

The impact of the Euromaster MSC on my life

Bárbara Velasco Anes

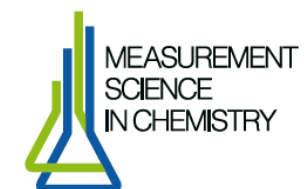
Summer School 2009

Master's degree in Chemistry (Analytical Chemistry)



Faculty of Sciences, University of Lisbon
Department of Chemistry and Biochemistry

Faculty of Sciences, University of Lisbon



Master Thesis - Implementation of ISO / IEC 17025:2005 in the context of some physico-chemical methods



Collaboration with the Laboratory of Solvay Portugal



Orientation of Prof. Maria Filomena Camões

Method validation and specific points studied:

TSS - Total Suspended Solids

pH

NH_4^+ - Ammonium

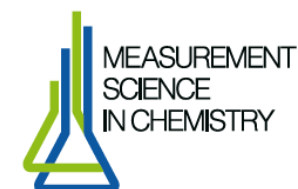
Total Cr – Total Chromium

Cr (VI) - Hexavalent Chromium

COD - Chemical Oxygen Demand

Approach to uncertainty of measurement estimation;

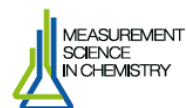
Compliance with the costumers objectives.





Improving knowledge on Metrology

TrainMiC
Training in Metrology in Chemistry



The first International Consortium of Master's Degree Programs offering education in Measurement Science delivered by:

- University of Tartu
- University of Warsaw
- Adam Mickiewicz University
- Maria Curie-Skłodowska University
- Université de Lyon
- University of Lisbon
- University of Maribor
- University of Oulu
- South-West University "Neofit Rilski"
- University of Bucharest (associated member)



Applications of measurements

Measurements must be considered in the broadest sense and have many practical applications, e.g. toxic metals in drinking water, cholesterol level in blood, strength of construction material, octane number of gasoline, protein content in wheat.

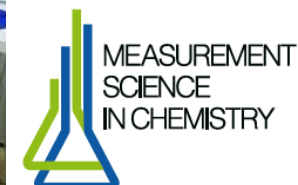


Importance of measurements

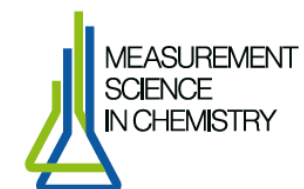
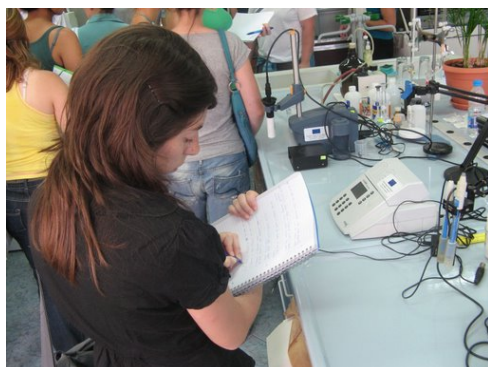
- Critical decisions (economical, social, medical) are based on results of measurements
- 40% of the EU directives involve measurements
- In EU about 80 billion EUR is spent on measurements - 1% of GDP
- In USA about \$ 800 billion is spent on measurements

The key to business success, healthier foods, cleaner and better environment, more reliable medicines is in qualified specialists and managers in laboratories.

www.msc-euromaster.eu



Euromaster MSC 2009



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UNIVERSIDADE DE LISBOA FACULDADE DE CIÊNCIAS

ALDINA MARIA VIEIRA, Chefe de Divisão dos Serviços Académicos, CERTIFICA, em face dos registos existentes nesta Faculdade, que:

Verificação

AS 20/06/10

O presente vai firmado com o selo branco em uso nesta Faculdade

Bárbara Velasco Anes

portadora do B.I. n.º 12061825, do Arquivo de Identificação de Lisboa, concluiu o Curso de Mestrado em Química, na área de Especialização em Química Analítica, no dia 14 de Dezembro de 2009, com a classificação final de 18 (dezoito) valores, Excelente, passando a ter direito ao Grau de Mestre em Química.

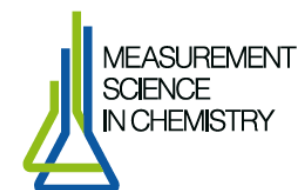
Mais certifico que a requerente já solicitou a respectiva Certidão de Registo.

Lisboa, 30 de Junho de 2010

A Chefe de Divisão



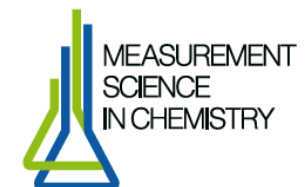
Master thesis degree –
Excellent
classification



Laboratory Trainee at Solvay Portugal



- Implementation of ISO/IEC 17025:2005 quality system
 - Definition and implementation of quality control in routine.
 - Preparing documents:
 - quality manual;
 - organization procedures;
 - technical procedures;
 - forms.
 - Participation on a internal audit with certified auditors from the Portuguese Accreditation Institute, IPAC.





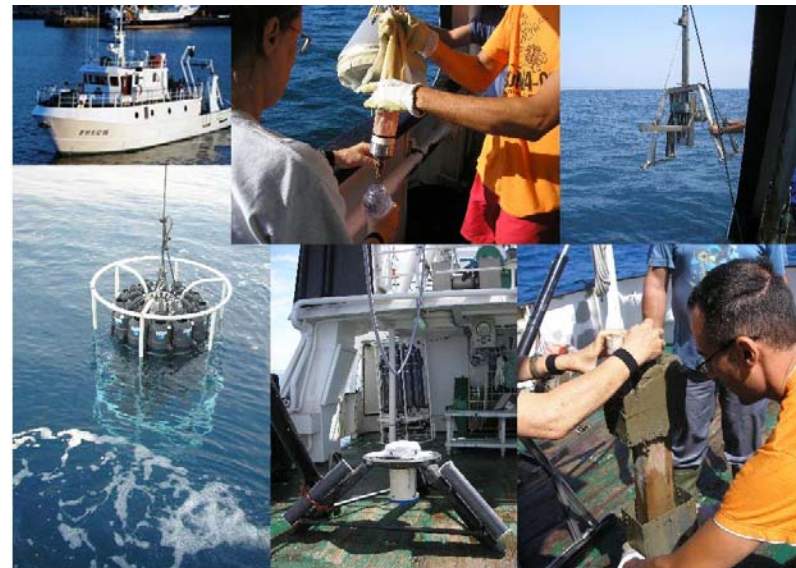
Research opportunity

Scientific research with the collaboration of the Research Institute of Fisheries and Marine - IPIMAR

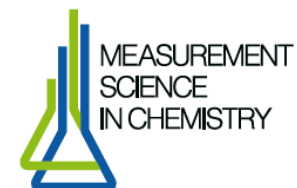
IPIMAR's mission is to conduct research and develop technology applied to the sustained development of the fisheries and aquaculture sectors.

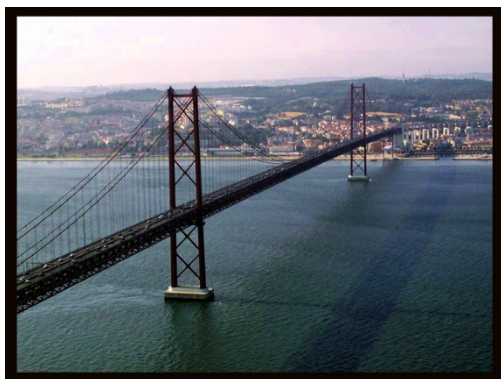
WORKING PROGRAM

- Sampling programmes
- Metal concentration studies using highly sophisticated techniques:
 - ICPMS
 - ICPOES
 - FAAS
 - GFAAS



**In order to achieve a Doctorate Degree from
University of Lisbon**





Thank you very much



MEASUREMENT
SCIENCE
IN CHEMISTRY