PROGRAMME

Monday 21th April 2008—*Subdivision, Damage Stability and Intermediate Stages of Flooding*

14:15-15:45
Introduction to subdivision and damage stability. Review of existing standards: SOLAS90, Stockholm Agreement.

16:30-18:00
Progressive flooding, intermediate stages of flooding and transient phenomena. Structural loads during progressive flooding.

Tuesday 22th April 2008 – *Theoretical Foundations of the Probabilistic Method*

14:15-15:45
Methodology for calculating the probability of flooding in case of combined transverse and longitudinal subdivision: “p”, “r” and “v” factor .

16:30-18:00
Methodologies for calculating the probability of survival after flooding: “s” factor and the required subdivision index.

Wednesday 23th April 2008 – *Probabilistic Subdivision and Damage Stability Regulations*

14:15-15:45
Current probabilistic regulations for subdivision and damage stability: IMO resolutions A.265 and MSC.19 (58). Application to calculations for simplified and non-simplified geometries.

16:30-18:00
New harmonized subdivision and damage stability regulations: resolution MSC.194(80). Explanatory notes to the harmonized subdivision and damage stability regulations.

Thursday 24th April 2008–*Probabilistic Subdivision Optimization and Damage Condition Evaluation*

14:15-15:45
Optimization of ship subdivision using the probabilistic method. Application to the optimization of conventional passenger ro-ro ship subdivision and fast ferry subdivision.

16:30-18:00
Method for ranking damage conditions according with probability of survival. Application to the identification of critical passenger ro-ro ship damage conditions.

Friday 25th April 2008 –*Ship Behaviour after the Damage and Structural Resistance*

14:15-15:45

Ship behaviour after the damage. Time to sink.

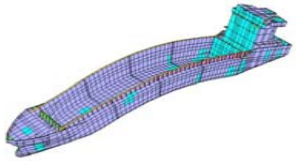
16:30-18:00
Structural resistance of the damaged ship.

Monday-Friday

15:45-16:30

Coffee break.

Education and Culture
TEMPUS



ASDEPP

Advanced Ship Design for Pollution Prevention

Probabilistic Approach to Damage Stability

Course announcement

21-25th April 2008
Zagreb, Croatia

About the Course

The course will start with a general description of the development of ship damage stability standards, taking especially in consideration relevant accidents and the identification of weak points in the deterministic standards. A comprehensive description of the theoretical foundations of the probabilistic method, in general, will then be provided. The new harmonized probabilistic regulations will also be reviewed. These methods will be applied through case studies, aiming to highlight some common difficulties found in its application. Hydrodynamic part of the course will be devoted to wave-induced loads on damaged ships with particular emphasize on differences between wave loads on intact and damaged ships. This course requires the students to have familiarity with undergraduate mathematics and statistics.
For more information about course please visit **ASDEPP** web page: **http://www.mar.ist.utl.pt/asdepp**

Lecturers

Prof. Carlos Guedes Soares, IST, Portugal

Prof. Šime Malenica, Bureau Veritas, France

Prof. Tiago Santos, IST, Portugal

Prof. Vedran Slapničar, FAMENA Zagreb, Croatia

Who should attend

Course targets three main groups of students:

a. **post-graduate Master of Naval Architecture (MNA) students**. Each course could bring up to 4 ECTS credits. Exercises and examinations will be organized using distance learning internet-based methods.

b. **PhD students in Naval Architecture and Ocean Engineering**. Each course could bring up to 10 ECTS credits. Exercises, seminar work and examinations will be organized using distance learning internet-based methods.

c. **Naval Architects and Marine Engineers** (shipyards, shipowners, design offices, classification societies, personnel from Local Authorities, facilities operating companies ...).

Cost

The cost of the course is covered by **EU Tempus Programme.** Therefore, registration fees are not required to attend courses and to receive course papers.

Students should make their own arrangements for travel and accommodation, although we can help by providing list of nearby hotels or budget accommodation.

For more information on accommodation in Zagreb please visit **http://www.zagreb-touristinfo.hr/**

Admission

If you belong to group **a.** or **b.** and wish to participate in the course, E-mail should be sent to **ASDEPP Secretary** with short CV. Please note that for final acceptance, students will need to provide support letter by head of their study, department or research project on which they are working. Engineers from industry sector need to send E-mail with short CV to **ASDEPP Secretary** in first instance, while for final acceptance they will need to provide support letter of their company.

Deadline

Deadline for submitting final application for the course with support letter is **07th April 2008**.

Contact

ASDEPP Secretary:

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Faculty of Mechanical Engineering and Naval Architecture
University of Zagreb
Ivana Lučića 5
10000 Zagreb
Croatia
E-mail: **silvana@fsb.hr**

Location

The course will be held at the **Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb** (**FAMENA**) **http://www.fsb.hr .** The Faculty is situated in the city of Zagreb, the capital of the Republic of Croatia).
The **University of Zagreb** is the oldest Croatian university and also the oldest university of Southern-Eastern European, founded in 1669. The modern University of Zagreb is founded in 1874, since when more than 200000 students have graduated and more than 8000 candidates have received PhD degree at University of Zagreb. Today, University of Zagreb consists of 33 organizational parts (faculties, academies etc.) with 60000 students.
The **Faculty of Mechanical Engineering and Naval Architecture** was founded in Zagreb in 1919. The teaching and research activities that are conducted at the Faculty cover wide areas of mechanical engineering, naval architecture and aerospace engineering.

Zagreb is an old Central European city. It is located on the intersection of several important routes between the Adriatic coast and Central Europe. Zagreb offers its guests the Baroque feel of the Upper town, picturesque open-air markets, various kinds of shops and delicious local cuisine.
Zagreb International Airport is located 17km from the centre of the city, or 20-25 minutes by bus.