

Poster Presentations

Stasinakis A.S.

Occurrence of emerging organic contaminants released from wastewater treatment plants in the aquatic environment and effects on aquatic life: the case of Greece

Borova V.

Screening of metabolites and transformation products of pharmaceuticals and illicit drugs by UHPLC-QTOF MS in effluent wastewater samples from Athens

Nika M.C.

Identification of ozonation transformation products of furosemide using LC-HR-MS/MS

Attiti S.

Fate of selected emerging pollutants and formation of transformation products in activated sludge batch reactors under aerobic/anoxic/anaerobic conditions

Alygizakis N.A.

PEAKTRAMS: An automated computational approach for the simultaneous detection of features in reverse phase and HILIC HRMS screening

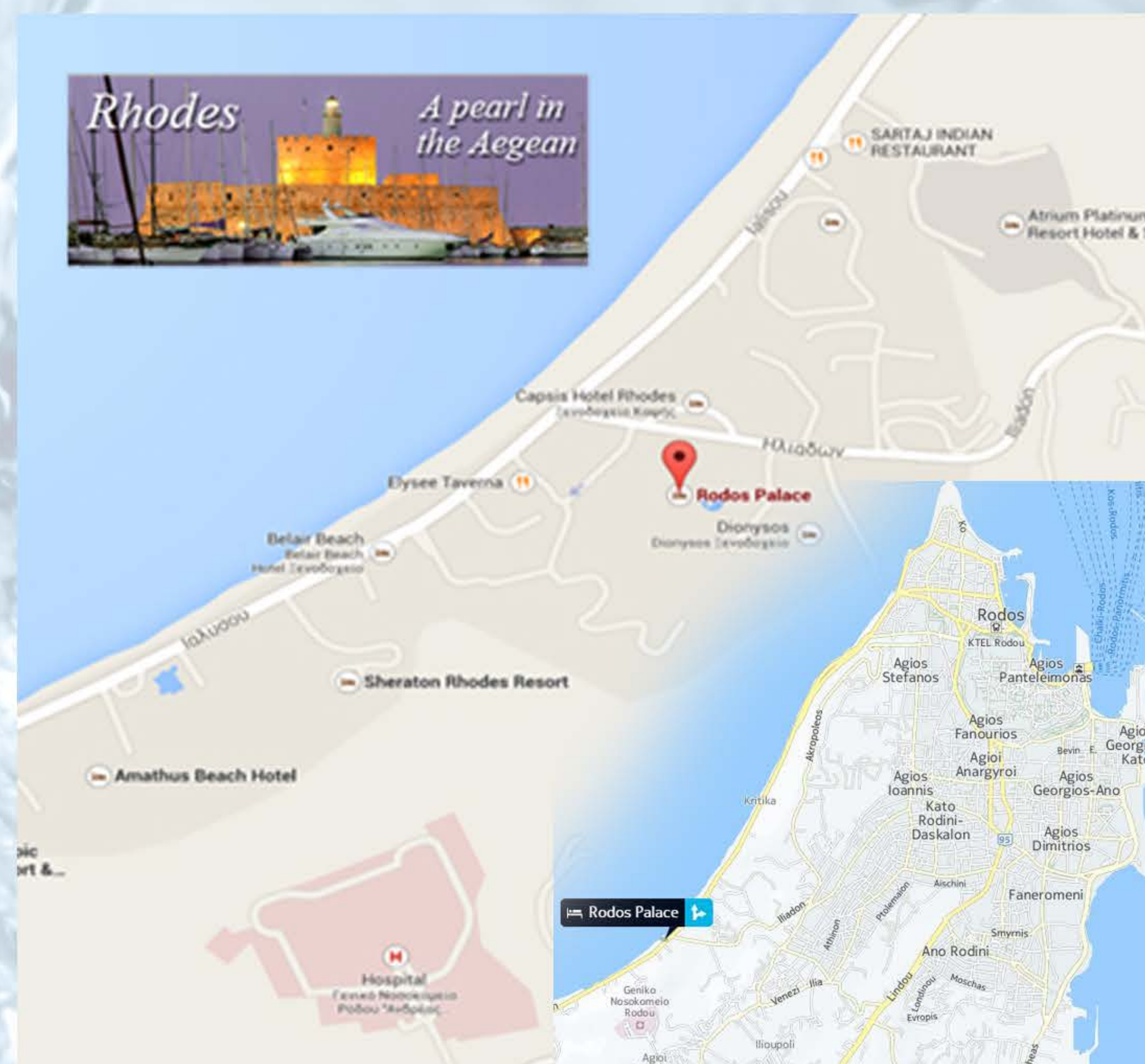
How to find "Rodos Palace" Hotel:

Rodos Palace

Trianton Avenue
Ixia 851 00



From Diagoras Rhodes International airport, the hotel and convention centre can be reached by bus, taxi or car within 10-15 minutes.



Date and Venue

This one-day workshop will take place on September 3rd 2015 in Rodos Palace Hotel, Rhodes. Note that beginning September is a high season for summer vacations. Therefore, book your flight and accommodation as soon as possible. Detailed travel information can be found at

<http://cest.gnest.org/content/venue> and
<http://www.rodos-palace.com/how-reach>

Hotel

Rodos Palace Hotel offers rooms at special prices if you mention the "CEST2015 conference" upon booking. For more information have a look here:

<http://cest.gnest.org/content/accomodation>



HELLENIC REPUBLIC

National and Kapodistrian
University of Athens

Program

Workshop on transformation products of emerging pollutants in the aquatic environment (TREMEPOL project)

organised by the University of Athens

3 September 2015, 11:30 pm

Rodos Palace:
Trianton Avenue, Ixia, Rhodes, Greece
Room E "Salon des Roses"

Attendance is free of charge

For further information contact

Nikolaos S. Thomaidis, University of Athens:
ntho@chem.uoa.gr

<http://trams.chem.uoa.gr/>
<http://tremepol.chem.uoa.gr/>

Background & Objectives

The main objective of the project research was the identification of the metabolites and the (bio)transformation products of various classes of emerging pollutants which enter the WWTPs by influents, are formed during secondary and tertiary wastewater treatment and discharged in the aquatic environment. Moreover, the removal efficiency of widely used secondary and tertiary wastewater treatment processes, as well as the formation of TPs during treatment was investigated for selected emerging pollutants. Therefore, the specific objectives of the research were:

1. To develop wide-scope targeted screening liquid chromatographic – (high resolution) tandem mass spectrometric (LC-HR-MS/MS) methods for the detection and quantitation of known and tentative (predicted) major metabolites and transformation products of abundant emerging pollutants and to build a database with their occurrence data in the wastewater treatment plant (WWTP) of Athens.
2. To develop wide-scope non-targeted screening LC-HR-MS/MS methods for the detection and identification of currently unknown abundant emerging pollutants and their possible transformation products using metabolomics strategies with the ultimate aim to map the “fingerprint” of influents and effluents.
3. To investigate the formation of transformation products of representative major emerging pollutants, such as diuretics (furosemide, hydrochlorothiazide), antiepileptic drugs (topiramate), opiates (tramadol), artificial sweeteners (cyclamate), and corrosion inhibitors (BTRs-BTHs) during lab-scale batch biological secondary and advanced tertiary wastewater treatment (ozonation) and to study the effect of major treatment parameters on their (bio)degradation.
4. To develop methods for the determination of new synthetic drugs of abuse and their transformation products in the wastewater treatment plant (WWTP) of Athens and back-calculate their consumption in the society.

Organiser:

Nikolaos S. Thomaidis
University of Athens, Greece

Program

Thursday 3 September 2015 – morning

Room E – Salon des Roses A

(Chairs: Thomaidis N.S., Hollender J.)

11:30 – 12:00

Fenner K. (Invited Speaker)

Towards a more accurate prediction of biotransformation – exploring linkages between micropollutant biotransformation and microbial community characteristics

12:15 – 12:30

Psoma A.K.

A workflow for the orthogonal identification of biotransformation products by HILIC-QTOFMS

12:30 – 13:00

Hollender J. (Invited Speaker)

Target, suspect and non-target screening approaches to identify organic contaminant records in lake sediments

13:15 – 13:30

Bletsou A.A.

Wide-scope target screening of 2327 emerging pollutants during wastewater treatment by RP-LC-QTOF-HR-MS/MS with an accurate-mass database

13:30 – 13:45

Gago Ferrero P.

Suspect screening of human metabolites of pharmaceuticals in wastewater using LC-HRMS/MS

13:45 – 14:00

Gago Ferrero P.

Non-target screening of organic micropollutants with a developed LC-HRMS-based workflow

Lunch Break

Thursday 3 September 2015 – afternoon

Room E – Salon des Roses B

(Chairs: Fenner K., Thomas K.V.)

17:00 – 17:30

Thomas K.V. (Invited Speaker)

Screening for contaminants of emerging concern in the Norwegian environment

17:45 – 18:00

Borova V.

Qualitative screening for emerging contaminants and their metabolites/transformation products in sewage sludge of Athens by UHPLC-QTOF MS

18:00 – 18:15

Aalizadeh R.

Application of retention time prediction models for suspect and non-target HRMS screening of emerging contaminants in the aquatic environment

18:15 – 18:30

Alygizakis N.A.

Automatic detection of concentration trends of organic pollutants in wastewater using computational approaches and chemometric tools on data acquired by LC-HRMS

Coffee break

19:00 – 19:15

Thomaidis N.S.

HILIC-QTOF-HR-MS/MS for wide-scope screening of polar micropollutants in environmental samples

The workshop is also sponsored by the 14th International Conference on Environmental Science and Technology, CEST2015



CEST 2015