and protection of environment and despite such efforts the number of ship wrecks has been rising. In this paper we analyze the causes of ship wrecks and study the remedial measures to control shipwrecks and hence lead to sustainable shipping.
Keywords: Shipwreck, oil spill, hazardous material, coral, marine accident and sustainable shipping.

Nomenclature

NOAA- National Oceanic and Atmospheric Administration
WW11- World War Two
BRM - Bridge Resource Management
HFO- Heavy Fuel Oil
ECDIS- Electronic Chart Display and Information Systems
ROV- Remotely Operated Vehicles
AUV- Autonomous Underwater Vehicle
RUST- Resource and Under Sea Threats

PROF. MANGESH V. L.

(Author)

1. EFFECTIVE EEDI PERFORMANCE ACHIEVEMENT BY MAN B&W G-TYPE ULTRA LONG STROKE MARINE DIESEL ENGINE: A REVIEW.

Source: International Journal of Vehicle Structures & Systems (IJVSS) . 2017, Vol. 9 Issue 4, p269-272. 4p. 1 Diagram, 4 Charts, 4 Graphs.

Abstract

Man Diesel & Turbo G-Type ultra long stroke marine diesel engine was introduced in October 2010.This ultra long stroke means it has been designed to have reduced engine speeds and there by achieving high efficiency ships with reduced fuel consumption as well as reduced CO₂ emissions. The ultra long stroke diesel engine with capability of using large size propeller and there by engines with comparatively low speeds can be used for propulsions of large bulk carriers and oil tankers. This arrangement facilitates the effective implementation of EEDI. In this paper we review the effectiveness of this engine in implementation and achievement of EEDI and thereby achieving reduced CO2 emissions. In this paper, we also study the selection of propeller sizes to achieve the optimum design ship speeds and thereby comply with EEDI requirements.

2. PROSPECTS OF PYROLYSIS OIL FROM PLASTIC WASTE AS FUEL FOR DIESEL ENGINES: A REVIEW

V L Mangesh, S Padmanabhan, S Ganesan, D Prabhudev Rahul and T Dinesh Kumar Reddy
IOP Conference Series: Materials Science and Engineering, Volume 197, Number 1

Abstract

The purpose of this study is to review the existing literature about chemical recycling of plastic waste and its potential as fuel for diesel engines. This is a review covering on the field of converting waste plastics into liquid hydrocarbon fuels for diesel engines. Disposal and recycling of waste plastics have become an incremental problem and environmental threat with increasing demand for plastics. One of the effective measures is by converting waste plastic into combustible hydrocarbon liquid as an alternative fuel for running diesel engines. Continued research efforts have been taken by researchers to convert waste plastic in to combustible pyrolysis oil as alternate fuel for diesel engines. An existing literature focuses on the study of chemical structure of the waste plastic pyrolysis compared with diesel oil. Converting waste plastics into fuel oil by different catalysts in catalytic pyrolysis process also reviewed in this paper. The methodology with subsequent hydro treating and hydrocracking of waste plastic pyrolysis oil can reduce unsaturated hydrocarbon bonds which would improve the combustion performance in diesel engines as an alternate fuel.

3. A REVIEW OF MARINE ENGINE VIBRATION PERFORMANCE ANALYSIS AND COUNTERACT MEASURES

Abstract

This paper gives a review of the vibration characteristics and its analysis associated with two stroke low speed marine diesel engines and its counteract measures. Marine diesel engines are variable speed engines and face resonance vibration in a narrow band speed within its speed range and this band is called as barred speed range. The historical strategy for vibration control has been sub-critical design criteria. This strategy adopts vibration analysis of local primary forces of machinery components and thereby neglects the impact of secondary forces. Recently, Global vibration analysis has been adopted to reduce the influence of barred speed range and secondary excitations. In this paper, we study the performance comparison of both sub-critical design criteria and global vibration analysis.

Keywords: Vibration, secondary excitations, barred speed range, sub critical design, Global vibration analysis.

FUEL SAVE (A GREEN TECHNOLOGY)

CADET: GOKUL S
(B.Tech 16)
Mob: 8056389044

Department Of Marine Engineering,
College: Coimbatore Marine College
gokulsekar09@gmail.com

PROS AND CONS OF BEING A MARINER

Abstract

Since, last decade the marine fuel oil (HFO) price has been seen increasing dramatically. It is suspected that within 2040 to 2050 there will be no crude oil abudently availablein the world. This has led the maritime industry to look forward for the alternate source of fuel to propell the ship. My paper is about the "FUEL SAVE (a green technology)" that deals with the marine hydrogen synth gas generator which generates on demand through onboard electrolysis a Hydrogen synth gas which is injected with water and methanol into the air intake of the engine. This adds the value that it leads to a cleaner and more efficient combustion process and reducesthe wear& tear of the engine. This also reduces the SO and NO emissions as per the IMO conventions and eco-friendly to the environment.

CADET: SHUBHAM BHAGAT
Mob: 6355561015
B Tech (Marine Engineering),
Coimbatore Marine College.
Bhagatshu@gmail.com

Learn New Languages

Life as a Seafarer is a life of excitement, fascination, and spiritually enlightenment. One of the key qualities is that seafarers are lifelong learners. Due to their lifestyle and job requirements, every seafarer visits various countries and meets many people from different parts of the world. Even while working onboard ship there is a higher chance you working in a multi-national crew (crew members from different countries). So it is handy to know basics for Common International languages. Learning new language can be tricky thing especially as you get older. But there are many tricks and techniques can be used. There are courses, tutorials, videos, apps, and even study groups that can help you to learn language of your choice.

Top 5 most spoken languages worldwide are Mandarin Chinese (1.1 Billion Speakers), English (9.8 Million Speakers), Hindi (5.4 Million Speakers), Spanish (5.2 Million Speakers) and Arabic (4.2 Million Speakers). There is a great chance that you might run into people speaking theses languages while working. It is better to know some of the basics of these languages. Even though we have advance technology like "Language Translators" on our smart devices (Google translator), it is better to know some of the bellow mentioned sentences and words by heart. Also by knowing these words it gives an edge to understand things quickly. Not to mention that it gives a positive impression about you and opportunities to create stronger bonds with your colleagues.

"Learning another language is not only learning different words for same thing but learning another way of thinking about things."- Flora Lewis

Here are some of the common sentences that every aspiring seafarer should know for starters and then he/she can work up the ladder to learn more words. Also practicing new words with a friend is a great way to learn new languages.

Note: Please follow the format of below table for each cell in main table.

Word/Sentence: In Native language Pronunciation: for sound (speaking)				
ENGLISH **English** **(Ingglish)**	**HINDI** **हिंदी** **(hindee)**	**SPANISHESPAÑOL** **(spae. nuhs)**	**M. CHINESE** **中文** **(chai. Neez)**	**ARABIC** **عربي** **(eurbaa)**
Hello	नमस्कारनमस्कार (namaskaar)	Hola(ola)	你好 (ni.hao)	مرحبا (marhabaan)
Good Morning	शुभप्रभात (shubhprabhaa)	Buenos días	早上好 (Zăoshanghăo)	صباحالخير (sabahalkhyr)
How are you?	क्याहालहै? (kyahaalhai?)	¿Cómoestás?	你好吗？ (Nǐhăo ma?)	كيفحالكم؟ (kayfhalikm?)
I am fine	मैंठीकहूँ (main theekhoon)	Estoybien	我很好 (Wŏhĕnhăo)	أنابخير ('anabikhayr)
Yes	हाँ (haan)	Si	是 (Shì)	نعم (nem)
No	नहीं (nahin)	No	没有 (Méiyŏu)	لا (la)
Thank you	धन्यवाद (dhanyavaad)	Gracias	谢谢 (Xièxiè)	شكرالكم (shukraanlakum)
Slow	धीरे (dheere)	Lento	慢 (Màn)	بطيء (bati')
Fast	तेज (tej)	Moda	快速 (Kuàisù)	بسرعة (bsre)
Upwards	ऊपरकीओर (ooparkee or)	haciaarriba	向上 (Xiàngshàng)	صاعدا (saeidaan)
Down	नीचे (neeche)	Abajo	下 (Xià)	أسفل ('asfal)
How much? (As in Money)	कितना? (kitana?)	¿Cuánto?	多少？ (Duōshăo?)	كمالثمن؟ (kamalthamana?)
Give me 2 please (As in quantity while buying)	कृपयामुझे 2 दें (krpayamujhe 2 den)	dame 2 por favor	请给我2 (Qĭnggĕiwŏ 2)	أعطني 2 منفضلك ('aetani 2 min fadlik)
I am travelling for work.	मैंकामकेलिएयात्राकररहाहूं। (mainkaamke lie yaatrakarrahahoon.)	. Estoyviajandoportrabajo	我正在上班。 (Wŏzhèngzàishàngbān.)	أناالسافرللعمل ('ana 'usafirlilealml.)
I will be here for 2 days.	मैं 2 दिनयहांरहूंगा। (main 2 din yahaanrahoonga.)	Estaréaquípor 2 días.	我将在这里停留2天。 (Wŏjiàngzàizhèlĭtíngliú 2 tiān.)	سوفأكونهنالمدةيومين. (sawf 'akunhunalimudatyawmayn.)
What time is my flight?	मेरीउड़ानकासमयक्याहै? (mereeudaankasamaykya ha?)	¿A quéhoraes mi vuelo?	我几点乘飞机？ (Wŏjĭdiănchéngfēijī?)	ماهوالوقترحلتي؟ (mahualwaqtrahlatay?)
Where is Terminal/Gate 1A?	टर्मिनल / गेट 1 एकहांहै? (tarminal / gate 1 e kahaanhai?)	¿Dóndeestá la Terminal / Puerta 1A?	终端/门1A在哪里？ (Zhōngduān/mén 1A zàinălĭ?)	أينهوالمبنى /البوابة 1A؟ ('aynhualmabnaa / albawwabat 1A?)
Where can I find a good restaurant?	मुझेएकअच्छारेस्तरांकहांमिलसकताहै? (mujheekachchharestaraankahaan mil sakatahai?)	¿Dóndepuedoencontrar un buenrestaurante?	在哪里可以找到一家好的餐厅？ (Zàinălĭkĕyĭzhăodàoyījiāhăo de cāntīng?)	أينيمكنتيالعثورعلىمطعمجيد؟ ('aynyumkinunialeuthurealaamateamjyd?)
Help!	मदद! (madad!)	¡Ayuda!	救命！ (Jiùming!)	إمساعده (musaeadat!)
Warning!	चेतावनी! (chetaavanee!)	¡Advertencia!	警告！ (Jĭnggào!)	إتحذير (tahdhir!)
Alarm	अलार्म (alaarm)	Alarma	报警 (Bàojĭng)	إنذار ('iindhar)
Extinguisher	आगबुझानेकीकल (aagbujhaanekeekal)	Extintor	灭火器 (Mièhuŏqì)	طفاية (tifaya)
Fire!	आग! (aag!)	¡Fuego!	火！ (Huŏ!)	إنار (nar!)
Emergency exit	आपातकालीननिकास (aapaatakaaleennikaas	Salida de emergencia	紧急出口 (Jĭnjíchūkŏu)	مخرجطوارئ (mukhrijtawari)

CADET: RAJATH. M. AMIN
Mob: 7760247844
B.Tech 16
Coimbatore Marine College.
Rajath.m.amin03@gmail.com

Introduction

The shipping industry is global industry hence which led to increase in cultural diversity in the maritime industry. As cadets, it is important to us to have some knowledge about multiculturalism in the shipping industry.

In the 20th century shipping industry was challenged with multicultural onboard crews. The multiculturalism led to miscommunication among seafarers, which is a major threat to industry as communication is the key factor of safety of the vessel. The poor commands in English, misunderstanding of work culture, different approach towards the risk between the crews has led to deadly accidents. Language and culture barriers are also one among the major stress factors on board.

A vessel is a closed environment where people work and also live together hence things can go really worse when it is managed badly, managing multicultural crews on board is challenging and required highly skilled leaders with positive attitude towards multi cultures.

Maritime Culture

Seafaring is an old industry which has its own laws, rules, traditions, working conditions which is quite different from other professions. The crews work on board with rules, regulations, restrictions with small community in confined space. The different nationalities may have difference in language and culture which sometimes might create misunderstandings which might create a bad working environment. Hence, seafarers must have some basic knowledge about others culture and must have respect to each other's culture.

Culture Intelligence (CQ)

As shipping industry is global industry the crews have to deal with different culture, and ethnicity. Hence, seafarers must have cultural intelligence this might help to reduce the difference between the crews and can work in a healthy working environment.

Cultural intelligence (CQ) is a specific form of intelligence, where a person can adapt himself and can work effectively in multicultural environment.

Cultural intelligent is the mental capability of a person, which reflects the general knowledge, cultural knowledge of variety of culture people acquiring through social and educational experience. Hence, one must improve his/her CQ through various available sources.

Language

Language also plays an important role in acquiring cross culture knowledge. The basic fundamental language skills help in acquiring general cultural knowledge. Poor in language makes a person disconnected and it destroys his/her confidence. Hence, one must have fundamental knowledge about internationally accepted languages. So, it helps to explore various cultures.

Education

Cultural education should be given more important so that cadets can gain knowledge about various culture and develop their perceptiveness, so as to increase their tolerance for complexity towards others culture, and also respect for diversity.

In educational institution cadets must mingle with different cultural background cadets, so that the positiveness towards the multicultural aspects will be developed which will be very helpful for the cadets to adopt themselves to the multicultural environment onboard. Due to multicultural environment the cadets must improve their competence non-technical resource management skills which help in creating a strong bond between the crews also helps in team building, attitude towards the work.

Nonverbal communication also plays an important role in communication when working under multi lingual crews. Hence, one must be aware of most basic fundamental nonverbal communications sign to avoid miscommunication among crews while working.

Tips:

Here are some tips which can help to overcome the problems when dealing with multicultural environment.

1. Think before you speak.
2. Don't be afraid to ask a question.
3. Try to come up with compromise.
4. See the things through a different lens.
5. Learn nonverbal communication.
6. Acquire knowledge.
7. Have positive attitude towards other.
8. Stay connected with co-workers.
9. Ask seniors their experiences about cross culture, multi lingual, diet etc.

CADET: SUNNY SHANKAR
(Batch: ETO 19 D)
Mob: 7339326676
Department of ETO
College: Coimbatore Marine College
Sunnykt904@gmail.com

PROS AND CONS OF BEING A MARINER

Quoting an incident from a mariner's wife to her husband which started by explaining how his son had started taking small-small steps and also calling out to his father in his stammering tone, made me feel like hell.

How could a man leave his friends and family and go on a voyage just to earn bread and butter for them when he has so many options to stay with them and do the same??

How could he or she miss the most precious moments of his life time and be away at some farther distance from where even in case of exigency he can be available only after due course of time ??

From there on began my pursuit of looking into the depth of the matter and bringing out the merits and demerits of being a mariner.

In the paragraphs below, I shall try to explore both the sides of the coin.

People are under the perception that mariners are on board for six months and rest six months they can avail as leave, but the truth is it completely depends upon the contract signed by one and the work policy.

Solving a problem on board with limited resources, lesser manpower and concrete timings becomes very challenging often. An emergency situation can result in longer working hours than stipulated timing and moreover on the ship it's a 24 x 7 job.

You also need to make your body accustomed to bearing 40° or more of temperature inside the engine room and to add on you may not also find immediate and adequate medical facilities to take care of yours especially when you are in the mid sea.

Nowadays as internet has become one of the basic necessities alongside bread, cloths and shelter, you might have to cut upon this need of yours just because of non-availability.

The competition in the field has also increased as the demand remains stagnant but the supplies have become higher keeping in pace with the number of marine institutes and colleges upcoming every now and then.

You won't be able to handle the job if you are homesick or mamma's boy. The sea also gives you some of the fiercest experiences of your lifetime as it's not always very calm.

But yes, when it comes to the advantages of being a mariner, all the disadvantages are overshadowed. First and foremost you get a better salary package than any of your peers, which also results in a better standard of living.

Secondly you get to know the cultural diversity of the world by interacting and working with people from different countries and also by visiting newer places often.

If you know how to enjoy your life when you are aloof from social media, then you won't face many difficulties when on board.

A marine engineer's certificate gives you universal acceptance and also wider prospects of the work opportunities.

You get longer holidays which can be planned in a better way to make optimum use of it.
Finally marine engineering makes you confident and stronger to face/handle any difficulties and unforeseen situations onboard or even at home.

To conclude my point, just small suggestions from my side, please go for marine engineering only is you are passionate about it and then you will be unstoppable and the happiest man on earth…!!

DIVYA VIBHUTI PRATAP
B.Tech 16
(Marine Engineering)

I AM THE SAILOR

Riding on the waves,
Going through the maps,
I am the Sailor, I am the Sailor

I know my passion
Heading in, my own direction,
I am the Sailor, I am the Sailor

My life is an adventure,
And, that makes my future,
I am the Sailor, I am the Sailor

Horizon seems to be closing in
Fame and honors overcoming my sin,
I am the Sailor, I am the Sailor

Like the wave of trough and crest,
Life sometime bad, sometime at best,

With my dreams, I have miles to go,
And lot of talent, I have to show
I am the Sailor, I am the Sailor

MARITIME SAFETY FOR MODERN MERCHANT VESSELS

RAYAN WILMER LOBO
GME 34
Mob: 7977838452

Introduction

Maritime safety, though being a vital aspect of the shipping industry is a fairly new concept with no universally accepted definition except for the understanding about the protection of merchandise vessels from piracy and other terrorist attacks and threats. While various countries proclaim their waters to be safe, every crew and country knows the value of the ship and its cargo. This is why, even though frowned upon by various authorities and nations, armed guards and other protective measures are essential onboard ships.

The concept of ship security began in the eighteenth and nineteenth centuries where European countries such as Spain, France, the Netherlands and Britain armed their merchant ships to prevent capture by pirates, raiders and privateers when they conducted overseas trade. The most heavily armed were ships carrying valuable cargo back from the Far East. These were the 'East Indiamen' class of ships which were constructed from the keel up with defence in mind, with their heavy armament making them equivalent to naval ships of the line. These ships were armed with arms by the British but were not provided with ammunition as it was unclear how the other nations would react to them, which was denial of entry in port. From there on, as the risk of piracy and terrorism grew, the industry has adapted to the situation implementing various policies and procedures under ISPS and other maritime amendments.

Protection Of Ships:

As of today many countries still take the concept of armed escorts and guards onboard ships with a pinch of salt and vinegar, the growth in piracy attacks in Somalia and tropics as well as terrorist attacks in the Arabian gulfs has made it necessary for ships to be armed. A regular merchant vessel currently follows three security levels ranging from keeping a watchful eye to lockdowns and barb-wires. All of these, for a modern threat are the equivalent of placing a wooden plank in the path of a car. It may cause a delay, but isn't sufficient to stop the course of events. Unlike naval vessels, commercial shipping has been relatively slow to tap the potential of fully integrated automation. Increasing the level of

shipboard automation and systems integration can lead to significant operational savings but also improve safety of the crew and the ship. Naval vessels have been equipped with integrated systems capable of linking up various ship components and systems – mainly defence and weapon platforms – into one control and monitoring unit, but commercial shipping has been relatively slow to adapt to fully integrated automation, which though today is changing at a rapid pace, is more associated with navigation than other systems such as the security of ships.

In recent years the industry has started discussing unmanned ships, a ship that operates without human intervention aboard and to diminish pollution through the use of clean fuel, protection of life at sea from any incidents and securing ships and cargoes with digitalization and ship automation. Although unmanned ships are not the ultimate goal, companies like Maersk have lately founded a joint project team with IBM for developing and integrating artificial intelligence systems in ship operation. While these are marvelous feats for the maritime industry, every individual who knows code has one belief drilled within him which says, no digital system is completely impregnable. Thus, while these ships may receive their commands from satellites which whose encryptions are tough, an individual once onboard the ship may either try it the digital method of hacking or go back to his roots with a welding torch and explosives.

Political Actions

Given the political conflicts and other threats prevailing in the oceans, countries have decided to protect merchant ships with convoys during their passage through unsafe sectors such as the Gulf of Aiden, the waters in and around Somalia as well as the east Arabian seas. Recently, the Indian Navy has deployed warships in the Gulf of Oman and Persian Gulf to ensure the safety and 'reassure' Indian flagged vessels operating in the region, after Iranian forces shooting down a US military drone while it was flying over the Strait of Hormuz. The navy said that its ships deployed in the Gulf of Oman and Persian Gulf are to undertake maritime security operations along with naval aircrafts shriveling the waters keeping a close watch on the movement of ships in the Gulf region, ensuring the safety of Indian maritime trade and merchant vessels operating in the region through which a fifth of the world's oil passes daily. Along with this several multinational naval task forces have been deployed in the Western Indian Ocean's high-risk area and escorted transiting merchant vessels to provide security. The UN naval blockade off Libya during the recent conflict and the newly established international maritime security mission launched by the UK and the US to safeguard freedom of navigation and safe passage of merchant vessels through the Gulf of Oman are but some of the actions by government team efforts to protect merchant ships.

Present Day Solution to Threats

As for now, no operating vessels have been equipped with any specialized security features except for the silent alarms. Most of these attacks occur on oil tankers as these are not only extremely valuable but also dangerous. They have vast holding tanks, which increases economies of scale. They are highly automated and minimally manned, which decreases operating costs. These design parameters result in commercial tankers being large, slow, difficult to maneuver, and easy to detect both visually and by radar, which makes them extremely easy for malign actors to target or seize.

While these measures are well designed for surveillance of coastal waters and waters around ships along with package delivery similar concepts have also been used by other nations in the development of drones for security purposes. The unmanned aircraft, reported Sky, is being considered as an option to increase cover for tankers sailing through the Strait of Hormuz. Countries like UK, USA and Israel consider beefing up its military operations in the Gulf by deploying drones from Kuwait as tensions with Iran show no sign of abating. Drones such as the Tikad developed by Duke Robotics, are armed with a machine-gun and a grenade launcher. The gun can be fired only by remote control, and is designed to reduce military casualties by cutting the number of ground troops required. These are available for private sale at an undisclosed price, and have won a security innovation award from the US Department of Defence, and there is interest from several military forces around the world, including Israel.

Thus countries provide their naval forces to protect the ships from the threats at sea, especially piracy and terrorist attacks. However, this is a solution not favored both by the shipping companies as well as the naval forces. The shipping corporations need to pay huge sums of money to procure a naval escort and that is not favourable for profits. On the other hand the naval forces, when diverted as convoys, not only reduce the nation's strength to defend itself but exert a huge toll on the naval force deployed itself. This is because these ships are designed to protect themselves from attack and attack targets. However in the case of acting convoys, these ships need to protect other ships from anti-cruse missiles which requires special equipment that the navy may or may not possess.

To solve this problem, the industry is planning of setting up a naval force specially designed for regions of high risk, such as the gulf of Aiden. The ships will be equipped with fast semi-inflatables ribs, an array of non-lethal counter-measures, and 0.50 calibre heavy machine guns and will be operated by a crew of five and carry eight armed security personnel each. The aim is to stop the pirates before they reach the merchant ship, and the emphasis is on non-lethal measures. Use of offensive weapons will be a last resort. While the cost of armed escorts and navy may soar up to $80,000, this navy is being designed such that the companies will only need to pay around $40,000 to ensure the safety of their ship.

The Modern Day Vessel:

Coming to the present day where the great mercantilist trading companies of the age of sail are long gone, the idea that a heavily armed merchant ship might again more fully participate in naval warfare has new credence. The birth of large, survivable container ships, having the provisions to be equipped with containerized weapon systems changes the legacy of the last century, merchant ships which were and yet continue to be soft targets which require significant protection. If properly armed and crewed, these same container ships have the potential to become powerful naval auxiliaries capable of defending themselves and presenting a significant risk to those that might attack them. These ships wouldn't need naval escorts, freeing them for other combat duties and contribute toward short term sea control while otherwise engaged in logistics operations.

Weaponry:

Modern TEU (Twenty Foot Equivalent Unit) containers can support a variety of "containerized" weapon systems to include guns, mortars, small missiles and even larger cruise missiles and other war fighting tools offering the possibility of a 21st century East Indiaman. Such a ship might field several dozen "militarized" containers with offensive and defensive weapons, sensors, and the communications equipment needed to link the ship to larger, regional battle networks unmanned air vehicles for both offensive and defensive actions. Such capabilities might be enough to repel an attack on a convoy by light or medium enemy forces and like their 18th century forebears, 21st century armed cargo ships could in effect escort themselves with significant self-defense capabilities and magazine spaces equivalent to those of medium-sized warships. The Israelis and the Russians are already experimenting with these concepts.

Ship Self-Defense System is a combat management system installed on aircraft carriers and amphibious vessels that guards against cruise missiles, provides situational awareness and coordinates combat mission operations are also one of the few options available for modern ships to sacrifice a small portion of their cargo space to ensure the safety of the ship. These systems with modular design make them scalable and expandable, and an open architecture means it can be upgraded affordably. It also features a high degree of automation that follows naval doctrine while maintaining the commanding officer's absolute control using modern networking technology, the system includes control sensors, identification and evaluation of potential threats and provides defence in-depth through specific tactical procedures.

Drone Defences:

Speed, effectiveness and capacity are important considerations in this context. If a drone can get to the problem, it can be fixed more quickly. And thus there is a belief that untapped potential exists for smaller drones to protect ships alongside large unmanned vessels that are the focus of today's marine industry.

The director of the European Maritime Safety Agency (EMSA) said that drones could be used to monitor gather information on vessels and cross-border crime. South Korea has taken to, as well, these ideas and the port authority announced last year it would use drones as part of its measures to prevent ships illegally anchoring in nearby sea lanes, using HD cameras for identification. A proposal by the EMSA and the European Space Agency to introduce 'emission-sniffing' drones to clamp down on sulphur emissions, particularly in the English Channel, the North Sea, the Baltic Sea and the Gulf of Bothnia. According to a report in the Wall Street Journal (WSJ), these could be fitted with sulphur and carbon dioxide sensors and travel through the exhaust plume.

Maersk Tankers revealed it had completed its first drone delivery to a ship dropping it from a height of 5m above deck level. Small, lightweight UAVs delivering small packages could remove the need for more conventional means of delivery. Similarly the UK Royal Navy began trialing the use of drones to identify defects on HMS Diamond's exteriors, reaching inaccessible area while at sea.

While these measures are well designed for surveillance of coastal waters and waters around ships along with package delivery similar concepts have also been used by other nations in the development of drones for security purposes. The unmanned aircraft, reported Sky, is being considered as an option

to increase cover for tankers sailing through the Strait of Hormuz. Countries like UK, USA and Israel consider beefing up its military operations in the Gulf by deploying drones from Kuwait as tensions with Iran show no sign of abating. Drones such as the Tikad developed by Duke Robotics, are armed

with a machine-gun and a grenade launcher. The gun can be fired only by remote control, and is designed to reduce military casualties by cutting the number of ground troops required. These are available for private sale at an undisclosed price, and have won a security innovation award from the US Department of Defense, and there is interest from several military forces around the world, including Israel.

The strategic waterway, through which about a fifth of the world's oil is said to pass, became a major flashpoint in June following an attack on two crude tankers in the Gulf of Oman. A number of countries have deployed military vessels to escort commercial ships through the Strait of Hormuz and are likely to get further reinforcement from drones housed in nearby Kuwait. The UK Royal Air Force (RAF) is said to house several Reaper drones in the oil rich country. They have been deployed in Iraq and Syria but these assets could now be re-directed to the Gulf where the drones will provide additional cover in the region where the US and Australia already have several unmanned aircraft assisting navy vessels escorting tankers through the Strait of Hormuz.

Structural Strength

While not built to warship survivability standards, the sheer size of modern container ships contributes to their survivability rating. While a larger size does mean a larger and easier target, with the use of watertight bulkheads and other systems, these ships are also extremely difficult to sink. Large merchant ships that have been the victims of attack since the 1980s have shown remarkable resiliency in resisting damage due to mine hits and other operations. The price tag for such a vessel might be relatively low, with most costs being associated with the additional containerized weapons and sensors, as well as the training needed to operate the devices.

Conflicts

Extending the reach and scope of what can be done is a big factor behind the expansion of drones, but legitimate concerns remain if a flight malfunctions and the aircraft is lost at sea or falls onto a ship. As the development of drone technology gathers pace for both military and recreational purposes, unmanned aerial vehicles are also becoming more prevalent in the maritime industry.

While the current MSC fleet has few container ships ready for armament, the Civil Mariners are thinking and having informed discussion on the legal implications of arming civilian vessels. An armed MSC ship acting as a combatant risks blurring the legal lines between military and civilian personnel. Civil Service Mariners may need to be designated as Navy reservists under special cases such as active wartime operations in order to avoid having civilians operating weapon systems. Such discussions would likely become academic at best in the midst of a high end war where logistics ships would be a prime target.

Conclusion:

While there remain considerable legal and policy issues regarding the concept of merchant ships armed with weapons, the technology appears ready for use. Such vessels could add to fleet size and free destroyers and littoral combatant ships for other missions other than convoy escort. The question is whether or not the industry will embrace the idea of an armed container ship as a combat unit in its own right. Given the current size of the fleet and the potential need for high endurance escorts for the Navy's replenishment force, a force of 21st cargo ships outfitted with frigate-level armament to escort themselves makes good financial and operational sense. Given that all of the discussion currently being discussed may only be viable for container and non-flammable cargoes, it is evident that ship security needs to be made a priority in the modern world if the industry aims to profit in the long run.

PARTHIBAN SUBRAMANIAN
ETO 19 D
Mob: 9677610804
parthi.pkt@gmail.com

SAILING IN NAUTICAL MILES

(" water… water… everywhere but not a drop to drink")

Yes of course marine career is entirely different from the shore job. It is a unique blend of variety encompassed in a single domain.

Marine engineering is considered as one of the toughest fields where you're mental toughness as well as your physical capability is tested.

We got a lot of opportunity to technically express our self in toughest situation, which will make us internally strong, after that we can ready to face any of the tough situations in our entire life.

In this field allow us to interact with different community across the globe.

Among the n numbers of mariners you have to prove your existence and not only the existence also have to prove you are the best among them.

We are the marine engineers who can arrange the things for others by sailing in nautical miles and trying to discover the globe, who have also balance their personal as well as professional life.

As per my past 6 years of experience in the marine service, i visited almost 17 different country of the globe when you travel more than a month from one port to another without any cell phone networks and when we are about to reach on the upcoming port our excitement level are on the top and every one want to get the SIM card to talk to their family.

One more beautiful memory is that when I crossed the equator area for the first time, seniors are doing lot of fun with me, they make me bald and we danced like anything and enjoying the party with the colleague .

One time when I crossed the Somalia region arms guards are on with us for our security, it shows how the government is also think about our safety.

Some times we are also depressed after long disconnect with the family and suddenly we want early signoff but we don't get signoff, so we refreshed our self with the help of seniors and colleagues.

Finally when we get the signoff with huge hardened tax free money that time I realized marine field is the best in all the industries as after the signoff we are staying and enjoyed much with our family.

CADET: G.SARAVANA KUMAR
GME 34
Mob: 9787921042
Department of GME
Coimbatore Marine College
gurusaravana.mech@gmail.com

MARINE BIOLOGY

Abstract:

It has been hypothesized that changes in marine biological pump caused a major portion of the glacial reduction of atmospheric carbon dioxide by 80 to 100 ppm through increased iron fertilization of marine plankton increased ocean nutrient content or utilization or shift the dominant plankton types. Iron fertilization and associated mechanisms can be responsible for no more than half the observed drawdown.

Introduction to Marine Biology:

Marine biology is the study of marine organism or marine environments their behaviors and interactions with the environment marine biologists study biological oceanography and the associated fields of chemical, physical and ,geological oceanography to understand marine organisms.

Marine biology is the very broad area. It's based on the particular species and techniques and eco system.

The marine science institute serves as an internationally recognized center for the study of marshes, bays, Gulf of Mexico and world oceans.

Marine biology is given that in biology many phyla families and genera have some species that live in the sea .the ocean is the three dimensional world covering 71% of the earth surface.
The observations made in first studiesmarine biology fueled the age of discovery and exploration that followed. Microscopic life undersea is incredibly diverse and still poorly understood for example the role of viruses in marine eco system is barely being explored even in the beginning of the 21st century.

Marine habitats can be divided into coastal and open ocean habitats. Coastal habitatsare found in the area that extends from the shore lines to the edge of the contention shelf.

Estuaries:

estuaries are also near shore and influenced by the tides an estuary is a partially enclosed coastal body of water with one or more rivers or streams flowing into it .they are subject into marine influence such as tides, waves the influx of saline water and to river line such flow as fresh water and sediment.

Open Ocean:

The open ocean relatively unproductive because of a lack of nutrients, yet because it is so vast in total it produces the most primary productivity the open ocean is separated into different zones much of the aphotic zones energy is supplied by the open ocean in the foam of detritus.

Distribution Factors:

An active research topic in marine biology is to discover and map the life cycles of various and where they spend time technologies that aid in this discovery include acoustic tags and others data loggers .most ocean breeds in specific places, nests or not in others ,spend time as juveniles in still others and in maturity in yet others recent advance in under water tracking devices illuminating what we know about marine organism that live at great ocean depths . The information that pop-up satellite archival tags give aids in certain tie of the year fishing closures and development of marine protected area. this data is important to both scientists and fishermen because they are discovering that by restricting commercial fishing in one small area they can have a large impact in maintaining a healthy fish population in a much large area.

Conclusion:

Globally there has been a surge of interest in designation areas of seas as marine reserves and protected area to maintain and conserve marine species and habitats threatened by human activities.

CMC AND EXPORT PROMOTION CENTER HAVE MADE AN MOU FOR BBA / MBA LOGISTICS & SHIPPING STUDENTS INTERNSHIPS, PLACEMENTS AND SEMINARS WITH THE EPC ,

on 21st December in Ulaga Tamil Sangam, Madurai,

Epc have organised " vibrant tamilnadu export summit 2019 and The chief guest Mr.Tarun Vijay chairman national monuments authority ministry of culture - government of india - ex MP- BJP along with the EPC members we had signed the MOU.

DIVYA VIBHUTI PRATAP
B.Tech 16
(Marine Engineering)

A BRIEF INTRODUCTION TO LIQUEFIED GAS CARRIERS

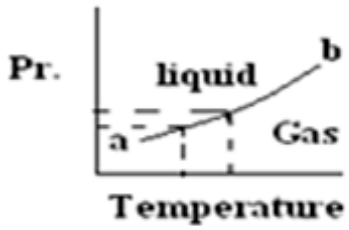
Liquefied gas tankers have their unique cargo properties & construction feature that set them apart from other classes of ships & other categories of hazardous cargoes.

Liquefied Gas Transportation

A liquefied gas is a substance that at ambient pressure & temperature is a gas but which, in order to store or transport economically to a much reduced volume, is liquefied by application of pressure or by cooling or by a combination of both.

IMO adopted following definition of liquefied gas carried by sea: "Liquid with a vapor pressure exceeding 2.8 bar absolute at a temperature of 37.8° C".

Fig. shown below, indicates the pressure-temperature relation of liquefied gas cargo. Line a-b is saturation curve of liquid & gaseous-vapor. For example, if liquid-cargo temperature increases (say ship sailing in tropical region) the pressure in the tank should be increased so that cargo remains in its liquid state.



Structural Strength

Since cargo tanks are subjected to high pressure or low temperature, the structure must resist impact damage, or be flexible & able to distort without rupture. More importantly tanks should be independent of ship's hull structure & need to be protectively located within ship's structure above double bottom & inboard of outer hull. These ships are exceptionally resistant to grounding & collision. Furthermore, ballast water should neither be stored in empty cargo tanks nor in a compartment adjacent to cargo tank. Although ballast water are spaced in double bottom or in double hull that gives an exceptional reserve of buoyancy in damaged condition.

Flammability of Gas Cargo

With all liquids, the surface temperature of liquid determines the absolute pressure exerted by its vapor in immediate contact with liquid. Transported liquefied gases fall into two categories. Liquefied gases which produce flammable vapor when mixed with air (e.g. hydrocarbons, butane, propane, ethylene, Liquefied Natural Gas (LNG)) and in the other vapors are either flammable, toxic or both (e.g. Ammonia, Vinyl Chloride Monomer (VCM), Methyl chloride).

In all method of carriage, cargo is stored above atmospheric pressure with ullage spaces only cargo vapors. Void spaces surrounding the cargo containments are automatically monitored for any vapor leak- ages, many times filled with dry inert gases. Thus prospects of an explosion of flammable gas are rare. Because of their rapid & complete evaporation at ambient temperature & pressure, generally no threat of any water pollution. Liquefied gases are transported by sea under following conditions:

· Fully pressurized - Under pressure but at ambient temperature
· Refrigerated, semi-pressurized - Under some pressure but below ambient temperature.
· Fully refrigerated - Slightly above atmospheric pressure & below ambient temperature.
· Liquefied natural gas (LNG) – Slightly above atmospheric pressure & insulated at cryogenic temperature i.e. cooled to-163°C.
· Note a), b), c) are categorized under liquefied petroleum gas (LPG).

Fully Pressurized Ship

These ships are fitted with independent type C tanks. Tanks are designed to accept a cargo working pressure (say up to 20bar) at highest temperature encountered in the area of trading. Tanks may be spherical, cylindrical or lobbed type. Cargo Capacity varies from 2500m3 to 8000m3. These tanks cannot withstand sub zero temperature. So they are fitted with cargo heater, which is used while loading from fully refrigerated vessel. These ships do not require secondary barrier.

Refrigerated Semi-Pressurized Ship

These ships are also fitted with independent type C tanks. Cargo is stored in cylindrical tanks up to a pressure of 7bar and temperature of up to -48°C. Tanks are also insulated to minimize heat input to cargo (refer fig 2). The required cargo temperature of cargo is maintained by vaporization which is re-liquefied & returned to cargo tanks. Cargo tank capacity up to 15000 m^3.Special grade steel is used. Because of its design, these ships can load or discharge from fully pressurized or fully refrigerated vessel. These ships do not require secondary barrier. All ethylene carrier ship (with tanks designed to withstand -103°C) is also referred as refrigerated -semi pressurized ships. These ships are provided with thermally insulated tanks and high capacity re-liquefaction plant (cascade type)

Fully-Refrigerated LPG Ship

They are large ship of 5000 m3 to 100,000m3. Cargo carried at near ambient pressure & down to -500°C. Tanks are free standing prismatic type A & constructed of special low temperature resistance steel. Tank surrounding structure is also made of special grade steel that acts as a secondary barrier in case of any leak from primary containment (refer fig 3). The tanks are independent of the ship structure and are resting on chokes. Anti rolling, antipitching chocks are provided in inerter barrier space to restrict the movement of the cargo tank. Cargo tank pressure & temperature are maintained by re-liquefaction plant. SIMS Lonavala has made an IGTS (integrated gas tanker simulator) of a fully refrigerated ship.

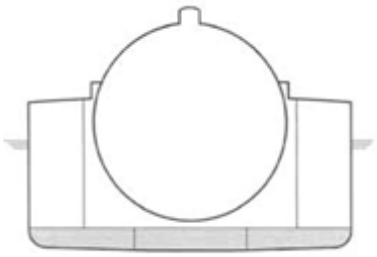


Fig 1. Fully Pressurized (Spherical Tank)

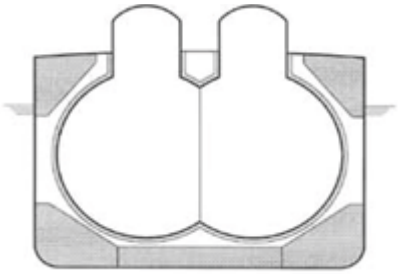


Fig 2. Semi Pressurized Tanker

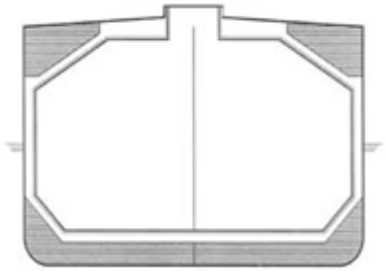


Fig 3. Fully Refrigerated (Spherical Tank)

LNG Carrier

Basically carry liquefied methane product. Cargo capacity ranges from 25,000 m3 to 200,000 m3. Roughly a liquefied natural gas (specific gravity =0.45) takes up 1/600th volume of its gaseous state. Tanks may be free standing spherical or prismatic or membrane type & with some limited pressure range capability. The spherical thank requires only partial secondary barrier and they undergo complete stress analysis. A drip tray is provided around the tank to contain any leakage. For membrane type of ship, two membranes are provided. One is called primary membrane (made of stainless steel or nickel- steel -'invar' with thickness 0.7mm~1.2mm) & Secondary membrane (made of invar or glass-aluminum-glass-'triplex').

Primary membrane holds cargo & secondary prevents leakage (if any). Two layers of insulation made of plywood filled with perlite (volcano rock) fitted between primary & secondary membranes & between inner hull & secondary membrane to maintain cargo temperature at -163°C (Refer fig 4 & 5). Watertight inner hull supports the tank.

LNG boil-off gas (BOG) gives off about 0.10% to 0.15% by volume per day. Existing LNG carrier do not re-liquefy BOG. This gas is used as a fuel for boiler. A con- trolled venting of gases is used in case of excessive pressure in the tank. However natural gas vapours once warmed above -110°C, are lighter than air & very quickly dispersed in to air. The pressure and temperature inside the tank is controlled by con- trolling the boil off extraction.

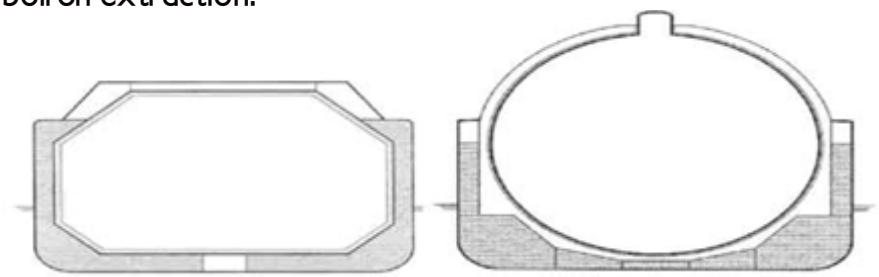


Fig 4. LNG Carriers (Prismatic & Spherical

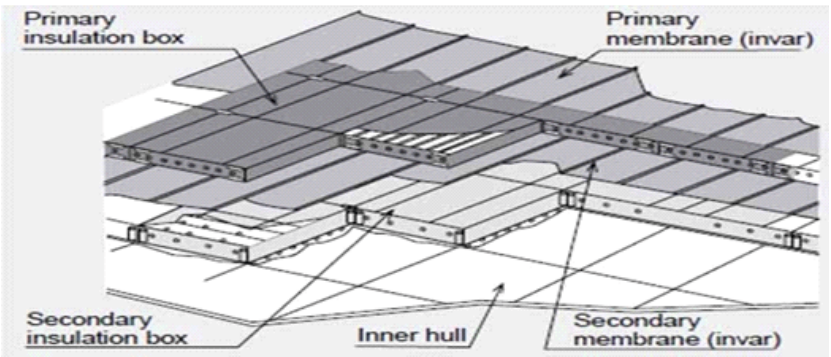


Fig 5. Insulation System Of a LNG Tanker

Safety Record of Gas Carriers

A gas carrier is often portrayed in the media as a potential floating bomb but accident statistics proves it quite contrary. As per experts, in reality, the sealed nature of liquefied gas cargoes completely segregated from oxygen or air virtually excludes any possibility of a tank explosion. In spite of the fact that these ships tend to be the regular target of special inspections by various authorities, the truth is that serious accidents related to gas carrier cargoes have been few. In fact, the safety record of these type of vessels is acknowledged as an industry leader. An illustration of the robustness of such a vessel could be found when Gas carrier Gas Fountain was hit by rockets in the first Gulf war, and despite penetration of the containment system with huge jet fires, the fires were successfully extinguished and the ship was salvaged together with most cargo on board.

During casualties few recommendations are: a) In case of fire, suppress all re-ignition sources, use fire extinguishing systems & establish a 5 km exclusion zone around the vessel to have protection from flammable & toxic cargo gas. b) Tow the vessel to a safe shelter place.

Development in Liquefied-Gas Carriers

Sloshing (movement of liquid cargo) in the tank involves complicated physical phenomenon such as sloshing wave breaking, phase transition between liquid & gas during impact, gas entrapment, cushioning effect due to corrugation etc. More general structural arrangements need to be considered near the free surface since sloshing causes a very high peak pressure over a small area or an average pressure over a large area. Plans can be made to fit on board equipment for real time measure or indication of sloshing. A number of sloshing risk diagrams can be prepared to indicate when more severe sloshing activity is likely for various filling levels. Few of new technologies involved in LNG carries (all are in operation) are use of steam turbine propulsion system, dual fuel diesel engine with electric motor propulsion, new cargo containment systems, LNG FPSO (Floating Production Storage & Offloading), LNG FSRU (Floating Storage & Re-gasification unit), re-liquefaction plants etc.

LNG and other Gas Fuel Developments

In July 2016, a new impetus was given to promoting LNG with the formation of a coalition of partners known as SEA\LNG. The aim of the group is to accelerate the widespread adoption of LNG as a marine fuel and to break down the barriers hindering the global development of LNG in marine applications. The main areas of focus for the coalition include supporting the development of LNG bunkering in major ports, educating stakeholders as to the risks and opportunities in the use of LNG fuel and developing globally consistent regulations for cleaner shipping fuels.

Recently two other fuels have been added to the list of alternatives to oil with successful use of both ethane and methanol. Both fuels have been on the horizon for some time and, although their use may be limited to certain vessel types, ensuring the engines run correctly is a vital precursor to their wider adoption.

In May 2015, Wärtsilä announced that its four-stroke 50DF engine has been certified to run on liquid ethane gas fuel after a successful testing programme in collaboration with petrochemical and gas shipping company Ever gas. The engines can switch between LNG, ethane, liquid fuel oil and heavy fuel oil with uninterrupted operation. Just as with LNG carriers, the ability for ethane carriers to burn ethane boil-off gas as engine fuel significantly reduces the need for gas re-liquefaction during the voyage, meaning that less power is needed for the cargo handling.

MAN Energy Solutions has secured an order for engines for eight ethane carriers belonging to German ship owner Hartmann Reederei. Their G50ME-C9 engines will run on boil-off gas when running in gas mode and can also operate on the full range of fuel oils from HFO to MGO.

Methanol is a fuel that avoids some of the problems associated with LNG and ethane because it is liquid at ambient temperature and so does not need such specialised fuel storage systems. The issues with methanol are not related to its environmental impact as it is considered as a clean fuel on a par with LNG and unlike fuel oil requires no exhaust treatment to meet MARPOL requirements.

LNG-burning engines have been used for onshore power generation for many years but their use for marine purposes is a more recent phenomenon. Initially, they were marketed almost solely as an alternative to the steam turbines in LNG carriers then later as a solution to meeting increasingly-stringent exhaust emission requirements.

Of the three options for meeting the 2020 sulphur rules, LNG would seem to be ideal as it contains no sulphur and thus engines running on it cannot produce SO_x. Proponents of LNG have been forecasting its role as the fuel of the future for most of the 21st century but the lack of international standards and rules has been an impediment to a greater take-up, although that is now changing.

In spite of its attractions on environmental grounds, LNG has had a slower take-up than its supporters expected. There are many reasons for this including lack of bunkering infrastructure, higher capital outlays, LNG's lower energy density compared to oil fuels and a lack of international regulation as to the use of gas as a fuel.

Those disadvantages are gradually being addressed and while the second two will remain an issue for ship owners to decide on merits, the first is underway and the fourth has been resolved by the IMO which in 2015 adopted the International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code), along with amendments to make the code mandatory under SOLAS with effect from 1 January 2017.

The impending introduction of the 2020 global sulphur cap has seen a growing acceptance of LNG as a marine fuel and the number and type of ships employing dual-fuel engines has advanced. Today there are dual-fuelled engines in the largest container carriers, bulkers, tankers and cruise ships as well as the smaller vessel types that were early adopters.

Because gas and other low-flashpoint fuels pose their own set of safety challenges and prior to the IGF Code their regulation was only possible by individual flag states, there had been no universal standard. The IGF Code addresses this and has led to more gas and dual-fuel ships being built.

The amendments to SOLAS chapter II-1 as a result of the IGF Code include changes to Part F 'Alternative design and arrangements.' These provide a methodology for alternative design and arrangements for machinery, electrical installations and low-flashpoint fuel storage and distribution systems while a new Part G 'Ships using low-flashpoint fuels', adds new regulations to require ships constructed after 1 January 2017 to comply with the requirements of the code, together with related amendments to chapter II-2 and Appendix (Certificates).

The code contains mandatory provisions for the arrangement, installation, control and monitoring of machinery, equipment and systems using low-flashpoint fuels, focusing initially on LNG with the intention to expand the provisions as new alternative fuels gain acceptance. It addresses all areas that need special consideration for the usage of low-flashpoint fuels, taking a goal-based approach, with goals and functional requirements specified for each section forming the basis for the design, construction and operation of ships using this type of fuel.

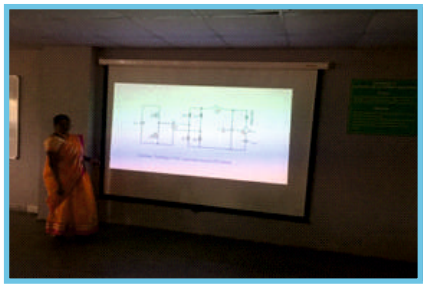
The MSC has also adopted related amendments to the STCW Code, to include new mandatory minimum requirements for the training and qualifications of masters, officers, ratings and other personnel on ships subject to the IGF Code. These amendments also entered into force on 1 January 2017, in line with the SOLAS amendments related to the IGF Code.

S. JAMBULINGAM. B.E., ME.,
(Author)

DR. M. RAJESHWARI.
(Co-Author)

M. POONGODI. B.E., ME.,
(Co-Author)

K. JOTHISWARI. B.E., ME.,
(Co-Author)



A COMPARATIVE PERFORMANCE ANALYSIS OF A NOVEL SINGLE STAGE THREE PORT CONVERTER FOR PV STORAGE SYSTEMS

Abstract

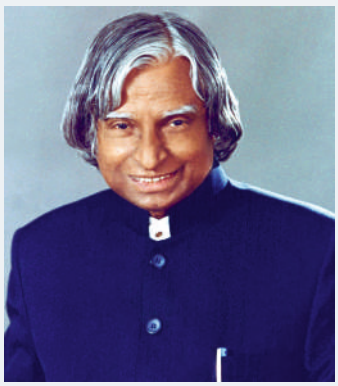
This research work is mainly highlight to show and estimate the performance of a novel three port converter by interfacing a PV port, a battery port, and a load port all together in a power system then a novel three port converter named bidirectional buck with buck boost converter(B4C) is projected. The major advantage of the proposed converter topology is the single-stage power conversion which improve the overall effectiveness of the converter. The performance of the planned system is simulated in MATLAB and its effectiveness based on overall component count, losses and efficiency is evaluated. Finally to validate the best of the proposed converter, it is compared with other conventional converters and the comparison results confirm the dynamic performance of the proposed system. The simulation results of various power converters with MPPT technique are compared and the result proves the requirement of an appropriate converter to be recognized for tracking the Maximum PowerPoint in PV systems.

HAPPENINGS:

- Remembrance
- Marine Engineers Association Inaugural Ceremony
- Cmc Nautical Science Association
- Inaugural Function For B.Tech 19 Batch
- Inaguration Of New Additional Block For Girls Hostel
- Inaugural Ceremony For The New Batch Of Bba & Mba
- Reefer Container Operation & Maintenance
- ETO 18 B Passing Out Ceremony
- GME 32 Passing Out Ceremony
- GP Rating Passing Out Ceremony
- 56th National Maritime Day
- Independence Day Celebration
- Onam Celebration
- Pooja Celebration
- Diwali Celebration
- Christmas Celebration
- Sports Day
- The World Ozone Day
- International Yoga Day
- Faculty Development Programme
- Parents Meeting
- Inspection
- Iso Annual External Auditing
- Career Guidance Programme
- Guest Lecture
- Placement
- Naughtica
- Flipkart Hr And Regional Head Visit
- Award To Udayank kumar
- Solar Street Light At CMC
- Flag Presentation
- Paper Presentation By CMC Cadet
- Paper Presentation By Faculties

REMEMBRANCE

On 27 July 2019 in our CMC campus, as a Remembrance to our Ex.President , Missile Man , Bharat Ratna Dr. APJ Abdul Kalam as we pay the respectful homage. All our Teaching and Non Teaching Staffs and students Honoured the Portrait



Empty Pocket
Teaches
you a Million
things in Life,
But full
Pocket Spoils you
in a Million
Ways.

INAUGURATION

Marine Engineers Association Inaugural Ceremony on 29th Aug 2019

Chief Guest C/E. P. KOLANDAIVELU, Assistant General Manager (Marine Training Institute), Cochin Shipyard Ltd & Mr. R.SRINIVASAN - MR, CMC Group of Institutions, lightening the lamp & Inaugurated the Association Logo.



CMC Nautical Science Association on 27th July 2019

The Chief Guest Capt. Sasidharan, General Manager, V Ship's & CMC Chairman C/E. S.I Nathan Addressed the Gathering. The Chief Guest inaugurated the occasion with lighting the lamp and also published the Association Logo.




Inaugural Function for B.tech 19 Batch on 19th July 2019


Inaguration of New Additional Block for Girls Hostel

New additional block for girls hostel was inaugurated on 5th Sep 2019. Senior Professor Mrs. Rajeswary, on behalf of ladies faculties cut the ribbon and inaugurated the New Additional Block.




Inaugural Ceremony for the New Batch of BBA & MBA

"INAUGURAL CEREMONY for the New Batch of BBA & MBA (LOGISTICS AND SHIPPING)" had been conducted on 19th august 2019 @ CMC conference Hall.

Reefer Container Operation & Maintenance

CMC introduces Reefer container operation & maintenance course in CMC college premises. Reefer course commenced on 28th Nov 2019 with Mr Sakthivel, Faculty of ETO Department, Mr.Ajith , Faculty in consultation with Mr. Jayapal, Head of the Department of ETO.

GME 32 Passing Out Ceremony

On 15.11.2019, @ CMC GME 32 Passing out function was celebrated. Principal C/E.Nedumaran addressed the gathering. HODs and Faculties motivated our GME 32 cadets and conveyed the wishes for their wonderful career. Few cadets of GME 32 shared their wonderful experiences at CMC Campus.

ETO 18 B Passing Out Ceremony

ETO - 18 B Batch "Passing Out Parade" was held on 02.03.2019 @ CMC. Chief Guest Dr. B. Vaseeharan, Director, Directorate of Collaborative Programmes, Alagappa University, distributed the certificates to the ETO cadets. Chairman C/E S.I Nathan, Principal C/E Nedumaran and Dean Dr. Senthil Kumar addressed the gathering.

ETO 19 B Passing Out Ceremony

ETO 19 B Passing Out Parade was celebrated at Coimbatore Marine College on 09.12.2019. Chief Guest Capt.Kaushik Bhatnagar, Head for Manning in PIL/INDIA was welcomed with Guard of Honour.CMC Principal C/E. Nedumaran addressed the gathering, Placement Director C/E. Gopalakrishnan & ETO HOD, Mr. Jeyapal motivated and conveyed their wishes to ETO cadets. The Chief Guest Capt. Kaushik Bhatnagar distributed the certificates.

GP Rating Passing Out Ceremony on 14th Nov 2019

56th National Maritime Day

56th National Maritime Day was celebrated at cosmopolitan club, Coimbatore, in a grand manner on 4TH April 2019. The chief guest, Commodore Rajiv Choudhry , commanding Officer , INS Agrani, graced the occasion. Chairman C/E. S.I. Nathan honoured the Chief Guest. The Chief Guest released the college magazine "THE HELM".









Christmas Celebration" was Celebrated @ CMC on 23rd Dec 2019

The celebration began with the speech by Father Stanislas from Good Shepered Seminary , Myleripalayam . It was followed by a Prayer song and cake cutting. Our Principal C/E Nedumaran addressed the gathering. The Santa Claus distributed sweets to all faculties and cadets.





Sports Day

SPORTS DAY - SPARTA '19 was celebrated on 28th SEPTEMBER 2019 . The Chief Guest Mr.E.S.BALASUNDARAM, Group HR Head, APM United Groups, inaugurated the Olympic Torch.




Independence Day Celebration on 15.08.2019





Onam Celebration on 9th Sep 2019 @ CMC with Onam Special Lunch



Pooja Celebration on 5th October 2019 @ CMC



Diwali Celebration on 25th October 2019 @ CMC


The World Ozone Day

The International Day for the Preservation of Ozone Layer on September 7, 2019, CMC management organized a Cross Country Running among CMC Cadets and Staffs for the Preservation of the Ozone Layer and Conservation of Water.


International Yoga Day

5th International Yoga Day was celebrated in CMC, cadets along with Faculty Mr.Ramesh Kumar performed Yoga on the parade ground.


Parents Meeting

Parents Meeting was held at Coimbatore Marine College on 13th & 27th of April 2019.



Inspection

Inspection for BBA and Catering Courses was done on 24th June, 2019 @ Coimbatore Marine College. The Chief Guests Dr. Swaminathan, Syndicate Member in Alagappa University and Dr. Paneer Selvam, Madurai Kamarajar University was received at the reception and followed by campus visit and the inspection.


ISO Annual External Auditing

ISO ANNUAL EXTERNAL AUDITING was conducted. On 09.09.2019@ CMC by Mr.R.Srinivasan, Board of Directors, CMC Group of Institutions with External Auditors Mr. Bharathan & Mr. Sathish, Bureau Veritas & Internal Consultant Mr.Swaminathan conducted the ISO Annual External Auditing.



Career Guidence Programme

Career Guidance Program was conducted for CMC cadets on 15th Oct 2019 at Coimbatore Marine College by Department of Posts, India. The Chief Guest Dr. Sudhir Gopal Jakhere, IPOs', SSPOs, Coimbatore division delivered the lecture to the cadets about the overview of Employment registration at Post Offices through National Career Service (An Initiative taken by Ministry of Labor and Employment).

Faculty Development Program on 7th Sep 2019

Mr,Michael Basnet & Mrs Linnet , Director Training , Word express delivered a lecture on Soft Skills development for the Faculties.

Faculty Development Program by Mr. Raman Parasuraman

Faculty development program was conducted on 11th June 2019 on the topic "How learning works"

Faculty Development Program

Dr.S.Balamurugan , IQAC Coordinator, Government Arts and Science College, Avinashi. had conducted a Faculty Development Program on the topic "Teaching Etiquette for Present Era" at CMC Conference Hall.

Gurushishya

Faculty Development Program " GURUSHISHYA" was conducted by LEAD College of Management in Palakkad, on 30.11.2019 & 01.12.2019. Head of the Department of BBA & MBA (L & S) Mr.Senthilkumar and Faculties Mr.Rameshkumar, Mr. Jambulingam, Mr.Vivek and Miss.Vijayalakshmi of Coimbatore Marine College attended GURUSHISHYA.

Guest Lecture

Guest Lecture on the topic "Concepts of Thermodynamics" was conducted on 18th August 2019 by Dr. Sivakumar, Associate Professor, Kumaraguru College of Technology at CMC Conference Hall.



Placement

Dockendale Ship Management(I) Pvt.Ltd conducted. Campus Interview On 21st & 22 nd June, 2019 @ Coimbatore Marine College.

The chief guest Mr.SUBRAT MUKHERJEE, DIRECTOR – MANNING IN DOCKENDALE SHIP MANAGEMENT(I) Pvt.Ltd. was welcomed with Guard of Honor , the chief guest was honored with Shawl by the Academic Director C/E.Nedumaran and the Placement Director C/E. GopalaKrishnan.





Naughtica 2K19

Cadets of CMC participated in various events of NAUGHTICA 2019 at Chennai convention centre on 13th & 14th April 2019.





Flipkart Hr & Regional Head, Mrs.Menaka & Mr.Cindraj Visited the Campus

Mrs.Menaka , HR of Flipkart & Mr.Cindraj Regional Head of Flipkart visited CMC On 12 th July, 2019 and pictured the the logistics operations of Flipkart.


Award To Udyank Kumar

Cadet Udyank Kumar of B,Tech 16 was awarded Rs. 10,000 and a book by Placement Director C/E.Gopala Krishnan for his performance in Q & A session conducted on 14.11.2019 at Coimbatore Marine College.

Solar Street Light @ CMC

ETO - 19 B Cadets were awarded with Merit and Appreciation certificates On 13.12.2019 at Coimbatore Marine College. All the ETO - 19 B cadets are certified and Appreciated for their involvement in the project " SOLAR STREET LIGHT'.

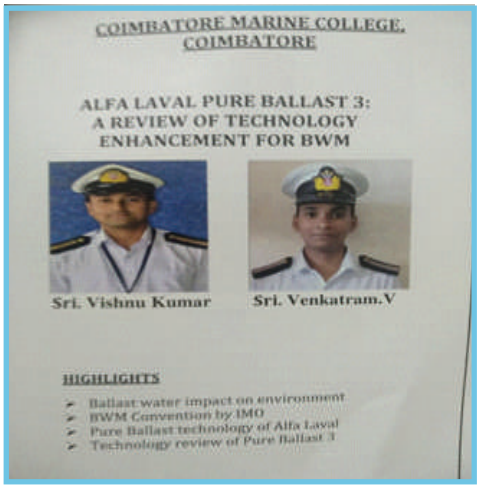



Flag Presentation

The Flag Presentation was done by Coimbatore Marine College Band in LOGIFEST 2019, conducted by Coimbatore Custom House and Steamer Agents Association on 13th October 2019 at SBM Vishesh Mahal. It's very proud to our college that everyone had admired the Flag Presentation which was done by Coimbatore Marine College Band on that Special Occasion.


Paper Presentation by CMC Cadets

Cadet Vishnukumar & Venkatramv from B.Tech 17 presented a Technical paper on the topic " ALFALAVAL PURE BALLAST 3: A REVIEW OF TECHNOLOGY ENHANCEMENT FOR BWM" at PRAYAG 2019 METI KOCHIN SHIPYARD on 8th nov 2019.



Best Faculty Award

Best Faculty award was given by Chairman C/E S.I.Nathan on 29.04.2019 for their best performance in their Academics. , Mr.V.L. Mangesh , Mrs. Santhamani, Mr. Sureshkumar, Mrs. Rajeswary, Mr. Rajasekar, Mr. S. Vignesh, Mr. R. Rameshkumar and Mr.Marimuthu were awarded with cash and Gifts for their best performance in their Respective Fields.

Paper Presentation by Mrs.Rajeswary & MS. Vijayalakshmi

Senior Assistant Professor Mrs.K.S.Rajeswary and Faculty Ms.P.Vijayalakshmi of Coimbatore Marine College, attended a National Conference on Regional Literature and Translation Studies On 27.09.2019, @ Hindustan College of Arts and Science in Coimbatore, Mrs.K.S.Rajeswary presented and published a paper on the topic " Note of Modernity in Emily Dickinson's Poetry". Ms. P.Vijayalakshmi presented and published a paper on the topic " Culture and Identity through the Plight of Women in A thousand Splendid Suns" by Khaled Hosseini.

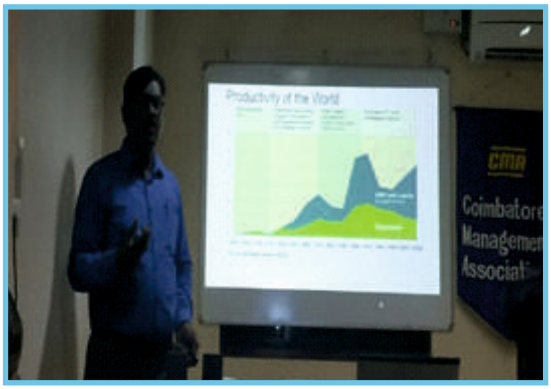

National Seminar at Akshya College of Engineering and Technology

Akshaya College of Engineering and Technology organised a one day National Seminar on " Hybrid Optical Acoustic Autonomous Underwater Vehicles and Swarms for Marine Environment Monitoring" On July 12, 2019. The CMDE Ashok Rai, INS Agrani, was the Chief Guest and spoke on " Indian Maritime - Security , India's prosperity and resources" . Senior Professor, Capt. Sunil Balagopal, Master Mariner, Coimbatore Marine College had attended and explained the importance of Swarming in that seminar.



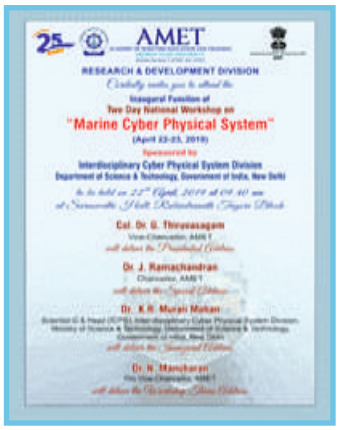

Paper Presentation

Professor.V.L Mangesh, Research and Development Cell incharge, Coimbatore Marine College delivered the presentation on the topic " Behavioural Finance and Capital Allocation" at Coimbatore Management Association. On 15.04.2019,

National Workshop

Professor.Mr. V.L Mangesh, Research and Development Cell in charge and Assistant Professor Mr. P. Arunprasath from Coimbatore Marine College attended A two days National Workshop on " Marine Cyber Physical System" sponsored by Interdisciplinary Cyber Physical System Division, Department of science and Technology, Govt of India, New Delhi On 22 & 23 April 2019, at AMET Chennai.



Career Guidance Program

"Career Guidance Program" for Polytechnic students were conducted on 25th July 2019. 50 Students (II year Diploma in Mechanical Engineering) from Morning Star Polytechnic College, Nagerkovil visited CMC campus.

Seminar

Professor Mr.S.Senthil kumar, HOD of BBA & MBA and Dr.Gurusamy Assistant Professor, Coimbatore Marine College had attended seminar on the topic "PRODUCT SELECTION & NEGOTIATION SKILLS" conducted by Export Promotion Center (EPC) at Hotel Plaza Inn on

COIMBATORE MARINE COLLEGE

(Approved by D.G.Shipping, Govt. of India | CIP Ranking : IRS, Grade A1 (Outstanding))

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1 Year - GME | 4 Months - ETO | General Purpose (GP) Rating

BBA Shipping & Logistics | MBA Shipping & Logistics

Highlights

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- Well Qualified & Experienced Faculty
- Engine Room with Main Engine (2100 HP)
- Full Mission Maneuvering Bridge Simulator
- Full Mission Maneuvering Engine Simulator
- Real Time Model Ship In Capus - TS Clarissa
- Aux Machinery, Aux Boiler, Electrical Systems
- Separate Lab for Communication Skills
- Personality Development Programmes
- Dedicated App for Placement Training (V-Guru)
- Well Equipped Laboratories

100% Placement Assistance

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Note: The IMU Entrance Examination (Rank) is mandatory for B.Tech Marine Engineering Course

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OF INSTITUTIONS

COIMBATORE MARINE COLLEGE

296, Pollachi Main Road, Myleripalayam
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Tel : 0422 2612200 - 45 / Fax +91422 2613222
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VIRTUAL GURU

NO.22 B,Kannika Parameshwari Nagar,
Nanjundapuram Road, Ramanathapuram,
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Corporate office

CMC GROUP OF INSTITUTIONS

NO.22 B,Kannika Parameshwari Nagar,

Nanjundapuram Road,Ramanathapuram

Coimbatore-641045.

Call us : 1800 120 5533 I 0422 2364 999

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