" TSSM'S "

PADAMBHOOSHAN VASANTDADA PATIL INSTITUTE OF TECHONOLOGY

S.N. 33/22 , Near. Chandni Chowk ,Opp. Athashree Project, Pirangut Road, Bavdhan , Pune 411 021.

Approved By AICTE and Affiliated To SPPU Pune DTE Code : 6122

Accredited By NAAC With "A" Grade

Tel :+918530134040 | +9188305658165 **Website** : www.pvpittssm.edu.in

3.3.2

3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

3.3.2.1. **Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years**

HEI Input :

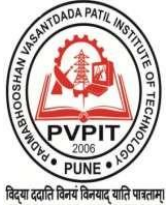| 2022-23	2021-22	2020-21	2019-20	2018-19
4	4	9	1	0

DVV Clarification :

• Cover page, content page and first page of the selected publication.

Dr.R.S.Pawar
Principal
PRINCIPAL
Padmabhooshan Vasantdada Patil
Institute of Technology
Bavdhan, Pune-411021

- Web-link of books

HEI Response:

As per DVV suggestion supporting Documents are attached

Supporting Documents:

Dr.R.S.Pawar
Principal
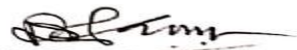PRINCIPAL
Padmabhooshan Vasantdada Patil
Institute of Technology
Bavdhan, Pune-411021

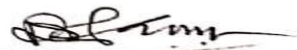| Annexures			
Annexures No	Description	Link	Digital page No
Annexures-1	Link landing to the research paper	**Annexures I**	03

Annexure- I: Cover page, content page and first page of the selected publication with weblink of Books.

Sr. No	Name of the teacher	Title of the book/ chapters published	Title of thepaper	Title of the proceedingsof the conference	Name of the conference	National/ International	Calendar Year of publi catio n	ISBN number of the proceedin g	Link	Digital Page No
1	Dr. R S Pawar	Internationa l conference on Mechanical Engineering, NIT Warangal	Studies of surface characterization on of finished hobbed gear	International conference on Mechanical Engineering, NIT Warangal	ICMech-REC2023	International	2023	-	https://link.springer.com/book/9789819709175	1
2	Dr. R S Pawar	-	Design and testing of composite materials T joint for Naval ship using FEA	IECIPBES-2023	IECIPBES-2023	National / International	2023	-	https://ijsrst.com/IJSRST101321	2

| 3 | Dr. R S Pawar | - | Adsorption Study of Carbon Monoxide on | - | First International Conference on Advances in Computer Vision | International | 2023 | - | https://www.atlantis-press.com/proceedings/acvait-22/125989821 | 3 |

			Modified Metal and Non-metallic Surface UsingDensity Functional Theory: A Short ReviewTowards Functional Materials		and Artificial Intelligence Technologies (ACVAIT 2022)					
4	Kamble Raju D	-	Equalizer based PlasticOptical FiberLinks	IEEE International Conference on Signal Processing and Communications	SPCOM	International	2023	978-1-6654-8251-6	https://doi.org/10.1109/S PCOM55316.2022.9840 8 29	4
5	Kamble Raju D	-	Impact of Component Sensitivity on Biquad	International Conference for Adancement in Technology,	ICAT	International	2022	978-1-6654-7518-1	https://doi.org/10.1109/I CONAT57137.2023.100 80782	5
6	Prof.Pr achi Thakar	Search Algorithm-Essence Of Optimization.	An Adaptive Task Scheduling InFog Computing	Scopus Journal	Scopus Journal	National	2022	Nill	https://www.intechopen.c om/chapters/84920	6
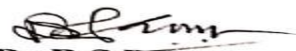
7	Dr. R S Pawar	-	Design and Testing of Composite Material T-Joint for Naval Ship Using FEA and Experimental Technique	International E-Conference on "Interdisciplinary Perspective of Basic and Engineering Science" In Association with International Journal of Scientific	International E- Conference on Interdisciplinary Perspective of Basic and Engineering Science" In Association with Journal of Scientific Research	International	2022	ISSN: 2278-0181	https://ijsrst.com/IJSRST101321	8

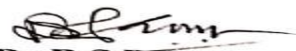|									
			Research in Science and Technology	in Science and Technology					
8	Dr.R.R.Sorate	Engineering Geology Multiple choice questions (MCQs), Engineering Geology	-	-	-	-	2021	-	-	9
9	Dr.R.R.Sorate	Geotechnical Engineering	-	-	-	-	2021	9789390596591	-	10
10	Dr.R.R.Sorate	Foundation Engineering	-	-	-	-	2021	9789354516931	-	11
11	Dr.R.R.Sorate	Fluid Mechanics	-	-	-	-	2021	978-9351646150	-	12
12	Prof.V.D. Jaysingpure	-	Indian Water works Associtaion - Parameters influencing anaerobic digestion,its optimization	Indian Water works Associtaion - Parameters influencing anaerobic digestion,its optimization	Indian Water works Associtaion 54th Annual Convension	National	2021	-	-	-
13	Prof.V.D. Jaysingpure	-	Advances in Construction Technology and Management	Advances in Construction Technology and Management	TEQQIP-III Sponsored International Conference	International	2021	-	-	-

14	Prof.V.D. Jaysingpure	-	Biogas generation through anaerobic digestion of organic waste : review	Biogas generation through anaerobic digestion of organic waste : review	ACTM-2021- International conference COEP,Pune 2021	International	2021	-	https://www.researchgate.net/publication/363917072_Biogas_Generation_Through_Anaerobic_Digestion_of_Organic_Waste_A_Review	13
15	Prof.V.D. Jaysingpure	Hydrology and Water Resource Engineering	-	-	-	-	2021	-	-	14
16	Dr. C. M. Sedani		Quality Improvement approaches for Engineering Education: A survey	IEI 2020	Institute of Engineers Mechanical Chapter	National	2020	320025890	-	-
17	Dr. C. M. Sedani	Auditing ISO management system	-	-	-	-	2019	31102021	-	-
18	Dr.S.M. Kulkarni	Power devices andcircuits	-	-	-	-	2022		-	16

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

Department of Mechanical Engineering

ICMech-REC-2023 Certificate

This is to certify that *Govind Shantaram Dhage, Dr R.S.Pawar and Mr Jotiba Patil* has presented a paper entitled as "*Studies of Surface Characteristics of Finish Hobbed Gear- A Review*" in 1st International Conference on Mechanical Engineering: Researches and Evolutionary Challenges -2023 conducted by National Institute of Technology Warangal, Telangana from 23 -25 June, 2023.

Springer

Prof. K Madhu Murthy
Convener

Prof. Suresh Babu V
Chairman

Prof. Bidyadhar Subudhi
Director

1

Design and Testing of Composite Material T-Joint for Naval Ship Using FEA

Sachin S. Yadav[1], R.S. Pawar[2], Sushil V. Deshpande[3]

[1]Genba Sopanrao Moze College of Engineering, Balewadi, Pune & 411045, Maharashtra, India
[2]Padmabhooshan Vasantdada Patil Institute of Technology, Bavdhan, Pune & 411021, Maharashtra, India
[3]Dr.DY Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune & 411018, Maharashtra, India

ABSTRACT

The preeminent defect that occurs in composite t-joint is the undefined failure at the joint which is the only complex part of the composite structure. Many researchers have done most of the studies to analyse how the t-joint fails and the failure conditions. Many attempts have been made to overcome this problem by CFD or by Finite Element Analysis approach to composite structure, but there is ample scope for modelling composite t-joint and the use of composite materials. The process to manufacture composite structures is a bit complex and requires skills. Composite t-joint is mainly crafted by casting or hand lay-up technique. The sandwich core is which supporting part is built by coating the PVC with glass fiber and epoxy resin. The resin binds with the glass fiber which eventually increases the stiffness of the PVC foam bond. Lamination of the core parts is a critical part in manufacturing of sandwich core. The adhesion of the resin should be strong enough to hold the structure together. The t-joint mainly fails due to the delamination of the core parts. Different angles are provided to the model to test which holds good to expectations. There is a need for lots of modification in modelling for the enhancement of the future of composite structures. The studies on different parameters and defects in composite T-Joint structures are widely used in superstructures, decks, bulkheads, advanced mast sensor systems, propellers, aircraft carriers, propulsion shafts, pipe, pumps, valves, machinery, etc. Four different categories have been distinguished to study defects in composite T-Joint and the effect of various parameters

Keywords: Composite Material, Design, Material selection and FEA of Composite T-Joint

I. INTRODUCTION

The purpose of the project is to determine the methodology to predict the damage criticality of a composite marine structure T-joint. This knowledge will enable the prediction of the life and reliability of the structure. To acquire this, it is very useful to do the preliminary design using a FE package. The FE tool has been proved useful in predicting the behavior of composite structures. It allows for cost savings by reducing the amount of required experimental works. The FE prediction methodology is very commonly used on composite structures for not only marine structures but also for aerospace applications. Since last decade, with the advent of powerful finite element analysis (FEA) packages, these have been proven good tool to perform accurate

Adsorption Study of Carbon Monoxide on Modified Metal and Non-metallic Surface Using Density Functional Theory: A Short Review Towards Functional Materials

Amogh A. Sambare[1](✉), Kunal P. Datta[1], Mahendra D. Shirsat[2], Bharti W. Gawali[1,3], and Ramkisan S. Pawar[4]

[1] Deen Dayal Upadhyay KAUSHAL Kendra, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India
amoghsambare@gmail.com

[2] RUSA Centre for Advance Sensor Technology, Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India

[3] Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India

[4] Shreeyash College of Engineering and Technology, Aurangabad, Maharashtra, India

Abstract. Carbon Monoxide is an established pollutant with high indexed hazard potential for human being and environment and its omnipresence in indoor and outdoor air, has garnered specific research interest for real time detection of the same at trace level of existence. Extensive spectrum of research for development of Carbon Monoxide sensors are therefore being carried out and pursuit for efficient and smart materials constitute the core of such research efforts. The most common technique of sensing these gas molecules is to detect them with various adsorption materials, such as metal, semi-conductor metal oxides like MnO_2, MoS_2, and carbon-based materials, among others. Doping transition metal atoms in adsorbent materials has also been shown to be beneficial in the gas adsorption process. In order to have a predictive command over development of smart functional materials for detection of Carbon Monoxide, the Density Function Theory calculation is still a time-tested tool for analyzing the adsorption properties of pollutant molecules on various materials at the microscale levels to comprehend adsorptive reactions, adsorbents reactivity, and structure activity relationships, that can provide theoretical guidance for scientific experiments. This review presents the adsorption models and surface properties of CO gas molecules on metal and nonmetallic surfaces by Density Function Theory calculations in recent years. This review opens up the theoretical background for DFT based molecular adsorption studies and some of the recent reports of research pertinence.

Keywords: DFT · Carbon Monoxide · Functional Materials

Biquad filter based equalization for PMMA SI-POF links

Publisher: IEEE | Cite This | 📄 PDF

Raju D. Kamble ; Kumar Appaiah   **All Authors**

Ⓡ   ⟨   ©   📁   🔔

Abstract:

This paper proposes the use of an analog biquad filter as an equalizer for PMMA based step index plastic optical fiber (POF) links. We show both theoretically and experimentally that this approach achieves 100 Mbit/s over for 100 m of fiber. The material properties of the POF channel causes significant intersymbol interference SNR degradation for long link lengths. The use of DSP based equalization, while effective, imposes significant additional complexity. We propose the design and implementation of an analog biquad filter that is tuned using fiber modeling to effectively compensate the dispersive limitations. We show experimentally that the designed filter is able to successfully overcome the dispersion limits over a large range of fiber lengths and data rates.

Impact of Component Sensitivity on Biquad Equalizer based Plastic Optical Fiber Links

Cite This

PDF

Raju Dinkar Kamble ; Kumar Appaiah   All Authors

Abstract

Document Sections

I. Introduction

II. System Model

III. Biquad Filters As Equalizers

IV. Simulation Results

V. Conclusion

Authors

Figures

References

Keywords

Abstract:

Plastic optical fibers (POFs) offer a robust solution for short reach high speed optical fiber links. However, data rates in POFs are significantly limited due to dispersion, and digital equalization may impose higher complexity of implementation. Analog equalizers possess much lower complexity, although they are sensitive to component variations that cause them to deviate from their designed operational parameters. In this paper, we conduct a sensitivity analysis of biquad equalizer based POF links, and quantity the impact of component variations on the bit error rate (BER) of such links. Via detailed simulations, we find that the degradation in BER due to component variations is limited to less than 2 dB.

We are IntechOpen,
the world's leading publisher of
Open Access books
Built by scientists, for scientists

6,800
Open access books available

182,000
International authors and editors

195M
Downloads

Our authors are among the

154
Countries delivered to

TOP 1%
most cited scientists

12.2%
Contributors from top 500 universities

WEB OF SCIENCE™
Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com

Chapter

An Adaptive Task Scheduling in Fog Computing

Dinesh G. Harkut, Prachi Thakar and Lovely Mutneja

Abstract

Internet applications generate massive amount of data. For processing the data, it is transmitted to cloud. Time-sensitive applications require faster access. However, the limitation with the cloud is the connectivity with the end devices. Fog was developed by Cisco to overcome this limitation. Fog has better connectivity with the end devices, with some limitations. Fog works as intermediate layer between the end devices and the cloud. When providing the quality of service to end users, scheduling plays an important role. Scheduling a task based on the end users requirement is a tedious thing. In this paper, we proposed a cloud-fog task scheduling model, which provides quality of service to end devices with proper security.

Keywords: ANN, fuzzy logic, fog computing, IoT, QoS, K-means clustering

1. Introduction

Cloud computing is very popular in the technology world as it provides numerous useful services to end users. Cloud computing is based heavily on virtualization technology. Cloud computing provides many features such as huge processing power, great storage provision, and pay-per-use model. Cloud computing has many desirable features such as flexibility, scalability, performance-cost efficiency, and ease of test, adopting and deploying new technologies [1].

In spite of all these services, there are some drawbacks of cloud computing that cannot be ignored. For examples, the cloud and users are physically far away from each other that induce intolerably delay, again there can be a shortage of resources for executing the tasks, many resources could remain idle even though tasks need to be processed, etc. [1].

Internet of Things (IoT) is an emerging technology. It requires latency-aware computation for real-time application processing. In IoT environments, devices connected to it generate a huge amount of data, which are generally referred to as big data. IoT devices generated data are generally processed in a cloud infrastructure because of the on-demand services and scalability features of the cloud computing. However, processing IoT application requests on the cloud is not an efficient solution for some IoT applications, especially time-sensitive ones. To address this issue, Fog computing, which is a middle layer between cloud and IoT devices, was proposed. In Fog computing environment, IoT devices are connected to Fog devices. These Fog devices are located in close proximity as compared to cloud to users and are responsible for intermediate computation and storage [2].

There are many challenges when we are working in fog computing environment. One of the challenges is task scheduling. Tasks are broadly classified into two

1

Design and Testing of Composite Material T-Joint for Naval Ship Using FEA

Sachin S. Yadav[1], R.S. Pawar[2], Sushil V. Deshpande[3]

[1]Genba Sopanrao Moze College of Engineering, Balewadi, Pune & 411045, Maharashtra, India
[2]Padmabhooshan Vasantdada Patil Institute of Technology, Bavdhan, Pune & 411021, Maharashtra, India
[3]Dr.DY Patil Institute of Technology, Sant Tukaram Nagar, Pimpri, Pune & 411018, Maharashtra, India

ABSTRACT

The preeminent defect that occurs in composite t-joint is the undefined failure at the joint which is the only complex part of the composite structure. Many researchers have done most of the studies to analyse how the t-joint fails and the failure conditions. Many attempts have been made to overcome this problem by CFD or by Finite Element Analysis approach to composite structure, but there is ample scope for modelling composite t-joint and the use of composite materials. The process to manufacture composite structures is a bit complex and requires skills. Composite t-joint is mainly crafted by casting or hand lay-up technique. The sandwich core is which supporting part is built by coating the PVC with glass fiber and epoxy resin. The resin binds with the glass fiber which eventually increases the stiffness of the PVC foam bond. Lamination of the core parts is a critical part in manufacturing of sandwich core. The adhesion of the resin should be strong enough to hold the structure together. The t-joint mainly fails due to the delamination of the core parts. Different angles are provided to the model to test which holds good to expectations. There is a need for lots of modification in modelling for the enhancement of the future of composite structures. The studies on different parameters and defects in composite T-Joint structures are widely used in superstructures, decks, bulkheads, advanced mast sensor systems, propellers, aircraft carriers, propulsion shafts, pipe, pumps, valves, machinery, etc. Four different categories have been distinguished to study defects in composite T-Joint and the effect of various parameters

Keywords: Composite Material, Design, Material selection and FEA of Composite T-Joint

I. INTRODUCTION

The purpose of the project is to determine the methodology to predict the damage criticality of a composite marine structure T-joint. This knowledge will enable the prediction of the life and reliability of the structure. To acquire this, it is very useful to do the preliminary design using a FE package. The FE tool has been proved useful in predicting the behavior of composite structures. It allows for cost savings by reducing the amount of required experimental works. The FE prediction methodology is very commonly used on composite structures for not only marine structures but also for aerospace applications. Since last decade, with the advent of powerful finite element analysis (FEA) packages, these have been proven good tool to perform accurate

MULTIPLE CHOICE QUESTIONS
(MCQ's)

For Online Examination (Phase I & II - 50 Marks)

ENGINEERING GEOLOGY

Second Year Degree Course In
CIVIL ENGINEERING (Sem - II)

Includes
- Sample Ques. Papers for Online Exams (50 Marks)

RAVIRAJ R. SORATE
Dr. PRAKASH RAO
Dr. NARENDRA S. JAIN

Third Year Degree Course In
Civil Engineering (SEM - VI)

NMU

GEOTECHNICAL ENGINEERING – I

VR PHADAKE
RR SORATE
Mrs. SS JAIN

According to New Revised Credit System Syllabus

SPPU

Final Year (B.E.) Degree Course In
CIVIL ENGINEERING (Semester - VII)

FOUNDATION ENGINEERING

Dr. RAVIRAJ R. SORATE   Dr. SHRIKANT S. JAHAGIRDAR
Dr. SATISH B. MORE

Includes
- Model Question Papers For Practice
  (In Sem-30 Marks & End Sem- 70 Marks)

www.pragationline.com
niralipune@pragationline.com
www.facebook.com/niralibooks
@nirali.prakashan

NIRALI PRAKASHAN
ADVANCEMENT OF KNOWLEDGE

11

B.Tech. Degree Course In
CIVIL / MECHANICAL Engg. (SEM - III)   **UPTU**

FLUID MECHANICS

P. V. SHROTRI
R. R. SORATE

Chapter

Biogas Generation Through Anaerobic Digestion of Organic Waste: A Review

September 2022

DOI:10.1007/978-981-19-2145-2_49

In book: Recent Trends in Construction Technology and Management (pp.641-649)

Authors:

Vaishali Dinesh Jaysingpure
College of Engineering, Pune

Moni U. Khobragade

Download citation   Copy link

Hydrology & Water Resource Engineering

AS PER
SPPU
CREDIT SYSTEM
SYLLABUS

TE (CIVIL) SEM I

IN SEM
& END SEM SOLVED
QUESTIONS

SOLVED
SPPU QUESTION
PAPERS
AUG 2015 to
MAY 2017

CHAPTERWISE
SOLVED
SPPU QUESTIONS
MAY 2006 to
MAY 2017

TECHNICAL
PUBLICATIONS
An Up-Thrust for Knowledge

V. D. Jaysingpure
Sachin N. Patil

TABLE OF CONTENTS

Power Devices & Circuits

SPPU CBCS SCHEME - COURSE 2019 - T.E. (E&TC) - SEM - VI

Sub. Code : 304194
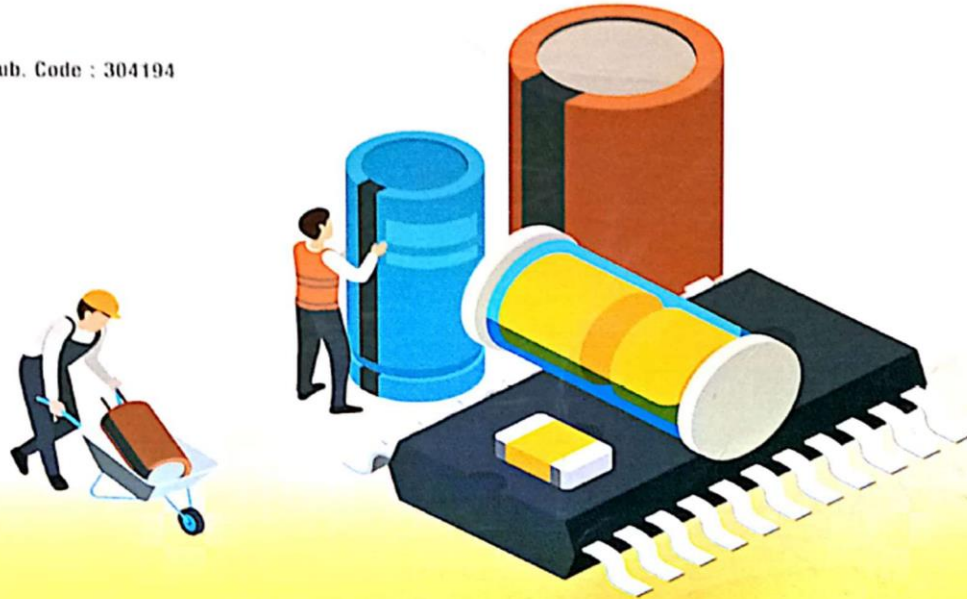
- Simplified & Conceptual Approach
- Multiple Choice Questions with Answers & Explanations
- Chapterwise Solved SPPU Questions Apr. 1998 to Dec. 2019
- Solved Model Question Papers (In Sem) & (End Sem) As Per 2019 Pattern
- Solved SPPU Question Papers Apr. 2015 to Dec. 2019

T **TECHNICAL** ® **PUBLICATIONS**
SINCE 1993 *An Up-Thrust for Knowledge*

Dr. J. S. Chitode
Dr. S. M. Kulkarni

9 789355 850645

POWER DEVICES
& CIRCUITS

Dr. J. S. Chitode
M.E. (Electronics), Ph.D.
Formerly Professor & Head,
Department of Electronics Engineering
Bharati Vidyapeeth Deemed University
College of Engineering, Pune

Dr. S. M. Kulkarni
Ph. D. (ECE)
Associate Professor (E&Tc),
TSSM'S Padmabhooshan Vasant Dada Patil Institute of Technology,
Pune

(i)

TABLE OF CONTENTS

Unit 1

18

TEXT BOOKS FOR T.E. (E&TC) SEM VI

Compulsory Subjects

1. Cellular Networks *(V. S. Bagad)*
2. Project Management *(Rana S. Mahajan, Dr. Dipak P. Patil, Dr. Manoj V. Bhalerao)*
3. Power Devices & Circuits *(Dr. J. S. Chitode, Dr. S. M. Kulkarni)*

Elective Subjects

4. Digital Image Processing
5. Sensors in Automation
6. Advanced JAVA Programming *(A. A. Puntambekar, Santosh B. Dhekale)*
7. Embedded Processors
8. Network Security *(V. S. Bagad, I. A. Dhotre)*

Scan this QR code & get
free sample eBooks

Download APP in Play Store

ONLINE SELLER

Scan this
QR Code
& visit us at
www.technicalpublications.org
amazon *Flipkart*

ISBN 978-93-5585-064-5

9 789355 850645

For Orders

PUNE REGION CONTACT
Devendra : 9763209871

NASHIK REGION CONTACT
Shashikant : 8888861609

Email : sales@technicalpublications.org

19