Physikalisch-Technische Bundesanstalt

Der Präsident

Physikalisch- Technische Bundesanstalt * Postfach 33 45 * 3300 Braunschweig

National Physical Laboratory

Teddington/Middlesex
TW11 OLW
England

Ihr Zeichen, Ihre Nachricht vom	Mein Zeichen, meine Nachricht vom	Tel.: (0531) 5 92-	Braunschweig,
	7.32/92	7320	December 21, 1992

Ref.: EUROMET Project Ref. No. 221
Neutron Emission Rate Measurements from Radionuclide Neutron Sources

Dear Sirs,

in the context of providing traceability within Europe to appropriate primary standards, the joint work of NPL and PTB on the determination of the neutron emission rate from radionuclide neutron sources has been almost completed. This collaboration has produced two essential results.

1. The international intercomparison of neutron source emission rates organised by BIPM (1979-1984) has shown good agreement (0.1 %) between the manganese bath method (NPL) and the water bath method (PTB).

2. In the EUROMET project Ref. No. 221, the neutron source emission rate determined at the PTB by measuring fission fragments of a ^{252}Cf source by means of an ionisation chamber has been compared with manganese bath results at NPL. The agreement is better than 1 %.

Due to the good agreement between the PTB and NPL results, it is proposed to generally devolve official neutron source emission rate measurements from PTB to NPL. In future, official requests for such measurements should be transferred from PTB to NPL.

In the PTB it is intended to perform neutron source emission rate measurements only within the framework of scientific collaboration, or in cases of special requests which are outside the scope of routine work.

Yours sincerely,

Postanschrift: Bundesallee 100, Postfach 33 45, 3300 Braunschweig
Frachtgut: Braunschweig-Hgbf 1957, Expreßgut: Braunschweig-Hbf
Telefon (Zentrale): (0531) 592-0, Telefax: (0531) 592-4006
Telegramme: Bundesphysik Braunschweig, Teletex: 5318209PTB, Telex: 952822 ptb d
Konten: Bundeskasse Hannover, PGiroA Han. 5018-304 (BLZ 250 100 30), LZB Han. 250 01 000 (BLZ 250 000 00)
PTB Berlin-Charlottenburg, Abbestraße 2-12, 1000 Berlin 10
PTB Berlin-Friedrichshagen, Fürstenwalder Damm 388, 1162 Berlin