

Optimización Recomendada

Para mejorar el rendimiento de su ordenador, haga clic en "Comenzar"

1. Optimización Automática

Comenzar

[Más Información](#)

[Huliq](#) [New To Huliq?](#) [Submit Content](#) [Login](#)

HULIQ.com

Become A Citizen Journalist
For Huliq.com

[Technology](#) [Business](#) [Health](#) [Sports](#) [Recreation](#) [Science](#) [World](#) [Arts](#) [Society](#)

Quality Control Of Radiotherapy Treatments Is Possible

0 The research team from the Department of Electronics and Computer Science at the University of Granada (UGR), together with the Department of Radiology at the Hospital Virgen de las Nieves in Granada, have designed a portable and low-cost device which can measure the ionizing radiation someone is exposed to, for example, during **radiotherapy**.

Ionizing radiations play a vital role in the treatment and diagnosis of malignant neoplastic illnesses as well as in the diagnosis of other pathologies. However, according to Manuel Vilches Pacheco from the Medical Physics and Radiology Department at the Hospital Virgen de las Nieves in Granada, "the potential harm ionizing radiations can cause means that, in order to obtain clinical benefits and reduce the onset of unwanted adverse effects as much as possible, they must be used under strict quality control".

According to experts, this is why it is important to develop instruments which can verify the final result by carrying out a direct follow-up of treatments administered to patients, such as image registration (portal imaging system) or the in vivo measurement of the exact dose administered to patients.

In vivo Control

Portal imaging systems have greatly improved in the last five years and are widely used today. This is not the case for systems used for in vivo dose measurement in vivo which, in a significant number of patients and treatment sessions, "has been limited to a few centres". This is because a great amount of effort is required to place the device onto the patient and as it interferes noticeably with the treatment "it can considerably modify the distribution of the administered dose".

On this matter, Alberto Palma López, from the Department of Electronics and Computer Science at the University of Granada, explains that this new device does not require an electricity connection or a reading supply unit and, among other improvements, it minimizes treatment disorders and is made of low-cost and reusable electronic devices, "something that was impossible until now".

Furthermore, the device's design has metrological characteristics which ensures that it performs correctly at high temperatures. This means the room does not need to be specially fit out. The detector's minuscule size can measure the radiation quickly in different areas of the body as well as keep a historical record of the patient.

Significant progress has been made in encouraging the widespread use in vivo dosimetry control, an important element among patients undergoing **radiotherapy**. However, its use can be extended to other radiological practices such as diagnosis by X-ray or for the protection of professionals exposed to a radioactive environment-Universidad de Granada

[Used Radiology Equipment](#)

Quality Refurbed Medical Equipment Buy - Sell - Lease - Trade

www.castlemedicalsolutions.com

[Granada Airport car hire](#)

Flying low-cost, hire low-cost too! Voted best car hire 2006 & 2007

www.carjet.co.uk

[x-ray lead glass](#)

Radiation glass for x-rayshielding control windows for medical x-ray

www.xrayglass.com

[X-ray/Digital X-ray News](#)

For x-ray & radiology professionals News, teaching files, CMEs, & more

X-ray.AuntMinnie.com

[Type 1 Diabetes Research](#)

Learn about participating in a JDRF Funded Study

www.ProtegeDiabetes.org

Today's Top Stories

- [Dolly Parton To Lead Macy's Thanksgiving Day Parade 2007](#)
- [FBI Reports Increased Hate Crimes](#)
- [Toshiba Gives Away Five High Definition DVDs With Every New HD Laptop](#)
- [Robot Claims 'world First' Convertible Legs](#)
- [French Rail Network 'sabotaged'](#)
- [Bush Anti-abortion Allies Could Reap Benefit Of Stem Cell Research Breakthrough](#)

Submit your news

BOOKMARK

☐ Web ☒ huliq.com

Google Search

Navigation

[Recent Posts](#)
[Instant News](#)
[Huliq Blog](#)

Poll

Are You Traveling This Thanksgiving?:

☐ Yes

☐ No

Vote

Alyssa commented on [Suspects In Natalee Holloway Case Back In Custody](#)

Anonymous commented on [Parents Blame Daughters Suicide On Myspace Hoax](#)

Hye commented on [UEFA Is Wrong About Football Matches On Armenia, Azerbaijan](#)

Abdullah commented on [South Of France Real Estate Market : Sea, Sun And Properties](#)

Anonymous commented on [Gym Class Heroes Takes Home Woodie Of Year Award](#)

Anonymous commented on [UEFA Is Wrong About Football Matches On Armenia, Azerbaijan](#)

Hye commented on [UEFA Is Wrong About Football Matches On Armenia, Azerbaijan](#)

tolu jabarl commented on [Nigeria: Tinapa, Africa's Premier Business-Tourism Resort Opens Monday April 2](#)

Cheri commented on [Parents Blame Daughters Suicide On Myspace Hoax](#)

sharetipsinfo commented on [Indian Stock Exchange Sensex Scores Biggest Ever Gain Of 893.5 Pts](#)

Posted under: [Health](#) [Ionizing Radiation](#) [Neoplastic Illnesses](#) [Radiotherapy](#)

Submitted by harminka on Thu, 2007-11-22 08:35.

Comments

[Post new comment](#)