The Abdus Salam International Centre for Theoretical Physics

College on Evaluation of Energy Technologies and Policies for Implementation of Agenda-21

Organizer(s): Director: A.I. JalalLocal Organizer: N. Paver
Trieste - Italy, 10 - 28 November 2003

Venue: Adriatico Guest House Giambiagi Lecture Hall

Final programme

MONDAY, 10 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

10 November 1964

09:00 - 10:30 (Room: Adriatico Guest House (Lower Level 1))
REGISTRATION/OPENING CEREMONY
Overview of the College - (objectives, nature & programme) Course Staff for 1st Week: 10 - 14 November 2003 A.I. JALAL N. GADAHELDAM A. GRITSEVSKYI M. STRUBEGGER A. GALINIS F. NAQVI

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **A.I. JALAL** / *IAEA, Vienna, Austria*
Sustainable Energy Development & Agenda-21

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 **A.I. JALAL** / *IAEA, Vienna, Austria*
Main Considerations in Energy Technology Evaluation

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
A. GRITSEVSKYI / *IAEA, Vienna, Austria*
Installation of MESSAGE

TUESDAY, 11 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

11 November 2003

09:00 - 10:30	**F. NAQVI** / *Pakistan Atomic Energy Agency, Islamabad, Pakistan* **Fossil Fuel Resources and Technologies: Potential, Economics & Environmental Aspects**
10:30 - 10:45	(Room: Adriatico Guest House (Lower Level 1)) --- COFFEE/TEA BREAK ---
10:45 - 12:00	**N. GADAHELDAM** / *UNIDO, Vienna, Austria* **Renewable Energy Sources, Technologies and Potential**
12:00 - 13:30	(Room: Adriatico Guest House Cafeteria) --- LUNCH BREAK ---
13:30 - 15:30	**N. GADAHELDAM** / *UNIDO, Vienna, Austria* **Economics & Environmental Aspects of Renewable Energy**
15:30 - 15:45	(Room: Adriatico Guest House (Lower Level 1)) --- COFFEE/TEA BREAK ---
15:45 - 17:00	(Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1)) **COURSE STAFF** **WORK SESSION** Familiarisation with MESSAGE
18:30 - 19:30	(Room: Adriatico Guest House Cafeteria) --- SMALL RECEPTION (Informal Buffet) ---

WEDNESDAY, 12 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

12 November 2003

09:00 - 10:30	**A.I. JALAL** / *IAEA, Vienna, Austria* **Overview of Energy Model MESSAGE**
10:30 - 10:45	(Room: Adriatico Guest House (Lower Level 1)) --- COFFEE/TEA BREAK ---
10:45 - 12:00	**M. STRUBEGGER** / *IIASA, Laxenburg, Austria* **Mathematical formulation and structure of MESSAGE**
12:00 - 13:30	(Room: Adriatico Guest House Cafeteria) --- LUNCH BREAK ---
13:30 - 15:30	**A. GRITSEVSKYI** / *IAEA, Vienna, Austria* **Demonstration of Model Operation**
15:30 - 15:45	(Room: Adriatico Guest House (Lower Level 1)) --- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Familiarisation with MESSAGE

THURSDAY, 13 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

13 November 2003

09:00 - 10:30 **A. GALINIS** / *Lithuanian Energy Institute, Kaunas, Lithuania*
Modelling of Energy System with MESSAGE

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **presented by: A. GRITSEVSKYI** / *IAEA, Vienna, Austria*
Nuclear Power: Status and Trends

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 **M. STRUBEGGER** / *IIASA, Laxenburg, Austria*
Trends in Energy Technology Development

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Familiarisation with MESSAGE

FRIDAY, 14 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

14 November 2003

09:00 - 10:30 **A. GRITSEVSKYI** / *IAEA, Vienna, Italy*
Energy Policy Analysis and Strategies

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **A.I. JALAL** / *IAEA, Vienna, Austria*
Designing Case Studies

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Setting up of Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

MONDAY, 17 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

17 November 2003

09:00 - 10:30 **Questions & Answers SESSION**
Course Staff for 2nd Week: 17 - 21 November 2003 A.I. JALAL T.-D. BUI A. GALINIS F. NAQVI

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **A.I. JALAL** / *IAEA, Vienna, Austria*
Modelling of Hydro Power Plants

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

TUESDAY, 18 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

18 November 2003

09:00 - 10:30 **A. GALINIS** / *Lithuanian Energy Institute, Kaunas, Lithuania*
Modelling Combined Heat & Power Technology

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **T.-D. BUI** / *IAEA, Vienna, Austria*
Options for Mitigating Environmental Pollution from Energy Production & Uses

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

WEDNESDAY, 19 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

19 November 2003

09:00 - 10:30 **A.I. JALAL** / *IAEA, Vienna, Austria*
Representation of Exogenous Constraints in MESSAGE

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **A. GALINIS** / *Lithuanian Energy Institute, Kaunas, Lithuania*
Application of MESSAGE to Lithuanian Study

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

THURSDAY, 20 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

20 November 2003

09:00 - 10:30 **F. NAQVI** / *Pakistan Atomic Energy Agency, Islamabad, Pakistan*
Application of MESSAGE to Pakistan Study

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

FRIDAY, 21 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

21 November 2003

09:00 - 10:30 **T.-D. BUI** / *IAEA, Vienna, Austria*
Modelling Environmental Regulations and Constraints in MESSAGE

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

MONDAY, 24 NOVEMBER 2003 (Room:Adriatico Guest House Giambiagi Lecture Hall)

24 November 2003

09:00 - 10:30 **Questions & Answers SESSION**
Course Staff for 3rd Week: 24 - 28 November 2003 T.-D. BUI M. STRUBEGGER A. GALINIS F. NAQVI

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **T.-D. BUI** / *IAEA, Vienna, Austria*
Preparation of Model Output Tables

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

TUESDAY, 25 NOVEMBER 2003 (Room:Adriatico Guest House Kastler Lecture Hall)

25 November 2003

09:00 - 10:30 **M. STRUBEGGER** / *IIASA, Laxenburg, Austria*
Interpretation of Model Results

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **T.-D. BUI** / *IAEA, Vienna, Austria*
Guidelines for Cast Study Presentations

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

WEDNESDAY, 26 NOVEMBER 2003 (Room:Adriatico Guest House Kastler Lecture Hall)

26 November 2003

09:00 - 10:30 **A. GALINIS** / *Lithuanian Energy Institute, Kaunas, Lithuania*
Advanced Features of MESSAGE: Multi Region

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 (Room: Adriatico Guest House - Eklund Informatics Lab (Lower Level 1))
COURSE STAFF
WORK SESSION
Country Case Studies

THURSDAY, 27 NOVEMBER 2003 (Room:Adriatico Guest House Kastler Lecture Hall)

27 November 2003

09:00 - 10:30 **PARTICIPANTS**
Presentation of Country Case Studies

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00 **PARTICIPANTS**
Presentation of Country Case Studies

12:00 - 13:30 (Room: Adriatico Guest House Cafeteria)
--- LUNCH BREAK ---

13:30 - 15:30 **PARTICIPANTS**
Presentation of Country Case Studies

15:30 - 15:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

15:45 - 17:00 **PARTICIPANTS**
Presentation of Country Case Studies

FRIDAY, 28 NOVEMBER 2003 (Room:Adriatico Guest House Kastler Lecture Hall)

28 November 2003

09:00 - 10:30 **PARTICIPANTS**
Presentation of Country Case Studies

10:30 - 10:45 (Room: Adriatico Guest House (Lower Level 1))
--- COFFEE/TEA BREAK ---

10:45 - 12:00	**PARTICIPANTS** **Presentation of Country Case Studies**
12:00 - 13:30	(Room: Adriatico Guest House Cafeteria) --- LUNCH BREAK ---
13:30 - 15:30	**PARTICIPANTS** **Presentation of Country Case Studies**
15:30 - 15:45	(Room: Adriatico Guest House (Lower Level 1)) --- COFFEE/TEA BREAK ---
15:45 - 17:00	**CLOSING SESSION**