



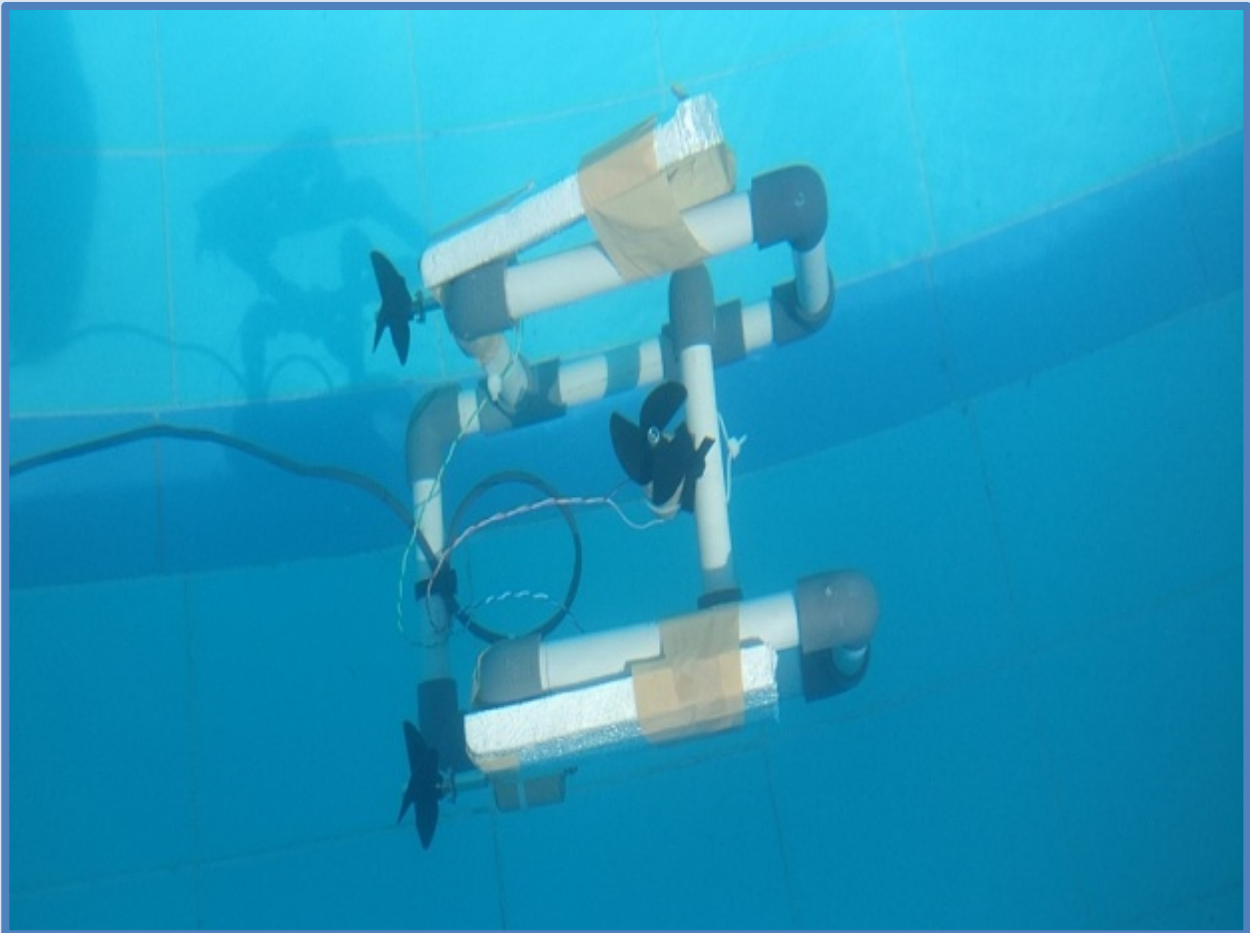
AMET

ACADEMY OF MARITIME EDUCATION AND TRAINING

Deemed to be University Under Section 3 of UGC Act 1956

DEPARTMENT OF NAVAL ARCHITECTURE AND
OFFSHORE ENGINEERING

KNOTS



Odd Semester Magazine
2020-2021

AMET DEEMED TO BE UNIVERSITY, CHENNAI - 603112

EDITORIAL

Dear Readers,

I am pleased to know that this issue of AMET university NA&OE department magazine “KNOTS” is being published. The NAOE department is an abode of excellence for ship hydrodynamics and Ship Structures in the AMET University. Students are made familiar with the latest theoretical developments in their respective engineering disciplines.

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Dr. J.Ramachandran

Pro-Chancellor

Dr. RajeshRamachandran

Vice-Chancellor

Col. Dr. G. Thiruvassagam

Pro Vice-Chancellor

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Head, Department of Naval Architecture & Offshore Engineering,
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FOREWORD

Prof. MSP Raju, Head, Department of Naval Architecture & Offshore
Engineering



The Department of Naval Architecture & Offshore Engineering started functioning in AMET University from the year 2007 keeping in view to meet the national need of qualified and trained man power in the field of Naval Architecture and Offshore Technology. The department is offering a degree programme at bachelor, masters and doctoral levels.

The fundamental aspects of design, construction, repairs and conversion technology of ships and other marine structures are imparted to the students. They are also exposed to the higher-end relevant topics of finite element methods, quality assessment, control, and use of various software required by the practising engineers of the field. The Department is also having a collaboration with the Department of Naval Architecture & Ocean Engineering of the University of Strathclyde, Glasgow UK for academic exchange of students and joint research programme.

The students are encouraged to take up challenging projects and to participate in extra-academic activities for overall development. The aim is to make a Naval Architect who can take up the challenges and shoulder the responsibilities as demanded. We highly value our association with industries, alumni, and well-wishers of AMET University.

With best wishes!

PREAMBLE

AMET is India's first Deemed to be University in Maritime Education which is ranked as 3rd among Maritime Universities of the World in the PIMET (Performance Indicators in Maritime Education and Training) Ranking of International Association of Maritime Universities (IAMU). Established during 1993, AMET's uncompromising strides of excellence in the field of maritime education and training laced with its capacity to feed the global shipping industry with an unrivalled maritime human resource secured it to have many national and international recognitions, accreditations and rankings such as NAAC, NIRF, ARIIA, DGS-CIP, PIMET etc.



AMET serves as an ocean of knowledge for over 4000 students pursuing Programmes ranging from diploma to Doctoral programs through 9 schools and 23 intensive research and training centres for marine and marine related activities. Equipped with an excellent infrastructure for research and development, co-curricular and extracurricular activities AMET secured its compliance certificate for ISO 9001:2015 QMS standards from the prestigious and globally renowned DET NORSKE VERITAS, Norway.

For over two decades AMET is remaining as the favourite destination for campus interviews by many shipping giants such as AP MOLLER MAERSK, GOODWOOD, NYK, SONANGOL,

VSHIPS, WALLEMS, SHELL, CHEVRON, STENA and so goes a list of over 100 companies. Besides positions on-board, AMET Business school graduates have secured lucrative jobs in commercial shipping sectors such as chartering and ship broking. Never the less, Naval architecture, petroleum engineering, harbour engineering, marine electrical and electronics engineering graduates have successfully walked away from AMET with jobs offering sumptuous packages along with an opportunity to grow and glow in their career swiftly. Needless to say, about the entrepreneurship development activities nurtured into AMET'ians has been found rewarding by students who are chief executive officers of their own organization.

VISION AND MISSION OF THE UNIVERSITY

VISION

To sustain identity as a World Class Leader in Maritime Education and empower learners with wholesome knowledge through progressive innovation in training, research and development which will render students a unique learning experience and a transformation impact on the Global Society.

MISSION

AMET will strive continuously to

- (A) Impart value-based higher education and technical knowledge with uncompromising strides of outstanding quality.
- (B) Emerge as a Centre of Excellence inculcating skill development in recent technologies by industrial trends.
- (C) Create World-class research capabilities on par with the finest in the world and broaden student's horizons beyond classroom education.
- (D) Nurture talent and entrepreneurship to enable all-round personality

Development among students.

- (E) Empower students across socio-economic strata
- (F) Make a positive difference to society through technical education.

QUALITY POLICY

AMET is committed to provide the highest quality in education and be the most preferred institution for pursuing marine and marine-related courses.

This will be achieved by a consistent focus on:

- Providing a conducive, vibrant, progressive and enriching learning atmosphere.

- Teaching excellence and research output.
- Global outlook and engaging with the world through learning, teaching and research.
- Providing competitive advantage in gaining employment for further academic opportunities.
- Maintaining excellent links with commerce and industry in both national and international.
- Complying with all applicable requirements and continually improving the effectiveness of the Quality Management System.

ABOUT THE DEPARTMENT

Naval Architecture & Offshore Engineering

Vision of the Department

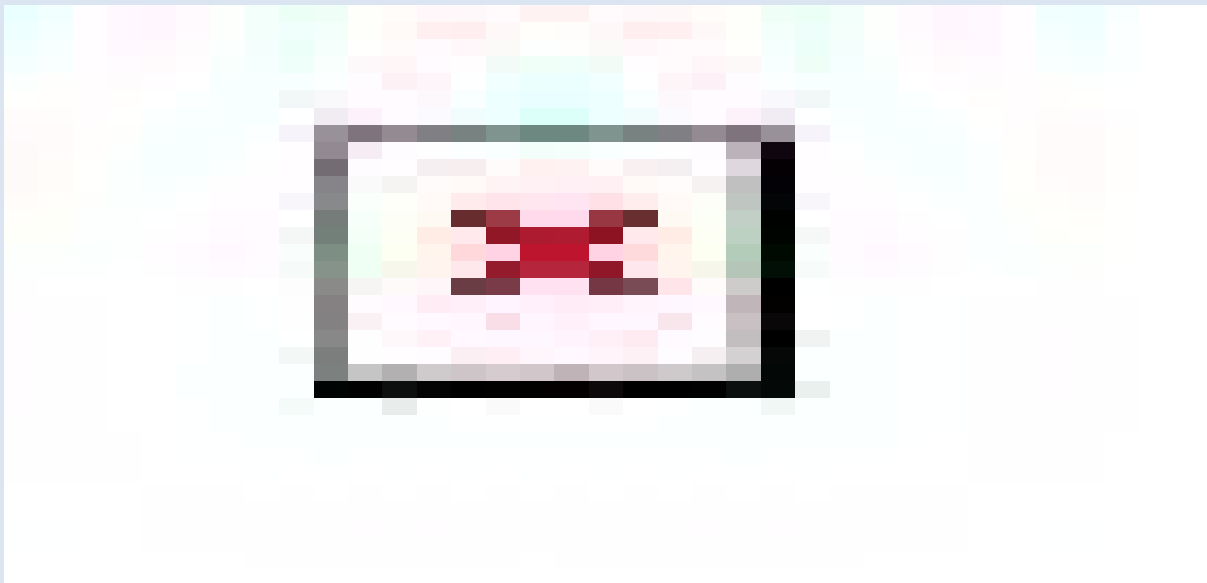
We aim to bring in education of highest International standards within the reach of every young individual. We are committed to achieve and maintain excellence in education and research in the fields of naval architecture and offshore structure design, construction, repair and maintenance and conversion leading to producing employable graduates for the benefit of the Society.

Mission of the Department

To rise towards being the center for excellence in research to play an active role in institute-industry collaboration sustained academic development in industrial orientation to become a focal point of experts and specialists in the field under the title Friends of AMET Increase the visibility of AMETIANS in the industry worldwide.

The Department of Naval Architecture and Offshore Engineering, AMET University imparts excellent knowledge and practice in the field of Naval Architecture and Offshore Engineering. The students learn under the guidance of faculty members who have vast experience and have had eminent positions in various fields. This not only adds up benefiting the department morally but also builds an introspective view of the industry. The department has come to be one of its kind, where the approach towards the academics is not only theoretical but also practical, where the students are trained on latest technical software and also trained on manual drawings. From the beginning of the course itself, the students have been exposed to shoulder various situations in order to become not only responsible and sincere students but also become more pragmatic individuals. Exposure to real industrial problems is given adequate importance. The department also has diversified student community which caters to learning and their multilingual background engages in communal

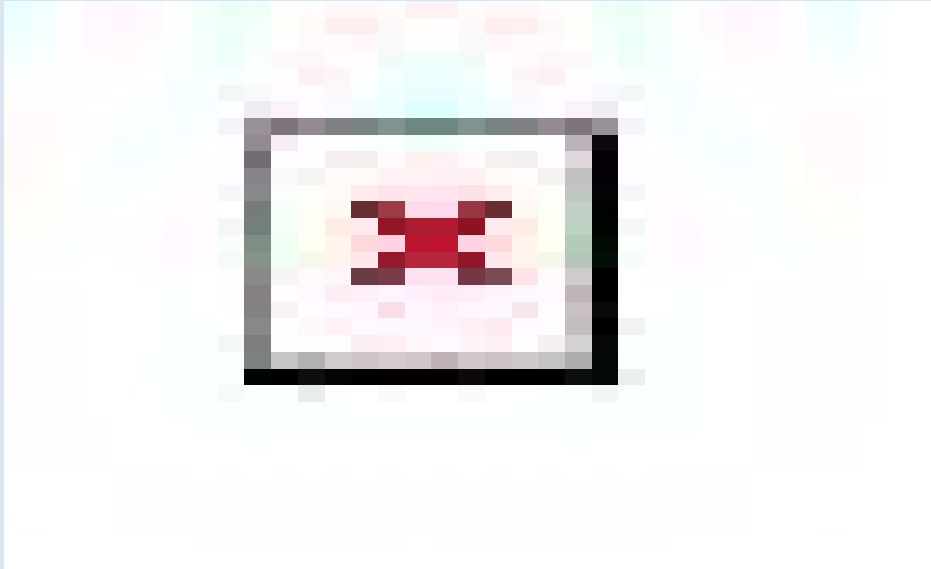
exchange. This also makes learning more interesting and initiates a sense of teamwork and also maintains unity in diversity. On completion of the degree, our students will be capable of providing clients with engineering solutions, technical solutions, and management for concept design studies, new vessel constructions, refits and conversions. In addition to which some students undergo Dual Degree programme which offers them a Diploma and Advanced Diploma in Business Management. A total of 77 students of Batch 2017 - 21 are pursuing B.E. Naval Architecture and Offshore Engineering at AMET University.



Academic Programs

1. Doctorate Programme leading to Ph. D degree
2. Master's Programme of 2 years leading to M.E. Naval Architecture and Offshore Engineering degree
3. Bachelor's Programme of 4 years leading to B.E. Naval Architecture and Offshore Engineering degree

SOFTWARE TRAINING



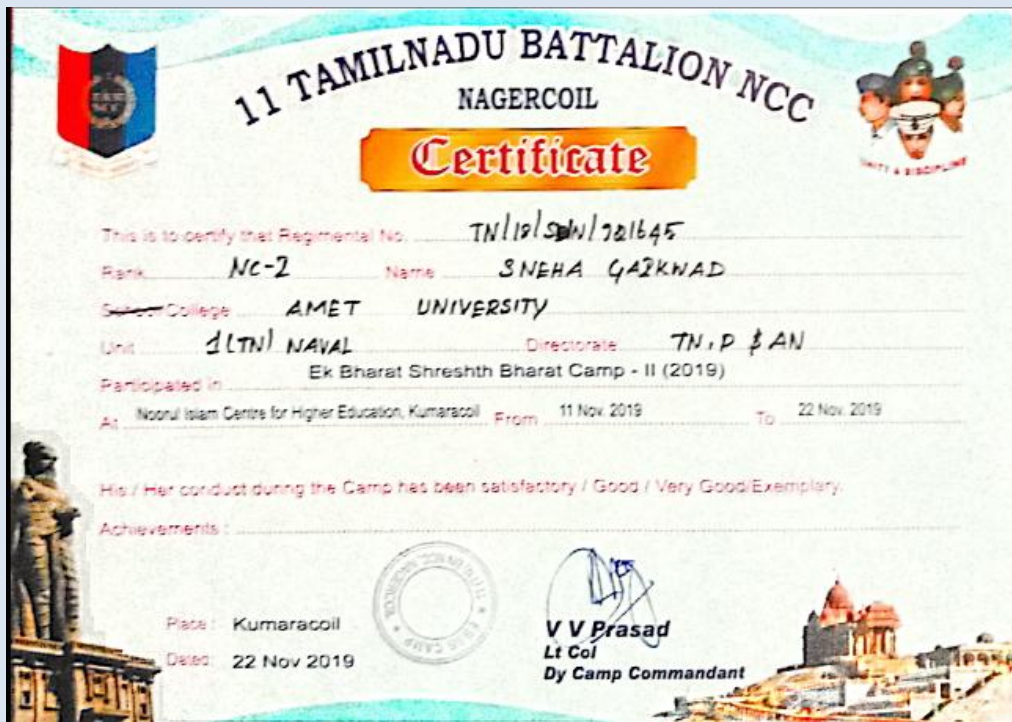
Students are given software training with the marine related software which enable us to understand the ship design aspects in-depth and also helps them to deliver their best while working in the industry.

1. AUTOCAD - Design drawings on computer
2. MAXSURF - Vessel Hull Design, Naval Architecture Software
3. Star CCM+ - CFD Software
4. DNV SESAM (GeniE) - Design and Analysis of Offshore Platforms (Fixed and Floating), Mooring and Riser Analysis.
5. SSI Ship Constructor - Vessel Hull Design, Outfitting Design, Naval Architecture Software
6. Python Programming

STUDENTS' ACHIEVEMENTS



Ms. Y.V.S.S. Lavanya of 2nd year B.E., Naval Architecture and Offshore Engineering student is certified as a Yoga Teacher in the month of September 2020.



Ms. Sneha Gaikwad of 3rd year B.E Naval Architecture participated in Ek Bharat Shreshth Camp

STAFF AWARDS & RECOGNITIONS

Staff Awards					
S. No	Staff Name	Name of the Award	Name of Board/Organization issuing the award	Level (International/National/state)	Date of receiving the award
1.	Dr. P. Sivabalan	National Eminent Researcher Award 2020	I2OR India	National	Dec 2020
2.	Mr. Premanand	National Eminent Researcher Award 2020	I2OR India	National	Dec 2020
3.	Dr. Lilly. R	Best Researcher National Award 2021	IRDP India	National	June 2021
4	Dr. Shameem B.M	Best paper Award	ICSOE2021	International	June 2021

PROJECTS

Name of the Project/ Endowments, Chairs	Name of the Principal Investigator /Co Investigator	Name of the Funding agency	Type (Government/Non-Government)	Department of Principal Investigator/ Co Investigator	Year of Award	Funds provided (INR in Lakhs)	Durat ion of the proje ct
Numerical modelling on hydrodynamic stability analysis of tidal inlet	Dr. K. Thiruvengatasamy (Principal Investigator) and Dr. J.Rajaraman (Co-Investigator)	Ministry of Earth Sciences, Government of India	Government	Department of Naval Architecture & Offshore Engineering	2018-2019 (20 th March 2019)	21.72 Lakhs	3 years (2018 - 2021)
Beach Profile survey and shoreline monitoring along the south of Puducherry coast, Southeast coast of India	Mr. P. Mohamed Rajab	Modern Consultancy services, Chennai	Non-Government (Industry Consultancy Project)	Department of Naval Architecture & Offshore Engineering	17 th June 2020	0.50 Lakhs	3 months
Assessment of wave power potential for Ratnagiri, along West coast of Maharashtra	Dr. K. Thiruvengatasamy	Sarathy Geotech & Engineering Services Pvt. Ltd., Bangalore	Non-Government	Department of Harbour and ocean Engineering	17 th June 2020	0.58 Lkhs	8 Months

NUMERICAL MODELLING ON HYDRODYNAMIC STABILITY ANALYSIS OF TIDAL INLETS

PROJECT DETAILS

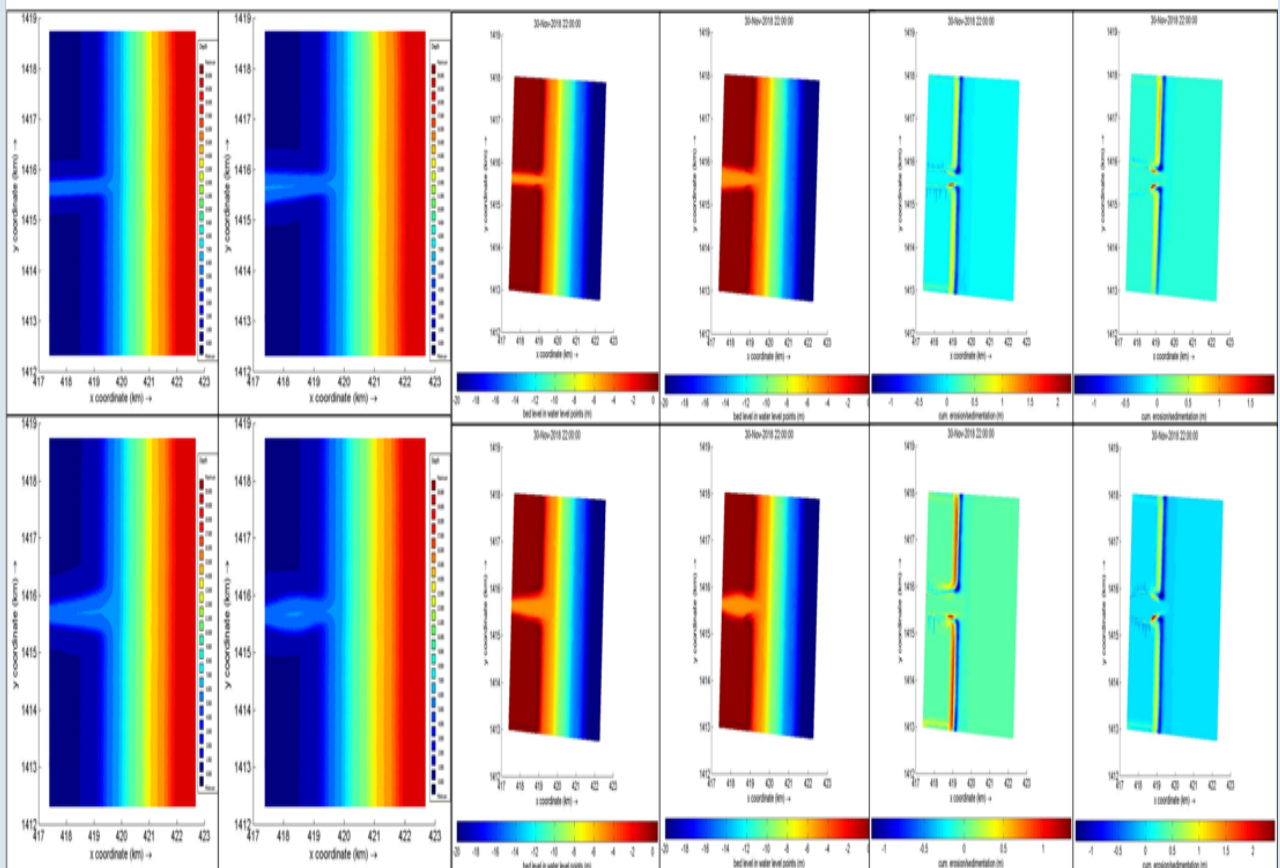
Project Budget: 21.79 Lakhs

First Grant Release on Budget for Current Financial Year: 9.77 Lakhs

Principal Investigator: Prof. Dr. K. THIRUVENKATASAMY, Dr. Eng.

Co-Principal Investigator : Prof. Dr. J.RAJARAMAN, Ph. D.

Junior Research Fellow: Mr.K.Ayyappan, M.Sc. (Ph.D) Ocean Sciences



PUBLICATIONS

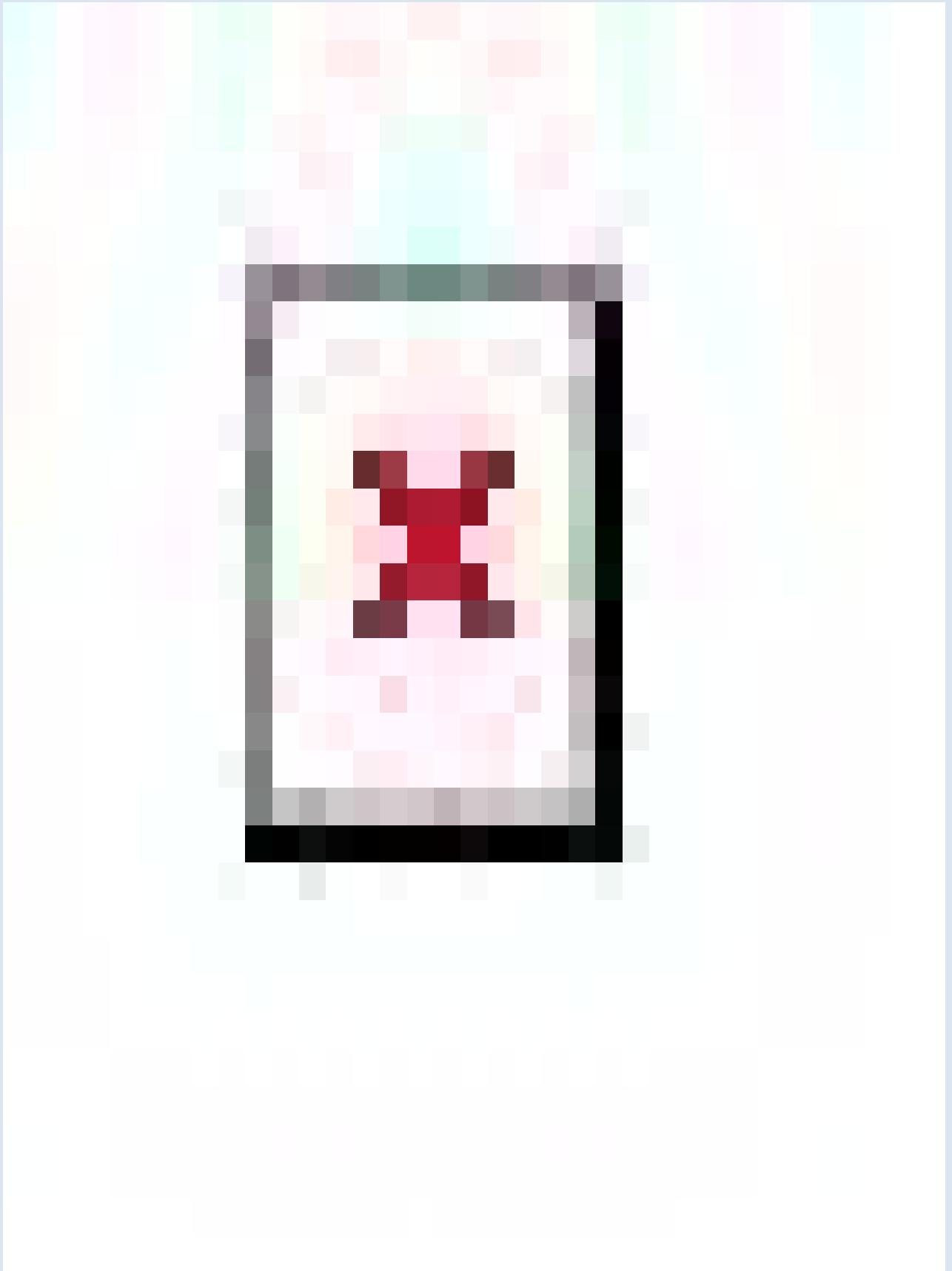
SCOPUS, UGC and others

S.NO	Title of the paper	Name of the author/authors	Name of the journal	Indexing
1	Research on Motion Response of the Fishing Boat in Different Heading of Waves	Sivabalan P, Sivakumar N	International Journal of Engineering Research and Applications	UGC
2	Effect of moonpool on drillship motions	Sivabalan P, MSP Raju	Journal of Offshore Structures and Technology	Other
3	An introduction to Data analytical methods used for autonomous ships	Kolli Sujith Kumar	Maritime Journal	Other
4	Drillship Response on Different Loading Condition ICCCC-2020	Sivabalan P et al	Test Management	Scopus
5	Effect of Bulbous Bow on Resistance of a Tuna Longliner	MSP Raju, Sivabalan Ponnappan, Toney Thamby, B.Saravanan	International Journal of Advanced Research in Engineering and Technology (IJARET)	Scopus
6	Happiness	Cdr. Prashant Kumar	International Journal of Psychological rehabilitation	Scopus
7	State Space Modelling Of Anti-Roll Tank For Ship Roll Stabilization	B.M Shameem	International journal of scientific & technology research (IJSTR)	Scopus
8	Offshore Detached Breakwaters Alignment Changes Its Impact On Scour Deposition Pattern Using Numerical Model	P. Mohamed Rajab, K. Thiruvenkataswamy, Indra Kumar Dev, Mohamed Hatha Abdulla and S. Shafeer Ahamed	International Journal of Scientific and Technology Research,	Scopus

GLIMPSES FROM 2020



Glimpses from 2020



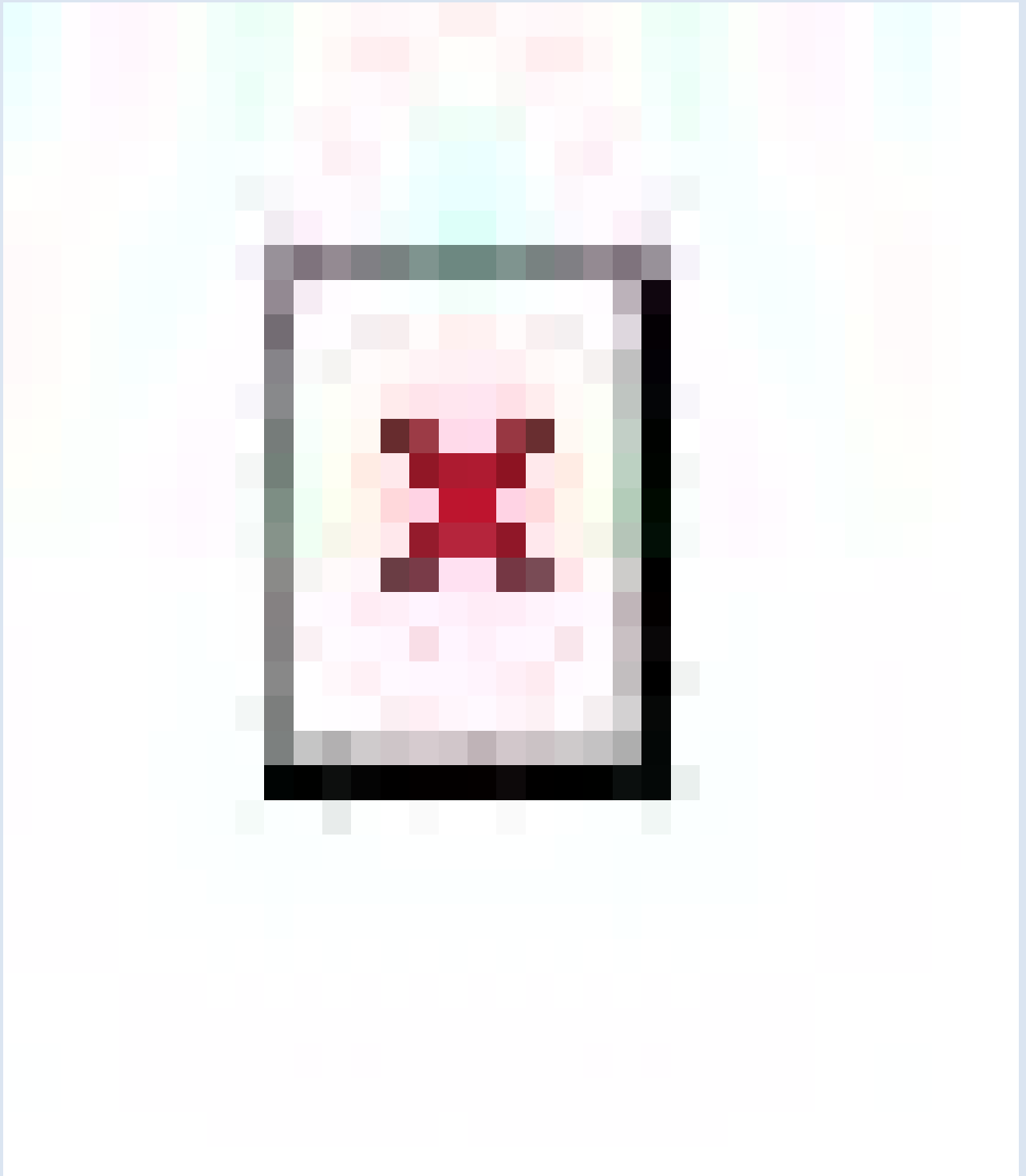
Glimpses from 2020



PLACEMENTS

Students of the Department of NA&OE have been given opportunities by various esteemed organizations in the field of Naval Architecture and Offshore Engineering, as well as in allied industries.

Some of our past recruiters include:



PLACEMENTS

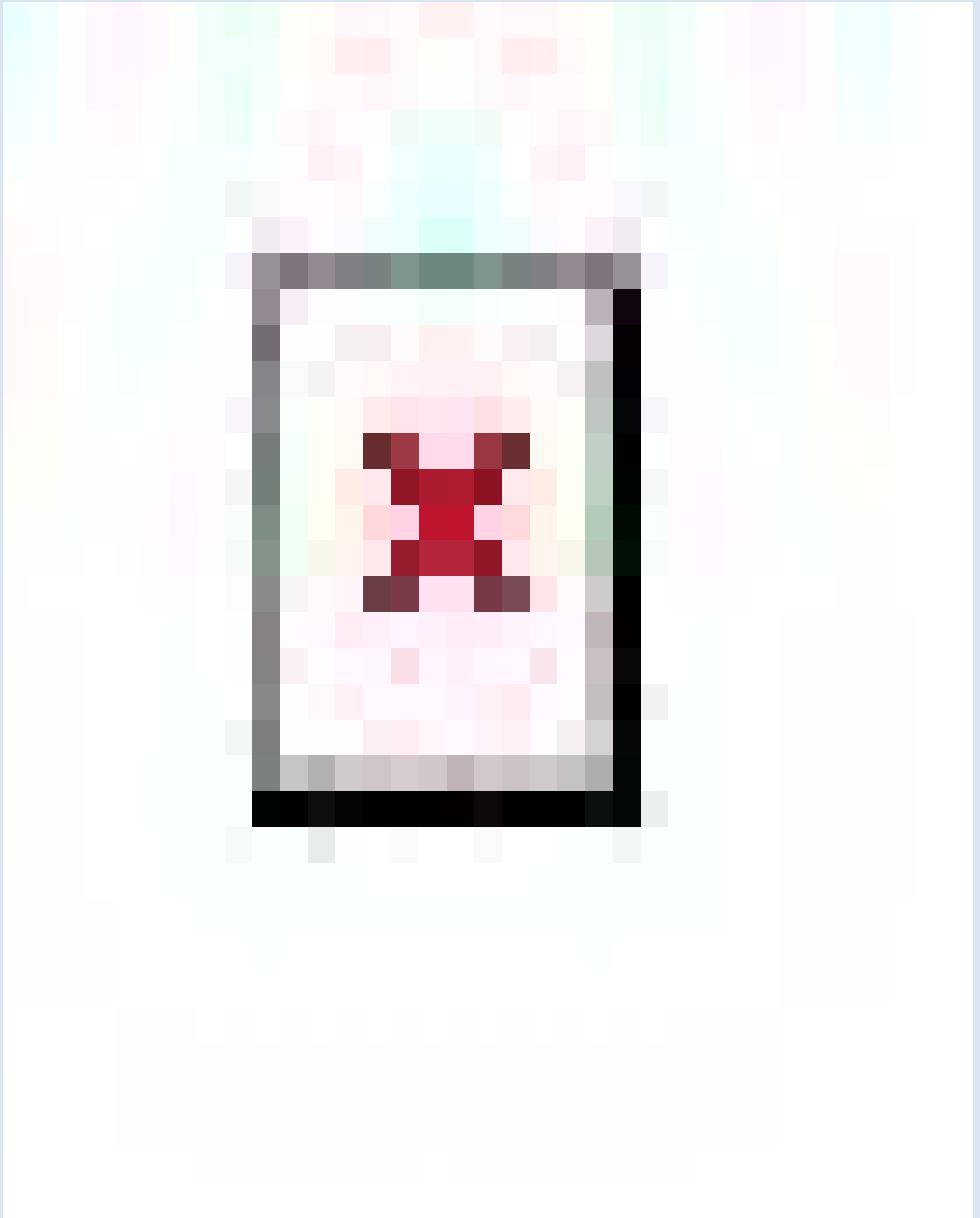
Existing Batch

S. No	Name of the Student	Name of the Employer	Number of Students
1	Nitish Balaji	Vedam Design & Technical Consultancy	1
2	Hari Prasanth	Boat Craft Goa	2
3	Athul Sunny		
4	Indumathi	Fietz Global	1
5	Ardra G	Navagathi Marine Design	1
6	Venu Aravind	Vik Sandvik	5
7	Shreyanka K		
8	Christan Britto S		
9	Yashwanth C		
10	Sivaranjani A		
Total Placement			10

Passed out batch

S. No	Name of the students	Company name	Number of Students
1	Shruti Tiwari Shivam Mehrotra Abhiroop K	Vedam Design & Technical Consultancy	03
2	Varada Saldas Elsarisah Maniah	Cybermarine Knowledge Systems	02
3	Varun Wajjala Naresh	Polyglass fibre Industries Pvt. Ltd	02
4	Vivek G Rohit	Ultramarine Puducherry	02
5	Vineeth B	Optimum Voyage	01
6	Vivekananth R	Albion Engineering India Pvt. Ltd	01
7	Austin Ajith Bindhiya A.R Mervin Israel	Varuna Marine Services	03
8	Manish	Conceptia Marine	01
9	Gowrishankar	Navidium	01
10	Himanshu Khutiyare	SCGS Consulting	01
11	Aagrah Punnakkan	Summit Marine	01
12	Jins Joys	Sarang Marine	01
13	Sachu Antony	Loftmans Marine	01
Total Placement			20

Alumni Testimonials





FACULTY DETAILS



Department faculty members

NAME	Prof. M. S. P Raju	
DESIGNATION	Head of the Department	
QUALIFICATION	M.Tech (Ocean Engineering), IIT Madras, B.E (Naval Architecture), Andhra University, Visakhapatnam	
SPECIALIZATION	Ship Hydrodynamics and Classification Society survey/rules	
EXPERIENCE	24 years	
E-MAIL	msp.raju@ametuniv.ac.in	
CONTACT NO.	9989625271	
NAME	Dr. Thiruvenkatasamy K	
DESIGNATION	Professor	
QUALIFICATION	Ph. D (Coastal Engineering), Japan M.S (Ocean Engineering), IITM	
SPECIALIZATION	Coastal Engineering, Hydrodynamics Ocean Energy	
EXPERIENCE	18 years(Teaching & Research)	
E-MAIL	thiruvenkatasamy.k@ametuniv.ac.in	
CONTACT NO.	9600132904	
NAME	Dr. B. M. Shameem	
DESIGNATION	Assistant Professor	
QUALIFICATION	Ph. D (Ocean Engineering), IIT Madras, M.Tech (Ocean Engineering), CUSAT, Cochin.	
SPECIALIZATION	Experimental and Numerical Ship Hy	
EXPERIENCE	14 years	
E-MAIL	shameem.bm@ametuniv.ac.in	
CONTACT NO.	9840290907	

Department faculty members



NAME	Dr. P. Sivabalan
DESIGNATION	Assistant Professor
QUALIFICATION	Ph. D (Ocean Engineering), IIT Madras, M.Tech (Naval Architecture & Ocean Engineering), IIT Kharagpur
SPECIALIZATION	Ship Motions and Control
EXPERIENCE	16 years
E-MAIL	sivabalan@ametuniv.ac.in
CONTACT NO.	9952244560



NAME	<u>Dr. Prasob P. A.</u>
DESIGNATION	Assistant Professor
QUALIFICATION	Phd (Composite Materials) VIT University, <u>M.Tech CAD/CAM</u> , Anna University
SPECIALIZATION	Mechanical Engineering, Structures Vibration
EXPERIENCE	6 years in Industry, 5 years in Teaching
E-MAIL	pprasob@ametuniv.ac.in
CONTACT NO.	7708166025



NAME	Dr. Lilly
DESIGNATION	Assistant Professor
QUALIFICATION	Ph. D (Water Resources), Anna University, M.E (Irrigations & water management)
SPECIALIZATION	Geo technical, Hydrodynamics Visual mold flow
EXPERIENCE	14 years
E-MAIL	lilly1979@ametuniv.ac.in
CONTACT NO.	9341115534



Department faculty members



NAME Mr. Prem Anandh
DESIGNATION Assistant Professor
QUALIFICATION M.S. (Naval Architecture & Offshore Engineering), AMET University Chennai, B.E. (Naval Architecture & Offshore Engineering), AMET University Chennai
SPECIALIZATION Naval Architecture, Hydrodynamics, Ship Design Software's
EXPERIENCE 8 years
E-MAIL premanandh@ametuniv.ac.in
CONTACT NO. 8072973051



NAME Mr. Kolli Sujit Kumar
DESIGNATION Assistant Professor
QUALIFICATION M.Tech, Naval Architecture & Ocean Engineering, Indian Maritime University, Visakhapatnam, B.E Civil Eng Andhra University, Visakhapatnam
SPECIALIZATION Ship Stability and Construction
EXPERIENCE 6.5 years
E-MAIL kolli.sujit@ametuniv.ac.in
CONTACT NO. 9959116665



NAME Mr. Yarabala Gopi Krishna
DESIGNATION Assistant Professor
QUALIFICATION B.Tech (Naval Architecture & Ocean Engineering)
SPECIALIZATION Resistance and Propulsion, Wave Hydrodynamics, Design of Offshore Structures, DNV-SESAM and NAPA Software
EXPERIENCE 9 years
E-MAIL yarabalagopikrishna.s@ametuniv.ac.in
CONTACT NO. 9840777636



Department faculty members

NAME	Mr. Jaya Surya R.	
DESIGNATION	Assistant Professor	
QUALIFICATION	B.E (Mechanical Engineering), M.Tech (Naval Architecture & Offshore Engineering)	
EXPERIENCE	Hull Corrosion Engineering	
E-MAIL	1 year	
CONTACT NO.	jayasurya.r@ametuniv.ac.in 8825631902	
NAME	Mr. <u>Gugan</u>	
DESIGNATION	Lab Instructor	
QUALIFICATION	B.E (Naval Architecture & Offshore Engineering), AMET University, Chennai.	
SPECIALIZATION	Ship repair/building, AUTOCAD	
EXPERIENCE	8 years	
E-MAIL	gughan2391@gmail.com	
CONTACT NO.	9884128826	

Prof. MSP Raju

Head of the Department
Department of Naval Architecture &
Offshore Engineering

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