

## **Chapters and Tasks for the Final Report of the IAEA CRP Reference Database for Neutron Activation Analysis**

The following chapters will be included:

1. Introduction (taken from CRP proposal documentation), MAK, 1 Feb 2009
2. Summary of proficiency tests
  - a) Peak area determination, MB, 1 Feb 2009
  - b) Efficiency curve exercise, ZR, 31 May 2009
  - c) SMELS analysis, MA, MAK, 1 Feb 2009
  - d) Conclusions, All, 30 June 2009
3. Recommendations for experimental procedures (inc. software use and FDC's recommendations on additional monitor materials), MB, 1 March 2009
4. Newly measured data and validation (a-c, ZR, SJ, RJ/AT, XL) 1 March 2009
  - a) Efficiency curve determination
  - b) Neutron spectrum characterisation
  - c)  $k_0$ ,  $Q_0$  measurements, FDC, 30 March 2009
  - d) Validation against reference materials, MB, 15 April 2009
5. Comparison of  $k_0$ ,  $\sigma_0$ ,  $\sigma_\gamma$ , half-lives,  $E_\gamma$ ,  $P_\gamma$  (EGAF), RBF, 1 June 2009
6. Comparison of neutron energy dependent cross section data and  $Q_0$ , AT, 1 June 2009
7. Conclusions/recommendations, All, 30 June 2009
8. Appendix:  $k_0$ -IAEA software improvements resulting from the CRP, MB, 1 Feb 2009

Tasks:

Delivery date	Participant	Task
1 March 2009	ZR/SJ	Report $k_0$ values
1 March 2009	AT	Report on new $Q_0$ , $E_r$
30 March 2009	FDC	Calculate $k_0$ values (from these $Q_0$ values)
15 April 2009	MB	Validate these $k_0$ values against reference materials already measured at TU Delft, including SMELS
1 June 2009	RBF	Compare $k_0$ values with the contents of EGAF