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Country

India

Keywords

Numerical Mathematics, Continuum Mechanics, Fractional Order Derivative

Other IDs

Scopus Author ID: 55631753500 (http://www.scopus.com/inward/authorDetails.url?authorID=55631753500&partnerID=MN8TOARS)

Biography

I work as an Associate Professor in the Department of Applied Sciences at UIET, Kurukshetra University (Estab. 1956), a NAAC A++ accredited institution. I am a founding faculty member of UIET (since 2004) and have designed over 15 mathematics syllabi, including the most recent aligned with AICTE model curriculum and the National Education Policy (NEP).

I specialize in continuum mechanics, fractional-order derivatives, and engineering mathematics, with 15 Scopus-indexed research papers (impact factors ranging from 0.8 to 3.2) and 2 published textbooks (Kreyszig's Applied Mathematics Vol. I & II, Wiley India). I am currently supervising one Ph.D. student and mentoring UG/PG research projects. My research profiles can be accessed via ORCID: 0000-0001-6849-3057 and Scopus Author ID: 55631753500.

I serve as Convener of the Training & Placement Cell (since 2015) and have invited over 300 companies, including 125+ in the last three years, for campus placements. I lead pre-placement training, industry interactions, and internship facilitation. I also introduced two new branches—Artificial Intelligence & Machine Learning (AIML) and Electrical & Computing (ECO)—to expand the institute's academic offerings and financial sustainability.

I hold several leadership and institutional roles:

• Faculty In-Charge (From 2017–2021)

• Member, Board of Studies – Applied Sciences

• Nodal Officer, TEQIP-III (World Bank Project) – overseeing institutional • Convener, GATE Committee, Fest & Sponsorship Coordination, Grievance Redressal

• Centre Superintendent, conducted 30+ entrance exams

• Presiding Officer, Lok Sabha General Election 2009, 2014 & 2019

As an active member of the Training & Placement Cell and Institution's Innovation Council (IIC – UIET KUK), I help establish strategic MoUs with 10 leading organizations, including IBM, Microsoft, Infosys, HP, Siemens, CDAC, NIELIT, IITs, Wavelink, and Campus CYPE (Spain). These partnerships support internships, innovation projects, and placements.

I am also the only regular faculty managing six engineering branches with an annual intake of 572 students. I initiated and founded the Excellence Foundation (2009)—a platform for technical innovation that hosts UIET's flagship 3-day festival EXCELSIOR, featuring events like robo wars and LAN gaming.

In addition, I contribute to the Ph.D. Affairs Committee, Exam Reforms Committee, and IPR Cell, and actively engage in professional development, having completed 7+ FDPs/workshops on AR/VR, IPR, and academic MIS systems.

Employment (2)

University Institute of Engineering and Technology, Kurukshetra University: Kurukshetra, Haryana, IN
2019-09-29 to 2036-09-10 | Associate Professor in Mathematics (Applied Sciecnes and Humanities (Mathematics))
Employment
Source: Sanjeev Ahuja, Ph.D.

University Institute of Engineering and Technology, Kurukshetra University: Kurukshetra, Haryana, IN
2004-09-10 to 2019-09-29 | Assistant Professor (Applied Sciences and Humanities (Mathematics))
Employment
Source: Sanjeev Ahuja, Ph.D.

Works (13 of 13)

Analysis and Simulation of Fractional Oscillatory Chemical Reaction Equations
Mathematical Methods in the Applied Sciences
2025 | journal-article
DOI: 10.1002/mma.10957
EID: 2-s2.0-105002462288
Part of ISSN: 10991476 01704214
Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Analysis and numerical simulation of fractional-order blood alcohol model with singular and non-singular kernels
Computational and Mathematical Biophysics
2024 | journal-article
DOI: 10.1515/cmb-2024-0001
EID: 2-s2.0-85190320591
Part of ISSN: 25447297
Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Petri net modeling, computational analysis, and simulation of interleukin 17E signaling pathway: A study of dynamics
Mathematics in Engineering, Science and Aerospace
2024 | journal-article
EID: 2-s2.0-85196097902
Part of ISSN: 20413173 20413165
Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Fundamental solution for a two-dimensional problem in transversely isotropic micropolar thermoelastic media
Multidiscipline Modeling in Materials and Structures
2017 | journal-article
DOI: 10.1108/MMMS-03-2017-0011
EID: 2-s2.0-85032937395
Part of ISSN: 15736113 15736105
Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

A study of plane wave and fundamental solution in the theory of microstretch thermoelastic diffusion solid with phase-lag models
Multidiscipline Modeling in Materials and Structures
2015 | journal-article
DOI: 10.1108/MMMS-05-2014-0032
EID: 2-s2.0-84938817353
Part of ISSN: 15736113 15736105
Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Wave propagation in fibre-reinforced transversely isotropic thermoelastic media with initial stress at the boundary surface
Journal of Solid Mechanics
2015 | journal-article
EID: 2-s2.0-84933498248
Part of ISSN: 20087683 20083505
Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Effect of Initial Stress on the Propagation Characteristics of Waves in Fiber-Reinforced Transversely Isotropic Thermoelastic Material under an Inviscid Liquid Layer
Journal of Thermodynamics
2014 | journal-article
DOI: 10.1155/2014/134276
EID: 2-s2.0-84937046277
Part of ISSN: 16879252 16879244
Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Numerical analysis of the propagation characteristics of Stoneley waves at an interface between microstretch thermoelastic diffusion solid half spaces

Latin American Journal of Solids and Structures

2014 | journal-article

DOI: 10.1590/S1679-78252014001300005

EID: 2-s2.0-84919326797

Part of ISSN: 16797825 16797817

Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Rayleigh waves in isotropic microstretch thermoelastic diffusion solid half space

Latin American Journal of Solids and Structures

2014 | journal-article

DOI: 10.1590/S1679-78252014000200009

EID: 2-s2.0-84879979110

Part of ISSN: 16797825 16797817

Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Reflection and transmission of plane waves at the loosely bonded interface of an elastic solid half-space and a microstretch thermoelastic diffusion solid half-space

Materials Physics and Mechanics

2014 | journal-article

EID: 2-s2.0-84907605773

Part of ISSN: 16058119 16052730

Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Surface Wave Propagation in a Microstretch Thermoelastic Diffusion Material under an Inviscid Liquid Layer

Advances in Acoustics and Vibration

2014 | journal-article

DOI: 10.1155/2014/518384

EID: 2-s2.0-84934966257

Part of ISSN: 1687627X 16876261

Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

A study of plane wave and fundamental solution in the theory of an electro-microstretch generalized thermoelastic solid

Materials Physics and Mechanics

2013 | journal-article

EID: 2-s2.0-84875461665

Part of ISSN: 16052730 16058119

Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

Propagation of plane waves at the interface of an elastic solid half-space and a microstretch thermoelastic diffusion solid half-space

Latin American Journal of Solids and Structures

2013 | journal-article

DOI: 10.1590/S1679-78252013000600002

EID: 2-s2.0-84876585794

Part of ISSN: 16797825 16797817

Source: Sanjeev Ahuja, Ph.D. *via* Scopus - Elsevier

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