



International initiative on x-ray fundamental parameters

Workshop on fundamental parameter determinations in Paris, Oct. 23-24, 2008

Dear colleagues,

Fundamental parameters are required for accurate quantitative x-ray analysis, and the lack of recent reliable values with low associated uncertainties was pointed out during the last European X-Ray Spectrometry conference (EXRS2008) in Cavtat last June.

Thus, within the framework of the European X-ray Spectrometry Association (EXSA), it was proposed by LNE-LNHB (France) and PTB (Germany) to start an international initiative to measure these fundamental parameters, bringing together key players from international x-ray instrumentation companies as well as various institutes from the academic sector.

In view of the challenges related to this important work, the participation of several national metrology and research institutes is essential for success. Experts on x-ray analysis should provide advice for the use of experimental facilities, ensuring best practise. Moreover, new measurements aiming at the determination of fundamental parameters should be performed by several laboratories to ensure their consistency.

Several research institutes and companies have already shown interest in participating in this initiative during the EXRS2008 conference:

- Metrology institutes : LNE-LNHB, NIST, PTB
- Research institutes: Technical U. Vienna, N.C.S.R. Demokritos, Technical U. Berlin
- X-ray companies: manufacturers of EDXRF, WDXRF and layer thickness instruments

We propose to have joint discussions involving theoretical experts, users, experimentalists, and also industrial companies interested in such a work. This could be held in two steps :

- First workshop this year in Paris at LNE on Thursday and Friday October 23th-24th
- Follow-up workshop in 2009 in Berlin at PTB

The first goals of these meetings in Paris and Berlin should be :

- To define initial priorities (parameters of main interest, elements, energy range of interest) based on industrial and academic needs;
- To establish a list of available experimental facilities;
- To establish mutual cooperations in which first parameters can be determined.

The workshop in Paris will begin on Thursday, Oct. 23, at 4 p.m. and close on Friday, Oct. 24, also at about 4 p.m. Detailed information on the location of the workshop in the city center and the tentative program will be provided at www.EXSA.hu (→ upcoming events supported by EXSA).

We are inviting you to participate in this initiative and to forward this information to those who could be interested in it.

If you wish to join this initiative, please be kind enough to send back the interest form by e-mail.

Yours sincerely,

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