



TITOLO PROGETTO

GMOS - Global Mercury Observation System
Linea finanziamento: VII FP - Cooperation
Area Scientifico Disciplinare: 03_ Scienze chimiche

DOCENTE RESPONSABILE SCIENTIFICO : [BARBANTE Carlo](#)

DATI FINANZIARI

Costo Complessivo del Progetto	Finanziamento Complessivo Assegnato	Costo totale delle attività a Ca' Foscari	Assegnazione Complessiva a Ca' Foscari
8.667.135,00	6.882.060,00	269.280,00	202.797,00

INIZIO ATTIVITA' (previsione)
2011

FINE ATTIVITA' (previsione)
2016

ABSTRACT PROGETTO

The overall goal of GMOS is to develop a coordinated global observation system for mercury, including ground-based stations at high altitude and sea level locations, ad-hoc oceanographic cruises over the Pacific, the Atlantic and the Mediterranean, and free tropospheric mercury measurements. This will then provide high quality data for the validation and application of regional and global scale atmospheric models, to give a firm basis for future policy development and implementation. The specific objectives of the proposed project are:

- To establish a Global Observation System for Mercury able to provide ambient concentrations and deposition fluxes of mercury species around the world, by combining observations from permanent ground-based stations, and from oceanographic and tropospheric measurement campaigns.
- To validate regional and global scale atmospheric mercury modelling systems able to predict the temporal variations and spatial distributions of ambient concentrations of atmospheric mercury, and Hg fluxes to and from terrestrial and aquatic receptors.
- To evaluate and identify source-receptor relationships at country scale and their temporal trends for current and projected scenarios of mercury emissions from anthropogenic and natural sources.
- To develop interoperable tools to allow the sharing of observational and models output data produced by GMOS, for the purposes of research and policy development and implementation as well as at enabling societal benefits of Earth observations, including advances in scientific understanding in the nine Societal Benefit Areas (SBA) established in GEOSS.
- During the GMOS development it will be investigated the possibility of transition of GMOS infrastructure to an operational research infrastructure, such as ESFRI.