



SCIENTIFIC PROGRAMME

ERCOFTAC Workshop organised by PC Greece

AUTH, KEDEA, 3 Sept. str. Thessaloniki, Greece

Conference Hall III, 1st Floor

Thursday 26th April 2018

9:00 Registration and Coffee

9.30 Welcome and Opening

Chairman, AUTH, A. Tomboulides, AUTH & ERCOFTAC, M. Founti, NTUA & ERCOFTAC (Greek PC)

Invited Lectures

09:50 Aerodynamic Shape Optimization using the Continuous Adjoint Method at PCOpt,
K.C. Giannakoglou and E. Papoutsis-Kiachagias, Fluids Section, School of Mech. Eng. NTUA

10.10 Complex flow simulations using HPC, *G. Papadakis, K. Diakakis, J. Prospathopoulos,*
S. Voutsinas, V. Riziotis, School of Mech. Eng. NTUA

10.30 DBD Plasma actuators for active flow control: Experimental measurements and numerical Simulations, *P. Kaparos, Z. Vlahostergios and K. Yakinthos, Dept. of Mech. Eng., AUTH/DUTH*

10:50 Research Activities in ERCOFTAC's Special Interest Groups, *S. Hickel, Chairman of the ERCOFTAC Scientific Programme Committee (SPC), TU Delft*

11:10 Coffee Break

11.30 Nested multi-scale modelling with PALM Large Eddy Simulation model for assessing the impacts of atmospheric forcing on critical infrastructures, *N. Moussiopoulos, F. Barmpas, A. Hellsten, G. Tsegas and S. Raasch, Dept. of Mech. Eng., AUTH*

11.50 Scale simulation of the atmospheric boundary layer, surface pressure distribution and mean and fluctuating velocity measurements using stereo PIV and Hot Wire, *D. Bouris, M. Manolesos, School of Mech. Eng. NTUA*

12.10 Marangoni instabilities in evaporating thin film solutions, *S. Yantsios, Dept. of Chemical Eng AUTH*

12:30 Large Eddy Simulation activities in SIG1 , *M.-V. Salvetti (Univ. of Pisa)*

12:45 Lunch and get together - Poster Presentations*

14.10 Flow, mixing and combustion characteristics of a stratified bluff body burner, interacting with a co-annular swirl induced recirculation, *E. Dogkas and P. Koutmos, Dept. of Mech. Eng. University of Patras*

14.30 Reaction to fire tests of construction materials, *T. Panidis, Dept. of Mech. Eng. University of Patras*

14.50 Combustion chemistry, aspects for C1-C2 Oxygenated fuels in fundamental configurations, *M.A. Founti, G. Skevis, G. Vourliotakis, Ch. Keramiotis, Z. Malliotakis, School of Mech. Eng. NTUA and CeRTH*

15:10 Presentation of the ERCOFTAC QNET-Wiki, *W. Rodi (KIT)*

15:30 Coffee Break



European Research Community on Flow, Turbulence and Combustion

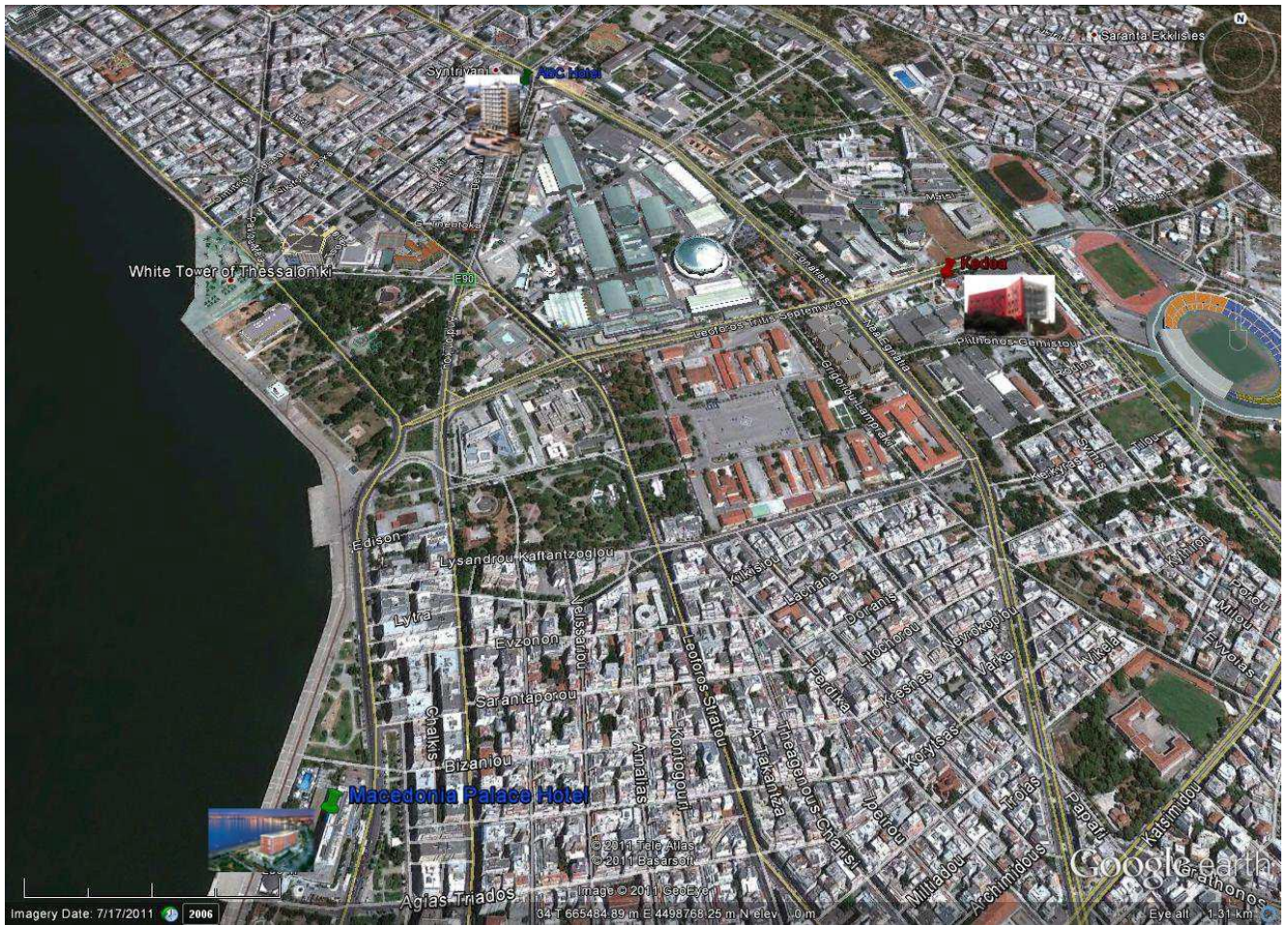
- 15:50 Plasma ignition of methane jets in homogenous isotropic turbulence**, *C. Chen, Y. Hardalupas (Imperial College) and G. Charalampous* Dept. of Mech. Eng. University of Thessaly
- 16.10 Cold flow velocity measurements in optical research engine**, *D Kolokotronis, V. Tsiogkas, A. Tourlidakis* Dept. of Mech. Eng. University of Western Macedonia
- 16.30 CFD spray and combustion modeling for marine engine applications**, *X. Vouvakos, P. Kontoulis, D. Kazangas, L. Kaiktsis*, School of Naval. Mech. Eng. NTUA
- 16.50 Activities of the Knowledge Network Committee**, *D. Standingford* (Zenotech, UK), Chairman of the ERCOFTAC Knowledge Network Committee (KNC)

Walk from KEDEA to downtown of Thessaloniki and restaurant

- 18.30** Joint Walk in downtown of Thessaloniki
- 20.00** Dinner (restaurant TBA)

***Poster Presentations (lunch time):**

- P1 Cold flow LES in an optical research engine**, *A. Katsinos, A. Tomboulides*, Lab. of Applied Thermodynamics, Dept. of Mech. Eng. AUTH
- P2 Flow and kinetic modelling and simulation of fuel reforming processes**, *G. Pantoleonos, D. Koutsonikolas, S. Lorentzou, N. D. Vlachos, G. Skevis, A.G. Konstandopoulos*, CeRTH/CPERI
- P3 Thermal characteristics of externally venting flames and their effect on the exposed façade surface**, *M.A. Founti, D.I. Kolaitis, and E.K. Asimakopoulou*, School of Mech. Eng. NTUA
- P4 Simulation of flows past oscillating bluff bodies**, *S. Peppas, L. Kaiktsis, G Triantafylloy* School of Naval. Mech. Eng. NTUA
- P5 Combining air quality modelling and data streams from Internet Of Things sensor networks to mitigate air pollution in urban areas across Europe: the AIRTHINGS project**, *N. Moussiopoulos, G. Tsegas, F. Barmpas, E. Chourdakis, K. Schäfer and E. Fragkou*, Lab. of Heat Transfer and Environmental Engineering, Dept. of Mech. Eng., AUTH



ERCOTAC COMMITTEES MEETINGS SCHEDULE

AUTH, KEDEA, 3 Sept. str. Thessaloniki, Greece

Friday 27th April 2018

- 9:00** **Coffee**

- 9:00 - 11:30 Scientific Programme Committee (SPC) and Knowledge Network Committee meetings (KNC) to be held in parallel
 - SPC meeting**
 - Amphitheatre 3
 - KNC meeting**
 - Meeting Room (Mezzanine)

- 11:30 – 12:30 **Joint SPC and KNC meeting**
- Amphitheatre 3

- 12:30 – 14:00** **Lunch**

- 14:00 - 17:00 **Executive Committee (EC) Meeting**
- Amphitheatre 3

- 17:00 **Closing**