

# The 1<sup>st</sup> International Conference on Gas Turbines and Industrial Turbomachinery

ICGT&IT 2022

November 2022, 19-20, Djelfa, Algeria

Call for papers

Submission Link : <https://cmt3.research.microsoft.com/ICGTIT2022>

Joint Research Team  
Djelfa University

## Gas Turbine

### A. Performance of gas turbines

- Emissions and life
- Improvement technology
- Combustion of gas turbines
- Behavior of gas turbines
- Life cycle and operability management
- Performance prediction
- Pollution and environmental effects
- Electricity production cycles
- Thermal and propellant efficiency
- Thermodynamics and new cycles

### C. Gas turbine control and diagnostics

- Gas turbine monitoring
- Fault tolerant control
- Gas turbine failure diagnosis
- Tips of gas turbine
- Hybrid and intelligent control systems
- Integrated control systems
- Decision making in diagnosis
- Measurement and data acquisition
- Implementation of control systems
- Parallel and distributed control systems

### E. Mathematics in turbomachines industry

- Signal processing in rotating machinery
- Experimental and computational methods
- Dynamic instability
- Noise and vibration modelling
- Model-based FDI techniques
- Dimensionality and model reduction
- Multi-dimensional signal processing
- Multi-modal signal processing
- Filtering in signal processing
- Nonlinear signal processing

### B. Gas turbine vibrations

- Intakes and exhaust nozzles
- Noise and vibrations
- Rotor dynamics and vibration
- Modeling of stalls and over voltages
- Vibration analysis
- Vibration control systems
- Dimensionality and vibration modeling
- Vibration measurement and acquisition
- Vibration signal identification
- Vibration tests

### D. Gas turbine applications

- Conditional maintenance
- Configurations and operability
- Intelligent acquisition data
- Intelligent monitoring
- Reliability engineering and failure analysis
- Intelligent data acquisition
- Reconfiguration systems
- Sensors and data measurement
- Energy and power
- CO2 capture

### F. Turbomachinery and fluid dynamics

- Active and passive flow control
- Aero acoustics' and noise reduction
- Aerodynamic and Hydrodynamic flows
- Aviation and industrial gas turbines
- Compressors and fans
- Heat transfer in turbomachinery
- Measurement and experimental validation
- Surge and stall phenomena
- Turbomachinery and fluids dynamics
- Turbulent and transitional flows

### Paper Submission

Papers must be written in English and should describe the work in detail. Please download the template from the ICGTIT2022 website: <http://www.univ-djelfa.dz/icgtit/>

Paper submission is through: <https://cmt3.research.microsoft.com/ICGTIT2022>

Accepted and presented, peer-reviewed papers will be published in Indexed and Abstracted Proceedings

For any requests or further information concerning the full paper submission, please do not hesitate to contact the ICGTIT2022 secretariat at : [icgtit@univ-djelfa.dz](mailto:icgtit@univ-djelfa.dz)

### Important Dates :

Paper Submission Deadline: October 20, 2022

Notification of Acceptance: November 05, 2022

Final Paper Submission Deadline: November 10, 2022



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ÜNİVERSİTESİ

