ERASMUS+ TRAINEESHIP FORM

Profile of the Host Department /Service at CUT:

Michalis Koutinas is an Assistant Professor of Environmental Biotechnology at the Department of Environmental Science and Technology. He holds a Diploma in Chemical Engineering from the University of Patras, Greece. He has a PhD in Chemical Engineering from Imperial College London where he also worked as a postdoctoral Research Associate in Biological Modelling. His research focuses on the development of novel biotechnological applications for manufacturing high added-value chemicals from renewable resources, as well as on the development of advanced systems for biodegradation of industrial pollutants. His research often involves experimental and theoretical analysis, studying fundamental phenomena and their implications for specific systems, using advanced molecular techniques and mathematical modelling, for understanding important genetic systems and studying the dynamics of specific microbial strains. Dr. Koutinas has unique combination of expertise in bioproduction of added-value products, biological modelling and application of molecular techniques for bioprocess monitoring ensuring successful guidance of the trainee in highly interdisciplinary projects.

Main Responsibilities

Please provide a short Description of the main responsibilities of the trainee:

The trainee will join a dynamic, multidisciplinary team committed to excellence working on different projects concerned with the valorization of renewable waste streams through bioprocessing.

Responsibilities may include:

- **Conducting microbial cultures for the production of added-value products from renewable biomass, including orange peels, cheese whey, lupanine wastewater and biodiesel by-products.**
- **Applying physico-chemical and biological pretreatment methods for the biowaste employed.**
- **Monitoring the performance of the microbial cultures with analytical techniques (HPLC, GC, UV, etc.).**
- **Immobilizing microorganisms of different supports to improve the performance of the bioprocess.**
- **Visualizing the immobilized microorganisms using microscopy.**
- **Quantification of important metabolic properties through application of molecular techniques.**
- **Assisting in the maintenance of the Environmental Bioprocessing Lab.**

Knowledge, skills and competences to be acquired by the trainee at the end of the traineeship

Please provide a short Description:

This is a unique opportunity for the trainee to gain insight, knowledge and hands-on experience on research topics related to Environmental Biotechnology, Sustainable Bioprocessing and Biomass Biorefineries. Following completion of the training period the researcher will have acquired broad knowledge in sustainable waste valorization strategies and its impact in the environment, industry and society including the new knowledge generated via the research work as well as thorough understanding of the outstanding research questions in the field.

Responsible Contact Person/Mentor throughout the Traineeship Period:

Please provide the name and email address of the responsible contact person mentor/ throughout the traineeship period:

Dr. Michalis Koutinas, Department of Environmental Science and Technology, michail.koutinas@cut.ac.cy

Working Hours

38 hours/week- 5 days a week

Provisional Start date and End date (dates are subject to approval by the Sending Institution)

Start Date: 01/11/2016 **End Date: 30/04/2016**

Required Qualifications

Desired Level of Studies *(Please choose-multiple choices are possible)*

☐ **Undergraduate** ☐ **Post-graduate** ☐ **Doctoral** ☐ **Recent Graduate** ☒ **No preference**

Linguistic Skills ***(Please refer to the desired linguistic skills, e.g. Fluency in English both oral and written and/or other languages)***

The candidate should be fluent in English for oral communication.

Academic and Other Qualifications *(Please refer to the desired academic qualifications)*

The trainee should be motivated and independent. We may provide posts for trainees of different experience, including final year students of a Bachelor's or postgraduate degree of Master's level from accredited Universities in Chemical Engineering, Chemistry, Environmental Engineering, Biology or any other related field. Furthermore, Doctoral candidates can be also appointed in high profile projects in the field.

Application Procedure and Deadline

If all of the above sounds exactly like you then send us your CV and a brief cover note explaining:

1. Why you would like to have an Erasmus+ traineeship period at CUT.
2. Why you feel you would be ideal for the role**.**

Email us at **incoming@cut.ac.cy** with Subject Title: ERASMUS+ traineeship@CUT

Deadline: (to be filled by the Erasmus Office)