European Desalination Society

DESALINATION MANAGEMENT AND ECONOMICS
A 2-day intensive course

Lecturer Corrado Sommariva, Ph.D.

June 26–27, 2008 L’Aquila, Italy

The course will illustrate the main aspects of desalination economics including a description of the market environment and prices, project delivery mechanisms (private—turnkey multi-contracts etc.) and budgeting a desalination project.

The economic session will be related to both thermal and RO processes.

Participants should be end users, turnkey contractors, developers who wish to gain a more detailed understanding of thermal desalination and the associated interface with a power plant.

Course objectives are to provide a theoretical basis and practical information on desalination technology with emphasis on thermal processes and to become familiar with the basic aspects of the design of a desalination project using thermal technology and with operating conditions of desalination systems.

Lecturer

Dr. Corrado Sommariva, a Divisional Director at Mott MacDonald in the UK, has planned and will deliver the course. He has been involved in thermal and RO processes of desalination for 20 years. He is Professor at Genoa. He has published over 40 papers on desalination and economics and holds 2 patents. Dr. Corrado Sommariva has been on the Board of Directors of the European Desalination Society and International Desalination Association for the past 12 years. He is author of a book on Desalination Management and Economics.
VENUE

L’Aquila, Canadian Hotel

L’Aquila, the capital of the Abruzzo region, is dominated by the Gran Sasso mountain, highest point in the Appenines and enjoys a healthy alpine climate: cold but dry in winter, and hot without becoming unpleasant in summer.

The city was born in the Middle Ages, has a hundred splendid squares which are symbols and testimony of the small villages that cooperated in building it. The long cultural tradition is preserved in the beautiful medieval monuments and buildings in Baroque and Renaissance style, in paintings and in its museums, as well as maintaining an active and musical and theatrical life, local cuisine, handicrafts and folklore.

In the surroundings there is a unique natural environment at a height of 3,000 m where there are protected woods with chamoix, bears and wolves.

The course and accomodation will be at the Canadian Hotel.
Tel. +39 0862 317402
Fax +39 0862 317398

PROGRAMME

Day 1 Desalination Management and Economics

09.00 Desalination process comparison: MSF, MED, RO and future trends
  Current status of thermal desalination technology
  History of major developments
  Future trends
  Review of advantages and disadvantages of each technology

10.30 Coffee break

10.45 The business environment
  Different players involved in project development
  Technology market segmentation
  Legislation and permits

13.00 Lunch
14.00 Managing water demand
Forecasting and planning
  Demand forecast
  Capacity required
  Capacity available and retirement scenarios
  Capacity shortfall
Managing project delivery mechanisms
  Multiple contracts
  Turnkey contracts
  Private projects
  Public versus Private
Private projects
  Key agreements
  Typical structures
  Risk management and allocation
Financial modelling
  Water capital charge
  Water output charge
  Water electricity charges
Functional specification
Break even analysis

16.00 Summary and discussion

Day 2 Budgeting

09.00 Budgeting a desalination project
Water cost build up factors
  CAPEX
  Development costs
  OPEX
Thermal desalination plant capital costs
  Evaporator island cost breakdown
  Cost component budgeting and analysis
  Material and technical specification effects on CAPEX
  Auxiliary plants

10.30 Coffee break
RO desalination plant capital costs
  Seawater quality cost impact
  Cost component budgeting ad analysis
  Material and technical specification effects on CAPEX
  CAPEX versus OPEX comparison
  Sensitivity analysis to cost factors

13.00 Lunch

14.00 Structuring water tariffs

16.00 Summary and discussion
REGISTRATION FORM

Surname _______________________________ Name _______________________________

Address _____________________________________________________________________

Country ________________________ Telephone ____________________________________

Fax ______________________________ E-mail ____________________________________

Registration fee:

Till June 15 After June 15

☐ EDS members € 950 €1050

☐ Non-members €1050 €1150

The fee includes 3 nights accommodation, transportation to/from Rome airports (one and half hour drive), lunches, coffee, dinners, course material, a book by Corrado Sommariva Desalination Management and Economics.

Payment can be made by:

Cheque made out to Credit card

European Desalination Society

Bank Transfer to be sent to the Card N° _____________________________

the address below and a copy faxed to us Exp. date ____________________________

Please take care of your own bank charges Account name: European Desalination

Cardholder name ______________________

Society

Signature ______________________________

Account No. 11863.19 Swift code: PASCITMMAQU

Banca Monte dei Paschi di Siena IBAN code: IT 92I 01030 03600 000001186319

Please fill in the form and email, fax or mail to:

European Desalination Society

Science and Technology Park of Abruzzo, Via Antica Arischia 1, 67100 L’Aquila, Italy

Tel. +39 0862 319954 Fax +39 0862 3475 213, email: balaban@desline.com