

## THE LASER RESEARCH CENTRE

### INTERNATIONAL VISITS

Prof Heidi Abrahamse (Director, LRC) and two staff members, Dr Nicolette Houreld and Dr TJ Moore, recently attended 2 international conferences and undertook collaborative visits to 3 research centres in Ulm, Germany; Salzburg, Austria and Turin, Italy.

Invited conference presentations were delivered at the **International Society for Medical Laser Applications (ISLA)** in Beverungen, Germany as well as the **World Federation for Lasers in Dentistry (WFLD)** in Brussels, Belgium by all 3 LRC staff.

The **Institute for Lasers in Medicine (ILM), University of Ulm, Germany** was visited with Prof Rudolf Steiner as host to the LRC. The ILM was founded in 1985 as „Stiftung für Lasertechnologien in der Medizin“ by the companies Aesculap and Carl Zeiss.



Initially being focused on laser medicine, the scope of the institute was extended by optical metrology in 1995. ILM concentrates on a defined set of core competencies in the field of photonics / optics. These are used as manifold and synergistic as possible on various questions. Often, the same procedure can be used both for medical and technical applications.



Prof Barbara Krammer in the **Department of Molecular biology at the University of Salzburg** hosted the LRC.

We focus on the cellular mechanisms of Photodynamic Tumor Therapy (PDT), a promising new method for cancer treatment. Their research approach is devoted to the investigation of Immune Response and Tumor Immunity following PDT. Current focus areas include: Effects of PDT on Immune Cells; Cellular Physiology and Metabolism of PDT-induced Cell Death; Photosensitizer accumulation in EB tumor models; Polymers for delivery of lipophilic photosensitizers to tumor cells and Molecular mechanisms of radon therapy.



In Torino, Prof Stefano Guena in the **Department of Clinical & Biological Sciences University of Turin School of Medicine, Italy** introduced the LRC to his research centre. The University of Turin is one of the leading Italian public Universities with an international reputation for high quality teaching and research.

The view of the visit was to **establish collaboration in the areas of Photodynamic therapy and Stem cell therapy**. A joint European/Africa grant application has been submitted with the view of obtaining funding for future collaboration.