You should select from the following keyword when submitting a manuscript to Tribology Letters. If you have any questions or comments about the keywords, please contact Nic Spencer (nicholas.spencer@mat.ethz.ch).

Tribology Letters Keywords

Additives, Chemistry and Performance
Additive Decomposition
Additive Degradation
Additive Depletion
Additive Deposition
Additive Interaction
Additive Solubility
Antifatigue Additives
Antioxidants
Antiwear Additives
Biocides
Corrosion/Rust Inhibitors
Detergents
Demulsifiers
Dispersants
Emulsifiers
Extreme Pressure Additives
Foam Control Additives
Friction Modifiers
Grease Thickeners
Magnetic Particles
Metal Passivators
Pour Point Depressants
Solid Lubricant Additives
VI Improvers

Applied Tribology, by Type of Industry
Aviation
Agriculture
Aluminum Industry
Automotive
Biotribology
Cement Industry
Economics
Food Processing
Forestry
History of Tribology
Magnetic Data Storage
Marine
Mining
Oil Production
Paper Manufacturing
Petrochemical Industry
Power Generation
Railroad
Space
Steel Industry
Textile Manufacturing
Tribology Education

Base Stocks, Chemistry and Performance
Biodegradable Base Stocks
Cryogenic Fluids
Fire-Resistant Base Stocks
Fluorocarbons
Food-Grade Base Stocks
Liquid Crystals
Mineral Base Stock Refining
Mineral Base Stocks
Organic Esters
Phosphate Esters
Phosphazenes
Polyethers
Polyglycols
Silicate Esters
Silicones
Synthetic Base Stocks
Synthetic Hydrocarbons
Vegetable Oils

Boundary Lubrication and Nanotribology
Boundary Lubrication Friction (see also, Friction)
Boundary Lubrication Chemistry
Boundary Lubrication (General)
Boundary Lubrication Test Methods
Boundary Lubrication Thermal Effects
Boundary Lubrication Wear (see also, Wear)
Nanotribology

Component and Machine Tribology
Centrifugal Gas Compressors
Centrifugal Hydraulic Pumps
Compressors (General)
Couplings - see Gears, Couplings, Etc.
Electrical Equipment
Engines - see Engine Tribology
Gas Turbines - see Engine Tribology
Gear Hydraulic Pumps
Gears - see Gears, Couplings, etc.
Human Joints, Replacements
Hydraulic Drives
Hydraulic Systems (General)
Hydraulic Valves
Hydrodynamic Bearings - See Hydrodynamic, etc.
Machine Tools
Magnetic Bearings
Magnetic Data Disks (Hard, Floppy)
Magnetic Data Tapes
Magnetic Data Recording Heads
MEMS Devices
Paper Machines
Piston Gas Compressors
Piston Hydraulic Pumps
Refrigerant Compressors
Rolling Bearings - see Rolling Element Bearings
Screw Gas Compressors
Slideways
Steam Turbines
Torque Converters
Valvetrains, Cams and Lifters
Vane Pumps

**Computational and Math Methods for Tribology**
Data Acquisition
Dynamic Modelling
Expert Systems
Fluid Mechanics Methods
Statistical Analysis
Tribology Databases

**Contact Mechanics and Fatigue**
Contact Mechanics
Fatigue Analysis
Fatigue Crack Propagation
Non-Contact Fatigue
Stress Analysis
Thermal Analysis

**Elastohydrodynamic Lubrication (EHL)**
Compliant Surface EHL
EHL Film Geometry
EHL (General)
EHL with Greases
EHL with Non-Newtonian Lubricants
Low Elastic Modulus EHL
Micro-EHL
Partial-EHL, Roughness Effects
Starvation in EHL
Thermal Effects in EHL
Traction

**Engine Tribology**
Diesel Engines
Gasoline Engines
Gas/Jet Turbines
Rocket Engines
Marine Diesel Engines
Natural Gas Engines

**Friction and Energy Conservation**
- Adhesion, Stiction
- Brakes
- EHL Friction (Traction) - see EHL
- Energy Conservation
- Friction Mechanisms
- Friction Test Methods
- Hydrodynamic Friction
- Rolling Friction
- Self Lubrication Friction
- Solid Lubrication Friction
- Static Friction
- Stick-Slip
- Unlubricated Friction

**Gears, Couplings, Transmissions**
- Automatic Transmissions
- Belt Drives
- Bevel Gears
- Chain Drives
- Clutches
- Constant Velocity Joints
- Continuously Variable Transmissions (CVT)
- Epicyclic (Planetary) Gears
- Friction Drives
- Gear Couplings
- Gears (General)
- Helical Gears
- Hypoid Gears
- Open Gears
- Rack and Pinion Gears
- Splines
- Spur Gears
- Traction Drives (IVT)
- Worm Gears

**Hydrodynamic and Hydrostatic Lubrication and Bearings**
- Air Bearings
- Air, Gas and Vapor in Hydrodynamics
- Cavitation in Hydrodynamics
- Compliant Surface Bearings
- Compressibility in Hydrodynamics
- Film Geometry in Hydrodynamics
- Flow Rate in Hydrodynamics
- Foil Bearings
- Human Joint Hydrodynamics
- Hydrodynamic Bearings (General)
- Hydrodynamic Friction - see Friction
- Hydrodynamic Lubrication (General)
- Hydrostatic Bearings
Hydrostatic Lubrication
Inertia Effects in Hydrodynamics
Journal Bearings
Load-Carrying Capacity
Multi-Lobe Bearings
Non-Newtonian Effects in Hydrodynamics
Porous Metal Bearings
Roughness Effects in Hydrodynamics
Slideway Bearings
Squeeze-Film Dampers
Squeeze-Film Lubrication
Stability in Hydrodynamics
Starvation in Hydrodynamics
Thermal Effects in Hydrodynamics
Tilting-Pad Bearings
Turbulent Flow in Hydrodynamics
Vapor Phase Lubrication
Viscoelasticity in Hydrodynamics

Lubricant Application and Disposal Methods
Aerosol Lubrication
Grease Application
Lubricant Circulation Systems
Lubricant Cleanup, Solvents
Lubricant Conservation
Lubricant Disposal
Lubricant Reclamation
Lubricant Recycling
Lubricant Rerefining
Lubricant Storage
Lubricant Waste
Lubrication Scheduling
Mist Lubrication
Oil Bath Lubrication
Pollution
Splash Lubrication
Spray Lubrication
Vapor Phase Lubrication
Wick, Ring, Disc Lubrication

Lubricant and Grease Formulation and Performance
Automatic Transmission Fluids
Biodegradable Oils
Circulating Oils
Compressor Oils
Coupling Lubricants
Cryogenic Lubricants
Diesel Engine Oils
Ferrofluids
Fire-Resistant Fluids
Food-Grade Lubricants
Gas Turbine Oils
Gasoline Engine Oils
Gear Lubricants
Greases
Hydraulic Fluids
Internal Combustion Engine Oils
Jet Engine Oils
Lubricant Blending and Manufacture
Lubricant Marketing
Metalworking Fluids - see Metalworking, etc.
Natural Gas Engine Oils
Paper Machine Oils
Process Fluids
Radiation Resistant Lubricants
Refrigeration Oils
Screw Thread Lubricants
Spindle Oils
Steam Turbine Oils
Traction Fluids
Vapor Phase Lubricants
Water, Water-Based
Way Oils

Lubricant Properties, Chemical Analysis
  Acidity
  Basicity
  DSC
  Ferrography
  Fluorescence
  Fuel Dilution
  Gas Chromatography
  Hydrolytic Stability
  Infra Red
  Liquid Chromatography
  NMR
  Oxidation Resistance
  Radiation Resistance
  Spectroscopy
  TGA
  Thermal Stability
  Voltametric

Lubricant Properties, Physical Analysis
  Air Release
  Bulk Modulus
  Demulsibility
  Density
  Electrical and Magnetic Properties
  Electrorheological Behavior
  Emulsivity
  Flash and Fire Point
  Foaming
  Gas Solubility
Heat Capacity
Low Temperature
Non-Newtonian Behavior
Pour Point
Rheology
Surface Tension
Thermal Conductivity
Traction, Shear Strength
Vapor Pressure, Volatility
Viscoelasticity
Viscosity
Viscosity-Pressure
Viscosity-Temperature

**Maintenance, Monitoring and Lubricant Problems**
Chemical Contamination
Cleanliness
Computer Use in Maintenance
Equipment Monitoring
Failure Analysis
Filtration
Humidity
Hydrolysis
Incompatible Fluids
Life Prediction Methods
Lubricant Degradation
Maintenance
Oil Condition Monitoring
Oxidative Degradation
Particulates
Water Contamination

**Materials in Tribology (Solids)**
Aluminum
Beryllium
Borides
Carbon, Graphite
Carbides
Ceramic Composite
Ceramics
Chromium
Cobalt
Copper
Diamond
Elastomers
Ferrous Alloys, Steel
Gallium
Glass
Gold
Iron
Lead
Molybdenum
Nickel
Nitrides
Non-Ferrous Alloys
Oxides
Polymers (solid)
Powder Metals
Self-Lubricating Composites
Silicon
Silver
Tin
Titanium
Tungsten

**Metalworking and Metalworking Fluids**
- Boring
- Casting
- Cutting
- Cutting Fluids
- Drawing Fluids
- Drawing, Extruding
- Finishing
- Forging
- Forging Fluids
- Forming
- Grinding
- Grinding Fluids
- Honing
- Jet Cutting
- Lapping
- Milling
- Polishing
- Quenching Fluids
- Rolling
- Rolling Fluids
- Tapping
- Turning

**Rolling Element Bearings**
- Ball Bearings
- Ball Screw
- Cylindrical Roller Bearings
- Linear Rolling Bearings
- Needle Roller Bearings
- Precision Rolling Bearings
- Rolling Element Bearings, General
- Rolling Element Bearing Noise
- Spherical Roller Bearings
- Tapered Roller Bearings

**Seals and Sealing Technology**
- Bellows
- Brush Seals
Elastomeric Seals
Elastomeric Static Seals
Face Seals
Gaskets
Labyrinth Seals
Lip Seals
Magnetic Seals
Mechanical Seals
O-Rings
Packing Seals
Piston Rings
Reciprocating Seals
Rod Seals
Rotary Seals
Sealants
Static Seals
Two-Phase Seals
Viscoseals

Solid and Self Lubrication
Graphite
Jewel Bearings
Molybdenum Disulfide
PTFE
Self Lubrication
Self Lubrication Friction - see Friction
Self Lubricating Bearings
Solid Lubricants
Solid Lubricated Bearings
Solid Lubrication
Solid Lubrication Film Thickness
Solid Lubrication Friction--see Friction
Solid Lubrication Mechanisms
Solid Lubrication Wear--see Wear
Spherical (pivot) Bearings

Surface Technology and Analysis
Additive-Deposited Films
AES(Auger)
AFM
Annealing
Barrier Films
Carburizing
Chemical Analytical Techniques
Coatings, Friction-Reducing
Coatings, Wear-Resistant
Corrosion
Dynamic Light Scattering
EDS
EDXRF
EELS
EPMA
ESCA
EXAFS
FTIR
Hardening
Hardness
Hydrodynamics, Roughness Effects - see Hydrodynamics
Ion Implantation
Metallurgical Analysis
Mossbauer
Nitriding
Optical Microscopy
Partial-EHL, Roughness Effects - see EHL
Raman
RBS
Running-In
SEM
SIMS
STM
Surface Energy
Surface Modification
Surface Roughness
Surface Roughness Analysis and Models
Surface Roughness Measurement Methods
TDS
TEM
XANES
XPS
XRD

**Toxicology and Hygiene**
- Food Contact
- Hygiene
- Lubricant Microbial Degradation
- Safety
- Toxicology

**Wear and Failure**
- Abrasive Wear
- Adhesive Wear
- Bench Wear Tests
- Cavitation Erosion
- Corrosive Wear
- Delamination Wear
- Electrical Erosive Wear
- Equipment Wear Tests
- Erosive Wear
- Fatigue
- Fretting
- Galling
- Impact Wear
- Oxidative Wear
- Rolling-Contact Fatigue
Scoring, Scuffing
Self-Lubricated Wear
Solid Lubricated Wear
Triboemission
Unlubricated Wear
Wear Mechanisms
Wear Particle Analysis
Wear/Failure Testing Devices

Other
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New topics can be typed into blank fields.