HDR Brachytherapy Calibration Services

Calibration Service for $^{192}\text{Ir}$ High Dose Rate (HDR) Brachytherapy Dosemeters

NPL’s $^{192}\text{Ir}$ HDR brachytherapy calibration service is for ionisation chambers used as secondary standards or instruments required for measurement of the greatest accuracy. Calibration of either an ionisation chamber alone or of a complete system including an electrometer is available.

Service features

- Calibration directly against the NPL air kerma primary standard
- Reference air kerma rate (RAKR) of the $^{192}\text{Ir}$ source up to 50 mGy/h

Specification and availability

- Calibration of well-type (re-entrant) chambers suitable for HDR sources
- Calibration of thimble chambers with customer provided calibration jig
- Electrometer calibration (charge or current calibration)
- Calibrations are normally carried out in spring and are undertaken using a microSelectron $^{192}\text{Ir}$ HDR source
- Calibration conforms to IPEM Code of Practice (2010)

Contact details

National Physical Laboratory
Hampton Road
Teddington
Middlesex
United Kingdom
TW11 0LW

Switchboard: 020 8977 3222
Website: www.npl.co.uk

Further information

Technical Advice
Thorsten Sander, AIR
Telephone number: 020 8943 6226
Email: thorsten.sander@npl.co.uk

Customer Measurement Services
Radiation Dosimetry Team
Telephone number: 020 8943 8695
Email: dosimetry@npl.co.uk

The National Physical Laboratory is operated on behalf of the National Measurement Office by NPL Management Limited, a wholly owned subsidiary of Serco Group plc.
LDR Brachytherapy Calibration Services

Calibration Service for Low Dose Rate (LDR) Brachytherapy Sources

NPL’s LDR brachytherapy service includes the calibration of $^{125}\text{I}$ seeds and $^{192}\text{Ir}$ wires and pins.

Service features

- Source calibration traceable to the NPL air kerma primary standard

Specification and availability

- Source calibrations in terms of $\mu$Gy/h at 1 m
- Calibration of $^{125}\text{I}$ seeds and $^{192}\text{Ir}$ wires and pins, including:
  - $^{125}\text{I}$ seeds (e.g. IMC6711 OncoSeed™, IMC 7000 RAPIDStrand™).
  - $^{192}\text{Ir}$ wires and pins (e.g. Amersham ICW-series).
- Calibrations of other source types/configurations possible.
- Available by arrangement throughout the year.

Contact details

National Physical Laboratory
Hampton Road
Teddington
Middlesex
United Kingdom
TW11 0LW

Switchboard: 020 8977 3222
Website: www.npl.co.uk

Further information

Technical Advice
Michaela Baker, AIR
Telephone number: 020 8943 6283
Email: radioactivity@npl.co.uk

Customer Measurement Services
Radioactivity Group
Telephone number: 020 8943 8695
Email: radioactivity@npl.co.uk

The National Physical Laboratory is operated on behalf of the National Measurement Office by NPL Management Limited, a wholly owned subsidiary of Serco Group plc.