

Ongoing PhD research

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Abdo Shamseldin	Development of a constitutive law for accurate prediction of time dependent deformation of OPC based cementitious material at elevated temperatures		Wan-Wendner Roman	Seetharam Suresh	2020-10-01
Abrams Floris	Combining Machine Learning and Operations Research methods for Optimizing Remediation Efforts in Response to Large-Scale Nuclear Emergencies Affecting Food and Agriculture	KULeuven	Van Orshoven Jos (KULeuven)	Sweeck Lieve	2019-10-01
Adam Martin	Shape controlled thorium dioxide precipitation routes	KULeuven	Vleugels Jozef (KULeuven)	Acevedo Muñoz Beatriz	2020-10-01
Aerts Robin	Non-aqueous separation process for the purification of the lutetium-177 medical radioisotope	KULeuven	Binnemans Koen (KULeuven)	Van Hecke Karen	2020-10-16
Ahenkorah Stephen	Development of 225Ac- and 213Bi-labelled somatostatin analogues with improved tumour to kidney ratio for the treatment of neuroendocrine tumours	KULeuven	Bormans Guy (KULeuven)	Ooms Maarten	2018-10-29
Akbar Fitriani Cholidah	Fracture mechanisms in environmentally assisted cracking of austenitic steels	UGent	Verbeken Kim (UGent)	Gavrilov Serguei	2020-10-01
Al-dbissi Moad	A novel approach to partial defect testing of spent nuclear fuel for safeguards applications		Pazsit Imre	Borella Alessandro	2020-03-01
Arman Meryem	Oxidation of terbium(III) as a first step towards high purity terbium-161 for medical applications	KULeuven	Binnemans Koen (KULeuven)	Geboes Bart	2018-10-01



Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Babaei Saeid	A Multi Scale Approach to Model Early Age Thermo-Hydro-Mechanical Behaviour on non-reinforced Concrete	UAntwerpen	Steenackers Gunther (UAntwerpen)	Seetharam Suresh	2017-01-16
Bianchi Anna	Microdosimetry of therapeutic proton beams	UHasselt	Reniers Brigitte (UHasselt)	Vanhavere Filip	2017-10-01
Brookhuis Hein	New Big Science in Belgium. Transformation and Adaptation of SCK CEN 1991-2022.	KULeuven	Vanpaemel Geert (KULeuven)	Geysmans Robbe	2018-10-15
Caglak Emre	Atomic scale simulation of gaseous and volatile fission products with application to LWR and GEN-IV fuels	ULB	Labeau Pierre-Etienne (ULB)	Verwerft Marc	2016-11-16
Cassells Irwin	Development of 161Tb-labelled nanobodies for the treatment of colorectal cancer	KULeuven	Bormans Guy (KULeuven)	Ooms Maarten	2018-10-29
Castillo Dayana	Dosimetry aspects of recoiling daughter nuclides of 225-Actinium in Targeted Alpha Therapy	KULeuven	Koole Michel (KULeuven)	De Saint-Hubert Marijke	2019-11-08
Chang Chih-Cheng	Assessment of mechanical properties of fusion materials by micro-mechanical testing	UCL	Pardoen Thomas (UCL)	Terentyev Dmitry	2020-02-01
Colak Gamze	Preparation of Am containing transmutation targets	KULeuven - MTM	Vleugels Jozef (KULeuven - MTM)	Leinders Gregory	2020-03-16
Corazza Christophe	Aerosol formation, transport and deposition in lead based fast reactors	KULeuven	Vetrano Maria Rosaria (KULeuven)	Rosseel Kris	2018-10-01
Courilleau Camille	Fundamental understanding of the sensitivity of radiation hardening to nickel content and temperature in RPV materials	UR	Pareige Philippe (UR)	Chaouadi Rachid	2019-10-01

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Cristina Antonella	Interception, retention and translocation of radionuclides in agricultural crops under greenhouse conditions, following sprinkling irrigation	UA	Samson Roeland (UA)	Sweeck Lieve	2016-11-01
Dengra i Grau Francesc Xavier	Impact of land use change on the migration of historical radionuclide and heavy metal contamination in riparian soils of the Grote Nete Valley	KULeuven	Smolders Erik (KULeuven)	Van Laer Liesbeth	2020-11-01
Fahrion Jana	Biological oxygen production and air revitalisation for habitats on the Moon	UClermont Auverge	Dussap Claude-Gilles (UClermont Auverge)	Leys Natalie	2020-10-01
Fuentes Solis Noelia	Effect of liquid metal environment on nucleation and propagation of fatigue cracks	KULeuven	Seefeldt Marc (KULeuven)	Gavrilov Serguei	2020-02-15
Geelen Stef	Improving radiological monitoring using drones	UHasselt	Schroeyers Wouter (UHasselt)	Camps Johan	2018-10-01
Geenen Lorain	Study of the radiobiological basis of the therapeutic and cytotoxic responses of targeted radionuclide therapy using Lu177-DOTATATE and Ac225-DOTATATE	EURotterdam	De Jong Marion (EURotterdam)	Aerts An	2019-10-01
Giacomo Gregori	Electrochemical measurement and characterization of corrosion products in lead-bismuth eutectic		Doneux Thomas	Lim Jun	2019-12-01
Giménez Francisco Javier	Microbial community structure and dynamics during radioactive waste disposal	VUB	Peeters Eveline (VUB)	Mijnendonckx Kristel	2019-11-15
Glesner Colin	Safety, security, and innovation in high-risk sociotechnical systems – tensions and tradeoffs	ULiège	Fallon Catherine (ULiège)	Geysmans Robbe	2017-10-01
Goussarov Gleb	Bioinformatics tools for metagenomics analysis of microbial communities	UGent	Vandamme Peter (UGent)	Van Houdt Rob	2017-10-01

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Hasan Moudud Md	Decreasing global uncertainty in mapping site & environmental contamination by combining different measurement techniques in a joint (geo)statistical interpretation	VUB	Huysmans Marijke (VUB)	Vidmar Tim	2017-10-01
Heynickx Nathalie	Study of the radiobiological basis of therapeutic and toxic responses of prostate cancer radiation therapy	UGent	Baatout Sarah (UGent)	Aerts An	2019-10-07
Hoti Ferdiana	Communication of uncertainties related to radiological risk situations	UAntwerpen	Thijssen Peter (UAntwerpen)	Perko Tanja	2018-10-15
Hsu Han-Hung	Sol-gel chemistry to control morphology and porosity of actinide oxide feeds for electroreduction	UAntwerpen	Breugelmans Tom (UAntwerpen)	Geboes Bart	2020-02-01
Hurier Sophie	High intensity ISOL ion source for long-term irradiations	KULeuven	Cocolios Thomas (KULeuven)	Rijpstra Kim	2019-12-01
Inalegwu Auchi	Unravelling the potential of circular RNAs as novel biomarkers of radiation exposure and -sensitivity and their functional characterization in the radiation response	UAntwerpen	de vos winnok (UAntwerpen)	Quintens Roel	2017-10-15
Kachko Olga	Development of Reduced Activation Ferritic Martensitic Steels for fusion applications	UGent	Petrov Roumen (UGent)	Terentyev Dmitry	2020-01-01
Kayal Gunjan	Clinical dosimetry in molecular radiotherapy	UToulouse	Bardies Manuel (UToulouse)	Struelens Lara	2018-01-01
Kenens Joke	Probing the potential of citizen science in the governance of nuclear incidents, accidents, and post-disaster situations	KUL	Van Hoyweghen Ine (KUL)	Turcanu Catrinel	2017-08-01

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Khvan Tymofii	Nano-indentation for sub-miniaturized testing of irradiated materials: FEM analysis and experiments	ULiège	Noels Ludovic (ULiège)	Terentyev Dmitry	2018-10-19
Laanen Paulus	Do plants adapt to chronic low-dose gamma exposure? A mechanistic study comparing plants exposed under field and lab conditions on (epi) genetic, biochemical and population level.	UHasselt	Cuypers Ann (UHasselt)	Horemans Nele	2018-10-01
Larion Ygee	Reduced Order Modelling Techniques for Coupled Geomechanics Problems		Massart Thierry	Seetharam Suresh	2017-10-01
Leenders Benji	Improving the extraction of radioactive isotopes from MYRRHA linac targets by molecular sidebands	UGent	Cottenier Stefaan (UGent)	Houngbo Donald	2019-10-25
Lescur Amke	The influence of heavy liquid metal environment on mechanical and corrosion properties of austenitic stainless steel welds	UGent	Petrov Roumen (UGent)	Lim Jun	2019-01-01
Li Xiang	Corrosion study of the BR1 fuel in highly alkaline conditions	UCL	Pardoen Thomas (UCL)	Caes Sébastien	2020-01-01
Li Meng	Experimental and numerical investigations on the miniaturization for fracture toughness characterization of RPV materials	UCL	Pardoen Thomas (UCL)	Uytendhouwen Inge	2018-10-15
Llopart Inés	Development of novel assays for 'difficult-to-measure' radionuclides in materials produced during nuclear decommissioning activities	VUB	Leermakers Martine (VUB)	Vasile Mirela	2019-11-01

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Lopes Maia Eloi	Mechanisms of localized corrosion initiation in liquid metal environment	VUB	Terryn Herman (VUB)	Gavrilov Serguei	2020-10-15
Lu Min	Quantifying and predicting river-aquifer exchange in lowland floodplains (Nete, Demer and Dijle)	KULeuven	Huysmans Marijke (KULeuven)	Gedeon Matej	2017-11-01
Maertens Dominic	Study of reaction kinetics in continuous partitioning processes for actinide separations	KULeuven	Binnemans Koen (KULeuven)	Cardinaels Thomas	2019-11-01
Maertens Laurens	Understanding copper- and silver-based antimicrobials and their potential in space applications		Matroule Jean-Yves	Van Houdt Rob	2017-10-01
Mertens Amber	Unravelling uranium uptake mechanisms in Arabidopsis thaliana	UHasselt	Cuypers Ann (UHasselt)	Saenen Eline	2018-10-01
Miranda Silvana	Understanding the gravity of the situation: immune dysfunction in response to space stress	UGent	Baatout Sarah (UGent)	Baselet Bjorn	2020-11-01
Nabha Racell	Assessment of relative biological effectiveness of clinical and secondary irradiation in proton therapy by microdosimetric measurements and simulations	KULeuven	Sterpin Edmond (KULeuven)	Van Hoey Olivier	2019-01-01
Nguyen Luong The Thinh	Carbonation, decalcification and recalcification of Calcium-Silicate-Hydrate	KULeuven	Cizer Özlem (KULeuven)	Phung Quoc Tri	2020-11-01
Nguyen Thi Nhan	Physico-chemical evolution of geopolymers in contact with aggressive environment	KULeuven	Pontikes Yiannis (KULeuven)	Phung Quoc Tri	2019-12-15
Patil Amit Ravindra	Model development for the assessment of the impact of accidental and routine radioactive releases into the Meuse-Scheldt aquatic system	UCL	Deleersnijder Eric (UCL)	Fiengo Perez Fabricio	2020-11-01

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Pauwels Jente	Chemical and radiological assessment of deep brine-type geothermal groundwaters.	KU Leuven	Cappuyns Valérie (KU Leuven)	Salah Sonia	2017-10-01
Penders Aäron	Microstructural investigation of irradiation assisted stress corrosion cracking mechanism based on focused ion beam analysis of tested and industrial specimens	UAntwerpen	Schryvers Nick (UAntwerpen)	Konstantinovic Milan	2018-10-01
Petrović Đorđe	Investigation of a Hypothetical Core Disruptive Accident scenario in MYRRHA	KU Leuven	D'haeseleer William (KU Leuven)	Scheveneels Guy	2020-10-16
Radstake Eline	Unraveling non-cancer effects of spaceflight: how are the brain and skin affected in astronauts?	UGent	Baatout Sarah (UGent)	Verslegers Mieke	2019-02-01
Ribeiro Jessica	Radiation effects on human brain development, modeled in human brain organoids	HHU	Gopalakrishnan Jay (HHU)	Quintens Roel	2020-01-01
Rogiers Tom	Unravelling radionuclide resistance mechanisms in the bacterium Cupriavidus metallidurans	UGent	Boon Nico (UGent)	Mijnendonckx Kristel	2017-10-01
Saldarriaga Vargas Clarita	Preclinical computational dosimetry of Nanobodies in targeted radionuclide therapy of HER-2 over-expressing cancers	VUB	Caveliers Vicky (VUB)	Struelens Lara	2017-04-01
Sallam Magy	Cardiovascular dysfunction after cancer radiation therapy: search for biomarkers and study of the underlying physiological mechanisms	UAntwerpen	Guns Pieter-Jan (UAntwerpen)	Aerts An	2018-12-01
Schönlank Maximiliaan	Improved deposition modelling based on combining state-of-the-art atmospheric dispersion		Termonia Piet	Camps Johan	2020-10-01

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
	simulations and numerical weather data.				
Segers Charlotte	Investigating microbial therapies to combat gut microbiome dysbiosis during pelvic irradiation	UAntwerpen	Lebeer Sarah (UAntwerpen)	Mastroleo Felice	2017-10-01
Serag Essam Sadik	Coatings enabling robotic systems in liquid metal for a new generation of nuclear reactors.	UNamur	Lucas Stéphane (UNamur)	Schuurmans Paul	2020-10-01
Shagalakova Aidana	HERMMES - Hadron Energy Resolved Measurement using Magnetic Electron Separation	KULeuven	Sterpin Edmond (KULeuven)	de Freitas Nascimento Luana	2020-10-16
Star Kelbij Sabrina	Development of Reduced Order CFD models for the application of Uncertainty Quantification	UGent	Degroote Joris (UGent)	Belloni Francesco	2017-10-01
Tamborino Giulia	Medical alpha emitting radionuclides: how to correlate microdosimetry with biological effects?	EURotterdam	De Jong Marion (EURotterdam)	De Saint-Hubert Marijke	2017-10-01
Uygur Selim	Phase stability and oxidation behavior of high Pu content fast reactor MOX fuel	KULeuven	Vleugels Jozef (KULeuven)	Delville Rémi	2019-01-15
Van Dyck Isabelle	Application of Lemna minor in site remediation strategies		Vangronsveld Jaco	Vanhoudt Nathalie	2019-10-01
Vande Pitte Jonas	Post-test irradiation temperature determination and neutron dosimetry methods	UGent	Detavernier Christophe (UGent)	Uytendhouwen Inge	2017-10-01
Vanheukelom Margot	Quantifying the effects of soil and plant characteristics on radiocesium uptake: A global perspective	KULeuven	Smolders Erik (KULeuven)	Sweeck Lieve	2020-10-01
Verbeelen Tom	URINIS Project - Urine valorisation in Space	UGent	Ganigue Ramon (UGent)	Mastroleo Felice	2020-03-23

Name	Title	Univ.	Promoter	SCK CEN Mentor	PhD started
Verlinden Bart	Effect of ionizing radiation on solvent extraction systems for the separation of minor actinides	KULeuven	Binnemans Koen (KULeuven)	Van Hecke Karen	2017-10-01
Waked Anthony	Targeted radionuclide therapy as new treatment opportunity against glioblastoma recurrences	ULiège	Rogister Bernard (ULiège)	Benotmane Rafi	2020-11-01
Wanna Nancy	Development and validation of HPLC-SF-ICP-MS methodologies for characterization of spent nuclear fuel	UGent	Vanhaecke Frank (UGent)	Van Hoecke Karen	2017-01-15
Wouters Shari	Harnessing a therapeutic microbiome as an alleviating strategy for dysbiosis and recurrence in colorectal cancer patients undergoing radiotherapy	UAntwerpen	Kumar-Singh Samir (UAntwerpen)	Ahmed Mohamed Mysara	2018-10-01
Yin Chao	Development and qualification of irradiation tolerant tungsten and novel toughness-enhanced composites for fusion applications	UCL	Pardoen Thomas (UCL)	Terentyev Dmitry	2017-01-15
Zakirov Aidar	Effect of Cu, P, Ni and Mn content, individually and synergistically, on the microstructure of irradiated chemically-tailored RPV steels	UNormandie	Pareige Philippe (UNormandie)	Stergar Erich	2018-11-05
Zhu Hongshan	Inorganic sorption materials tailored for ²²⁵Ra/²²⁵Ac and ²²⁵Ac/²¹³Bi radionuclide generators for biomedical applications		Binnemans Koen	Heinitz Stephan	2019-10-28