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## DESCRIPTION

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*Composites Science and Technology* publishes refereed original articles on the fundamental and applied science of **engineering composites**. The focus of this journal is on **polymeric matrix** composites with **reinforcements/fillers** ranging from nano- to macro-scale. *CSTE* encourages manuscripts reporting unique, innovative contributions to the physics, chemistry, materials science and applied mechanics aspects of **advanced composites**.

Besides traditional fiber reinforced composites, novel composites with significant potential for engineering applications are encouraged. These may include, but are not limited to, nanocomposites, biomedical composites, green/eco composites, energy composites, and composites mimicking natural materials. Manuscripts dealing with multi-scale and multi-functional issues and performance as well as interdisciplinary approaches to the study of new generation composite materials are welcome. Analytical work should be validated. Publication of manuscripts reporting routine processing, synthesis and property characterization are not a priority of *CSTE*.

In order to expedite the handling of [submissions](#), manuscripts will be given a preliminary review prior to the full reviewing process to evaluate their suitability for *CSTE*. General Review articles as well as Feature articles covering topics of major interests to the readers will be presented at regular intervals, often at the invitation of the Editors. *CSTE* does not accept short communications or letters. It is the aim of *CSTE* to play an effective role in the rapid dissemination of research findings in the ever-evolving field of composite materials.

## AUDIENCE

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Materials Scientists, Stress Analysts, Aeronautical, Structural and Mechanical Engineers.

## IMPACT FACTOR

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## ABSTRACTING AND INDEXING

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## GUIDE FOR AUTHORS

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### INTRODUCTION

*Composites Science and Technology* publishes refereed original articles on the fundamental and applied science of engineering composites. The focus of this journal is on polymeric matrix composites with reinforcements/fillers ranging from nano- to macro-scale. *CSTE* encourages manuscripts reporting unique, innovative contributions to the physics, chemistry, materials science and applied mechanics aspects of advanced composites.

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#### **Types of paper**

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Reference to a journal publication:

[1] J. van der Geer, J.A.J. Hanraads, R.A. Lupton, The art of writing a scientific article, *J. Sci. Commun.* 163 (2010) 51–59.

Reference to a book:

[2] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

Reference to a chapter in an edited book:

[3] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[4] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13.03.03).

Reference to a dataset:

[dataset] [5] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, Mendeley Data, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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#### *List of keywords*

#### **A. Material:**

Adhesive joints  
Alloys  
Amorphous materials  
Aramid fibre  
Carbon fibres  
Carbon nanotubes  
Coating  
Coupling agents  
Fabrics/textiles  
Fibres  
Flexible composites  
Functional composites  
Glass fibres  
Glasses  
Hybrid composites  
Intermetallics  
Laminate  
Layered structures  
Metal-matrix composites (MMCs)  
Metals  
Nanoclays  
Nano composites  
Nano particles  
Oxides  
Particle-reinforced composites  
Polymer-matrix composites (PMCs)  
Polymers  
Pre ceramic polymer  
Recycling  
Sandwich  
Structural composites  
Short-fibre composites  
Smart materials  
Textile composites  
Wood

**B. Property:**

Corrosion  
Creep  
Curing  
Debonding  
Defects  
Delamination  
Durability  
Electrical properties  
Embrittlement  
Environmental Degradation  
Fatigue  
Fibre/matrix bond  
Fracture  
Fracture toughness  
Fragmentation  
Friction/wear  
High-temperature properties  
Hygrothermal effect  
Impact behaviour  
Interface  
Interfacial strength

- Interphase
- Magnetic properties
- Matrix cracking
- Mechanical properties
- Non-linear behaviour
- Plastic deformation
- Porosity/Voids
- Strength
- Stress/strain curves
- Surface treatments
- Synergism
- Thermal properties
- Thermomechanical properties
- Transport properties
- Vibration

### **C. Analysis:**

- Anelasticity
- Anisotropy
- Buckling
- Complex moduli
- Computational mechanics
- Crack
- Damage mechanics
- Damage tolerance
- Deformation
- Elastic properties
- Failure criterion
- Fibre bridging
- Finite element analysis (FEA)
- Laminate theory
- Modelling
- Multiscale modeling
- Notch
- Plate theory
- Probabilistic methods
- Residual stress
- Sandwich structures
- Shell theory
- Statistics
- Stress concentrations
- Stress relaxation
- Stress transfer
- Transverse cracking

### **D. Testing:**

- Acoustic emission
- Atomic force microscopy (AFM)
- Differential scanning calorimetry (DSC)
- Dynamic mechanical thermal analysis (DMTA)
- Electron energy loss spectroscopy (EELS)
- Electron microprobe analysis
- Fractography
- Hardness testing
- Infrared (IR) spectroscopy
- Life prediction
- Moire techniques
- Non-destructive testing



Optical microscopy  
Photoelectron spectroscopy (XPS)  
Raman spectroscopy  
Rheology  
Scanning electron microscopy (SEM)  
Scanning/transmission electron microscopy (STEM)  
Secondary ion mass spectrometry (SIMS)  
Thermogravimetric analysis (TGA)  
Transmission electron microscopy (TEM)  
Ultrasonics  
X-ray diffraction (XRD)  
X-ray fluorescence (XRF)

#### **E. Processing:**

Annealing  
Braiding  
Casting  
Chemical vapour deposition (CVD)  
Chemical vapour infiltration (CVI)  
Directional solidification  
Electro-spinning  
Extrusion  
Filament winding  
Heat treatment  
Injection moulding  
Ion implantation  
Ion plating  
Isostatic pressing  
Knitting  
Liquid metal infiltration (LMI)  
Melt-spinning  
Microwave processing  
Physical vapour deposition  
Plasma deposition  
Plasma spraying  
Powder processing  
Pultrusion  
Resin transfer moulding (RTM)  
Sintering  
Slip casting  
Sol-gel methods  
Welding/joining

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