

Journals of fluid Mechanics/Dynamics/computational dynamics/Aerodynamics

1. Experimental Thermal and Fluid Science (International Journal of Experimental Heat Transfer, Thermodynamics, and Fluid Mechanics)

Experimental Thermal and Fluid Science

fluid mechanics

multiphase

flow

2. Journal of Computational Physics

Journal of Computational Physics
physical problems

computational aspects of

3. International Journal of Computational Fluid Dynamics

Computational fluid dynamics

4. International Journal for Numerical Methods in Fluids

CFD and numerics

fluid dynamics

5. Theoretical and Computational Fluid Dynamics

CFD fluid dynamics

6. Computers & Fluids(International Journal)

CFD

Computers & Fluids

Hydro- and aerodynamics
turbulence and flow stability, multiphase flow

aeronautical

fluid flow computations,
computational analysis of flow physics and fluid interactions

Computers & Fluids

7. Computing and Visualization in Science

computational fluid dynamics

8. Journal of Non-Newtonian Fluid Mechanics

Fluid Mechanics

9. International Journal of Heat and Fluid Flow

fluid flow

International Journal of Heat and Fluid Flow

experimental, computational,
fluid dynamics
multiphase and microscale flows.

10. Fluid Dynamics Research

dynamics of fluids.

fluid dynamics

11. Fluid Phase Equilibria

Fluid Phase Equilibria publishes high quality papers dealing with experimental, theoretical and applied research related to equilibrium and transport properties of fluid and solid phases. The fluid phase properties of interest include: PVT, enthalpies, heat capacities, Joule-Thomson coefficients, Gibbs and Helmholtz energies, chemical potentials, activity and fugacity coefficients, critical properties, chemical equilibria, multiphase equilibria and interfacial properties, thermal conductivity, viscosity and rheological properties, and diffusion coefficients.

Acta Mechanica

Since 1965, the international journal *Acta Mechanica* has been among the leading journals in the field of theoretical and applied mechanics. In addition to the fields of solid and fluid mechanics, such as elasticity, plasticity, vibrations, structures, multi-body dynamics, hydrodynamics, gasdynamics and multiphase flows, it also gives special attention to areas such as Non-Newtonian fluid dynamics, micro- and nanomechanics of fluids and solids, smart materials and structures, biomechanics of solids and fluids, and novel issues at the interface of mechanics and materials.

Link :- <http://www.springer.com/materials/mechanics/journal/707>

13. Acta Mechanica Sinica

Acta Mechanica Sinica, sponsored by the Chinese Society of Theoretical and Applied Mechanics, promotes scientific exchanges and collaboration among Chinese scientists in China and abroad. It features high quality, original papers in all aspects of mechanics and mechanical sciences. Not only does the journal explore the classical subdivisions of theoretical and applied mechanics such as solid and **fluid mechanics**, it also explores recently emerging areas such as biomechanics and nanomechanics.

Link :-<http://www.springer.com/materials/mechanics/journal/10409>

14. The Chinese Journal of Mechanical Engineering (CJME)

CJME presents papers which explore basic theories and their applications across the field of mechanical engineering such as **Fluid Mechanics, Fluid Dynamics**, Solid Mechanics, etc. The editors place emphasis on timely reporting of new developments in scientific research and advanced technologies. The official journal of the Chinese Mechanical Engineering Society, CJME has earned its place as a leading journal in international mechanical engineering. To its worldwide readership, The Chinese Journal of Mechanical Engineering offers a window to the accomplishments of Chinese mechanical engineering.

Experiments in Fluids

Experiments in Fluids examines the advancement, extension, and improvement of new techniques of flow measurement. The journal also publishes contributions that employ existing **experimental techniques** to gain an understanding of the underlying **flow physics** in the areas of **turbulence**, **aerodynamics**, **hydrodynamics**, convective heat transfer, combustion, turbomachinery, **multi-phase flows**, and chemical, biological and geological flows. In addition, readers will find papers that report on investigations combining experimental and analytical/numerical approaches.

16. Flow, Turbulence and Combustion

The journal is published in association with the European Research Community on Flow, Turbulence and Combustion (ERCOFTAC), a collaboration among European universities, research institutes and industry active in the area of **applied fluid mechanics**, which promotes scientific research on current issues in this area. The journal covers the entire domain of flow, turbulence and combustion, including all flow problems relevant in industrial, geophysical and environmental applications. The emphasis is on solid and original

research results, numerical, experimental and theoretical, and their relevance to applied fluid mechanics and combustion.

Fluid Dynamics

Fluid Dynamics is the leading Russian journal for the publication of **theoretical**, **computational**, and applied research in the fields of **aeromechanics**, hydrodynamics, plasma dynamics, underground hydrodynamics, and biomechanics of continuous media. Special attention is given to new trends developing at the leading edge of science, such as theory and application of **multi-phase flows**, chemically reactive flows, liquid and gas flows in electromagnetic fields, new hydrodynamical methods of increasing oil output, new approaches to the description of turbulent flows, etc.

18. The Journal of Engineering Physics and Thermophysics

The Journal of Engineering Physics and Thermophysics highlights papers examining contemporary problems in the fields of technology, engineering, and physics and **computational physics**. Specifically, it publishes the results of theoretical and **experimental studies** in thermophysics, heat and mass transfer, heat conduction, thermodynamics of irreversible processes, theory of drying, heat and mass transfer in disperse and porous systems, formation of carbon nanostructures, low-temperature plasma, hydrogen power engineering, ecology, rheodynamics, and rheology.

19. The Journal of Marine Science and Technology

The Journal of Marine Science and Technology provides a forum for the discussion of current issues in marine science and technology. The range of topics extends from research in naval architecture, marine engineering, and ocean engineering to marine-related research in the fields of environmental science and technology, oceanography, **computational mechanics**, and information technology.

20. The Journal of Phase Equilibria and Diffusion (JPED)

The Journal of Phase Equilibria and Diffusion (JPED) focuses on the crystallographic, chemical, diffusion, and other kinetic properties of phases. It features critical phase diagram

evaluations on scientifically and industrially important alloy systems, authored by international experts, as well as critically reviewed basic and applied research results, and a survey of current literature. JPED covers the topics of fluids and it consists significance of diagrams as well as new research techniques, equipment, data evaluation, nomenclature, presentation, and other aspects of phase diagram preparation and use.

21. Journal of Thermal Science

Journal of Thermal Science publishes high-quality articles on experimental, numerical and theoretical investigations which give insight into the major areas of thermal and fluid sciences. It publishes contributions in the fields of fluid mechanics, aerothermodynamics of internal flow, heat and mass transfer, multiphase flow, turbulence modeling, combustion, engineering thermodynamics, thermophysical properties of matter, measurement and visualization techniques. The journal also includes technical papers concerning the application of fundamental knowledge to industrial processes and equipment, such as energy conversion and conservation, turbomachinery, heat transfer equipment, furnaces and boilers.

22. Visualization

Visualization is an interdisciplinary imaging science devoted to making the invisible visible through the techniques of experimental visualization and computer-aided visualization. This official journal of the Visualization Society of Japan presents the latest visualization technology and its applications. It is published in full color in order to realize its mission of promoting a better understanding of complex phenomena.

23. Microfluidics and Nanofluidics

Microfluidics and Nanofluidics is an international peer reviewed journal exploring all aspects of microfluidics, nanofluidics, and lab-on-a-chip science and technology. The journal seeks to improve the fundamental understanding of microfluidic and nanofluidic processes, examining the current state of research and development and the latest applications. This journal broadly interprets microfluidics and nanofluidics as the study of mass (including molecular and colloidal) and momentum transfer, heat transfer, and reactive processes, coupled with transport in microscale and nanoscale systems.

24. Shock waves

The journal addresses physicists, engineers and applied mathematicians working on theoretical, experimental or numerical issues, including diagnostics and flow visualization. Coverage includes, among other topics, **aero- and gas dynamics**, acoustics, physical chemistry, condensed matter and plasmas, with applications encompassing materials sciences, space sciences, geosciences, life sciences and medicine.

25. Theoretical and Computational Fluid Dynamics

Theoretical and Computational Fluid Dynamics provides a forum for the cross-fertilization of ideas, tools and techniques across all disciplines in which fluid flow plays a role, such as: **aeronautical sciences**, geophysical and environmental sciences, life sciences and materials sciences.

26. Archives of Computational Methods in Engineering

A partial list of topics includes modeling; solution techniques and applications of computational methods in a variety of areas (e.g., **liquid and gas dynamics**, solid and structural mechanics, bio-mechanics, etc.); variational formulations and numerical algorithms related to implementation of the **finite and boundary element methods**; finite difference and finite volume methods; and other **basic computational methodologies**.

Link :-

<http://www.springer.com/engineering/computational+intelligence+and+complexity/journal/11831>

27. Computational Mechanics

Computational Mechanics reports original research in computational mechanics of enduring scholarly value. It focuses on areas that involve and enrich the rational application of mechanics, mathematics, and numerical methods in the practice of modern engineering. The journal investigates theoretical and **computational methods** and their rational applications. Areas covered include solid and structural mechanics, multi-body system dynamics, constitutive modeling, inelastic and finite deformation response, and structural control. The journal also covers **fluid mechanics** and fluid-structure interactions, biomechanics, **free-surface and two-fluid flows**, aerodynamics, etc.

Link : <http://www.springer.com/materials/mechanics/journal/466>

28. **Experimental Mechanics**

Experimental Mechanics, the official journal of the Society for **Experimental Mechanics**, publishes papers in all areas of the field, including its theoretical and computational analysis. This journal's coverage extends from research in solid and **fluid mechanics** to fields at the intersection of disciplines such as physics, chemistry, and biology.

Link :- <http://www.springer.com/materials/mechanics/journal/11340>

29. **ADVANCES IN ENGINEERING SOFTWARE**

Link:- <http://www.elsevier.com/inca/publications/store/4/2/2/9/1/1/index.htm>

The objective of this journal is to communicate recent and projected advances in computer-based engineering techniques. The fields covered include mechanical, aerospace, civil and environmental engineering, with an emphasis on research and development leading to practical problem-solving.

The scope of the journal includes:

- innovative **computational strategies and numerical algorithms for large-scale engineering problems**
- analysis and simulation techniques and systems
- model and mesh generation
- control of the accuracy, stability and efficiency of computational process
- exploitation of new computing environments (eg distributed heterogeneous and collaborative computing)
- advanced visualization techniques, virtual environments and prototyping
- applications of AI, knowledge-based systems, computational intelligence, including fuzzy logic, neural networks and evolutionary computations
- application of object-oriented technology to engineering problems
- intelligent human computer interfaces
- design automation, multidisciplinary design and optimization
- CAD, CAE and integrated process and product development systems
- quality and reliability

30. **ADVANCES IN WATER RESOURCES**

Link:- <http://www.elsevier.com/inca/publications/store/4/2/2/9/1/3/>

Advances in Water Resources provides a forum for the presentation of fundamental scientific advances in the understanding of water resources systems. The scope of *Advances in Water Resources* includes any combination of theoretical, **computational, or experimental approaches** used to advance fundamental understanding of surface or subsurface water resources systems or the interaction between these systems.

31. **AEROSOL SCIENCE & TECHNOLOGY**

Link :- <http://www.aaar.org/as&t.htm>

Established in 1982, *Aerosol Science and Technology (AS&T)*, is the official journal of AAAR. It publishes the results of **theoretical and experimental investigations** into aerosol phenomena and closely related material as well as high-quality reports on fundamental and applied topics. AS&T is published monthly and sent to all members of the AAAR.

32. **AEROSPACE POWER JOURNAL**

Link:-<http://www.airpower.maxwell.af.mil/airchronicles/apje.html>

The *Aerospace Power Journal*, published quarterly, is the professional flagship publication of the United States Air Force. It is designed to serve as an open forum for the presentation and stimulation of innovative thinking on military doctrine, strategy, tactics, force structure, readiness, and other matters of national defense i.e deals with the **Aerospace industry**. The views and opinions expressed or implied in the *Journal* are those of the authors and should not be construed as carrying the official sanction of the Department of Defense, the Air Force, Air Education and Training Command, Air University, or other agencies or departments of the US government.

33. **AEROSPACE SCIENCE AND TECHNOLOGY**

Link:-<http://www.elsevier.nl/inca/publications/store/6/0/0/7/3/5/>

The journal welcomes papers from a wide range of countries. This journal publishes original papers and review articles related to all fields of **aerospace research**, from fundamental research to industrial applications for the design and the manufacture of aircraft, helicopters, missiles, launchers and satellites.

Main scientific topics are related to:

- **Fluid dynamics**
- Energetic materials and structures
- Flight mechanics
- Physics
- Guidance and control
- Noise
- Sensor technology
- Automatic systems
- Data processing and transmission

34. **AIAA JOURNAL**

Link:- <http://www.aiaa.org/Publications/index.hfm?pub=5>

This Journal is devoted to the advancement of the science and technology of astronautics and aeronautics through the dissemination of original archival research papers disclosing new theoretical developments and/or experimental results. The topics include aeroacoustics, aerodynamics, combustion, fundamentals of propulsion, fluid mechanics and reacting flows, fundamental aspects of the aerospace environment, hydrodynamics, lasers and associated phenomena, plasmas, research instrumentation and facilities, structural mechanics and materials, optimization, and thermomechanics and thermochemistry.

35. AICHE JOURNAL

Link:-<http://www.aiche.org/aichejournal/>

The *AIChE Journal* is the premier research monthly in chemical engineering and related fields. This peer-reviewed and broad-based journal reports on the most important and latest technological advances in core areas of chemical engineering as well as in other relevant engineering disciplines including computational techniques. To keep abreast with the progressive outlook of the profession, the *Journal* has been expanding the scope of its editorial contents to include such fast developing areas as biotechnology, electrochemical engineering, and environmental engineering.

36. AIRCRAFT DESIGN

Link:- <http://www.elsevier.nl/inca/publications/store/6/0/0/8/7/6/>

The Journal aims to serve as a forum for worldwide exchange of up-to-date knowledge between the academic world and industry on progress in aircraft design technology. The basic engineering disciplines (mechanical, aerodynamic, electrical, electronic and materials science) are integrated with principles of design functionality, ergonomics, environmental acceptability and sustainable engineering. The journal therefore invites contributions which are essentially applications orientated in the following areas:

- Design specifications and missions
- Integration of new technologies
- Design of specific aircraft (projects)
- Advanced aerospace propulsion systems and engines
- Aerodynamic design
- Structural materials and design
- Handling qualities, flight control technology and simulation
- Aircraft systems
- Production and Manufacturing technology
- Design Concepts and patents
- Operational requirements and procedures
- Maintainability, reliability, supportability
- Design-to-cost, value engineering

37. **APPLIED MATHEMATICAL MODELLING**

Link:- <http://www.elsevier.nl/locate/apm>

This influential publication covers a wide spectrum of subjects including heat transfer, **fluid mechanics, CFD**, and transport phenomena; solid mechanics and mechanics of metals; electromagnets and MHD; reliability modelling and system optimization; finite volume, finite element, and **boundary element procedures**; decision sciences in an industrial and manufacturing context; civil engineering systems and structures; mineral and energy resources; relevant software engineering issues associated with CAD and CAE; and materials and metallurgical engineering.

38. **APPLIED MATHEMATICS AND COMPUTATION**

Link:- <http://www.elsevier.com/inca/publications/store/5/2/2/4/8/2/>

The brief descriptions of any work involving a novel application or utilization of mathematics, or a development in the methodology of applied mathematics is a potential contribution for this journal. All areas of mathematics are appropriate: from number theory through Lie algebras to differential games. All application areas are welcome as well, be it computer science, physics, anthropology, **fluid dynamics** or any other of the main fields of endeavor, where mathematics is used in nontrivial ways.

39. **APPLIED MATHEMATICS LETTERS**

Link:- <http://www.elsevier.com/inca/publications/store/8/4/3/index.htm>

The purpose of *Applied Mathematics Letters* is to provide a means of rapid publication for important but brief applied mathematical papers with the best possible typography that a camera-ready publication can provide. The brief descriptions of any work involving a novel **application or utilization of mathematics** for eg in **Fluid Mechanics**, or a development in the methodology of applied mathematics is a potential contribution for this journal. All areas of mathematics are appropriate: from number theory through Lie algebras to differential games. All application areas are welcome as well, be it computer science, physics, anthropology, fluid dynamics or any other of the main fields of endeavor, where mathematics is used in nontrivial ways.

40. **APPLIED MECHANICS REVIEWS**

Link:- <http://www.asme.org/pubs/amr/index.htm>

This monthly journal features review articles and book reviews in each issue. Each journal issue of AMR also contains over 1,600 article abstracts in **Applied mechanics** and related fields from 475 international search journals.

41. APPLIED NUMERICAL MATHEMATICS

Link:- <http://www.elsevier.com/inca/publications/store/5/0/5/6/0/2/>

The purpose of the journal is to provide a forum for the publication of high quality research and tutorial papers in computational mathematics. In addition to the traditional issues and problems in numerical analysis, the journal also publishes papers describing relevant applications in such fields as physics, **fluid dynamics**, engineering and other branches of applied science.

42. ARCHIVE OF APPLIED MECHANICS

Link:-<http://link.springer.de/link/service/journals/00419/>

As of 1991 the title "Ingenieur-Archiv" was changed to "Archive of Applied Mechanics". The purpose of this journal is the dissemination of the results of scientific research in the fields of solid mechanics, **fluid mechanics**, structural mechanics, dynamics and control, including related disciplines, in a form useful to engineering practice. Contributions in analytical, numerical and computational methods are welcome.

43. ATMOSPHERIC RESEARCH

Link:- <http://www.elsevier.com/inca/publications/store/5/0/3/3/2/3/>

The journal publishes scientific papers (research papers, review articles, letters and notes) dealing with the part of the atmosphere where meteorological events occur. Attention is given to all processes extending from the earth surface to the tropopause, but special emphasis continues to be devoted to the physics of clouds and precipitation, i.e. atmospheric aerosols; microphysical processes; **cloud dynamics** and thermodynamics; numerical simulation of cloud processes; clouds and radiation; meso- and macrostructure of clouds and cloud systems, and weather modification.

44. CHEMICAL ENGINEERING SCIENCE

Link:- <http://www.elsevier.com/inca/publications/store/2/1/5/>

The journal publishes papers on the fundamentals of chemical engineering, including applications of the basic sciences. Descriptions of original experiments are acceptable and likewise developments in theory; papers combining new experiments with theoretical insight are especially welcome. Core topics are: chemical reaction engineering, applied catalysis, biochemical engineering, **fluid mechanics, fluidization**, absorption, adsorption, heat transfer, mass transfer, **mathematical modelling and simulation, multiphase flow**, polymers, rheology, separation processes, mixing processes, particle formation and processing, thermodynamics, systems engineering, molecular synthesis and simulation, complex fluids: thermodynamics and transport.

45. CHEMICAL ENGINEERING AND PROCESSING: PROCESS INTENSIFICATION

Link:- <http://www.elsevier.com/inca/publications/store/5/0/4/0/8/1/>

This journal consists Multidisciplinary papers and contributions from other disciplines, such as materials science, applied physics, electronics, **fluid mechanics** or energy technology, having impact on intensification of the chemical process industry .

46. CHRONICLE OF INSTREAM FLOW ACTIVITIES

Link : - http://www.mesc.usgs.gov/rsm/ifim-chron/chron_ifim.html

The Chronicle of **Instream Flow Activities** is an update on activities of the River Systems Management research within the [Stream and Riparian Ecology Section](#). Henceforth there will be no surface mailing of IFIM NEWS. The ongoing activities will be published here. IFIM now has an "ifim-news" mailing list. See [IFIM Listserver Announcement:"ifim-news" Mailing List](#).

47.COASTAL BRIEFS

Link :- <http://www.whoi.edu/coastal-briefs/table-of-contents.html>

Coastal Briefs: Electronic access to coastal scientific information

Link :- <http://www.elsevier.nl/locate/combustflame>

The journal exists for the publication of experimental and theoretical investigations of combustion phenomena and closely allied matters. Among the subjects emphasized are:

- Atmospheric pollution from combustion
- Combustion in practical systems
- Deflagration and detonation waves
- Electrical aspects of flames
- **Experimental techniques**
- Fire phenomena
- Flame inhibition, stability and structure
- **Fluid dynamics** and combustion
- Heat transfer and radiation
- Propellants
- Soot formation
- Spectra
- **Supersonic reacting flow**
- Thermal decomposition processes
- Thermochemistry and thermodynamic
- Transport properties
- Turbulent flames

48. **COMBUSTION SCIENCE AND TECHNOLOGY**

Link :- <http://www.gbhap.com/journals/111/111-top.htm>

Combustion Science and Technology is an international journal which provides for open discussion and prompt publication of new results, discoveries and developments in the various disciplines which constitute the field of combustion. The editors invite original contributions dealing with flame and fire research, flame radiation, chemical fuels and **propellants, reacting flows**, thermochemistry, material synthesis, atmospheric chemistry and combustion phenomena related to **aircraft gas turbines**, chemical rockets, ramjets, automotive engines, furnaces and environmental studies. In so doing, the editors hope to establish a central vehicle for the rapid exchange of ideas and results emanating from the many diverse areas associated with combustion.

49. **COMBUSTION THEORY AND MODELLING**

Link :- <http://www.iop.org/Journals/ct>

Devoted to the application of mathematical theory, modelling, numerical simulation and **experimental techniques** to the study of combustion.

50. **COMMUNICATIONS IN NUMERICAL METHODS IN ENGINEERING**

Link :- <http://www.interscience.wiley.com/jpages/1069-8299/>

Communications in Numerical Methods in Engineering is an international journal which publishes short, refereed contributions describing significant developments in numerical methods and the application of such **techniques to the solution of practical engineering problems**. It is a companion journal to the **International Journal for Numerical Methods in Engineering**, the *International Journal for Numerical and Analytical Methods in Geomechanics* and **the International Journal for Numerical Methods in Fluids**. These journals will now concentrate largely on full-length papers. This journal will enable important developments in numerical methods and their application to be made available quickly to the scientific and engineering community whereas longer papers on these developments can subsequently appear in the established journals.

51. **COMMUNICATIONS ON PURE AND APPLIED MATHEMATICS**

Link :- <http://www3.interscience.wiley.com/cgi-bin/jtoc?ID=29240>

Communications on Pure and Applied Mathematics (ISSN 0010-3640) is published monthly, one volume per year, by John Wiley & Sons, Inc. [Copyright](#) © 1997 John Wiley & Sons, Inc. All rights reserved. The journal publishes papers originating at or solicited by the [Courant Institute of Mathematical Sciences](#). It features recent developments in **applied mathematics, mathematical physics**, and mathematical analysis. The topics include **partial differential equations**, electrohydrogenonics, computer science, and applied mathematics. CPAM is devoted to mathematical contributions to the sciences; both theoretical and applied papers, of original or expository type, are included.

52. COMPUTATIONAL MECHANICS

Link :- <http://link.springer.de/link/service/journals/00466/>

The purpose of this journal is to report original research of scholarly value and of reasonable permanence in those areas of computational mechanics which involve and enrich the rational application of mechanics, mathematics, and numerical methods in the practice of modern engineering. The scope of the research reported in this journal will include theoretical and computational methods, and their rational application, in: (a) solid and structural mechanics, multi-body system dynamics, constitutive modeling, inelastic and finite deformation response, structural control; **(b) fluid mechanics and fluids engineering, compressible and incompressible flows, and aerodynamics**; (c) fracture mechanics and structural integrity; (d) transport phenomena and heat transfer; and (e) modern variational methods in mechanics, in general.

53. COMPUTER ASSISTED MECHANICS AND ENGINEERING SCIENCES

Link :- <http://comes.ippt.gov.pl/>

Computer Assisted Mechanics and Engineering Sciences (CAMES) is a refereed international journal, published quarterly, providing a scientific exchange forum and an authoritative source of information in the field of computational mechanics and related areas of applied science and engineering. The objective of the journal is to support researchers and practitioners based in Central Europe by offering them a means facilitating access to newest research results reported by leading experts in the field, publication of their own contributions, and dissemination of information relevant to the scope of the journal.

Papers published in the journal will fall largely into three main categories:

- State-of-the-art surveys and tutorials, providing the Central European readership with a guidance on important research directions as observed in the current world literature on computer assisted mechanics and engineering sciences.
- Contributions presenting new research developments in the broadly understood field of computational mechanics, including solid and structural mechanics, multi-body system dynamics, **fluid dynamics**, constitutive modelling, structural control and optimisation, transport phenomena, heat transfer, etc. Variational formulations and numerical algorithms related to implementation of the finite and **boundary element methods**, finite difference method, hybrid numerical methods, artificial intelligence approaches and other methodologies of computational mechanics will also be covered.
- Articles describing novel applications of computational techniques in engineering practice, industry, and education, in areas like mechanical, aerospace, civil, naval, chemical and architectural engineering as well as software development.

54. COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING

Link :- <http://www.elsevier.com/locate/issn/00457825>

The journal publishes papers concerned with applications of digital computers to problems of **applied mechanics** and engineering. Papers are of advanced character, containing substantial contributions to these fields and detailing methods as well as results. Papers dealing with techniques of wide applicability, beyond the boundaries of the field in which they were established, are especially emphasized

55. **COMPUTERS & FLUIDS**

Link :- <http://www.elsevier.nl/inca/publications/store/3/6/5/>

Computers & Fluids is multidisciplinary. The term '**fluid**' is interpreted in the broadest sense. **Hydro- and aerodynamics, high-speed and physical gas dynamics**, turbulence and flow stability, **multiphase flow**, rheology, tribology and fluid-structure interaction are all of interest, provided that computer technique plays a significant role in the associated studies or design methodology. Applications will be found in most branches of engineering and science: mechanical, civil, chemical, **aeronautical**, medical, geophysical, nuclear and oceanographic. These will involve problems of air, sea and land vehicle motion and flow physics, energy conversion and power, chemical reactors and transport processes, ocean and atmospheric effects and pollution, biomedicine, noise and acoustics, and magnetohydrodynamics amongst others. The development of numerical methods relevant to **fluid flow computations**, computational analysis of flow physics and **fluid interactions** and novel applications to flow systems and to design are pertinent to **Computers & Fluids**.

56. **COMPUTERS AND STRUCTURES**

Link :- <http://www.elsevier.nl/locate/compstruc>

The objective of this journal is to communicate recent advances in the development and use of computer methods for the solution of scientific and engineering problems related to hydrospace, aerospace and terrestrial structures. The word structures is interpreted in the broadest sense. The journal is intended to be of interest and use to researchers and practitioners in academic, governmental and industrial communities.

The range of appropriate contributions for the journal is very wide. The scope of the journal includes papers on mathematical modeling and **computer methods** in all areas of mechanics including structural, **fluid**, soil and fracture mechanics as well as heat transfer, non-linear dynamics and chaos. Also the solution of problems concerned with multiple media is relevant to the journal including **fluid-structure** and soil-structure interaction problems. The applications may come from any field of science or engineering including civil, mechanical, ocean, **aerospace**, automotive, environmental and materials engineering.

57. **COMPUTING AND VISUALIZATION IN SCIENCE**

Link :- <http://link.springer.de/link/service/journals/00791/>

Devoted to computational sciences - a field of a major and continually growing importance for both research and applications, this journal provides the ideal platform

for scientists eager to cooperate in solving scientific and technological challenges. The aim is to link professionals from the diverse fields of

- mathematics
- computer science
- physics
- chemistry
- environmental sciences
- biosciences
- engineering

Since visualization has become an important scientific tool, especially in the analysis of complex situations, it is treated in close connection with the other areas covered by the journal. These areas include:

- Numerical **methods and algorithms**
- **Fluid dynamics**
- Mathematical modeling
- **Computational physics**
- Modeling and **computation in engineering**

58. **CONTINUUM MECHANICS AND THERMODYNAMICS**

Link :- <http://link.springer.de/link/service/journals/00161/>

The journal reports on new developments in continuum mechanics and thermodynamics and their relevance to materials in geophysics, and in the environment. It encourages papers that describe new observed phenomena and presents - for their interpretation and simulation - models based on the **principles of mechanics**, thermodynamics, and statistical mechanics.

59. **DYNAMICS OF ATMOSPHERES AND OCEANS**

Link :- <http://www.elsevier.nl/locate/dynatmoce>

The journal exists for the publication of research articles on the **fluid dynamics** of atmospheres and oceans and their interactions, on related **basic dynamical processes**, and on climatic and biogeochemical problems in which the fluid dynamics play an essential role. Theoretical, numerical, observational and laboratory studies are all welcome.

60. **ENGINEERING SIMULATION**

Link :- <http://www.qbhapp.com/journals/189/189-top.htm>

With an international advisory board of distinguished scientists, *Engineering Simulation* publishes selected high quality papers in a broad area of technical and mathematical simulation, application of mathematical methods and computer hardware, nonlinear analysis, neural networks, stochastic models and stochastic analysis, electrical engineering and operations studies submitted by Eastern and Western authors. The journal aims to introduce mathematicians to applied engineering and to provide rapid communication of the latest achievements in research.

61. **ENVIRONMENTAL FLUID MECHANICS**

Link :- <http://www.wkap.nl/journals/efm>

Environmental Fluid Mechanics is an interdisciplinary journal devoted to the publication of basic and applied studies broadly relating to **natural fluid systems**, particularly as agents for the transport and dispersion of environmental contamination. Understanding transport and dispersion processes in **natural fluid flows**, from the microscale to the planetary scale, serves as the basis for the development of models aimed at simulations, predictions, decisions, and ultimately policy formulation. Within this scope, the subject areas are diverse and may originate from a variety of scientific and engineering disciplines: civil, mechanical and environmental engineering, meteorology, hydrology, hydraulics, limnology and oceanography.

62. **EXPERIMENTAL THERMAL AND FLUID SCIENCE**

Link :- <http://www.elsevier.nl/locate/etfs>

Experimental Thermal and Fluid Science provides a forum for research emphasizing experimental work that enhances basic understanding of heat transfer, thermodynamics and **fluid mechanics**, and their applications. The journal also publishes papers reporting experimental work together with theory, analysis and numerical studies, and papers analyzing original or existing experimental data, together with theory or numerical results. In addition to the principal areas of research, the journal covers research results in related fields, including combined heat and mass transfer, **multiphase flow**, combustion, radiative transfer, porous media, cryogenics, turbulence, contact resistance, and thermophysical property measurements and techniques.

63. **EXPERIMENTS IN FLUIDS**

Link :- <http://link.springer.de/link/service/journals/00348/tocs.htm>

Experiments in Fluids publishes research papers concerned with the development of new measuring techniques and with their extension and improvement, for the measurement of flow properties necessary for the better understanding of **fluid mechanics**. Equally, it publishes research papers concerned with the application of experimental methods to the solution of problems of **aerodynamics, basic fluid dynamics**, combustion, **hydromechanics**, convective heat transfer, hydrodynamics, turbo machinery, turbulence, two-phase flows, chemical, biological and geological flows. Papers which report on analysis of flow problems in conjunction with experiments are also welcome, and this applies particularly to contributions where combinations of **experimental and advanced numerical techniques** allow new information of flow characteristics.

64. **FLOW MEASUREMENT AND INSTRUMENTATION**

Link :- <http://www.elsevier.nl/locate/flowmeasinst>

Flow Measurement and Instrumentation is dedicated to disseminating the latest research results and related information on all aspects of **flow measurement**. The field has developed rapidly over the last two decades, with the application of new electronic techniques.

65. FLOW, TURBULENCE, AND COMBUSTION

Link :- <http://kapis.www.wkap.nl/journalhome.htm/1386-6184>

Flow, Turbulence and Combustion is published in association with the European Research Community on Flow, Turbulence and Combustion (ERCOFTAC). ERCOFTAC is a collaboration between European universities, research institutes and industry active in the area of applied fluid mechanics, and strongly promotes scientific research on current issues in this area. In this respect, the journal provides a forum for the publication of those research results that contribute to the solution of problems in flow, turbulence and combustion and related fields. The journal aims for an audience of readers and contributors coming from the entire international fluid mechanics community, both inside and outside academia, and underwriting the aims mentioned above. The journal covers the entire **domain of flow**, turbulence and combustion, including **all flow problems** relevant in industrial, geophysical and environmental applications. The emphasis is on solid and original research results, **numerical, experimental and theoretical**, and their relevance to applied fluid mechanics and combustion. This journal deals with the **fluid dynamics**.

66. FLUID ABSTRACTS: CIVIL ENGINEERING

Link :- <http://www.elsevier.com/inca/publications/store/4/2/2/8/6/8/>

The journal features **fluid mechanics**, hydraulics of closed and open systems, operations and utilities, coastal engineering, ports and harbours, offshore engineering [surface and subsea installations, well technology and pipelines] the atmosphere and aerodynamics, wind energy, water distribution and treatment. Each volume contains approximately 6,000 abstracts. Each issue includes a full subject index.

67. FLUID ABSTRACTS: PROCESS ENGINEERING

Link :- <http://www.elsevier.com/inca/publications/store/4/2/2/8/6/7/>

The management and control of fluids and their interactions with equipment and machinery is of prime concern to a wide range of personnel in the process and manufacturing industries. This abstracts journal serves both the current awareness and retrospective literature searching requirements of engineers, designers and researchers in these industries. Material is selected from over 500 publications and each volume contains approximately 6,000 abstracts. The journal features **fluid mechanics, fluid-solid flow, flow measurement**, hydraulic and pneumatic applications and equipment, pumps and other turbomachinery, seals and sealing, piping systems and technology, mixing and separation equipment and processes, corrosion, lubrication, heat exchange, industrial applications and instrumentation.

68. FLUID DYNAMICS RESEARCH

Link :- <http://www.elsevier.nl/locate/fluiddyn>

The scope of the Journal includes, (but is not limited to) flows of ideal or **viscous fluid, compressible flows**, rotational flows, wave motions, sub- or super-sonic flows, chaotic flows, turbulence and **non-linear dynamical aspects of flows**, and covers motions of stratified fluid, rotating fluid, and various fluids such as multi-phase fluid, chemically reactive fluid, magnetofluid, rarefied gas, bio-fluid and others.

69. FLUID DYNAMICS AND MATERIAL PROCESSING

Link :- <http://www.techscience.com/fdmp>

The Journal is intended to cover some "frontier" aspects of materials science and, in particular, the most modern and advanced processes for the production of inorganic (semiconductors and metal alloys), organic (protein crystals) materials and "living" (in vitro) biological tissues, with emphasis on the fluid-dynamic conditions under which they are operated. The Journal focuses on the final properties of these materials as well as on fluid-mechanical aspects pertaining to the technological processes used to grow them.

The scope of the Journal is covered by these topics (which could be updated): interplay between **fluid motion** and materials preparation processes (by means of: **experimental investigation**; computer modeling & simulation; novel numerical techniques and multiprocessor computations); multi-phase and multi-component systems; pattern formation; multi-scale modeling; interface-tracking methods (e.g., VOF, level-set) and moving boundaries; solidification; semiconductor crystals; metallurgy; **dynamics of dispersed particles, bubbles and droplets** (sedimentation, Marangoni migration, coalescence mechanisms, interaction with advancing fronts, etc.); flow control methods; macromolecular (protein) crystallization (nucleation mechanisms, morphology, surface growth kinetics and related interplay with the **fluid-dynamics** of the growth reactors); tissue engineering (physicochemical factors affecting the growth kinetics of biological tissues in standard bioreactors, trajectory analysis; shape evolution, effect of fluid-dynamic shear forces, design of new growth reactors).

70. FLUID PHASE EQUILIBRIA

Link :- <http://www.elsevier.nl/locate/fpe>

Fluid Phase Equilibria publishes high quality papers dealing with **experimental, theoretical** and applied research related to equilibrium and transport properties of **fluid** and solid phases.

71. GEOPHYSICAL AND ASTROPHYSICAL FLUID DYNAMICS

Link :- <http://www.tandf.co.uk/journals/titles/03091929.html>

Geophysical and Astrophysical Fluid Dynamics exists for the publication of original research papers and short communications, occasional survey articles and conference reports on the **fluid mechanics** of the earth and planets, including oceans, atmospheres and interiors, and the **fluid mechanics** of the sun, stars and other astrophysical objects.

72. **INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE**

Link :- <http://www.elsevier.nl/locate/ijengsci/>

The *International Journal of Engineering Science* publishes original research pertaining to the application of the physical, chemical and mathematical sciences to engineering. Emphasis is given to those contributions concerned with the cross-fertilization of these fields and research in the allied regions of mechanics, electricity and magnetism, thermodynamics, physical chemistry, both from continuum and molecular points of view. Applied research involving recent developments is welcome in such interdisciplinary areas as biomechanics, system theory, energy and approximation theory, applied and **computational mathematics**, as applied to basic problems in engineering science.

73. **INTERNATIONAL JOURNAL OF FLUID DYNAMICS**

Link :- <http://elecpress.monash.edu.au/ijfd/index.html>

The theme of the journal is the field of **fluid dynamics**, in particular the fundamental processes that contribute to its richness and diversity. Relevant topics include (but are not restricted to):

- wake dynamics
- jets
- bluff body flows
- **shear and boundary layers**
- turbulence
- aeroacoustics
- **rotating flows**

74. **INTERNATIONAL JOURNAL OF FLUID MECHANICS**

Link :- <http://www.begellhouse.com/fmr/fmr.html>

For the past 20 years, **Fluid Mechanics Research** (prior to 1992 Fluid Mechanics-Soviet Research) has offered broad coverage of the entire field of **fluid mechanics** including **flow of compressible and incompressible fluids**, vapor-liquid and slurry flows, turbulence, waves, boundary layers, wakes, **channel and nozzle flow**, fluid-structure interaction, lubrication, flow in porous media, flow through turbo-machinery, **aerodynamics** and rheology as well as new and innovative measurement techniques. The journal's coverage is now being broadened to encompass research in the general area of transport phenomena where convective, diffusional and chemical reaction processes are important and to include biological systems as well as technological and geophysical systems.

75. **INTERNATIONAL JOURNAL OF MULTIPHASE FLOW**

Link :- <http://www.elsevier.nl/locate/inca/234>

The *International Journal of Multiphase Flow* publishes theoretical and experimental investigations of multiphase flow which are of relevance and permanent interest.

Topics appropriate to the journal include **fluid mechanics** and rheological studies of problems involving:

- **multiphase flow** and heat transfer

- cavitation phenomena
- slurries (such as ceramics, catalysts, filled polymers, etc.)
- **suspensions**
- **particle-flow interactions**
- **bubble and drop dynamics**
- fluidization
- porous media

76. **INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS**

Link :- <http://www.interscience.wiley.com/jpages/0271-2091/>

The expressed intention of the Journal is the dissemination of information relating to the development, refinement, and application of **computer-based numerical techniques for solving problems in fluids**. These include, but are not limited to, the Finite Difference and Finite Element methods, in each of which the manner of imposing boundary conditions to obtain a numerical solution can be quite important. The submission of manuscripts in which the primary contribution is experimental is encouraged, if such results are compared with previously published numerical predictions. Also encouraged are papers in which an established numerical technique is used to study some of the subtleties associated with the physics of fluids. Indeed, even papers presenting closed form solutions directly related to engineering problems and demonstrated to be effective will be published.

77. **INTERNATIONAL JOURNAL OF ROTATING MACHINERY**

Link :- <http://www.gbhap.com/journals/236/236-top.htm>

The International Journal of Rotating Machinery, published in cooperation with the Pacific Center of **Thermal-Fluids Engineering**, presents research results on all types of rotating machinery employing gas, vapor, particle, liquid, and their mixtures (including slurry) as the working substances. Articles cover the topics of combustion, control design, dynamics, **fluid mechanics**, heat transfer, materials, manufacturing, structures and thermodynamics.

78. **JOURNAL OF AEROSPACE ENGINEERING**

Link :- <http://www.pubs.asce.org/journals/as.html>

An international communication forum for the exchange of ideas and knowledge on technology in space between civil engineers and those in related disciplines from nations across the globe. The journal defines the role of civil engineering in space, as peer-reviewed papers emphasize the practical application of civil engineering in space and on earth. Topics covered include lunar soil mechanics, environmental factors for the design of inhabited space facilities, am-6()76.41n of tisystems, stferrestrial2 n

This journal is a cover to cover translation of the Russian journal *Prikladnaya Matematika i Mekhanika*, published by the Russian Academy of Sciences and reflecting all the major achievements of the Russian School of Mechanics. The journal is concerned with **high-level mathematical investigations of modern physical and mechanical problems** and reports current progress in this field. Special emphasis is placed on aeronautics and space science and such subjects as continuum mechanics, theory of elasticity, and mathematics of space flight guidance and control.

80. JOURNAL OF APPLIED MECHANICS

Link :- <http://ojps.aip.org/ASMEJournals/AppliedMechanics/>

The Journal also lists and publishes scholarly reviews of new books on mechanics and related areas. Technical areas covered include: **aerodynamics**; aeroelasticity; **boundary layers; computational mechanics**; constitutive modeling of materials; dynamics; elasticity; flow and fracture; heat transfer; hydraulics; impact; internal flow; mechanical properties of materials; micromechanics; plasticity; stress analysis; structures; thermodynamics; turbulence; vibration; and wavepropagation.

81. JOURNAL OF APPLIED MECHANICS AND TECHNICAL PHYSICS

Link :- <http://www.wkap.nl/journalhome.htm/0021-8944>

Journal of Applied Mechanics and Technical Physics, a translation of *Zhurnal Prikladnoi Mekhaniki Tekhnicheskoi Fiziki*, is a publication of the Siberian division of the Russian Academy of Sciences. The journal presents top-level work in applied physics now going on in Russian research institutions. Each issue contains valuable contributions on **hypersonic flow, boundary layer theory**, plasma physics, shock waves, detonation fronts, theory of combustion, heat and mass transfer, thermophysical properties, plasticity, and creep. Engineering libraries with an interest in mechanical engineering will find this journal to be very valuable for their collection.

82. JOURNAL OF APPLIED OCEAN RESEARCH

Link :- <http://www.elsevier.nl/locate/apor>

The aim of *Applied Ocean Research* is to encourage the submission of papers that advance the state of knowledge in a range of topics relevant to ocean engineering. These topics include:

- **Experimental fluid mechanics**
- **Computational fluid mechanics**
- Hydrodynamics and wave dynamics
- Fluid/structure interaction
- Ocean towing and installation

83. JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS

Link :- <http://www.elsevier.nl/locate/cam>

This international journal publishes original research in all areas of applied mathematics. Welcomed are papers describing **new computational techniques for solving scientific problems**, and carefully-tested algorithms. Survey articles dealing with interactions between different fields of applied mathematics are also published.

84. JOURNAL OF COMPUTATIONAL PHYSICS

Link :- <http://www.apnet.com/www/journal/cp.htm>

Journal of Computational Physics thoroughly treats the computational aspects of physical problems, presenting techniques for the numerical solution of mathematical equations arising in all areas of physics. The journal seeks to emphasize methods that cross disciplinary boundaries.

Research Areas Include:

- **Computational methods**
- **Numerical analysis**

85. JOURNAL OF ENGINEERING FOR GAS TURBINE AND POWER

Link :- <http://ojps.aip.org/ASMEJournals/GasTurbinesPower/>

Covering a broad spectrum of practical topics of interest to the gas turbine and power industry, this journal presents archival quality research in stationary, vehicular, and aircraft power systems applications. It covers thermodynamics, **fluid mechanics**, and solid mechanics of components and systems; combustion systems, boilers, inlet systems, control systems, and applications of complete systems for power and propulsion of vehicles on land, sea and air. Specific topic areas include: gas turbine technology; fossil and nuclear power generation; internal combustion engines; fuels and combustion; aeronautical and aerospace propulsion systems; advanced energy systems; thermal power production and energy conversion; and cogeneration and combined cycles.

86. JOURNAL OF ENGINEERING MATHEMATICS

Link :- <http://kapis.www.wkap.nl/journalhome.htm/0022-0833>

The Journal of Engineering Mathematics promotes the application of mathematics to physical problems particularly in the general area of engineering science. It also emphasizes the intrinsic unity, through mathematics, of the fundamental problems of applied and engineering science. The journal publishes in the following areas:

Mathematics: Ordinary and partial differential equations, Integral equations, Asymptotics, Variational and functional-analytical methods, Numerical analysis, Computational methods.

Applied Fields: Continuum mechanics, Stability theory, Wave propagation, Diffusion, Heat and mass transfer, **Free-boundary problems; Fluid mechanics: Aero- and hydrodynamics, Boundary Layers**, Shock waves, Fluid machinery, Convection, Combustion, Acoustics, **Multiphase flows**, Transition and turbulence, Creeping flow, Rheology, Porous-media flows, Ocean engineering; Atmospheric engineering; Solid mechanics: Elasticity.

87. **JOURNAL OF FLOW VISUALIZATION AND IMAGE PROCESSING**

Link :- <http://www.begellhouse.com/jfv/jfv.html>

The *Journal of Flow Visualization and Image Processing* is a quarterly refereed journal that publishes original papers to disseminate and exchange the knowledge and information obtained through research on the principles and applications of **flow visualization techniques, including flow image processing**. Its purpose is to promote academic and industrial advancement and improvement of the techniques internationally. This journal presents a wealth of practical information covering all areas in science, technology, and medicine for engineers, scientists, and researchers in industry, academia, and government.

88. **JOURNAL OF FLUID MECHANICS**

Link :- <http://journals.cambridge.org/action/displayJournal?jid=JFM>

Journal of Fluid Mechanics is the leading international journal in the field and is essential reading for all those concerned with developments in fluid mechanics. It publishes authoritative articles covering theoretical, **computational and experimental investigations of all aspects of the mechanics of fluids**. Each issue contains papers on both the fundamental aspects of **fluid mechanics**, and their applications to other fields such as aeronautics, astrophysics, biology, chemical and mechanical engineering, hydraulics, meteorology, oceanography, geology, acoustics and combustion.

89. **JOURNAL OF FLUIDS AND STRUCTURES**

Link :- <http://www.idealibrary.com/cgi-bin/links/toc/fl>

The *Journal of Fluids and Structures* publishes original full-length papers, review articles and brief communications on any aspect of fluid-structure interaction and on the dynamics of systems related to such interactions. It is concerned with the fundamental mechanisms, as well as on specific applications, analytical, experimental, or computational. The journal promises speedy publication and special express processing of letters and brief notes.

The journal serves as a focal point of contact and exchange for the many kinds of specialists and practitioners concerned with fundamental and applied aspects of:

- **flow-induced excitation mechanisms**
- **solid-fluid interactions**
 - response of mechanical, civil, marine, and physiological structures to flow and flow-acoustic excitation
- **unsteady fluid dynamics**
 - aeroelasticity and other relevant aeronautical applications

90. **JOURNAL OF FLUIDS ENGINEERING**

Link :- <http://ojps.aip.org/ASMEJournals/Fluids/>

The Journal of Fluids Engineering disseminates technical information in fluid mechanics of interest to researchers and designers in mechanical engineering. The majority of papers present original analytical, numerical or experimental results and physical interpretation of lasting scientific value. Other papers are devoted to the review of recent contributions to a topic, or the description of the methodology and/or the

physical significance of an area which has recently matured. This journal publishes papers in the areas of aerodynamics, boundary layers, bubbly flows, cavitation, compressible flows, convective heat transfer, duct and pipe flows, free shear layers, flows in biological systems, **fluid-structure interaction**, fluid transients and wave motion jets, **multiphase flows**, naval hydrodynamics, sprays, stability and transition, turbulence, and wakes. In addition, contributions to the journal emphasize **investigative techniques**, analytical methods, **computational fluid mechanics**, and **experimental methods like laser-Doppler velocimetry, and hot film and hot wire anemometry**.

91. JOURNAL OF MATHEMATICAL FLUID MECHANICS

Link :- <http://link.springer.de/link/service/journals/00021/>

The *Journal of Mathematical Fluid Mechanics* is a forum of fluid mechanics for the publication of high-quality peer-reviewed papers on the mathematical theory of fluid mechanics, with special regards to the Navier-Stokes equations. As an important part of that, the journal encourages papers dealing with mathematical aspects of computational theory, as well as with applications in science and engineering. The journal also publishes in related areas of mathematics that have a direct bearing on the mathematical theory of **fluid mechanics**. All papers will be characterized by originality and mathematical rigor.

92. JOURNAL OF NON-NEWTONIAN FLUID MECHANICS

Link :- <http://www.elsevier.nl/locate/inca/502693>

The journal will appeal to people working on basic rheological science and applications. This journal consists of **fluid mechanics** papers.

93. JOURNAL OF PROPULSION AND POWER

Link :- <http://www.aiaa.org/Publications/index.hfm?pub=5>

This Journal is devoted to the advancement of the science and technology of aerospace propulsion and power through the dissemination of original archival papers contributing to advancements in airbreathing, electric, and advanced propulsion; solid and liquid rockets; fuels and propellants; power generation and conversion for aerospace vehicles; and the application of **aerospace science and technology** to terrestrial energy devices and systems. It is intended to provide readers of the Journal, with primary interests in propulsion and power, access to papers spanning the range from research through development to applications. Papers in these disciplines and the sciences of combustion, **fluid mechanics**, and solid mechanics as directly related to propulsion and power are solicited.

94. JOURNAL OF SPACECRAFT AND ROCKETS

Link :- <http://www.aiaa.org/Publications/index.hfm?pub=5>

This Journal is devoted to reporting advancements in the science and technology associated with spacecraft and tactical and strategic missile systems, including subsystems, applications, missions, environmental interactions, and space sciences. The

Journal publishes original archival papers disclosing significant developments in spacecraft and missile configurations, re-entry devices, transatmospheric vehicles, systems and subsystem design and application, mission design and analysis, **applied and computational fluid dynamics, applied aerothermodynamics**, development of materials and structures for spacecraft and missile applications, space instrumentation, developments in space sciences, space processing and manufacturing, space operations, interactions with spacecraft and sensors, design of sensors and experiments for space, and applications of space technologies to other fields.

95. **JOURNAL OF SUPERCRITICAL FLUIDS**

Link :- <http://www.elsevier.com/inca/publications/store/6/0/0/2/5/0/>

The Journal of Supercritical Fluids is an international journal devoted to the fundamental and applied aspects of supercritical fluids and processes. Its aim is to provide a focused platform for academic and industrial researchers to report their findings and to have ready access to the advances in this rapidly growing field.

Topics related to high pressure equipment design, analytical techniques, sensors, and process control methodologies are also within the scope of the journal. The journal publishes original contributions in all theoretical and **experimental aspects of the science and technology of supercritical fluids and** processes. Papers that describe novel instrumentation, new experimental methodologies and techniques, predictive procedures and timely review articles are also acceptable.

96. **JOURNAL OF TURBOMACHINERY**

Link :- <http://www.asme.org/pubs/journals/turbo/turbo.htm>

The journal publishes the best technical papers worldwide that further the technology of turbomachinery related to gas turbine engines. Subject matter scope includes the fluid dynamics and heat transfer aspects of turbomachine design and performance advancement. Some specific topic areas include: **fluid dynamics** and heat transfer phenomena in compressor and turbine components of gas turbine engines, turbine blade and measurement advancements, and the impact on cavity leaking flows on performance

97. **JOURNAL OF TURBULENCE**

Link :- <http://www.iop.org/Journals/jt>

The Journal of Turbulence (JoT) is a digital forum for new theoretical, numerical and experimental concepts aimed at understanding, predicting and controlling fluid turbulence, either statistically or deterministically.

Turbulence is a physical phenomenon occurring in most fluids, yet is still widely unsolved. Recent theoretical, numerical and experimental studies have advanced our understanding of turbulence. JoT will provide a central repository for communicating these studies for fundamental and applied aspects, in two and three dimensions, for turbulent situations arising in **aero- and hydrodynamics**, acoustics, hydraulics, aeroelasticity, combustion, turbo-machinery, heat transfer, two-phase flows, MHD and fusion, internal geophysics, oceanography, meteorology, and astrophysics.

98. **JOURNAL OF WIND ENGINEERING AND INDUSTRIAL AERODYNAMICS**

Link :-

http://www.elsevier.com/wps/find/journaldescription.cws_home/505658/description#description

The objective of the journal is to provide a means for the publication and interchange of information, on an international basis, on all those aspects of wind engineering that are included in the activities of the International Association for Wind Engineering. These are: social and economic impact of wind effects; wind characteristics and structure, local wind environments, wind loads and structural response, diffusion, pollutant dispersion and matter transport, wind effects on building heat loss and ventilation, wind effects on transport systems, wind power generation, codification of wind effects.

Papers on these subjects describing full-scale measurements, wind-tunnel simulation studies, computational or theoretical methods are published, as well as papers dealing with the **development of techniques and apparatus for wind engineering experiments.**

99. **LASERS IN ENGINEERING**

Link :- <http://www.gbhap.com/journals/707/707-top.htm>

Lasers in Engineering publishes research articles, reviews, short communications and letters on all aspects relating to the **applications of lasers in engineering** and related disciplines. The journal covers the use of lasers in sensors or measuring devices, as integral parts of production assemblies, as well as covering materials aspects of processes such as welding, cutting, surface treatment, and electrocomponent fabrication. The journal presents a balanced account of future developments, fundamental aspects e.g. solidification or modelling and industrial innovations. Modern technology has a vital role to play in meeting the increasingly stringent demands made on material and production systems. The journal *Lasers in Engineering* provides a readily accessible medium for the rapid reporting of advances in these technologies.

100. **OPTICAL DIAGNOSTICS IN ENGINEERING**

Link :- <http://www.ode-web.demon.co.uk/>

The journal deals with **optical diagnostics techniques to solve engineering problem.** It offers the opportunity for rapid networking with optical specialists world-wide. The e-journal contains abstracts in html and fully down-loadable papers in **pdf**. Where available the papers and summaries are connected by "hot" links to author's Web sites and email boxes.

101. **OPTICS & LASER TECHNOLOGY**

Link : <http://www.elsevier.nl/locate/optlastec>

Optics & Laser Technology aims to provide a vehicle for the publication of a broad range of high quality research and review papers in those fields of scientific and engineering research appertaining to the development and application of the technology of optics and lasers. Papers describing original work in these areas are submitted to rigorous refereeing prior to acceptance for publication.

The scope of *Optics & Laser Technology* encompasses, but is not restricted to, the following areas:

- development in all types of lasers
- developments in optoelectronic devices and photonics
- developments in conventional optics, optical instruments and components
- techniques of optical metrology, including interferometry and optical fibre sensors
- LIDAR and other non-contact **optical measurement techniques**, including optical methods in heat and fluid flow
- applications of lasers to materials processing, optical NDT display (including holography) and optical communication
- research and development in the field of laser safety including studies of hazards resulting from the applications of lasers (laser safety, hazards of laser fume)
- developments in optical computing

102. **OPTICS AND LASERS IN ENGINEERING**

Link :- <http://www.elsevier.nl/locate/optlaseng>

Optics and Lasers in Engineering aims to provide an international forum for the interchange of information on the development and application of optical techniques and laser technology in engineering. Emphasis is placed on contributions dealing with the practical use of methods and devices, the evaluation of results and developments and enhancement of solutions and new theoretical foundations for experimental methods.

Optics and Lasers in Engineering reflects the main areas in which optical methods are being used and developed in an engineering environment. The scope of the journal is defined to include the following:

- Optical Metrology
- Optical Methods for Process Control
- Machine Vision and Image Processing
- Optical Microelectromechanical Systems (MEMS)
- Optical Techniques in Micro-Mechanics
- Imaging, Microscopy and Adaptive Optics
- Laser Material Processing
- **Laser Beam Delivery and Diagnostics**
- Fibre Optic Sensors
- Laser Remote Sensing and Environmental Monitoring
- Laser Safety
- Lasers in Medicine and Biology
- **Engineering Applications of Spectroscopy**

103. **PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS**

Link :- <http://www.elsevier.nl/locate/physa>

Physica A publishes research in the field of statistical mechanics and its applications. Statistical mechanics sets out to explain the behaviour of macroscopic systems by studying the statistical properties of their microscopic constituents. Applications of the techniques of statistical mechanics are widespread, and include applications to physical systems such as solids, **liquids and gases**; applications to chemical and biological systems (colloids, interfaces, **complex fluids**, polymers and biopolymers, cell physics); and other interdisciplinary applications to biological, economical and sociological systems.

104. **PHYSICAL REVIEW LETTERS**

Link :- http://www.aip.org/journal_catalog/html/physrevlett.html

Link :- <http://prl.aps.org/>

Physical Review Letters is the premier physics Letters journal providing rapid publication of short (3-4 page) reports of significant fundamental research in all fields of physics. Truly international in scope, the journal provides its diverse readership with coverage of major advances in all aspects of physics and of developments with significant consequences across disciplines. Its topical sections are devoted to general physics; gravitation and astrophysics; elementary particles and fields; nuclear physics; atomic, molecular, and optical physics; **nonlinear dynamics, fluid dynamics**, classical optics, etc.; plasma and beam physics; condensed matter; and interdisciplinary physics, biological physics, quantum information, etc.

105. **PHYSICS OF FLUIDS**

Link :- <http://ojps.aip.org/phf/>

Physics of Fluids is published monthly by the American Institute of Physics with the cooperation of [The American Physical Society](#) **Division of Fluid Dynamics**. The journal is devoted to the publication of original theoretical, **computational, and experimental contributions to the dynamics of gases, liquids, and complex or multiphase fluids**.

106. **PROGRESS IN COMPUTATIONAL FLUID DYNAMICS (PCFD)**

Link :- <http://www.inderscience.com>

The ultimate goal of PCFD is to provide a platform for information exchange between model and software developers and users, by balanced international and interdisciplinary contributions from both areas. It aims to disseminate information relating to development and refinement of mathematical and numerical models, software tools and their innovative applications in the area of **CFD**. This journal covers Turbulence, Two-phase flows, Heat transfer, Chemical reactions and combustion, Acoustics, Unsteady flows, **Free-surfaces, Fluid-solid interaction, Navier-Stokes solution techniques** for incompressible and compressible flows, **Discretization methods** and schemes convergence acceleration procedures, Grid generation and adaptation techniques, Distributed computing, and Other relevant topics.

107. **SIAM JOURNAL ON APPLIED MATHEMATICS**

Link :- <http://www.siam.org/journals/siap/siap.htm>

The SIAM Journal on Applied Mathematics publishes research articles that treat scientific problems using methods that are of mathematical interest. Appropriate subject areas include the physical, engineering, financial, and life sciences. Examples are **problems in fluid mechanics**, including reaction-diffusion problems, sedimentation, combustion, and transport theory; solid mechanics; elasticity; electromagnetic theory and optics; mathematical biology, including population dynamics, biomechanics, and physiology; linear and nonlinear wave propagation, including scattering theory and wave propagation in random media; inverse problems; nonlinear dynamics; stochastic processes, including queueing theory and finance; signal processing; and image processing. Mathematical techniques include asymptotic methods, bifurcation theory, dynamical systems theory, and probabilistic and statistical methods.

108. **SIAM JOURNAL ON MATHEMATICAL ANALYSIS**

Link :- <http://www.siam.org/journals/sima/sima.htm>

The SIAM Journal on Mathematical Analysis features research articles of the highest quality employing innovative analytical techniques to treat problems in the natural sciences. Every paper should have content that is primarily analytical and that employs mathematical methods in such areas as partial differential equations, the calculus of variations, functional analysis, approximation theory, harmonic or wavelet analysis, or dynamical systems. Secondly, every paper should relate to a model for natural phenomena in such areas as **fluid mechanics**, materials science, quantum mechanics, biomathematics, mathematical physics, or to the computational analysis of such.

109. **STUDIES IN APPLIED MATHEMATICS**

Link :- <http://www.blackwellpublishers.co.uk/journals/SAPM/descript.htm>

Studies in Applied Mathematics explores the interplay between mathematics and the applied disciplines. Contributors report research results involving the core concepts of applied mathematics research, including propagation, equilibrium, stability, optimization, and discrete and random processes. These come from a range of related fields, including computer science, mechanics, astrophysics, geophysics, and high-energy physics, and often involve statistics, probability, combinatorics, **numerical analysis, and fluid dynamics**.

110. **THEORETICAL AND COMPUTATIONAL FLUID DYNAMICS**

Link :- <http://link.springer.de/link/service/journals/00162/>

The purpose of the journal is to report original research of scholarly value in theoretical and **computational fluid dynamics** aimed at elucidating flow physics. Papers along these lines covering the wide interdisciplinary range of fluid mechanics (e.g. aeronautics, environmental fluid dynamics, geophysical fluid dynamics, **gas dynamics, non-Newtonian fluid dynamics**, fluid dynamics of material sciences etc.) are sought. Of particular interest are those papers in which combined computational and experimental approach is taken to gain insight into **complex flow physics** and papers in which a

results are expected to be rigorous in the sense that the numerical algorithm has been well tested and the crucial issue of resolution of the flow field has been addressed. The journal contains a complementary blend of both computational and theoretical papers of a fundamental nature. Papers of a purely algorithmic, experimental, or engineering application flavor are outside the scope of the journal.

111. **WIND ENERGY**

Link :- <http://www.interscience.wiley.com/jpages/1095-4244/info.html>

Wind Energy offers a major forum for the reporting of advances in this rapidly developing technology with the goal of realising the world-wide potential to harness clean energy from the wind. The journal will aim to reach all those with an interest in this field from academic research, industrial development through to practical applications of wind turbines. Contributions across the spectrum of scientific and engineering disciplines concerned with the advancement of wind power conversion technology are an essential feature of the journal.

Principal Topics

- **Wind rotor technology** - **aerodynamics**, aeroacoustics, wakes, blade design.
- **Structural and mechanical engineering of wind power** - drive trains, hydraulics, fluid mechanics and mechanical components.
- **Electrical engineering of wind power** - electrical components, power electronics and controls, generators, grid connection, power transmission and distribution.
- **Dynamics and control** - materials, fatigue, testing, reliability and certification.
- **Resource assessment** - prediction, modelling, wind farm planning, siting (including off-shore developments), economics and environmental issues.
- **Systems** - design, installation, operation, performance, optimisation and control; small, hybrid and autonomous systems and applications other than grid connection such as desalination, water pumping and heating.

112. **Journal of Computational Science and Technology**

Link :- <https://www.jstage.jst.go.jp/browse>

JSME International Journal which is the English Journal of the Japan Society of Mechanical Engineers had evolved to be new electronic journals. The new journals are to be run by the divisions of the JSME. The Computational Mechanics Division of JSME had decided to launch the new journal "Journal of Computational Science and Technology (JCST)" and its first volume is issued in 2007.

The Computational Mechanics Division (CMD) of JSME has over 5000 registered members and it has had organized a number of international conferences. The CMD is known to be the group of researchers/engineers who really have high international activities. The CMD has maintained high research activities with having close ties with the industries. With these as the backgrounds, we expect that the new electric journal "Journal of Computational Science and Technology (JCST)" will evolve to be a major international journal in the field that has high citations and impact factor.

113. Journal of Fluid Science and Technology

Link :- www.i-product.biz/jsme/eng/data/jfst/jfst_foreword.html

Journal of Fluid Science and Technology (JFST) is an international journal published by the Fluids Engineering Division in the Japan Society of Mechanical Engineers (JSME). Namely, JSME discontinued former International Journals and projected new publications from the divisions belonging to JSME. The Fluids Engineering Division acted quickly among all divisions and launched the premiere issue of JFST in January 2006. The topics to be treated should be corresponding to the following keywords of the Fluids Engineering Division of the JSME. Basic keywords include: **turbulent flow; multiphase flow; non-Newtonian fluids; functional fluids; quantum and molecular dynamics; wave; acoustics; vibration; free surface flows; cavitation; fluid machinery; computational fluid dynamics (CFD); experimental fluid dynamics (EFD).**

114. Computational Physics

Link :- <http://xxx.lanl.gov/list/physics.comp-ph/recent>
computational physics

115. Fluid Dynamics

Link :- <http://xxx.lanl.gov/list/physics.flu-dyn/recent>

fluid flow, boundary problems, fluid dynamics

116. IMA Journal of Applied Mathematics

Link :- <http://imamat.oxfordjournals.org/content/by/year>

The *IMA Journal of Applied Mathematics* is a direct successor of the Journal of the Institute of **Mathematics and its Applications** which was started in 1965 with the aim of publishing papers in all areas of the application of mathematics. Since the appearance of the IMA Journal of Numerical Analysis in 1981, analytic and **numerical treatments of both physical and non-physical applied mathematical problems**, including those arising in industry, have formed the main part of the Journal's contents. The Journal also seeks to publish papers on new developments of existing mathematical methods, especially those that have relevance to more than one field of application and also new mathematical methods suggested by particular applications. Longer papers which survey recent progress in topical fields of mathematics and its applications are also published.

117. International Journal of Mechanical Engineering

Link :- http://www.serialsjournals.com/journal-detail.php?journals_id=46

The International Journal of Mechanical Engineering is a peer-reviewed journal. It consists the topic of mechanical engineering

- **Fluid mechanics**
- **Fluid Dynamics**
- Solid Mechanics
- CAD/Cam
- Manufacturing process, etc.

118. International Journal of Nonlinear Dynamics in Engineering and Sciences

http://www.serialsjournals.com/journal-detail.php?journals_id=159

The International Journal of Nonlinear Dynamics in Engineering and Sciences is a peer-reviewed journal. The International Journal of Nonlinear Dynamics in Engineering and Sciences is a fully refereed international journal, which publishes original research papers and survey articles in all subjects relevant to Dynamical Systems, nonlinear sciences and analytical and numerical solution. The highest priority will be given to those contributions which discuss practical problems, the establishment of nonlinear dynamic models, the determination of a solution, approximate or exact, analytical or numerical development of the results to the real-life problems. Manuscripts which discuss new analytical techniques for new nonlinear problems in different fields of science and engineering are also encouraged. Some topics in detail to be covered are:

- Modern Theory of Dynamical Systems.
- Analytical and Numerical Analysis of Dynamical Systems.
- Haimiltonian and Lagrangian Dynamics.
- Instabilities in Dynamical Systems.
- **Differential Equations and Partial Differential Equations.**
- **Numerical Simulation of new Non-linear problems.**
- **New Analytical Techniques for Applied DEs and PDEs.**

119. International Journal of Advances in Mechanical Engineering

http://www.serialsjournals.com/journal-detail.php?journals_id=326

This journal is intended to become a quality international journal in the field of Mechanical Engineering by publishing papers of high quality through critical reviews. The journal features a mix

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of experimental, numerical, and theoretical articles dealing with all aspects of the field, including but not limited to : **Fluid mechanics**, Heat transfer, Solid mechanics, Refrigeration and air conditioning, Renewable energy technology, Materials engineering, Composite materials, Marine engineering, Petroleum and mineral resources engineering, Textile engineering, Leather technology, Industrial engineering, Operational research, Manufacturing processes, Machine design, Quality control, Mechanical maintenance, Tribology, etc. In addition to being of interest to engineers and other scientists doing research in the field, the information published in the journal is also of great importance to engineers who design or use mechanical components and/or who are involved with manufacturing processes.

120. International Journal of Advances in Thermal Sciences and Engineering

Link :- http://www.serialsjournals.com/journal-detail.php?journals_id=227

The International Journal of Advances in Thermal Sciences and Engineering is a peer-reviewed journal. International Journal of Advances in Thermal Sciences and Engineering (IJATSE) is concerned with the science and engineering of thermal systems and processes. The journal aims to publish high quality original research articles covering the following research areas:

- **Thermo-physical properties of materials and fluids.**
- Thermal measurement techniques and data processing
- Heat and mass transfer occurring in many processes in chemical, food, agricultural, metallurgical, automobile, space and **aeronautical industries**
- Turbo Machines
- **Fluid Power Engineering**
- Computational methods in thermal engineering
- Application of **optimization techniques**
- **Computational fluid dynamics**