

**3rd INTERNATIONAL CONFERENCE
OF THE AFRICAN MATERIALS RESEARCH SOCIETY
University Hassan II Mohammedia,
Faculty of Sciences Ben M'Sik - Casablanca- Morocco
7-10 December 2005, Marrakech, Morocco
Email: africamrsconf3@yahoo.fr www.africamrsconf3.univ.ma**

Short Course

Title: Surface and Thin Film Analysis

Date: 5 December

Place: at Third Africa MRS Conference _ Marrakech

**Presenters: Prof. Terry Alford and James Mayer
Arizona State University, Tempe, AZ 85287, USA**

Based on: "Fundamentals of Nanoscale Film Analysis"
Authors: Terry Alford, Len Feldman and James Mayer
Publisher: Springer Science, New York, 2006.

Abstract: This course will cover the analysis of thin films by ions, electrons and X-rays proceeding from fundamentals to illustrative applications. We start with Rutherford backscattering with MeV He ions to discuss thickness and composition of films. Then we present Auger electron spectroscopy with sputter depth profile for elemental analysis. Electron and X-rays incident of the films provide analysis based on characteristic X-ray emission. Film structure can be determined from diffraction.

Course notes of 100 pages will be available for participants (Cost: 30 DH).

For participation send a message to:

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And to Prof Ahmed Maazaz, maazaz@menara.ma, Université Cadi Ayad, Marrakech