



# TERMODINAMICA APPLICATA AI MOTORI A COMBUSTIONE INTERNA

21-22 marzo 2016 (ore 10-13/14-17)

CNR- Istituto Motori

Piazza Barsanti, 1- Fuorigrotta (NA)

FOCUS DELLA LEZIONE:

- Termodinamica: ciclo ideale, limite e reale;
- La combustione nei motori ad accensione per compressione;
- La combustione nei motori ad accensione comandata  
Caratteristiche dei sistemi di post trattamento;
- Sperimentazione su motori da ricerca;

**Ing. Ezio Mancaruso**  
CNR-Istituto Motori

Ezio Mancaruso is a researcher of the National Research Council (CNR) and made his activity in the Istituto Motori of the CNR. He received M.Sc. degree in Engineering Mechanics from University Federico II of Naples in 2001. In 2006, EM earned its PhD degree in Mechanical Systems Engineer at the Mechanical Engineer Faculty of the University Federico II of Naples discussing a thesis on: Study of the combustion process in a Common Rail optically accessible diesel engine by means of optical techniques. He started the research activity at the Istituto Motori in 2002 and he has been carried out an intensive experimental research activity on both the fluiddynamic and combustion fields of the internal combustion engine using optical diagnostics. In particular, he is interested on the new combustion mode (HCCI, LTC, Dual-Fuel, etc.) in both real and optical engine fuelled with vegetable and synthetic fuel. From 2011, EM is responsible of the research group: Diagnostics and sensors for thermo fluiddynamic process improvements in internal combustion engines. he is responsible and collaborator to the research activity for several research projects financed by private business of the automotive sector. He is scientific coordinator in work packages of national and European projects. E.M. tutored university students in the preparation of their Bachelor and Master degrees final works and he has been tutor of PhD students. He taught at the university Federico II of Naples for students of both Master and PhD level; he was tutor in the formation projects of PON (National Operational Programs) founded by the Italian government. He is (co)author of over 100 publications in referred international journals and international conference proceedings on internal combustion engines, and thermo-fluid dynamics.