



## Gas Turbine Cooling Systems Design and Analysis

Guest Editors:

**Prof. Dr. Bruno Facchini**

Dipartimento di Ingegneria Industriale (DIEF), Università degli Studi di Firenze, Florence, Italy

**Dr. Alessio Picchi**

Dipartimento di Ingegneria Industriale (DIEF), Università degli Studi di Firenze, THT Lab coordinator, Florence, Italy

Deadline for manuscript submissions:  
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### Message from the Guest Editors

In the last decades the progress of gas turbine design achieved significant advancements, thanks also to the constant improvement of heat transfer technologies and prediction capabilities. Nowadays, novel experimental techniques open new opportunities and challenges on collecting high resolution and high accuracy data with well-defined boundary conditions at relevant engine working parameters. On the other hand, the research on numerical method continuously grow dragged by computing power; CFD is now facing with high fidelity simulations, multiphysics and multiscale problems, tuning of low order turbulence models, and fluid/solid coupling in conjugate simulations. In addition, the new manufacturing processes offer us new opportunities on design novel cooling architectures.

This special issue invites scientific output in the following topics:

- Novel internal and external heat transfer technologies
- Experimental methodologies for heat transfer investigation
- HiFi CFD and validation of numerical models in heat transfer
- Validation of Conjugate CFD simulations
- Experimental and numerical investigations on relevant heat transfer issues





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### Prof. Dr. Enrico Sciubba

Department of Mechanical and  
Aerospace Engineering,  
University of Roma Sapienza, Via  
Eudossiana 18, 00184 Roma, Italy

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*Energies* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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