

AbstractID: 1395 Title: e-LEARNING MATERIALS FOR TEACHING MEDICAL PHYSICS

Teaching Medical Physics requires lots of imaging material and specific explanations. These requirements provide an excellent background for application of e-Learning. The EU projects Consortia EMERALD and EMIT developed 5 volumes of such materials, now used in 65 countries. The initial objectives of the Consortia were to develop materials to support the training of medical physicists. With time these materials found stable place in all medical physics teaching. EMERALD developed e-Learning materials in 3 areas of Medical Physics (X-ray Diagnostic Radiology, Nuclear Medicine and Radiotherapy). EMIT developed e-Learning materials in 2 further areas - Ultrasound and Magnetic Resonance Imaging. These materials consist of e-books and educational image databases (IDB). The e-books include tasks helping studying of various equipment and methods. The text of these PDF e-books is hyperlinked with respective images. The e-books are used through the readers' own internet browser. Each IDB includes hundreds of images of equipment; block diagrams and graphs; QA procedures and test objects; image quality examples; artefacts, etc. Both the e-books and IDB are engraved on 5 separate CD-ROMs. To assess the usability of these the Consortia organised two International Conferences on Medical Physics Training with e-Learning materials (1998 and 2003, ICTP, Trieste, Italy). These conferences attracted specialists from 26 countries (including AAPM) and resulted in very useful comments on application of e-Learning materials for teaching Medical Physics. Based on these the International Medical Physics College at ICTP uses e-Learning in many of its lectures and practical sessions. More info at www.emerald2.net