

# SimTec

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## Software & Services

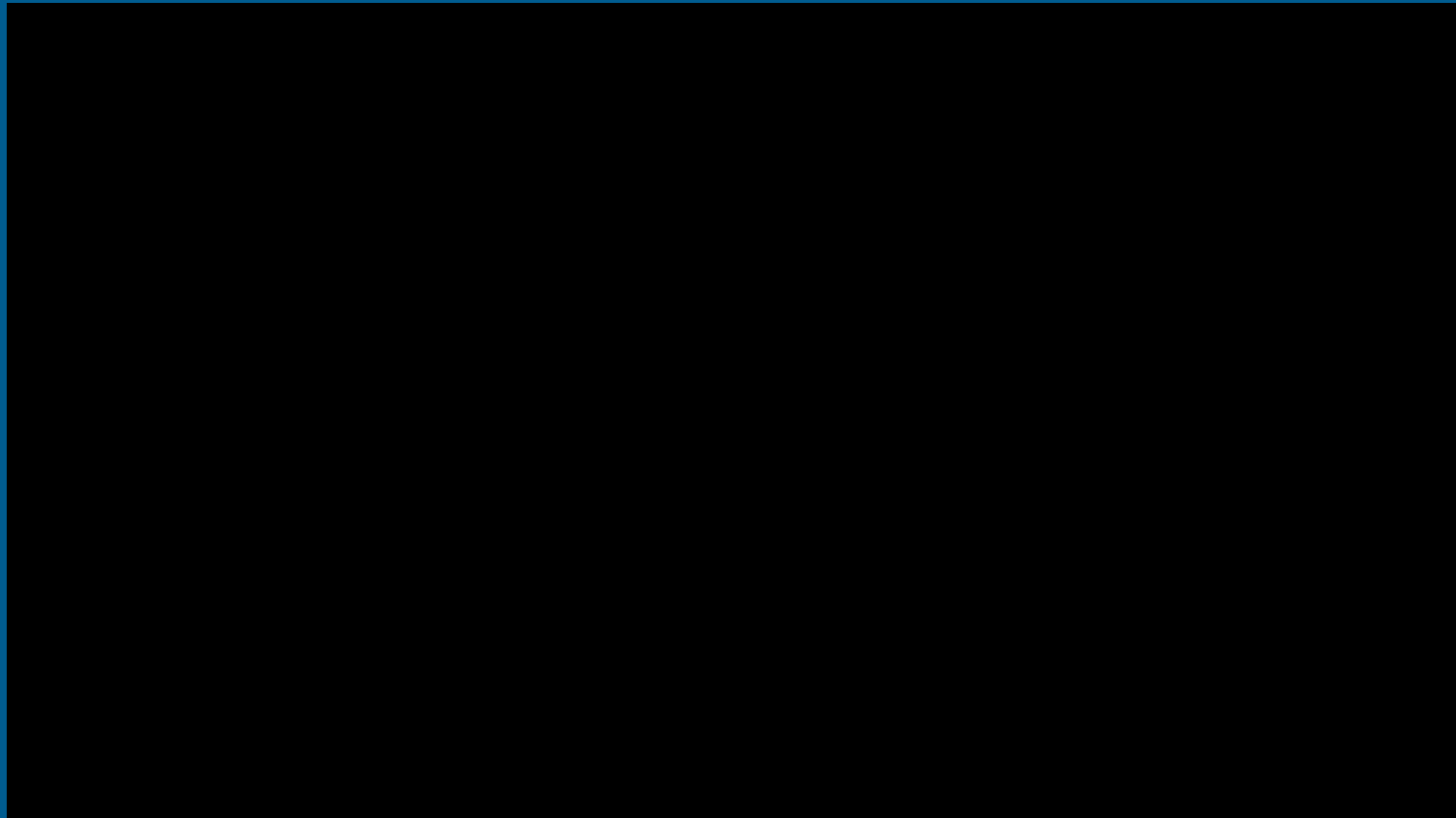
**Nikos Dellis,**  
**Mechanical Engineer MBA,**  
**Business Development Manager**

- ✓ Technical software company.
- ✓ Established in 2001
- ✓ Territory: Southeastern Europe
- ✓ Central office: Thessaloniki
  - Zagreb 2004
  - Ljubljana 2007
  - Athens 2009

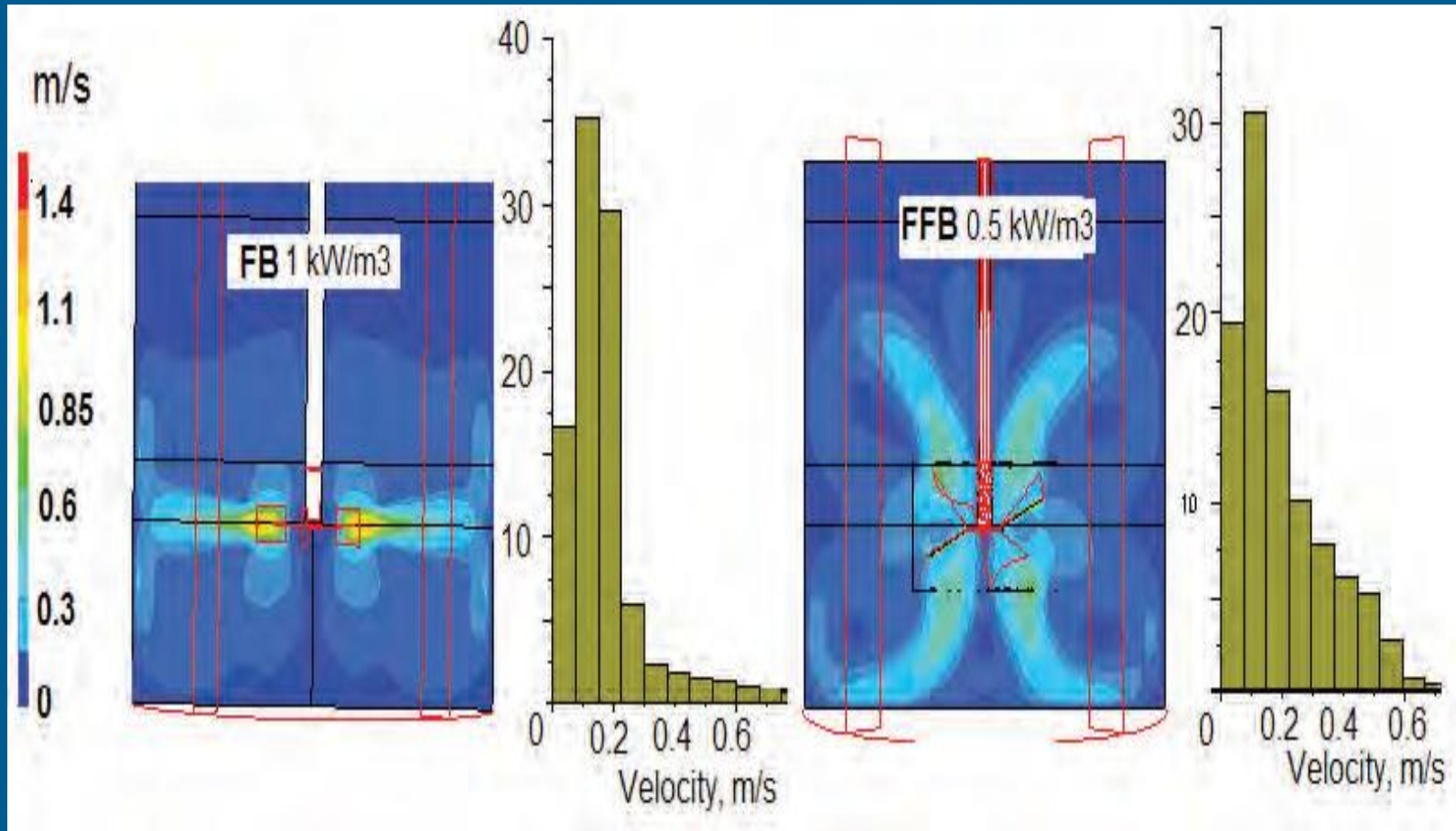


- ✓ The company since its initial establishment has focused its activity on high-end specialized CAD / CAE software and services and has developed a large product portfolio and a unique know-how in this market in the region of Southeastern Europe.
- ✓ The main activity of the company is the provision of technical software and the relevant training and technical support activities.

- ✓ Software distribution
  - Certified Channel Partner of **Ansys** Inc. in Southeastern Europe.
  - Value Added Reseller of **Autodesk** Inc. in E.U.
- ✓ Introductory and advanced training seminars
- ✓ Full technical support for the most efficient use of the software
- ✓ Development of CFD and other engineering software.
- ✓ CFD and FEA consulting services
- ✓ Participation in European and National R&D projects

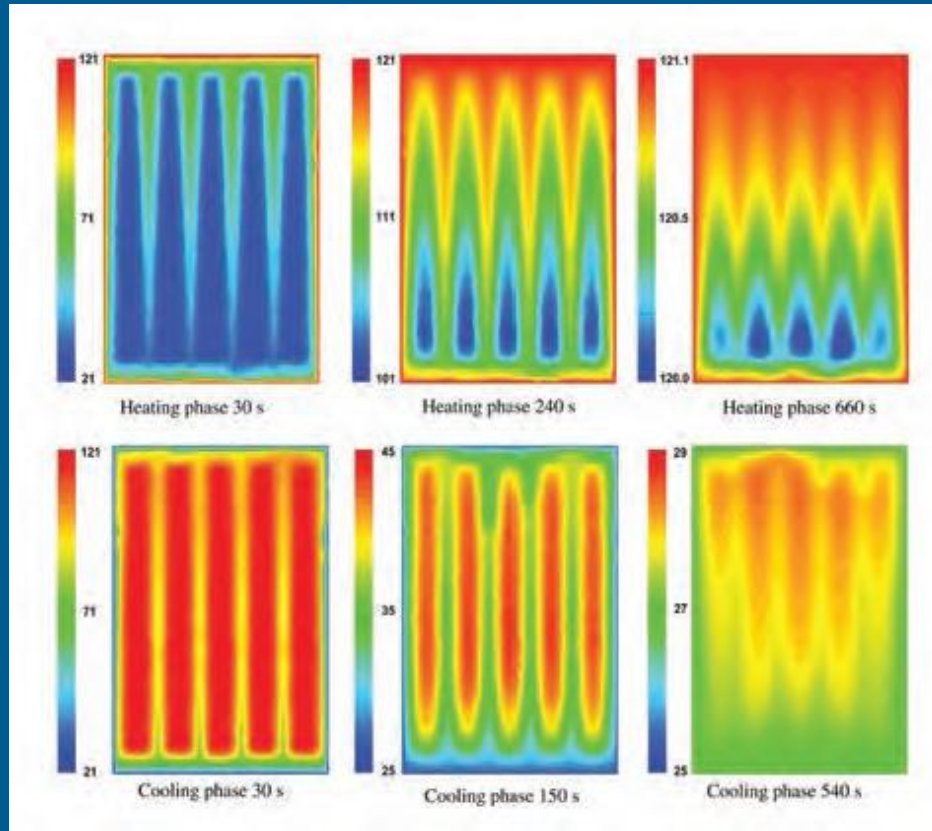


## I. Institute of Chemical Engineering



Contour plots and velocity distribution corresponding to different impeller designs

## II. Laboratory of Food Process Engineering



Temperature profile in a metal can at different times during the cooling and the heating cycles



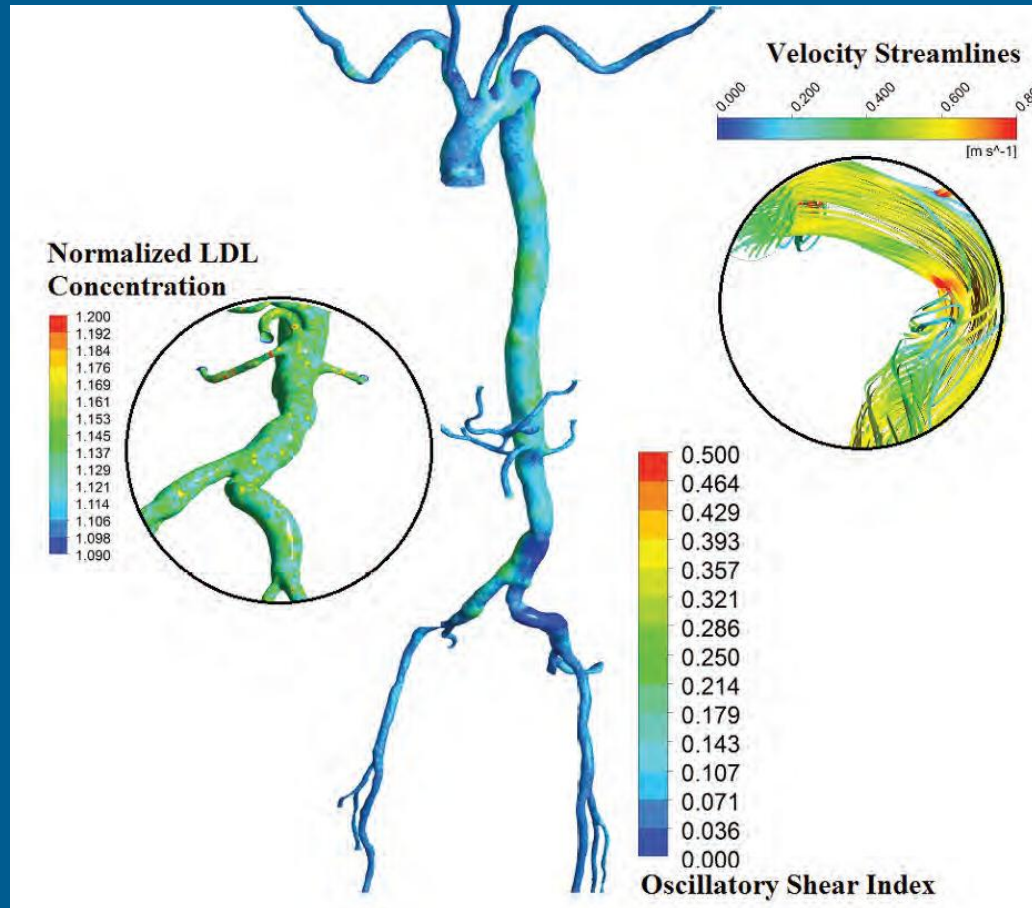
### III. Aristotle Racing Team



ART – 12 Race Car



## IV. Laboratory of Hydraulics

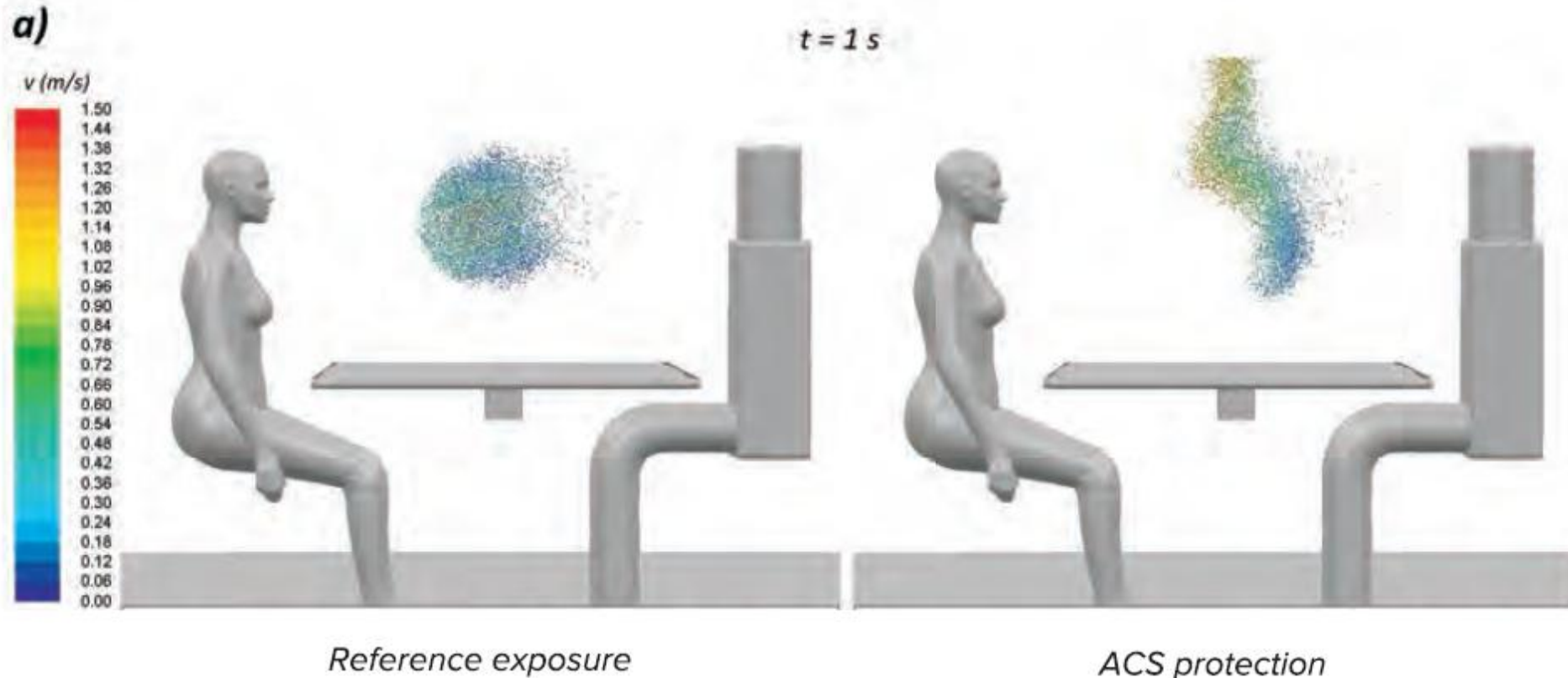


### Aortic system computational results

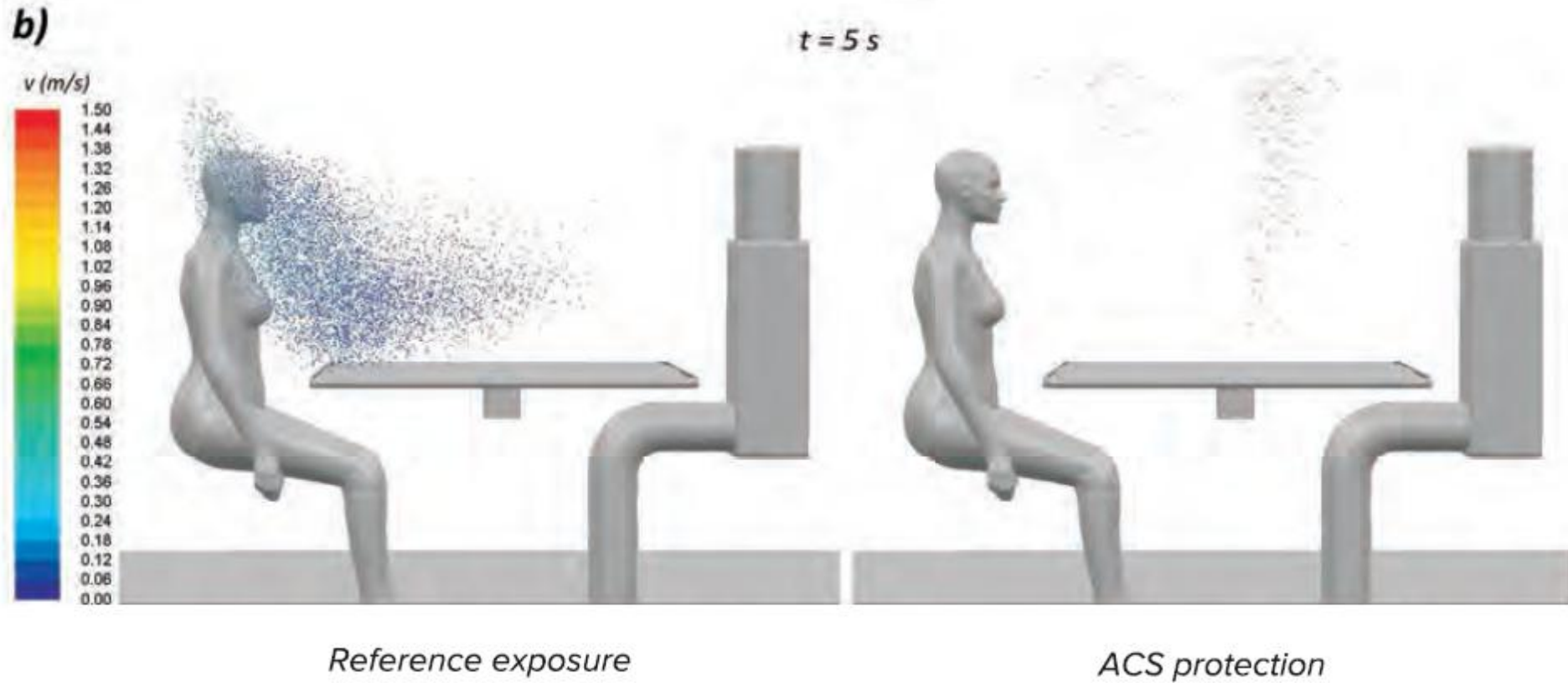
## Installed software sold by Simtec:

- ANSYS Academic Research (Mechanical Capability, CFX full Capability Solver, Fluent Explicit) → 25 tasks perpetual
- ANSYS Academic Research EM → 5 tasks perpetual
- ANSYS Academic Research HPC → 256 cores
- ANSYS Academic Research LS-DYNA → 1 task perpetual

**V. Laboratory for Heating, Sanitary, Solar and AC**  
**Advanced ventilation for airborne cross infection control in spaces**



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**Advanced ventilation for airborne cross infection control in spaces**



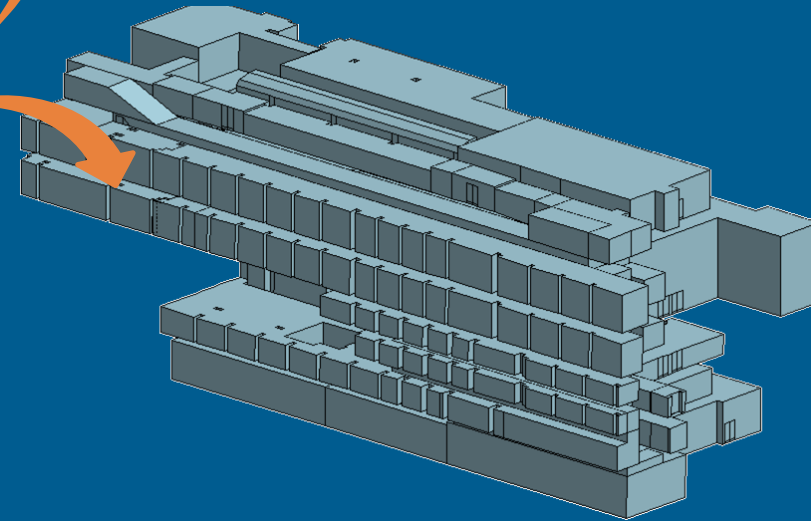
## **V. Laboratory for Heating, Sanitary, Solar and AC**

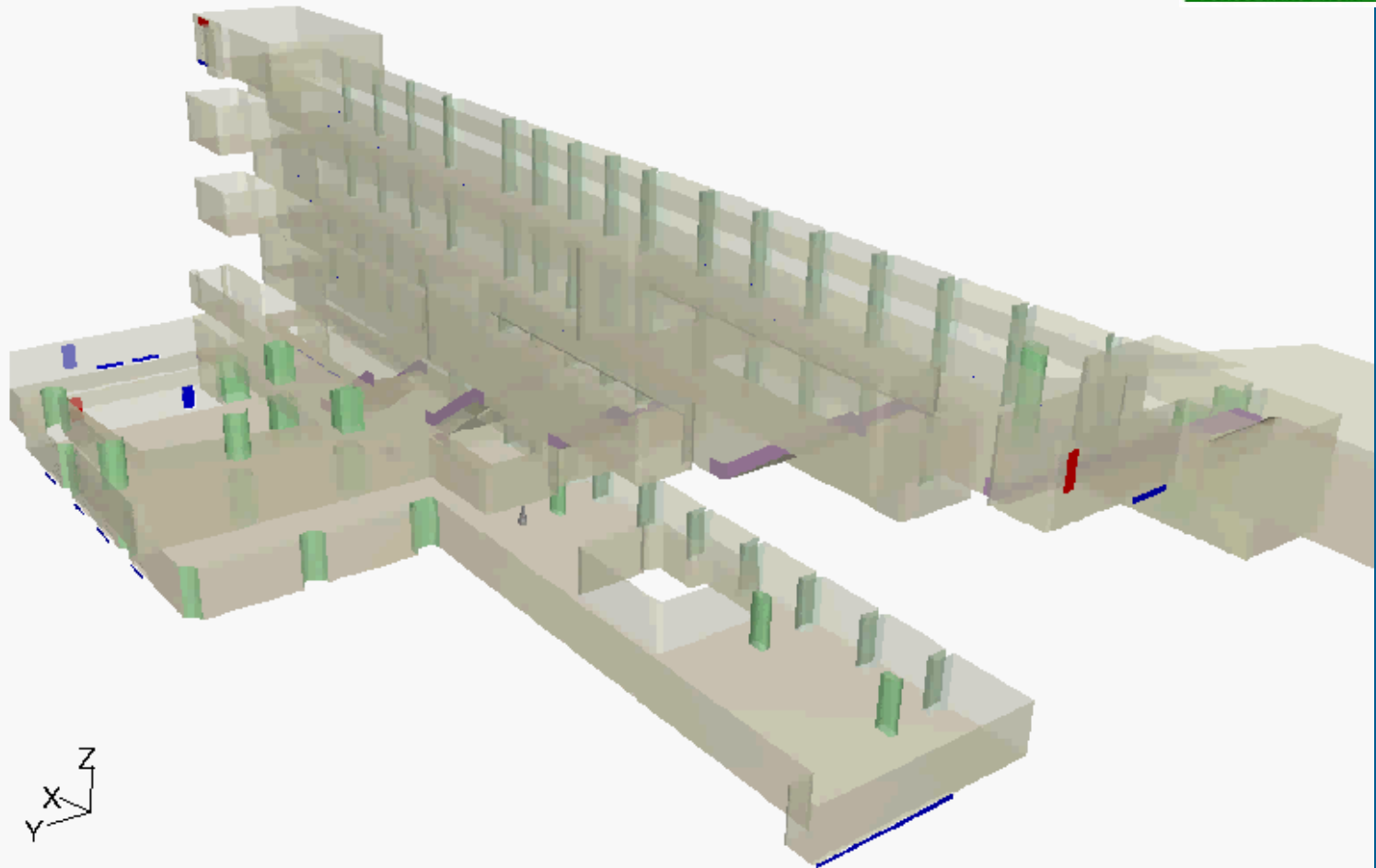
### **Advanced ventilation for airborne cross infection control in spaces**



Fig. 4 Dispersion of 12  $\mu\text{m}$  expiratory droplets in the occupied zone in case of the medium cough  
(a)  $t = 1$  s; (b)  $t = 5$  s; (c)  $t = 10$  s





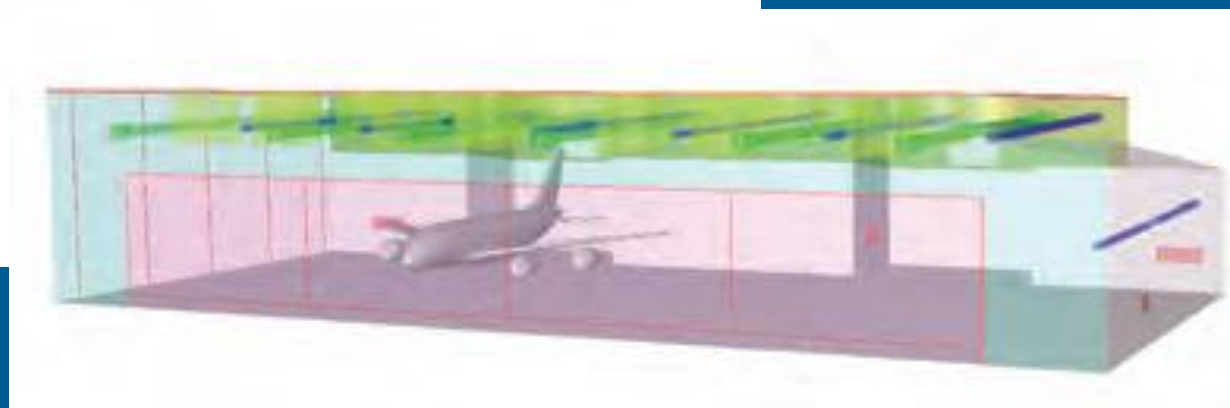


Grid (Time=2.0000e+01)

Oct 17, 2005  
FLUENT 6.2 (3d, segregated, spe, rngke, unsteady)



# Cooling of a Maintenance Hangar at an International Airport, Asia.

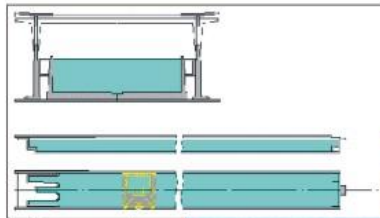


# Cooling of a Maintenance Hangar at an International Airport, Asia.



Contours of celcius-wall (Time=0.0000e+00)

Jan 05, 2011  
ANSYS FLUENT 13.0 (3d, pbns, rngke, transient)



Deep water  
towing tank



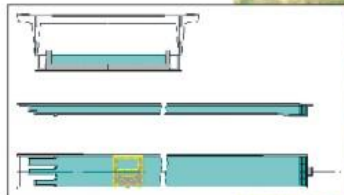
Wind tunnel



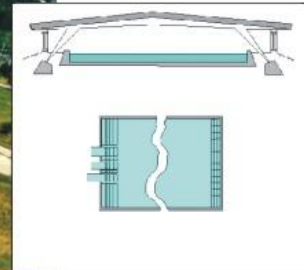
Air filters test stand



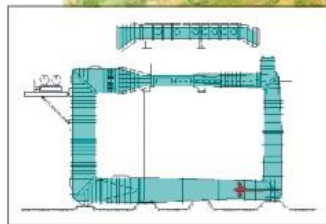
Multifunctional  
aerodynamic stand



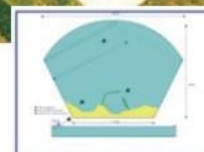
Shallow water  
towing tank



Seakeeping and  
manoeuvring basin



Cavitation tunnel



Coastal hydraulics basin

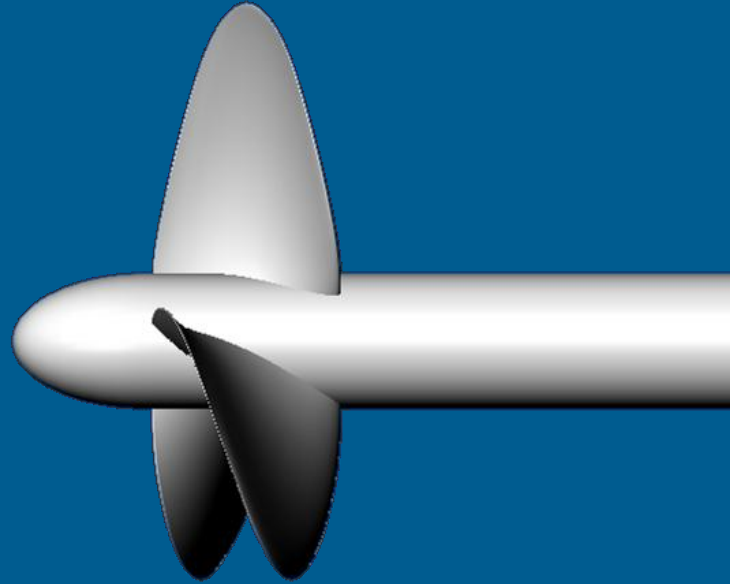


Open water area

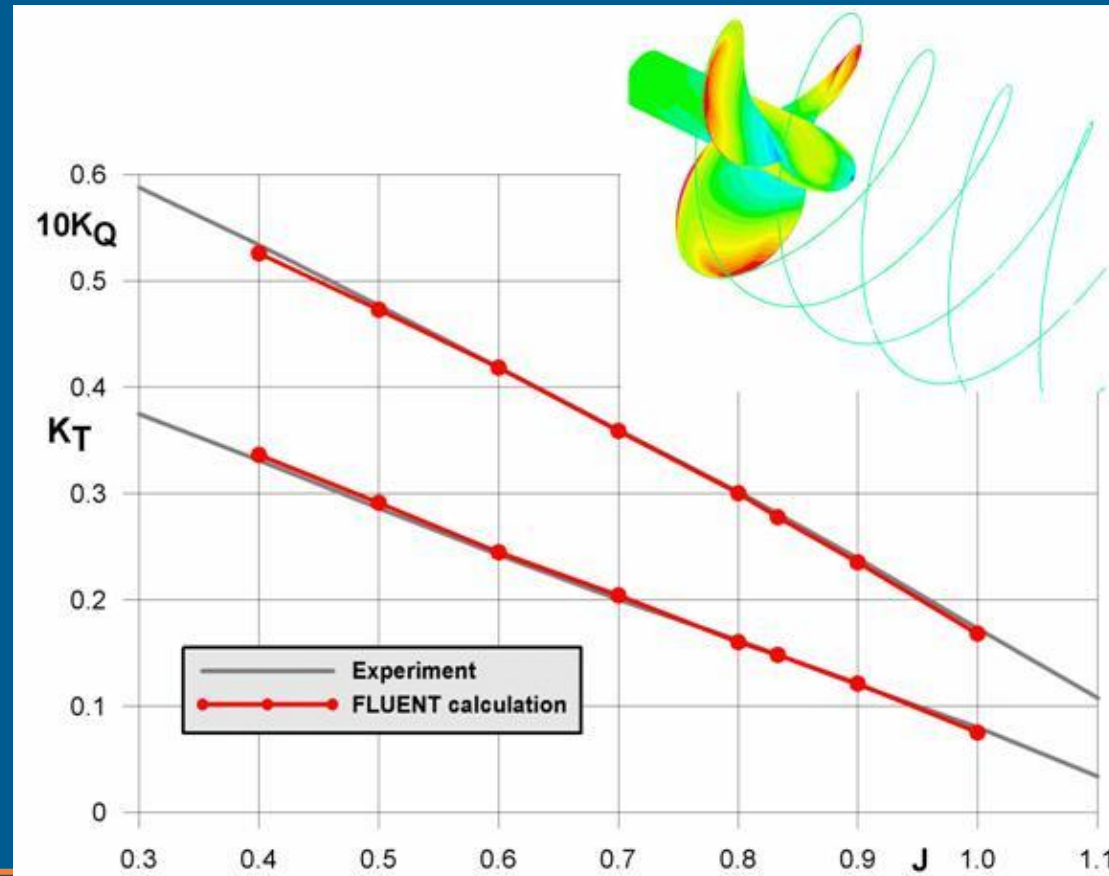




## Flow about the ITTC Test Screw Propeller No.4119



**Thrust & Torque  
Coefficients**



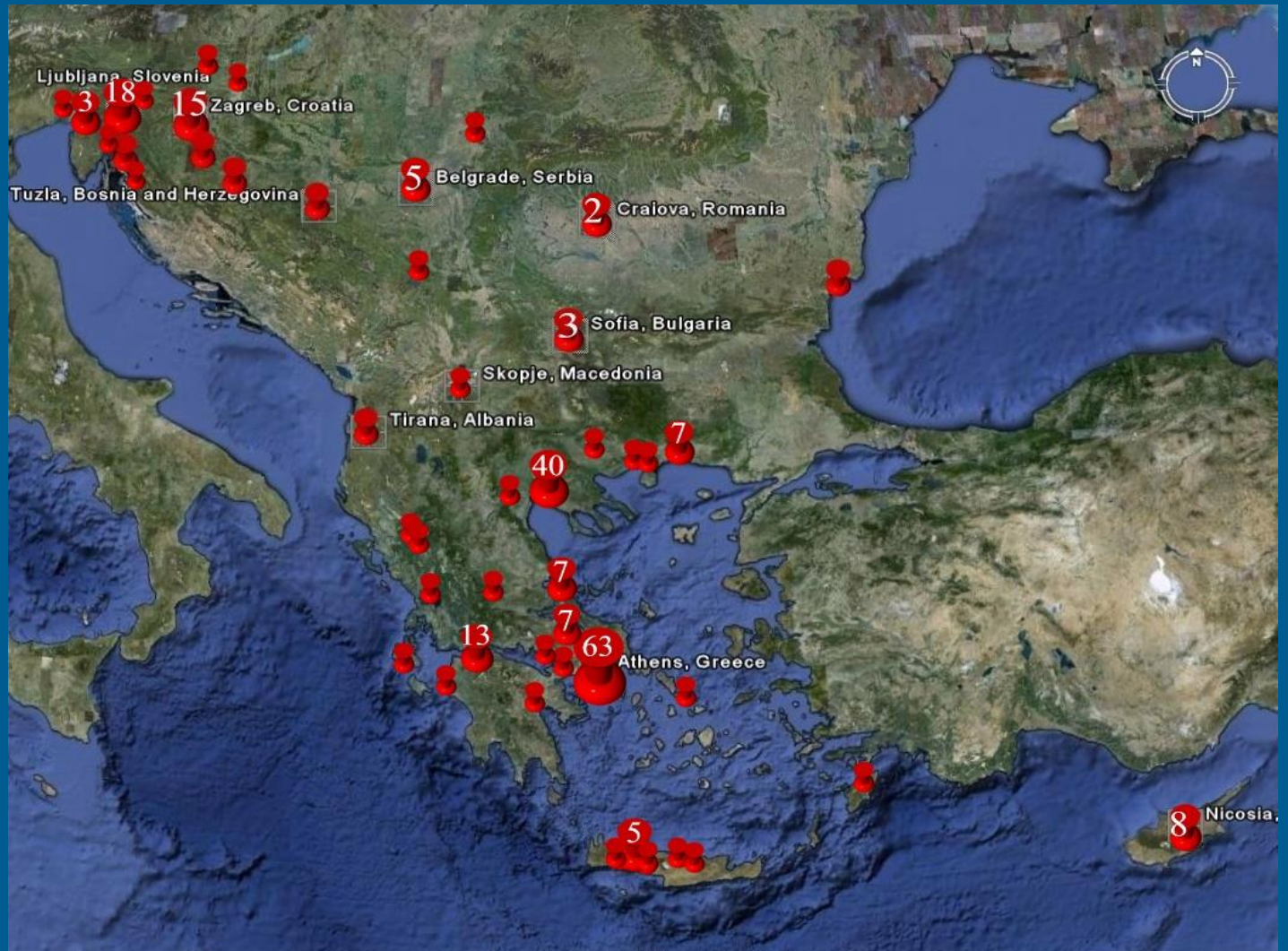
- ✓ 230+ customers
- ✓ 55% academic and research institutes
- ✓ 15% industry
- ✓ 30% engineering offices
- ✓ ~1000 supported user base
- ✓ 350+ installed licenses
- ✓ 20+ consulting projects
- ✓ 50+ training seminars
- ✓ Exports amount to 60% of the turnover



- ✓ SimTec covers approximately 50% of the CAE market in the territory.



# Simulation in Southeastern Europe





## Simtec has a clear direction...

- ✓ We have many times witnessed the successful integration of the analysis and simulation technology into research, design and development process.
- ✓ The continuous evolution of the CAD / CAE landscape, requires increased technical expertise.

**SO...**

- ✓ Simtec is determined to remain at the forefront of the technology evolution and continuously develop the technical skills and the knowhow in the company.
- ✓ Continuous education and participation in research projects are an integral part of our activity



**thank you**