## Postgraduate Students Visit Košice by Jasper Snyman

At the end of December 2010 two postgraduate students of Prof AM Strydom, Mr JL Snyman and Mr D Britz, from the Physics Department at the University of Johannesburg visited the Institute of Experimental Physics in Košice. The institute forms part of the Slovak Academy of Sciences and the visit formed part of the research agreement between the two institutions.



The Institute of Experimental Physics, Košice.

The purpose of the visit was to determine the low temperature magnetocaloric properties of  $ErB_{12}$ . After the necessary preparations on the equipment were done the experiment could finally be executed.

In between cooling down the equipment and setting up the measurement, the students had time to explore Košice, which has one of the most well preserved historical town centres in Slovakia. The historical town centre is built around an elongated square, the latter containing the Cathedral of St. Elizabeth (the easternmost Gothic Cathedral in Europe, dating from the 12'th century) and the National Theatre. During the time of the visit, the town square was alive with the annual Christmas market, which meant that busy physics students needing a respite from

working in a laboratory would always find warm company despite the extremely cold weather. One of the hallmarks of Košice is its wonderfully preserved historical architecture with the institute itself housed in an old monastery.



The Christmas Market in the town square.



National Theatre Building in Košice and the Chapel of Saint Josef, in front of the cathedral.

Both the Institute of Experimental Physics in Košice and the Department of Physics at UJ in South Africa posses extensive expertise and infrastructure allowing the investigation of the physical properties of condensed matter systems at extremely low temperatures, and in high magnetic fields. These expertise and equipment turned out to be very useful as the experiment was executed without any serious problems or delays. The experiment illuminated the interesting low temperature behaviour of ErB<sub>12</sub> to the great satisfaction of both teams of scientists.