

# Gamma-Ray Spectrometry Users Forum

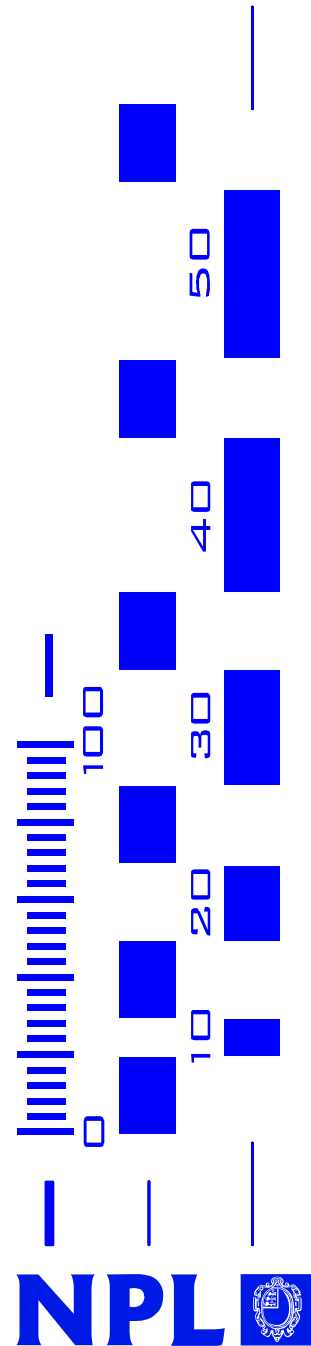
## SUMMARY NOTES

### GSUF SUBGROUP ON LOW ENERGY MEASUREMENTS

13 SEPTEMBER 1999

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# BACKGROUND

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- u Measurement problems

  - Matrix/attenuation*

  - Peak fitting/low energy continuums*

  - Efficiency fit*

    - $^{109}\text{Cd}$ ,  $^{158}\text{Eu}$ ,  $^{210}\text{Pb}$ ,  $^{234}\text{Th}$ ,  $^{234\text{m}}\text{Pa}$ ,  $^{241}\text{Am}$  ...

- u UKAS requirements

- u Regulatory consequences

# DISCUSSIONS (1)

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- u Methods in current use are both experimental and theoretical**
- u Require “Good Practice Guide”**
- u Require appropriate intercomparisons**
- u Need to quantify present situation amongst laboratories**

# DISCUSSIONS (2)

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## u Consider...

- 1) Sample preparation
- 2) Sample geometry
- 3) Calibration and peak analysis
- 4) Density corrections
- 5) Summing corrections

# ACTIONS

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- u Questionnaire to be sent to laboratories (by NPL) to assess requirements and demand**
- u Subject to be raised at environmental intercomparison workshop**

# QUESTIONNAIRE

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- u Do you measure below 120 keV?**
- u Do you correct for attenuation?**
- u If so, how?**
- u Would you support technically an investigation (by NPL) into recommending good practice in such measurements?**
- u What benefits do you foresee?**