Short Courses
ECROFI XVIII - Siena 4-5 July 2005

Fluid Inclusions in gemstones (a)

Program

Day 1: 04-07-2005

Morning 1 (common to the two courses a & b)

10.00
Welcome
R.J. Bodnar
Introduction

11.30 - Coffee break

12.00 – *R. Bakker*
Introduction to PVT modelling
Some definitions (isochore, fluid phases, diagrams, etc…)

13.00 - Lunch

Afternoon 1 (a)

14.30 - *M. Superchi and E. Gambini*
Introduction to inclusions in gemmology

16.00 - Coffee break

16.30 - *M. Superchi and J. Touret*
Techniques of observation: Inclusions in double polished plates and faceted gemstones

18.00 - End of Day 1

Day 2: 05-07-2005

Morning 2 (a)

9.30 - *J. Touret*
Why a mineral is a gem?
A model of fluid distribution in the continental lithosphere, based on fluid inclusion studies

11.00 - Coffee break

11.30 - *M. Superchi and J. Touret*
Granite–Pegmatite environments (beryls, tourmaline, topaz)
The special case of emeralds

13.00 - Lunch

Afternoon 2 (a)

14.30 - *M. Superchi and J. Touret*
High-grade (lower crustal) environments
- High-temperature granulites (Sri-Lanka, Madagascar): Corundum (sapphire), cordierite, garnet (almandine), orthoclase, etc..
- High pressure granulites (Myanmar, Vietnam): corundum (ruby), garnet (pyrope).

Upper-mantle environments: Sapphire (Australia), Olivine (Mantle xenoliths, Zebargad).

16.00 - End of the course

18.00 - *Welcome Party ECROFI XVIII*