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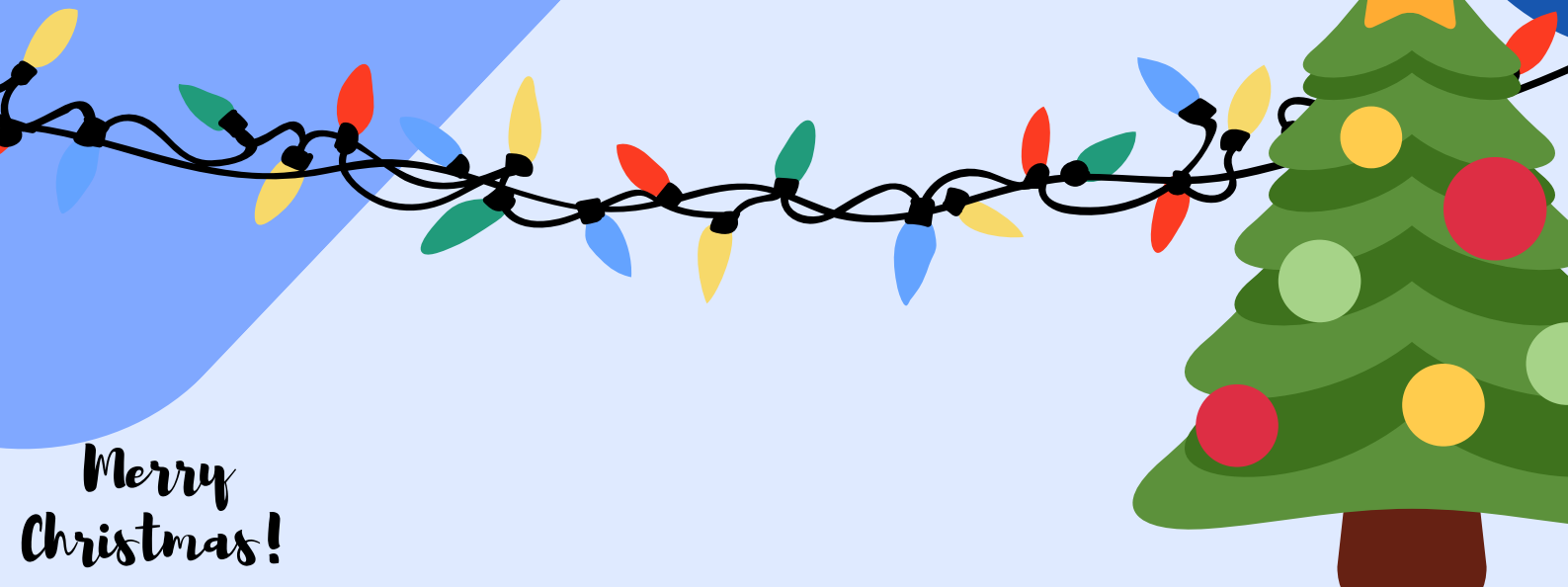
K. N. Toosi University
of Technology



Composite and Smart Materials and Structures



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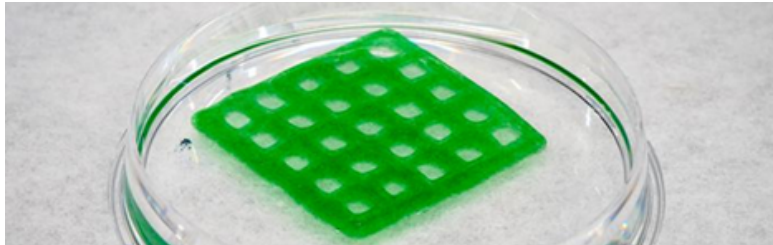
Merry
Christmas!

Merry
Christmas

| K.N.Toosi University of Technology & I.I.T Delhi |

Smart materials NEWS

New material that cleans decontaminated water



New material that cleans decontaminated water
Scientists from the University of California San Diego have developed a 3D-printed material that could offer a sustainable and eco-friendly way to clean pollutants from water. The new 'engineered living material', made from a natural polymer combined with genetically engineered bacteria, was shown to decontaminate the dye-based pollutant indigo carmine, a dye widely used in textiles to color denim.
<https://www.materialstoday.com/biomaterials/news/new-material-that-cleans-decontaminated-water/>

Composite materials NEWS



Al Seer Marine, Abu Dhabi Maritime unveil world's largest 3D-printed boat

Maritime manufacturers Al Seer Marine (Abu Dhabi, United Arab Emirates) and Abu Dhabi Maritime (UAE) recently secured The Guinness World Records title for the largest 3D-printed boat. The boat consists of two hulls, which were each printed in 5.5 days. It uses 67% recycled materials — 30% of it fiberglass and UV stabilizer — emphasizing both UAE company's core principles of sustainability and inclusivity.

Link: <https://www.compositesworld.com/news/al-seer-marine-abu-dhabi-maritime-unveil-worlds-largest-3d-printed-boat>



Editorial Message:

Once again, giving thanks to God that with the cooperation and support of my colleagues, students and industry members, I was able to publish 6 Editions of the Electronic Newsletter of Composite and Smart Materials and Structures, which is jointly published between K. N. Toosi University of Technology-Tehran (K.N.T.U.T.) and Indian Institute of Technology – Delhi (I.I.T.-D) when I was in I.I.T.D. Now, after return to K.N.T.U.T. , and a gap of 5 months, in the occasion of New Year 2024, I could able to manage to publish it and continue with the cooperation of my Iranian students. It is hoped that this Edition will be of interest to our dear readers and I waiting for your valuable comments and suggestions and also send us useful news for better Editions which are useful to our readers. On the eve of the arrival of the new year 2024, I wish all my loved friends and students good health, prosperity, success and happiness. Cordially yours
Prof. S.M.R. Khalili
E-mail address: : enews.compsmart@gmail.cpm
Faculty of Mechanical Engineering
KNTUT

Contents

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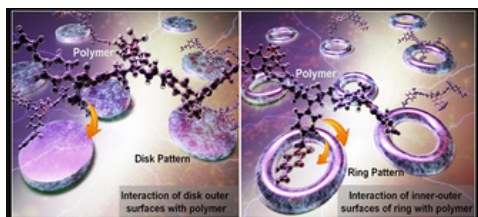
Composite NEWS

A novel approach for balancing properties in composite materials

A team of researchers has significant implications, as it addresses the challenge of simultaneously enhancing two properties—multifunctionality and structural integrity—in composite materials, which consist of at least two materials with different properties. By incorporating patterned nanostructures, he aims to overcome the trade-off typically observed between these properties, eliminating the need to sacrifice one to improve the other in current manufacturing methods. The work is published in the journal Advanced Materials.

He has explained by an example as increasing electrical conductivity often reduces strength or vice versa; increasing strength usually decreases fracture toughness. "The research team used a unique method to adjust how much a material absorbs water or repels it, known as the amphiphilicity degree, in multiple nanomaterials". Using these materials, they created and combined specific patterns called ring and disk patterns, which govern the final properties of composite materials.

It offers a practical, scalable, economically viable method for creating nanostructured materials and components with tunable properties. The use of diverse materials and precise control over architecture at multiple-length scales enhances the versatility and customization potential of the composites.



The researchers are utilizing disk and ring formations of multiple nanomaterials to tailor multifunctionality and enhance the performance of composites

To Know more click on link provided- Ozge Kaynan et al, Multifunctionality through Embedding Patterned Nanostructures in High-Performance Composites, Advanced Materials (2023). DOI: 10.1002/adma.202300948

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Research Opportunities in Composite and Smart Materials

1) PROFESSOR AJEET KUMAR

APPLIED MECHANICS, IIT DELHI

Motivated students who are looking for a PhD position are encouraged to contact me through email.

Contact - ajeetk@am.iitd.ac.in

Link- <http://web.iitd.ac.in/~ajeetk>

2) Assistant Professor Sabyasachi Chatterjee

APPLIED MECHANICS, IIT DELHI

Interested candidates may email me with their area of interest and updated CV. Please look at the Research section to see a few of the active projects in my group.

·1 Junior Research Fellow position is available (funded by DST-SERB, in the area of computational crack mechanics).

·1 Ph.D. position is available.

·1 postdoctoral position is available.

Website- <https://web.iitd.ac.in/~sabyasachi/>

Email- sabyasachi@am.iitd.ac.in

Awards and Achievements



Prof Singh accepting Life time achievement award at fmfp conference in jodhpur



Moments from student-teacher of Applied Mechanics Department- IITD outing.



Recent Publications

Self-healing polymers containing nanomaterials for biomedical engineering applications

Authors: Mohammad Yasin Mollajavadi, Fatemeh Forghan Tarigheh, Reza Eslami-Farsani

Publication date: 31/7/2023

Journal: Polymer Composites

Volume: 44, Issue 10, Pages: 6869-6889, **Publisher:** Society of Plastic Engineers (SPE)

3D printed Sr-HA/PCL scaffolds: Fabrication via liquid solvent technique

Authors: Ali Ashtariyan, Hamid Khorsand, Fatemeh Bavarsih

Publication date: 5/4/2023

Journal: Polymers for Advanced Technologies

Volume: 34, Issue 7, Pages: 2355-2368, **Publisher:** John Wiley and Sons

A novel corrugated carbon-fiber composite tube with circular corrugations on the lateral surface for crashworthiness: Manufacturing method, experimental and numerical analysis

Authors: Amirreza Sadighi, Masoud Asgari

Publication date: 15/7/2023

Journal: Journal of Composites Material

Volume: 57, Issue 22, Pages: 3557-3572, **Publisher:** Sage

Continuum damage mechanics based computational framework for prediction of the lifetime and degradation of wind turbine coatings with defects

Authors: VB Pandey, Nimesh Kuthe, Puneet Mahajan, Leon Mishnaevsky Jr

Publication date: 2023/12/1

Journal: Engineering Failure Analysis

Volume: 154

Pages: 107641

Publisher: Pergamon

link: <https://www.sciencedirect.com/science/article/abs/pii/S1350630723005952>

Finite element modeling and analysis of flexoelectric plates using gradient electromechanical theory

Authors: Yadwinder Singh Joshan, Sushma Santapuri

Publication date: 2023/9/9

Journal: Continuum Mechanics and Thermodynamics

Pages: 1-31

Publisher: Springer Berlin Heidelberg

link: <https://link.springer.com/article/10.1007/s00161-023-01252-6>

Efficacy of singly curved thin piezo transducers for structural health monitoring and energy harvesting for RC structures

Authors: Aleena V Krishnanunni, Naveet Kaur, Suresh Bhalla, Nishtha Singh, Sumit Balgavhar

Publication date: 2023/12/1

Journal: Energy Reports

Volume: 9

Pages: 2506-2524

Publisher: Elsevier

link: <https://www.sciencedirect.com/science/article/pii/S2352484723000926>

Efficient zigzag theory-based spectral element model for guided waves in composite structures containing delaminations

Authors: Mayank Jain, Santosh Kapuria

Publication date: 2023/12/1

Journal: Composite Structures

Volume: 325

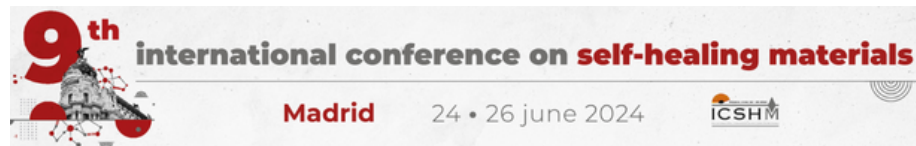
Pages: 117585

Publisher: Elsevier

link: <https://www.sciencedirect.com/science/article/abs/pii/S0263822323009315>

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Conference



Warm greetings from Madrid!

We are pleased to announce that the 9th edition of the International Conference on Self-healing Materials (ICSHM2024) is scheduled to be held in Madrid, Spain from 24 - 26 June 2024. This conference will be hosted by the Spanish National Research Council (CSIC) and organized together with Delft University of Technology (TUDelft, the Netherlands). The ICSHM2024 is expected to attract over 150 international delegates, providing a welcome environment for a mixture of academic, government and industrial researchers.

This edition will bring together a panel of highly-accomplished experts that will deliver talks encompassing all classes of self-healing materials; i.e. (1) soft matter (dynamic polymers such as vitrimers, reversible covalent and non-covalent chemistries, composites, coatings, rubbers, thermosets, hydrogels), and (2) hard matter (metal alloys, ceramics, concrete, mortar, bitumen). During the three-day conference, we will listen to recognized authorities as they discuss recent advances, difficulties, and breakthroughs in the field of self-healing.

For further information, please visit the conference website:

<https://icshm2024.org/ICSHM2024>

Please note that the deadline for abstract submission is January 31st 2024.

With the conviction that this conference will inspire you in moving self-healing materials one step further in their role to make a more sustainable society, we look forward to seeing you in Madrid.

Marianella Hernández Santana (ICSHM2024 Chair)

Santiago García Espallargas (ICSHM2024 Co-Chair)

Conference



In the name of God, "The 32nd Annual International Conference of the Iranian Association of Mechanical Engineers " will be held on May 7th to May 9th 2024, in collaboration with Arak industry university .

This conference is a good opportunity to present the scientific and research achievements of professors, students, researchers and craftsmen in the field of mechanical engineering, electrical engineering, materials engineering, chemical engineering and other related fields.

We hereby invite all university professors, students and researchers to collaborate with us and present their scientific articles, and industrial and research achievements in their respective engineering fields and to further enrich these scientific fields.

Researchers and craftsmen are also invited to forge and strengthen the bond between industry and academia by presenting ideas, problems and challenges of their respective industries in the form of short articles.

The conference will include scientific sessions and specialized roundtables, sessions for presenting research and industrial articles, keynote speeches by prominent domestic and foreign professors, exhibitions of technical and industrial products, specialized workshops and meaningful scientific competitions for students and craftsmen.

link: <https://conference.isme.ir/>

Composite Research Laboratory



Composites Research Laboratory (CRL) at Iran University of Science and Technology was established in 1996. The CRL provides an environment for educational, research, and development activities in Mechanics and Materials Engineering, especially composite materials. The linkage of this laboratory to composites industries, research laboratories, and research centers has made it a reliable and important scientific research center in the field of composite materials. There are several B.Sc., M.Sc., Ph.D. students, and Postdoc fellows in this center. There are many published papers in the international and national journals and conferences by the research fellows of this laboratory.

some completed projects

projects:

- Residual stress in composite materials
- Fatigue life of polymer composites
- The effect of destructive dynamic loads on the composite materials.
- The delamination grows in a clamped-composite beam under static load
- The fire effect on the buckling load in polymer-composite materials
- Strengthening of laminated polymer composites using nanoparticles
- Investigation of Corrosion effects on polymer composites
- Strengthening the corroded metal pipes with polymer composites
- Investigating the effect of carbon nanotubes on the creep of polymer composites

link : <http://www.iust.ac.ir/rln/page/199/About-CRL>

Company

Taban Composite Koosha



Taban Composite Company (private held co) aims to help various industries by providing knowledge enterprise solutions to deal with the destructive phenomenon of corrosion, including environmental, chemical and biological corrosion, reducing maintenance costs, producing special composite parts, etc. And it is always trying to provide engineered and optimal solutions in various sectors of the industry, including consulting, design, engineering, production, supply of raw materials and aftersales services.

As an R-EPC company with a knowledge enterprise approach, its services include research (R), design and engineering (E), procurement (P), construction and implementation (C) in the field of material and polymer engineering, production Engineered composite products include all types of tanks, connections and integrated and advanced composite parts, providing tools, composite industry raw materials and surface protection coatings including corrosion, abrasion, UV and fire-resistant coatings.



Services offered at Taban Composite Company:

- Design and production of GRP, GRVE and FRP composite tanks, including all types of horizontal, vertical and cubic storage and pressure tanks.
- Design and production of GRP, GRVE and FRP connections.
- Applying internal and external coatings on all types of surfaces including concrete, metal and thermoplastics.
- Consulting and providing advanced and engineered solutions to deal with environmental, chemical and biological corrosion.
- Innovator and producer of composite tapping saddles for instant branching of pipelines without the need to interrupt fluid flow.
- Designing and manufacturing tanks, pipes and double-walled fittings PVC+FRP, CPVC+FRP, PVDF+FRP and... for special applications
- Designing and manufacturing special and integrated FRP composite parts as a case study and based on customer needs.
- Reverse engineering of FRP, GRP, GRV composite products produced by foreign companies.

Design and engineering capabilities:

The engineering department of Taban Composite Company, by using experts in this field of science related to the production of GRP products, including mechanical designs and engineering of the raw materials of products in different chemical conditions, has the ability to design reference projects based on the latest standards of the day. designs and prepares and presents the required engineering documents, also product modeling is done in CATIA, SOLID WORKS and AUTO CAD software, and based on the customer's needs, stress analysis is done using the finite element method can also be done in ANSYS and ABAQUS software.

Contacts Info

Address: Taban Composite Koosha- 206 St. -Danesh Boulevard-after Kooshesh Square (Third Square) - Big Industrial Town – Shiraz- Iran

Phone: 071-91011556

E-Mail: info@tabancomposite.com

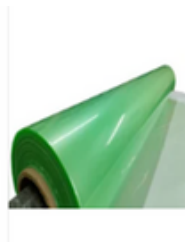
Source: <https://tabancomposite.com/about-us-2>

Company

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Job

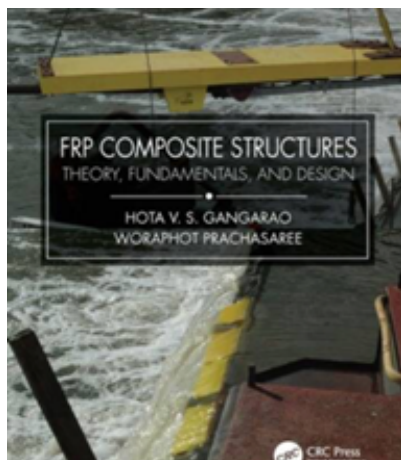
Postdoctoral Research Associate - Structural Simulation and Machine Learning (ML) for Polymer Compos
Oak Ridge National Laboratory, United States

overview:

We are seeking a Postdoctoral Research Associate who will support the Composites Innovation Group in the Manufacturing Science Division (MSD), Energy Science and Technology (ESTD) at Oak Ridge National Laboratory (ORNL) is seeking a Postdoctoral Research Associate to support the composite manufacturing technologies through machine learning and physics-based simulations, specifically finite element analysis (FEA) for polymer composites. The candidate will also focus on developing a manufacturing process optimization framework for polymer composites through physics-based simulations, sensors from machines, and artificial intelligence.

https://scholarshipdb.net/jobs-in-United-States/Postdoctoral-Research-Associate-Structural-Simulation-And-Machine-Learning-ML-For-Polymer-Compos-Oak-Ridge-National-Laboratory=80O2zm_D7hGUYgAlkGUTnw.html

Book



FRP Composite Structures Theory, Fundamentals, and Design
By Hota V.S. Gangarao, Woraphot Prachasaree

ISBN: 9781032052519

Page count: 534

Published: October 28, 2021

Publisher: CRC Press

This book:

- Explores practical and novel infrastructure designs and implementations
- Uses contemporary codes recently approved
- Includes FRP case studies from around the world
- Ensures readers fully understand the basic mechanics of composite materials before involving large-scale number crunching
- Details several advanced topics including aging of FRPs, typical failures of structures including joints, and design simplifications without loss of accuracy and emphasis on failure modes
- Features end of chapter problems and solved examples throughout.

This textbook is aimed at advanced undergraduate and graduate students and industry professionals focused on the analysis and design of FRP composite structural members. It features PowerPoint lecture slides and a solutions manual for adopting professors.

Table of content:

1: Introduction, 2: Engineering Properties of Composite Materials, 3: Mechanics of FRP Composite Lamina, 4: Mechanics of FRP Composite Laminates, 5: Analysis of FRP Composite Beams, 6: Analysis of FRP Composite Plates, 7: Design Philosophy and Basis of FRP Composite Structural Members, 8: Design of Pultruded FRP Axial Tension Members, 9: Flexural Member Design, 10: Design of Pultruded FRP Axial Compression Members, 11: Design of Connections for FRP Members, 12: Design of Combined Loads for FRP Members

Source: JOB Research Associate-Fixed Term Michigan State University, United States Work type:Faculty/Academic Staff Major Administrative Unit / College: College Of Engineering Department: Chemical Engineering And Materials Sci 10016140 Sub Area: FAS- Fac./Acad Staff Salary: Salary Commensurate with Experience Location : East Lansing Categories : Engineers/Architects, Research/Scientific, Fixed Term Academic Staff, Full Time (90-100%), Non-Union
<https://www.routledge.com/FRP-Composite-Structures-Theory-Fundamentals-and-Design/GangaRao-Prachasaree/p/book/9781032052519>

Journal

Materials & Design



Editorial Board:

Editor-in-chief

Alexander Korsunsky

University of Oxford, Department of Engineering Science, OX1 3PJ, Oxford, OX1 3PJ, United Kingdom

Materials and Design publishes original research reports, review articles, and express communications covering the studies of structure and properties of inorganic and organic materials, advances in synthesis, processing, characterization, and testing, design of materials and engineering systems, and applications in technology. The journal is multi-disciplinary in nature and seeks to bring together aspects of materials science, engineering, physics, and chemistry. In exploring the themes ranging from materials to design, it also pursues the elucidation of underlying connections between natural and artificial, and experiment and modeling. Manuscripts submitted to Materials and Design are sought to contain elements of discovery and surprise that often accompany the obtention of new insights into the architecture and function of matter. Authors who publish in Materials and Design will be able to make their work immediately, permanently, and freely accessible. Materials and Design authors will pay an article publishing charge (APC), have a choice of license options, and retain copyright to their published work. The APC will be requested after peer review and acceptance and will be required for all accepted articles. It should be noted that Materials & Design is an Open Access Journal.

Impact Factor: 8.4

Cite Score: 13.5

Time to First Decision: 3.9 weeks

Review Time: 5.8 weeks

Publication Time: 0.6 weeks

Acceptance rate: 24%

For more information:

www.sciencedirect.com/journal/materials-and-design

Eminent Person

Professor Alan Kin Tak LAU
(President, Technological and Higher Education
Institute of Hong Kong)



Email: aklau@swin.edu.au

Webpages:

-[Professor Alan Kin Tak LAU - Expert List - Research - THEi - Technological and Higher Education Institute of Hong Kong](#).

-<https://www.swinburne.edu.au/research/our-research/access-our-research/find-a-researcher-or-supervisor/researcher-profile/?id=aklau>

Google Scholar:

<https://scholar.google.com/citations?user=DLUWsRYAAAAJ&hl=en>
Cited by

	All	Since 2018
<u>Citations</u>	26392	14866
<u>h-index</u>	78	55
<u>i10-index</u>	255	196

Prof LAU, being a seasoned Vocational and Professional Education and Training (VPET) educator, started his career as an aircraft maintenance apprentice in Hong Kong. He first joined Hong Kong Polytechnic University and then Swinburne University of Technology, Australia after working for years in various engineering companies in Hong Kong and Australia. Prior to commencement of the President role in THEi, Prof LAU was Pro Vice-Chancellor (Research Partnerships and Digital Innovation) of Swinburne University of Technology, Australia to take charge of its research performance, international research, and ranking strategy.

Education:

-Doctor of Philosophy (PhD), Mechanical Engineering
The Hong Kong Polytechnic University.

- Master of Engineering (MEng), Aerospace Engineering
Royal Melbourne Institute of Technology, RMIT University.

- Bachelor of Engineering (BEng (Hons)), Aerospace Engineering
Royal Melbourne Institute of Technology, RMIT University.

Some of professional qualification/memberships:

Fellow, The Institution of Mechanical Engineers (FIMechE)

Fellow, The Institute of Materials, Minerals and Mining (FIMMM)

Fellow, The Institute of Engineering Designers (FIED)

Fellow, The Hong Kong Institution of Engineers (FHKIE)

Awards And Honors include:

2014- "Award for Outstanding Contribution to Education" granted by the Global Learntech Congress."

2015-USQ Research Giant Award on Nano-composites for Space Applications, Australia

2019-Australia's Research Theme Leader in Composite Materials

2020- VEBLEO Best Scientist Award, granted by International Science, Engineering and Technology Conference & Webinars.

Some of Patents:

- Temperature-compensated FBG strain sensor for statically and dynamically measuring mechanical strains of cement-based structures
- Rotary stepping actuator
- Novel Carbon Nanotube/nano clay composites

Some of Recent Research Interests:

- Composites
- Nano Composites
- Smart Materials & Structures
- Green Composites

Books:

- Advances in Composite Materials and Structures (2007)
- Multifunctional Materials and Structures (2008)
- Research, Development and Applications (2008)

Exhibition

The premier exhibition of composite materials



CAMX Award: Offered by the Composites and Advanced Materials Expo (CAMX), this award acknowledges advancements in composite materials and products across various industries

These awards, among others, are usually given to Individuals, teams, or organizations for their outstanding achievements or innovations in the development, application, or research of composite materials. For the most up-to-date information on awards in the new year, I recommend checking the respective organizations' websites or industry-related publications for announcements and details about upcoming awards in the field of composite materials

Explore the captivating world of Camx - the Composites and Advanced Materials Expo - which is the largest international trade fair for composites advanced materials in North America, held in San Diego, California US.

Come discover our new solutions and let's fiberize your ideas for your current and future projects!

Save the date for the upcoming Camx exhibition from September 10 to 12, 2024. Learn more about this expo at <https://www.thecamx.org>.

PhD Thesis

Nonlinear analysis of variable stiffness composite and auxetic honeycomb sandwich panels

Student: Gupta, Ankita

Supervisor: Pradyumna, S

Date: 2023

Published in: IIT Delhi

Composite laminated and sandwich structures are extensively utilised as the load-bearing components in aircraft, automobile, civil and naval industries due to their high stiffness-to-weight and strength-to-weight ratios. Auxetic honeycomb cores having re-entrant cell geometry possess negative Poisson's ratio and lead to increased stiffness and density of the sandwich panel. Conventionally, laminated composites are reinforced with straight fibres which are aligned along a particular direction resulting in constant lamina properties and are known as constant stiffness composite laminates (CSCL). However, the recent advancement in manufacturing technologies like tow placement machines enables to fabricate structures with continuously varying fibre orientation, resulting in spatially varying stiffness. Such panels are named as variable stiffness composite laminates (VSCL). The use of curvilinear fibres in composite structures allows tailoring their response specific to the design requirement with additional weight reduction. The introduction of VSCL also improves the tensile and buckling response and enables an optimum control on the fundamental frequencies of the structure, and therefore, the present study explores the viability of the VSCL based auxetic sandwich panels.

This thesis presents finite element (FE) formulation based on zig-zag displacement fields to analyze linear and nonlinear static and dynamic response of variable stiffness laminated composite and auxetic honeycomb sandwich shell panels.

Source: <http://eprint.iitd.ac.in/handle/2074/10082>

PhD Thesis

PARAMETRIC ANALYSIS AND FAILURE BEHAVIOUR OF SPHERICAL-ROOF CONTOURED-CORE (SRCC) COMPOSITE SANDWICH PANEL

Student: Quanjin Ma

Supervisor: Assoc. Prof. Ts. Dr. Mohd Ruzaimi Bin Mat Rejab; Dr. Nasrul Azuan Alang; Prof. Dr. Bo Zhang

Date : 2023

Published in: University of Science and Technology Shenzhen, China

Sandwich panels have been increasingly used in weight-critical structural components, which largely stems from the diversity of sandwich core topologies and the variation of the component materials. It is challenging to minimize the weight and manufacturing cost of the composite sandwich structure, which determines the core geometry of the sandwich structure. The 2D periodic core is considered as the traditional core structure with small enclosed space, which provides the certain strength. To improve the mechanical properties, energy-absorbing characteristics, and impact resistance performance of sandwich panels, the 3D periodic core structure is proposed to have the higher strength and impact characteristics with lighter mass. However, the existing or reported 3D periodic cores have certain geometry, restricted space, and complicated preparation process, which mainly lacks of bionic design and consideration of manufacture cost. It is determined that the structural mass, infilled space and fabrication method of 3D periodic core structure mainly affect the mechanical properties of sandwich structure. Therefore, it is an interesting topic to develop the new 3D periodic cores of sandwich panels with an inter-connected network of unit. This study is proposed the novel spherical-roof contoured-core (SRCC) inspired by the core geometry from egg-box and flat-contoured concepts.

Source:

https://www.researchgate.net/publication/372582555_PARAMETRIC_ANALYSIS_AND_FAILURE_BEHAVIOUR_OF_SPHERICAL-ROOF_CONTOURED-CORE_SRCC_COMPOSITE_SANDWICH_PANEL

MSc Thesis

Hybrid Repair of Aluminum Cracked Plate with Composite Patch and Piezoelectric Actuators.

Student: Mahdi Jokar

Supervisor: Prof. Seyed Mohammad Reza Khalili.

Date: September 2023

Published in: K.N.Toosi University of Technology

This thesis proposes a hybrid repair of edge-cracked plates by using PZT actuators at the front of the plate, and a composite patch at the back of the plate via numerical and experimental investigation. The models relate the Mode-I stress intensity factor (SIF), composite patch, and PZT actuator parameters for an edge-cracked aluminum plate. The electromechanical models are based on Linear Elastic Fracture Mechanics (LEFM), the singular stress at the crack tip, and the coupling effects of the PZT actuators.

The present results demonstrated that the maximum reduction of SIF is accomplished by the application of the thick composite patch with thin adhesive bond coupled with thin actuators at higher voltage. In summary, this thesis investigated the possibility and pragmatism of the hybrid repair of edge-cracked and center-cracked plates under Mode-I loading condition with FE and experimental studies.

Festival

India International Science Festival 2023

The 9th edition of the India International Science Festival (IISF) is being organized by the Ministry of Science & Technology, Ministry of Earth Sciences, Department of Space, Department of Atomic Energy, Government of Haryana, in collaboration with Vijnana Bharati at DBT THSTI-RCB Campus, NCR Biotech Science Cluster, Faridabad, Haryana, from 17th to 20th January 2024.

The "India International Science Festival" (IISF) is an annual event initiated in 2015 by the Ministry of Science and Technology, Ministry of Earth Sciences, and Vijnana Bharati. Eight festivals have been successfully organized in different parts of the country to celebrate science. The theme of IISF 2023 is 'Science and Technology Public Outreach in Amrit Kaal', and it will unfold through 17 programs during the event.

More details about the event can be accessed at the following link:

<http://www.scienceindiafest.org/>

You are invited to be a part of this event. A special call out to CAIC clubs and societies, as well as students involved in research labs at IITD, to register for this event.