Research Projects of total budget in excess of 7.5 Million Euro (1996-2004) are currently performed at the APTL, several of them funded through competitive R&D programmes of the European Union such as the following:

• <u>Solar Steam Reforming of Methane Rich Gas for Synthesis Gas Production</u> (SOLREF) (SES6-CT-2004-502829)

• Infrared Microsystem for Polluting Emission Control on Cars 2 (IMPECC2) (EU FP6-PLT-506507)

• Development of New Generation Ceramic Filters for Hot-Gas Cleaning (GREEN KERAMOS) (EUREKA Greek-French Collaboration 2003)

• Valorization of Industrial Non-Metallic Mineral Wastes in the Manufacture of High-Added-Value Products for Exhaust Gas Aftertreatment Applications (VALORMIN) (Greek EKBAN, GSRT 2003, Project no. FP30)

• <u>Multidisciplinary Approach to Airborne Pollutant Health Related Issues</u> (MAAPHRI) (QLRT-2001-02357)

• Flow Simulations On-Demand Using Grid Computing (FLOWGRID) (IST-2002-38433)

<u>Catalytic Monolith Reactor for Hydrogen Generation From Solar Water Splitting</u> (HYDROSOL ) (ENK6-CT-2002-00629)

· Coated Sintered Metal Trap (COMET) (G3RD-CT-2002-00811)

• Pre-Normative Work on Sampling and Testing of Solid Biofuels for the Development of Quality Assurance Systems (BIONORM) (ENK6-CT2001-00556)

Integrated Material and Information Technologies for Novel Emission Control Systems (IMITE C) (IST-2001-34874)

• <u>Simulation Tool for Dynamic Flow Analysis in Foam Filters</u> (STYFF-DEXA) (G3RD-CT-2002-00785)

• Smart NOx abatement systems for next-generation Environmental Technologies (SMART) (G5RD-CT-2002-00710)

• <u>Particulate Size and Composition Measurements for Diesel Exhaust Aftertreatment</u> (PSICO-DEXA) (G6RD-CT-1999-00038)

• <u>System Level Optimization and Control Tools for Diesel Exhaust Aftertreatment</u> (SYLOC-DE XA) (G3RD-CT-1999-00014)

• <u>Advanced Regeneration Technologies for Diesel Exhaust Particulate Aftertreatment</u> (ART-DE XA) (G3RD-CT-1999-00016)

 Advanced Solar Volumetric Air Receiver for Commercial Solar Tower Power Plants (SOLAIR) (ERK-CT1999-00021)

· Pilot-Scale Unit for Coating Catalytic Converters (GSRT, PAVE Program)

• Electrochemically Promoted Chemical Vapor Deposition of Silicon Carbide Films (GSRT, PENED Program)

• Development of an Exhaust Aftertreatment Simulator for Diesel Powered Vehicles (GSRT, Greek-Italian Collaborative Program)

Development of Innovative Instrumental Techniques for Coal Combustion (DITEC) (ECSC N.7220-PR/076)

· Multiwavelength Sensor for Sub-micron Particle Analysis (MULTISENS) (BRST-CT98-5537)

• Development of an Integrated System of Catalytic Ceramic Filters, Membranes and Sensors for the Reduction and Control of Soot Particulate Emissions from Mobile and Stationary Sources (OPRT-II Project no. 127)

• Functionalized Ceramic Membrane Filter for Highly Efficient Soot Particle Removal (CERFIL) (BRPR-CT98-0716)

· Compact Hot Gas Clean-up System for Particulate Removal (HOTGASYS) (JOF3-CT97-0047)

· Development of an Integrated Compact Oil Burner Boiler Unit (BRST- CT97-0703)

• Improvement of the Availability and Reduction of the Operating Costs of Coal Combustion Plants (ECSC COAL TECH 7220-ED/753)

Particle Laden Gases: Transport Properties and Deposit Formation (NATO COOPERATIVE RESEARCH GRANT 960054)

· Integrated Aftertreatment System of DI Diesels for Cars (DIDTREAT) (BRPR-CT95-0048)