

RadPro International GmbH

...Radiation Protection for the Radiation Professionals...

TLD & OSL



We supply full spectrum of TLD and OSL systems, materials, dedicated equipment and software.

RadPro International GmbH

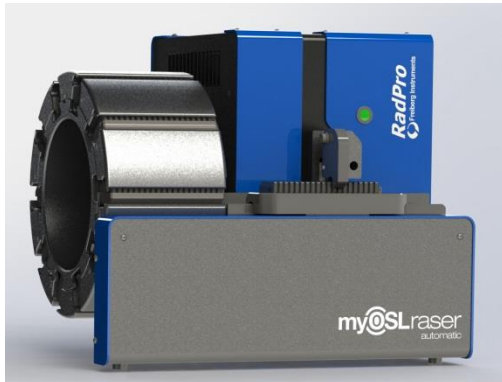
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OSL Personal Dosimetry System



myOSL System



myOSLraser OSL Reader and Eraser

The OSL reader myOSLraser (reader + eraser) is a manual device for evaluation of single myOSL dosimeters. Equipped with a feeder it automatically processes up to 200 myOSL dosimeter per loading and has also the capability of erasing the residual signal from the detectors within seconds.

Includes myOSLdosimetry software package for controlling and managing the operation of myOSLraser and myOSLirradiator. Also provides a client database for dose calculations and reporting.



myOSLirradiator Fast ⁹⁰Sr Irradiator

Built-in Sr-90, 37 MBq source

Upgradeable to automatic system to process up to 200 dosimeter per loading



myOSLdosimeter OSL dosimeter with 2 BeO elements

Small dosimeter, just 32 x 21 mm, for Hp(10) and Hp(0.07) measurements according IEC standards
For use with holders or blistered.



myOSLholder Holder or blister for myOSLdosi

myOSLdosimeter can be covered in blisters to provide protection against contamination or just clipped into holders

TL Personal Dosimetry System

RADOS TLD System

RE 2000 Readers

Multi-purpose TLD Reader for your needs

- **RE 2000A:** Automatically process up to 200 dosimeter cards or 800 single TL-elements at one load
- **RE 2000S:** Automatically process up to 20 dosimeter cards or 80 single TL-elements at one load
- **RE 2000RT:** Automatically process up to 20 dosimeter cards or 80 single TL-elements at one load including TL-Rods

IR 2000 Irradiator

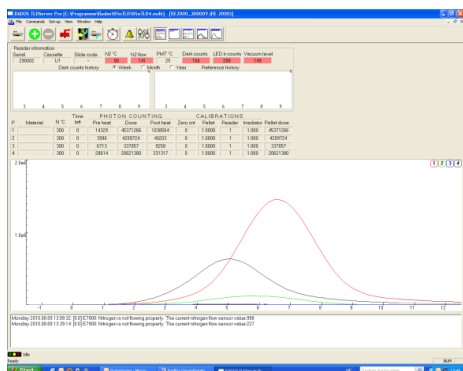
Fast ^{90}Sr Irradiator compatible to RE-2000 readers

- **IR 2000A:** Automatically irradiates up to 200 dosimeter cards or 800 single TL-elements at one load
- **IR 2000S:** Automatically irradiates up to 20 dosimeter cards or 80 single TL-elements at one load

RADOS TLD Dosimeter

for RE 2000 Readers

Bar coded thermoluminescence dosimeters with LiF detectors for Hp(10) and Hp(0.07) dosimetry



WinTLDpro

Software package for controlling and managing the operation of the RADOS TLD-Readers

WinTLDpro consists of two separate programs:

- **TLDServer** for communication with the reader
- **TLDEplorer** for managing the system set-up, calibrations and dose calculations.

Nitrogen Generator

Convenient and economic supply of high purity nitrogen to hot gas TLD readers.

Suitable for TLD Reader model RE-2000 or others.

Food & Medical & Science



TLD Cube

Manual TLD Reader for all TL applications



TLD Cube is a small, lightweight and portable TLD Reader with ceramic heater and optional nitrogen purging for all standard TLD shapes. TLD Cube is available in two versions as TLD Cube 400 with heating capability up to 400°C and as TLD Cube 600 which provides heating capabilities up to 600°C.

The software TLStudio includes calibration and QA features, data storage and export options as xml file or Excel file to meet all typical requirements.



Lexsyg-smart and lexsyg-research

Automatic TL/OSL Readers for many TL and OSL applications



Providing automatic evaluation of 40 or 80 samples in one load. Heating temperature up to 500°C/710°C. Thermal and optical stimulation can be simultaneously operated. Up to 3 different stimulation lights in one system.



PSLfood

Manual PSL Reader for all TL applications



PSLfood for fast is a newly developed PSL system for checking irradiated food according to EN 13751:2009 (Detection of irradiated food using photo stimulated luminescence). Compact design and new developed software combine easy operation and excellent performance.

The PSLfood drawer is designed for common petri dish with dimensions of 50mm in diameter & 20mm high.



myOSLchip

Manual stand-alone OSL Reader for OSL chip applications



myOSLchip is the most compact and simple solution for single OSL chip applications. It reads and erases single capsulated OSL elements of about 1 cm² size with or without PC connection.

TL & OSL Material



TLD Materials (from RADCARD, former TLD-Poland)

Probably the best TLD's in the world

Lithium fluoride thermoluminescent phosphor, in the form of powder, solid pellets and chips, is recognized universally as the "golden standard" for applications in radiation protection dosimetry, monitoring of environmental radiation and medical dosimetry.

MTS-N

MTS-N (LiF:Mg,Ti) has been produced since 1972 in the form of solid pellets, chips and powder, using unique method developed by Prof. Niewiadomski at the Institute of Nuclear Physics, Krakow, Poland.

- Fully exchangeable with with LiF:Mg,Ti phosphors, chips and pellets produced by other companies,
- Used world-wide in radiation protection, environmental monitoring and clinical dosimetry.

MCP-N

MCP-N type ultra-sensitive thermoluminscent LiF doped with magnesium, copper and phosphorus (LiF:Mg,Cu,P), available as solid detectors or in the form of powder.

- 30 times more sensitivity to gamma ray doses than MTS-N
- Unmatched for environmental monitoring and personal dosimetry.

TLD-Powders

TLD Powders for dosimetry in medical physics:

- Beam dosimetry
- TLD Quality Assurance for postal reference dosimetry
- Typical grain size 80 – 200 μm (customer specified)

MCP-Ns

MCP-Ns (LiF:Mg,Cu,P) thin active-layer ultra-sensitive TLD designed to measure $H_p(0.07)$ in external fields of weekly penetrating radiation. Each pellets consists of a thin radiation-sensitive part, of 8.5 $\text{mg}\cdot\text{cm}^2$ effective thickness, bonded to a thick, mechanically stable, non-luminescent LiF matrix.

- Flat energy response after X-ray and β -ray doses
- High sensitivity-reliable measurements of $H_p(0.07)$ in the μGy range

OSL Materials

BeO detectors and myOSLchip dosimeters

BeO detectors

- lose chips of 4.7 mm x 4.7 mm x 0.5 mm
- sensitivity optimized and sorted

myOSLchip dosimeters

- removable BeO detectors covered in a plastics housing
- 2D code label (rear side) and readable number (front side)
- Size: 10 mm x 9.5 mm x 2 mm

TL Dosimeters



TLD finger ring dosimeter for all applications in extremity dosimetry

- Type G: photon radiation
- Type BG: beta and photon radiation



Eye lens TLD dosimeter the best solution for monitoring of Hp(3) doses.

- Interventional radiology
- Nuclear medicine
- Medical diagnostics
- Nuclear Industry



H*(10) - Environmental dosimeters Gamma-Sphere & DORIS for environmental dosimetry

Gamma-Sphere for use with two loose TLD chips or discs.
Doris can either be equipped with aluminum TLD cards or RADOS TLD cards.



Albedo Neutron Dosimeter Cases Dosemeter cases for individual monitoring of personal exposure to thermal neutron radiation

The boron plastic Albedo covers are available to accommodate the TLD cards of different TLD card manufacturers.

TL Dosimeters & Accessories



TLD Aluminium Cards

Multi-element aluminum dosimetric cards

Our aluminum dosimetric cards, with one to four TL pellets or chips, sealed in fluoro-polymer (e.g. PTFE), can be evaluated in all compatible hot-gas readers.



Genesis Card-Holder

Card holder for aluminum dosimetric cards

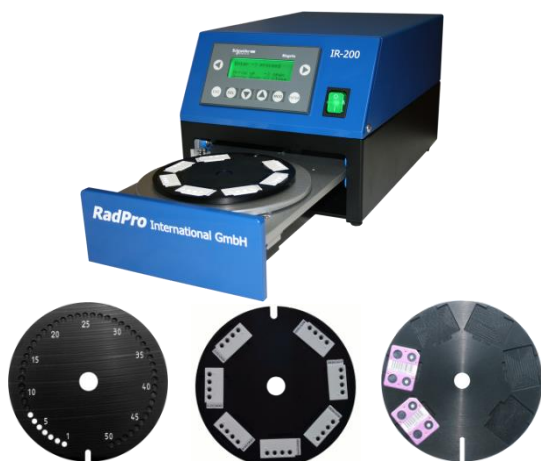
The Genesis allows for reporting of deep, lens of eye and shallow doses, and has a thin Mylar window for detection and measurement of low energy beta radiation.



Vacuum Tweezers

With tube and handpiece

Vacuum tweezers for proper handling of loose TLD elements and elements used in dosimeters like EYE-D and finger ring. Silent operation and convenient positioned power switch on top of the pump.



IR-200

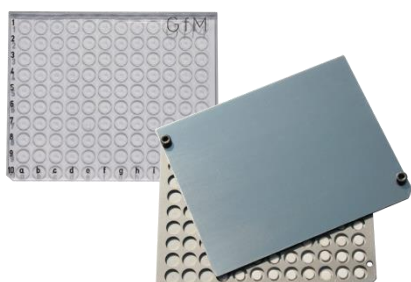
Table Top irradiator



The TLD/OSL Irradiator IR-200 is a multi-purpose irradiation system. The compact and versatile device requires only little space on the table. It is used for calibration purposes of TLD/OSL elements or cards and QA of the TLD/OSL system.

Carrier discs for different TLD elements like rods, chips and discs, BeO elements, as well for aluminum TLD cards and TLD Slides type "Rados". The irradiation value is defined by the number of carrier disc revolutions.

The IR-200 contains a $^{90}\text{Sr}/^{90}\text{Y}$ radiation source with an activity of 33 MBq.



Annealing tray and storage dish

Both with cover

Annealing tray and storage fit together for easy and fast transfer of detectors between dish and tray. Annealing tray fits in TLD Heat.

TL & OSL Accessories



TLD Heat

TLD annealing oven for thermoluminescent dosimeters

The TLD annealing oven TLD Heat with air circulation has specially been developed for thermo-luminescent dosimetry. It has a PC interface and Win software for easy and flexible programming and saving of any required heating profile for preheat and anneal of TLD material to a maximum temperature of 400°C.



Muffle Oven

Oven for annealing of BeO Elements

Muffle oven for annealing of BeO OSL elements at 700°C after irradiation to high doses.



RSD ART Phantom

THE ALDERSON RADIATION THERAPY PHANTOM (ART)

The Worldwide Standard for Quality Assurance for Radiation Therapy

RadPro International GmbH

...Radiation Protection for the Radiation Professionals...

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