



SRISHTI



BIMONTHLY NEWSLETTER FROM DEPARTMENT OF CIVIL ENGINEERING

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FROM THE DESK OF THE HEAD



Sustenance of creativity is a key element of a successful education, and a newsletter is the perfect media to showcase it. The department attempts to impart knowledge and lay ultimate focus on training the students to the highest standards. We believe that our vibrant students have been well accepted in their job profiles and have consistently stood up to the expectations of the dynamic corporate world.

I am quite pleased to learn about the forthcoming issue of the departmental newsletter "SRISHTI" which gives glimpses of the cumulative efforts of Department of Civil Engineering.

I do appreciate the editorial team for brilliantly bringing up the myriad thoughts and dreams of our students and faculties into a meaningful and delightful visual fest in this edition.

VISION OF THE DEPARTMENT

- ▶ To develop into a center of excellence for quality education moulding competent civil engineering professionals dedicated to the progress and development of humanity

MISSION OF THE DEPARTMENT

- ▶ To provide quality education and training to create competent civil engineer
- ▶ To interact with industries to provide a knowledge base for existing and emerging technologies in the field of civil engineering
- ▶ To inculcate moral and ethical values among the students to mould them as civil engineers with social obligations.



Original Article

Prediction of fatigue crack initiation life in SA312 Type 304LN austenitic stainless steel straight pipes with notch

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ABSTRACT

In the nuclear power plants, stainless steel is widely used for fabrication of various components such as piping and pipe fittings. These piping components are subjected to cyclic loading due to start up and shut down of the nuclear power plants. The application of cyclic loading may lead to initiation of crack at stress raiser locations such as nozzle to piping connection, crown of piping bends etc. of the piping system. Crack initiation can also take place from the flaws which have gone unnoticed during manufacturing. Therefore, prediction of crack initiation life would help in decision making with respect to plant operational life. The primary objective of the present study is to compile various analytical models to predict the crack initiation life of the pipes with notch. Here notch simulates the stress raisers in the piping system. As a part of the study, Coffin-Manson equations have been benchmarked to predict the crack initiation life of pipe with notch. Analytical models proposed by Zheng et al. [1], Singh et al. [2], Yang Dong et al. [25], Masayuki et al. [33] and Liu et al. [3] were compiled to predict the crack initiation life of SA312 Type 304LN stainless steel pipe with notch under fatigue loading. Tensile and low cycle fatigue properties were evaluated for the same lot of SA312 Type 304LN stainless steel as that of pipe test. The predicted crack initiation lives by different models were compared with the experimental results of three pipes under different frequencies and loading conditions. It was observed that the predicted crack initiation life is in very good agreement with experimental results with maximum difference of $\pm 10.0\%$.

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Ms. Anjusha K V published a paper on her work on Prediction of fatigue crack initiation life in SA312 Type 304LN austenitic stainless steel straight pipes with notch.

S1 CLASS TOPPERS

KTU S1 CE A TOPPERS



KAVERI K S
(VML20CE049)
SGPA 9.76



AISHA NUHA
(VML20CE011)
SGPA 9.71



VISHNUDAS P V
(VML20CE081)
SGPA 9.47

PLACEMENT IN TCS

TCS



SAYOOJYA P
(VML18CE058)



SREERAG R
(VML18CE068)



RAHUL K RANJITH
(VML18CE053)

3 out of 19 students from the college from 2018-2022 batch recruited by Tata Consultancy Services (TCS) are from civil department.

DEPARTMENT OF CIVIL ENGINEERING

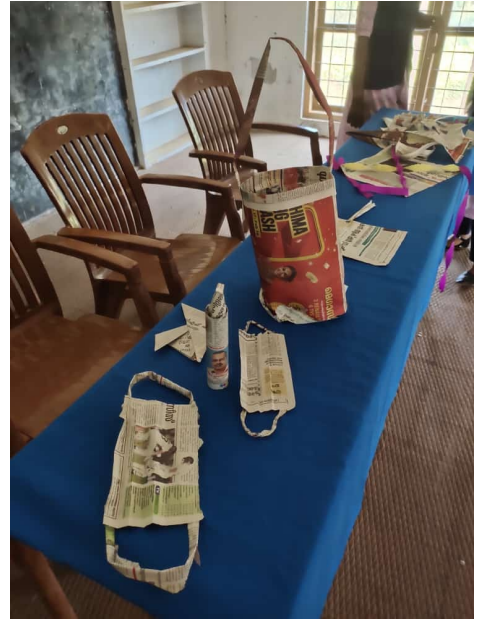
PLACEMENT IN QSPIDERS

The following students are selected by Qspiders.

Sl. No.	Candidate Name	Degree stream
1	SHYRA M C	Civil Engineering (CE)
2	sona treesa	Civil Engineering (CE)
3	Anusree T	Civil Engineering (CE)
4	APARNA RAVEENDRAN KV	Civil Engineering (CE)
5	Anjitha Satheesan TK	Electronics & Communication(E&C)
6	Albo Joseph K Sebastian	Electronics & Communication(E&C)
7	NUFAILA M	Electronics & Communication(E&C)
8	Rohan utc	Electronics & Communication(E&C)
9	Vishnu K	Electronics & Communication(E&C)
10	Vibin	Computer Science(CS)
11	Meriam Philip	Computer Science(CS)

Congratulations!!

FACULTY ACHIEVEMENTS



Mr. Logi N Bobby taking class for NSS camp held at MTDM higher secondary school thondernad.

FIRST YEAR STUDENT INDUCTION PROGRAM

First Year Student Induction Program was conducted from 22.11.2021 to 27.11.2021. The sessions were arranged by KTU as well as by college.

The KTU arranged sessions were :

- Inauguration and academic regulations by Vice Chancellor, Pro Vice Chancellor, Prof. Dr. Vinodkumar Jacob (Syndicate Member) and Dean (Academic)
- Talk by Sri. Manoj Abraham IPS, Additional Director General of Police, Kerala State.
- Talk by Smt. R. Sreelekha IPS (Retd. Director General, Fire and Rescue Services, Kerala State) on Safety of Youth.
- Talk by Dr. Arun B. Nair, Psychiatrist, Govt. Medical College, Trivandrum on Psychosocial Competence.
- Talk by Dr. S. Somanath, Director, VSSC on Possibilities of Engineering Domains.
- Talk by Smt. K. K. Shailaja Teacher.

Sessions arranged by College

- Talk on Universal Human Values by Dr. Manoj V. Thomas, Professor CSE.
- Talk on NSS Activities by Mr. Vasudevan Nair.

"Men build bridges and throw railroads across deserts, and yet they contend successfully that the job of sewing on a button is beyond them. Accordingly, they don't have to sew buttons" --Heywood Broun