

PROGRAM

ICASIN 2025

27 – 29 November 2025
Kenitra, Morocco

International Conference on Applied Sciences and
Innovation (ICASIN'2025)

1st Edition

Under the slogan

"Shaping Tomorrow: Pioneering Health, Water, Energy, and Environmental
Sustainability"

Organized in cooperation with





ICASIN
27-29 Nov 2025
Kenitra, Morocco

International Conference on Applied Sciences and Innovation 1st Edition

Preliminary Program

27 –29 November 2025

Kenitra, Morocco



***Moroccan Society for Research in Applied
Sciences and Innovation***

ICASIN2025 CONFERENCE

Organized in cooperation with

المعهد العالي لعلوم الصحة
INSTITUT SUPÉRIEUR
DES SCIENCES DE LA SANTÉ



**FACULTÉ D'ÉCONOMIE
ET DE GESTION
KENITRA**



**جامعة ابن توفيل
Ibn Tofaïl University
Faculté des Sciences**



Speakers Country Flag



We would like to thank ICASIN Sponsors:

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Horizon BIS is a Moroccan company specialized in strategic consulting, training, promotion, and operational support for healthcare stakeholders. Its activities cover the launch and commercial development of innovative healthcare solutions; market access and regulatory coordination, as well as commercial, marketing, medical, and scientific training, complemented by strategic monitoring and business intelligence. The company's mission is to support laboratories and medical technology firms in their growth within the Moroccan market by providing high-value local expertise.

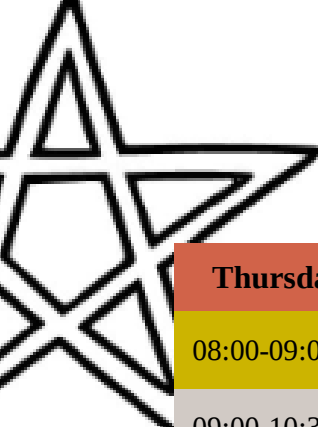


جمعية مغرب الطفولة والتمكين



La commune de Kénitra





***All times are in GMT+1**

Thursday, 27 November, 2025		Conference Program (Day 1)		
08:00-09:00		Registration		
09:00-10:30		Opening (Amphitheater)		
10:30-11:00		Coffee break		
	Plenary Session 1	Speaker	Keynote Talk	Plenary
11:00-11:30		Dr. T. Sato JAEA, Japan	Recent improvements of the PHITS code and its applications	
11:35-12:00		Discussions	Moderator: Pr. M. Goughri & Z. Sadoune	
12:05-14:05		Poster session1		
12:05-14:05	Round Table	Mr. D. Silem Mme. Z. Benmahi Mr. I. Hasan (Bertin Technology)	Connecting Dose, Securing Exposure: Technological Innovation for More Responsive and Collaborative Radiation Protection	
Chair: Mr. Hasan Irfan &Pr. E. Chakir				
14:10-15:55		Lunch		
	Plenary Session 2	Speaker	Keynote Talk	Plenary
16:00-16:30		Pr. B. Ould Bouamama, Polytech Lille, France	Green Hydrogen: Energy for the Future?	
16:35-17:05		Discussions	Moderator: Pr. E M. Chakir & Pr. M. Fahoum	
17:10-17:30		Coffee break & Poster session1 & Close First Day 1		



Friday, 28 November, 2025		Conference Program (Day 2)				
09:05-09:35	Plenary Session 3	Speaker	Keynote Talk	Plenary		
09:40-10:10		Pr. Y. Naimi, UH2C, Morocco	Physicochemical storage of renewable energy and green hydrogen			
10:15-10:45		Pr. S. Baatout SCK-CEN, Belgium	United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) strategic vision: an in-depth overview of current and future programme of work			
10:45-11:15		Pr. A W. Ajlouni ANFAS, Arabia Saudia	The Role of Artificial Inteligence in Teaching Physics: Applications Challenges, and Future Directions			
10:45-11:15		Discussions	Moderator: Pr. B. Ould Bouamama & Pr. H. El Ouarghi			
11:20-11:45		Coffee break				
11:50-13:00	Parallel session 1	Chairs	Topics	P1		
		Dr. T. Sato Dr. H. Amsil Pr. O. Jai	Scientific Modeling and Computational Codes for Advanced Research			
		Pr. M. Daouad Pr. L. Ounalli, Pr. A. Rrhiousa Pr. M. Krim	Medical Physics and Advanced Technologies and Healthcare	P2		
		Pr. M. Rettal Pr. Pr. S. Lmadani, Pr. M. Fahoum Pr. M. Chabab	Innovative Energy Systems, water for a Sustainable Future	P3		
		Pr. Y. Naimi Pr. A. Raidou Pr. E. Al Ibrahmi	Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications	P4		
		Pr. M. Jerry Pr. B. Houga Pr. M. Cherkaoui	Economic and Legal Challenges in the Energy Sector	P5		
		Pr. Y. Madani ALAMI Pr. A. Makrani	Artificial Intelligence and Smart Technologies: Transforming Industries and Society	P6		
		13:00-14:45				
		Lunch				
		14:50-15:20	Plenary Session 4	Speaker	Keynote Talk	Plenary
		15:20-15:50		Dr. P. Romano Aragone,USA	Advancements in Particle Transport and Nuclear Simulations: Leading OpenMC and Innovations in Reactor Physics, Fusion Energy, and High-Performance Computing	
15:50-16:20	Pr. L. Ounalli, CNSTN, Tunisia	Innovating for impact: The role of medical physics in sustainable and safe healthcare systems				
16:20-16:40	Pr. M. Chabab, UCA, Morocco	The African Strategy in Physics ASFAP: Particle physics as a prototype				
16:20-16:40		Discussions	Moderator: Pr. N. Dkhireche & Dr. H. Amsil			
16:40-17:00		Coffee break & Poster session 2 & Close First Day 2				

Saturday, 29 November, 2025		Conference Program (Day 3)	
09:00-10:15	Work-Shop		Rom 1, 2, 3 and 4
10:15-10:45	Coffee break		
11:00-13:00	Parallel session 2	Chairs	Topic
		Pr. O. Bounagui Pr. L. Ounalli, Pr. N. Dkhireche	Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications
		Pr. B. Ould Bouamama, Pr. Y. Naimi, Pr. Y. El Madani El Alami	Innovative Energy Systems, water for a Sustainable Future
		Pr. E M. Chakir, Pr. N. Rassai, Pr. F. Dib	Medical Physics and Advanced Technologies and Healthcare
		Pr. M. Lazaar Pr. K. Haddouch Pr. O. Kabach	Artificial Intelligence and Smart Technologies: Transforming Industries and Society
		Pr. C. Jerry Pr. B. Hindou Pr. A. Ben Ahmed	Economic and Legal Challenges in the Energy Sector
	Parallel session 3	Chairs	Topic
		Pr. K. Allabouche, Pr. H. Dekhissi Pr. Z. Aqachmar	Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications
		Pr. M. El Hassnaoui Pr. S. Mouslih Pr. H. Labrim	Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications
		Pr. A. Bilya Pr. R. Touti Pr. R. Mesradi	Medical Physics and Advanced Technologies and Healthcare
		Pr. H. Baddih Pr. A. El Makrani Pr. M. Cherkaoui	Economic and Legal Challenges in the Energy Sector
13:00-14:00	Lunch		
14:05-14:35	Plenary Session 5	Speaker	Keynote Talk
14:40-15:10		Pr. S. Padmanaban University of South Eastern Norway	Artificial Intelligence Inspired Power Electronics Renewable Energy
15:15-15:45		Dr. H. Bounouira CNESTEN, Morocco	Neutron Activation Analysis at CENM: a scientific lever serving environmental protection and geochemical exploration
15:45-16:14		Pr. M. BAN-SALMAN, Daejeon, Korea	Using the ICP plasma and catalyst for enhanced Bi-methane reforming forsyngas
16:15-17:15		Discussions	Moderator: Pr. Fahoum
17:15-17:45	Coffee break		
17:00-18:00	Certificate and close conference & Close First Day 3		

Thursday, 27 November, 2025		Full Program (Day 1)		
08:00-09:00		Welcome and registration of participants		
09:00-10:30		Introduction presentation & start of the Scientific Program of ICASIN’2025		
10:30-11:00		Coffee break		
11:00-11:30	Plenary Session 1	Speaker	Keynote Talk	Plenary
11:35-12:00		Dr. T. Sato JAEA, Japan	Recent improvements of the PHITS code and its applications	
		Discussions	Moderator: Pr. M. Goughri & Z. Sadoune	
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16:00-16:30	Plenary Session 2	Speaker	Keynote Talk	Plenary
16:35-17:05		Pr. B. Ould Bouamama, Polytech Lille, France	Green Hydrogen: Energy for the Future?	
		Discussions	Moderator: Pr. E M. Chakir & Pr. M. Fahoum	
17:10-17:30		Coffee break & Poster session1 & Close First Day 1		

Friday, 28 November, 2025		Conference Program (Day 2)				
09:05-09:35	Plenary Session 3	Speaker	Keynote Talk	Plenary		
		Pr. Y. Naimi, UH2C, Morocco	Physicochemical storage of renewable energy and green hydrogen			
09:40-10:10		Pr. S. Baatout SCK-CEN, Belgium	United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) strategic vision: an in-depth overview of current and future programme of work			
10:15-10:45		Pr. A W. Ajlouni ANFAS, Arabia Saudia	The Role of Artificial Inteligence in Teaching Physics: Applications Challenges, and Future Directions			
10:45-11:15		Discussions	Moderator: Pr. B. Ould Bouamama & Pr. H. El Ouarghi			
11:20-11:45		Coffee break				
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		Pr. M. Rettal Pr. Pr. S. Lmadani, Pr. M. Fahoum Pr. M. Chabab	Medical Physics and Advanced Technologies and Healthcare	P2		
		Pr. Y. Naimi Pr. A. Raidou Pr. E. Al Ibrahmi	Innovative Energy Systems, water for a Sustainable Future	P3		
		Pr. M. Jerry Pr. B. Houga Pr. M. Cherkaoui	Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications	P4		
		Pr. Y. Madani ALAMI Pr. A. Makrani Pr. M. Bencheikh	Economic and Legal Challenges in the Energy Sector	P5		
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		Pr. B. Ould Bouamama, Pr. Y. Naimi, Pr. Y. El Madani El Alami	Innovative Energy Systems, water for a Sustainable Future
		Pr. E M.Chakir, Pr. N. Rassai, Pr. F. Dib	Medical Physics and Advanced Technologies and Healthcare
		Pr. M. Lazaar Pr. K. Haddouch Pr. H. Harasse	Artificial Intelligence and Smart Technologies: Transforming Industries and Society
	Parallel session 3	Pr. C. Jerry Pr. B. Hindou Pr. M. Liwaeddine	Economic and Legal Challenges in the Energy Sector
		Chairs	Topic
		Pr. K. Allabouche, Pr. H. Dekhissi Pr. Z. Aqachmar	Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications
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17:00-18:00	Certificate and close conference & Close First Day 3		

Thursday, November 27, 2025

Full Program

08:00 - 09:00

Registration - Welcome to the participants

Opening – Amphitheater

**Introduction presentation & start of the Scientific Program of
ICASIN'2025**

General Chairs ICASIN 2025

Prof. El Mahjoub Chakir

Prof. Abdessamad Didi

Prof. Monir Jerry

Prof. Zouhair Sadoune

Official Opening Ceremony

Recitation of selected verses from the Holy Quran

Moroccan National Anthem

09:00 - 10:30

- **Pr. Mohamed EBN TOUHAMI**, Interim President of Ibn Tofail University, and Dean of Faculty of Sciences, Kenitra, Morocco
- **Pr. Said CHAKIRI**, Vice Dean in Charge of Research, Faculty of Sciences, Kenitra, Morocco
- **Mr. TAZI S. Mohammed**, Director of the National Center for Radiological Protection (CNRP), Ministry of Health and Social Protection
- **Dr. Said MOULINE**, Director general of AMSSNuR, Morocco
- **Pr. Saad EL MADANI**, Director of Higher Institute of Health Sciences, Hassan I University, Settat, Morocco
- **Pr. Mustapha ACHIBANE**, Dean of Faculty of Economics and Management of Kenitra
- **Mr. Omar SENTISSI**, President of the Intercommunal Cooperation Establishment, Rabat.
- **Mr. Irfan HASAN**, Managing Director of BERTIN TECHNOLOGIES, Nuclear and Radiological Instrumentation
- **Mr. Abdellah MESSOUDI**, CEO of SUETS
- **Mr. Ajbari Abderrahmane**, Moroccan Association for Childhood and Empowerment (جمعية مغرب الطفولة والتمكين)
- **Pr. El Mahjoub CHAKIR**, Faculty of Sciences, Kenitra
- **Pr. Mounir JERRY**, Faculty of Economics and Management, Kenitra
- **Pr. Zouhair SADOUNE**, Faculty of Sciences, Kenitra
- **Pr. Abdessamad DIDI**, President of the Society of Applied Sciences and Innovation & Higher Institute of Health Sciences, Hassan First University, Settat
- تكريم الإطار الوطني (المدرّب الوطني) لكرة القدم داخل القاعة هشام الدكيك

10:30 - 11:00

Coffee break (Hall)

11:00 - 11:30

Recent improvements of the PHITS code and its applications (Red Auditorium) - Dr. S. Tatsuhiko JAEA, Japan

11:35 - 12:00

Discussions: Moderator: Pr. M. Goughri & Z. Sadoune - Dr. S. Tatsuhiko

Work-Shop

Chairs: Mr. D. Silem Mme. Z. Benmahi Mr. I. Hasan (Bertin Technology) and Cyril Leleu - Connecting Dose, Securing Exposure: Technological Innovation for More Responsive and Collaborative Radiation Protection: **Location:** Department of Chemical,

Participants:

12:05 - 14:05	Pr. Yahya TAYLATI	FSR-UM5, Rabat
	Pr. Hassan HARASS	FMF-UHII, Casablanca
	Pr. Krim MUSTAPHA	ISSS, UHP, Settati
	Pr. Loubna MEZOUAR	FMFO, UM1, Oujda
	Pr. El Mahjoub CHAKIR	FSK-UIT, Kenitra
	Dr. Said MOULINE	AMSSNuR, Rabat
	M. Reda NOUR	AMSSNuR, Rabat
	Pr. Rajaa SEBIHI	FSR-UM5, Rabat
	Mr. Mohamed REZZOUK	CHU-Oujda
	Dr. Ibrahim AITOUAGGOU	CHU-Oujda
	Pr. Soufiane BERHILI	FMFO, UM1, Oujda
	Pr. Abdeslem RRHIOUA	FSO, UM1, Oujda
	Pr. Otman JAI	EST-USMBA, Fes
	Dr. Omar HAMZAoui	CHU-Oujda
	Pr. Omar BOUNAGUI	FSR, Rabat
	Mr TAZI S. MOHAMMED	CNRP, Rabat
	Mr Mohammed ZARYAH	CNESTEN, Rabat
	Mdm. Houda IDIHIA	AMSSNuR, Rabat
	Mr. Mostafa FETTAH	Horizon Bis
	Dr. Rachid ERRIFAI	CHU, Chikh Zaid Rabat
	Mr. Selmane YOUSSEF	CHU, Chikh Zaid Rabat
	Mr. Ibrahim AIT OUAGGOU	CHU, Oujda
	Mr. Hassan OUHADDA	CHU, Oujda
	M. Mohamed REZZOUK	CHU, Oujda
	Pr. El Mehdi ALIBRAHMI	FSK, Kenitra
	Pr. Youssef BOUZEKRAoui	ISSS, UH1, Settati
	Pr. Bouchra MAARouFI	FSK, Kenitra
	Pr. Ouadie KABACH	FSK, Kenitra
	Dr. Hamid BOUNOUIRA	CNESTEN, Rabat
	Dr. Hamid AMSIL	CNESTEN, Rabat
	Pr. Redowane El BAYDAoui	ISSS, UH1, Settati
	Pr. Mohamed Gouighri	FSK, Kenitra
	Pr. Mohamed BENCHEIKH	FST EL Mouhamadia
	Pr. Mourad RETTAL	ISSS, UH1, Settati
	Pr. Jaouad BOUZID	ISSS, UH1, Settati
	Pr. Noufel HAMMOUCH	ISSS, UH1, Settati

12:05 - 14:05	Poster session1
14:10 - 15:55	Lunch (Hall)
16:00 - 16:30	Green Hydrogen: Energy for the Future? (Red Auditorium) - Pr. B. Ould Bouamama, Polytech Lille, France
16:35 - 17:05	Discussions: Moderator: Pr. E M. Chakir & Pr. M. Fahoum (Red Auditorium) - Pr. B. Ould Bouamama
17:10 - 17:40	Coffee break & Poster session1 & Close First Day 1 (Hall)
Friday, November 28, 2025	

09:05 - 09:35	Physicochemical storage of renewable energy and green hydrogen (Red Auditorium) - Pr. Y. Naimi, UHASSAN II, CASABLANCA, Morocco
09:40 - 10:10	United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) strategic vision: an in-depth overview of current and future programme of work (ENLIGNE, (Red Auditorium) - Pr. S. Baatout SCK-CEN, Belgium
10:15 - 10:45	The Role of Artificial Intelligence in Teaching Physics: Applications Challenges, and Future Directions (ENLIGNE, (Red Auditorium) - Pr. A W. Ajlouni ANFAS, Arabia Saudia
10:45 - 11:20	Discussions: Moderator: Pr. B. Ould-Bouamama & Pr. H. El Ouarghi (Red Auditorium) - Pr. Y. Naimi & Pr. S. Baatout & Pr. A W. Ajlouni
11:20 - 11:45	Coffee break (Hall)
11:50 - 13:00	Parallel session 1:Topic 1: Scientific Modeling and Computational Codes for Advanced Research (Red Auditorium) - Dr. S. Tatsuhiko Dr. H. Amsil Pr. O. Jai Pr. M. Daouad
11:50 - 12:00	› HPGE response study using combined Geant4 and intelligence artificial method - <i>asmae ettoufi, Hassan II University of Casablanca, faculty of ain chock</i>
12:00 - 12:10	› Metrological Study for the Establishment of a Secondary Standard Dosimetry Laboratory (SSDL) at the National Center for Nuclear Sciences and Technology of Sidi Thabet, Tunisia - <i>Amel Sleimi, Imen Hammemi, Leila Ounalli</i>
12:10 - 12:20	› Analysis of Gamma Shielding Characteristics of Polyethylene Glycol/Graphene Nanocomposites Using PHITS Monte Carlo Code, XCOM and EpiXS - <i>Sultan Alsufyani, Taif University</i>
12:20 - 12:30	› Optimization of neutron shielding in radioactive waste containers using novel materials: a Monte Carlo simulation approach - <i>BRAHIM EL AZZAOUÏ</i>
12:30 - 12:40	› Assessment of Radiological Dispersal Devices in Densely Populated Areas: Simulation and Emergency Response Planning - <i>YASSINE EL KHADIRI, UIT/FSK</i>
11:50 - 13:00	Parallel session 1:Topic 2: Medical Physics and Advanced Technologies and Healthcare (P1) - Pr. L. Ounalli, Pr. A. Rrhioua Pr. M. Krim Pr. M. Rettal
11:50 - 12:00	› Accelerating VMAT Treatment Planning for Glioblastoma: A Deep Learning Framework for Dose Distribution Prediction - <i>Omar Hamzaoui, Laboratory of Physics of Radiation and Matter, Faculty of Sciences, University Mohammed First, Oujda 60000, Morocco.</i>
12:00 - 12:10	› Investigating the Dosimetric Effects of Metallic Implants in Very High Energy Electron (VHEE) Beams - <i>El Mehdi Essaidi, Hassan First University of Settat, High Institute of Health Sciences, Settat, Morocco</i>
12:10 - 12:20	› Optimization of Linear Accelerator (Linac) Beams in Radiotherapy: A Review of Recent Advances - <i>Bouzzit Fatima ezzahra, Faculté des Sciences Dhar El Mahras</i>
12:20 - 12:30	› Establishment of Beam Qualities for Medical Applications (Mammography and CT): Experimental Validation According to IEC 61267 Standards in a Moroccan Calibration Laboratory - <i>MARIEM EL HARCHAOUI, Faculty of SciencesKenitra</i>
12:30 - 12:40	› Optimization of Exposure Parameters and Evaluation of Average Glandular Dose in Mammography Using the MTM 100 Phantom - <i>Charifa Elalaoua, Ibn Tofail University</i>
11:50 - 13:00	Parallel session 1:Topic 3: Innovative Energy Systems, water for a Sustainable Future (P2) - Pr. S. Lmadani, Pr. M. Fahoum, El. ELIBRAHIMI
11:50 - 12:00	› Evaluation of the Adsorptive Efficiency of Natural Clays (Oulja-Sale, Had Kourt, and Ain Dourij) for Pb(II) Removal from Synthetic Wastewater in Morocco - <i>Hichame Es-sahbany, Université Ibn Tofail</i>

12:00 - 12:10	› Flow Behavior Analysis over the NACA 4412 Airfoil at Different Angles of Attack - Hakim EL HOUJAJI , Faculty of Science, Ibn Tofail University, <i>Kenitra</i>
12:10 - 12:20	› The aerodynamics of a Savonius blade - khalid mrigua , Laboratory of Renewable Energies and Environment (LR2E), Faculty of Science, Kenitra, Morocco
12:20 - 12:30	› Competitiveness of green hydrogen: a systematic literature review through the TCCM prism - Mounia HDA , Laboratoire Economics, Finance, Management & Innovation, Université Ibn Tofail - JIHANE IKHMIM , Université Ibn Tofail.
12:30 - 12:40	› Qualitative Analysis of Heavy Metal Traces in PM10 Particulates in Kenitra, Morocco - ILHAM FILALI , Faculty of Science, Ibn Tofail University, Morocco
11:50 - 13:00	Parallel session 1:Topic 5: Economic and Legal Challenges in the Energy Sector (P3) - Pr. M. Jerry Pr. B. Houga, Pr. M. Cherkaoui, Pr. B. Hindou
11:50 - 12:00	› Contrasting dynamics of energy consumption in MENA countries: between energy transition and fossil fuel dependency - ISSAM ASSOUH , Université Mohammed V de Rabat
12:00 - 12:10	› Demographic ageing and financial unsustainability of pension schemes: Is the private sector pension scheme in Morocco sustainable in its current configuration? - Asmaa Elanbari , Ibn Tofail University
12:10 - 12:20	› Gestion optimale en prévision journalière de la recharge bidirectionnelle des véhicules électriques pour l'efficacité économique et l'amélioration de la qualité de l'énergie. - Youssra Lahrarti , ERERA, ENSAM Rabat, Mohammed V University in Rabat, Morocco
12:20 - 12:30	› Low-Cost Epoxy Composites Enhanced with Cement for Effective X- Ray Shielding - Eiman Altowairqi , King Khalid university
11:50 - 13:00	Parallel session 1:Topic 6: Artificial Intelligence and Smart Technologies: Transforming Industries and Society (P4) - Pr. Y. Madani ALAMI Pr. A. Makrani
12:10 - 12:20	› Automated Detection And Classification Of Brain Tumors Using Artificial Intelligence - H. BENAICHA , Laboratory of Biomedical Science and Engineering, Biophysics and Health, Higher Institute of Health Sciences, Hassan First University
12:20 - 12:30	› Quantum Image Encryption using Quantum Image Representations - Achraf Abdelghafour Zemate , Laboratoire de Physique des Matériaux et Subatomique [Kénitra]
11:50 - 13:00	Parallel session 1:Topic 4: Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications (P4) - Pr. Y. Naimi, Pr. A. Raidou, Pr. E. Al Ibrahim, Pr. L. Ounalli, Pr. N. Dkhireche
11:50 - 12:00	› The effect of urea mole fraction on the solvation structure using molecular dynamics simulations - Aziza Asserghine , Faculty of Sciences OUJDA
12:10 - 12:20	› Comparative Physicochemical Characterization of Landfill Leachates from Three Moroccan Sites: CET Oum Azza, CET Moulay Abdellah, and CET Al Hocéima - Mohammed Bouziani Idrissi , Faculty of Science, Kenitra, Morocco
12:20 - 12:30	› Physicochemical characterization of leachates from the technical landfill center of El Hocéima (Morocco) - Faiza Rhoualem , Mohammed Bouziani Idrissi, Nabil Oukour, Hassane El Hadiri, Mohammed Naas, Said Ibn Ahmed, Hamid Erramli
12:30 - 12:40	› Investigation of the electrical transport mechanism in cross-linked polymer/natural phosphate composites - F. Ztak , Faculty of Sciences, Kenitra, Morocco
12 :40 – 12 :50	› UV-visible and X-Ray diffraction analysis of epoxy polymer loaded with polypyrrole-titanium dioxide composite, A. Keltoum, I. Fangouchi, N. Lahlouhi, L. Nkhaili, M. El Hashaoui, Ibn Tofail University.
13:00 - 14:45	Lunch (Hall)
14:50 - 15:20	Advancements in Particle Transport and Nuclear Simulations: Leading OpenMC and Innovations in Reactor Physics, Fusion Energy, and High-Performance Computing - Dr. P. Romano Aragone, USA (ENLIGNE, Red Auditorium) - Dr. P. Romano Aragone, USA
15:20 - 15:50	Innovating for impact: The role of medical physics in sustainable and safe healthcare systems - Pr. L. Ounalli, CNSTN, Tunisia (Red Auditorium) - Pr. L. Ounalli, CNSTN, Tunisia
15:50 - 16:20	The African Strategy in Physics ASFAP: Particle physics as a prototype (Red Auditorium) - Pr. M. CHABAB, UCD, Marrakech, Morocco

16:20 - 16:40	Discussions: Moderator: Pr. N. Dkhireche & Dr. H. Amsil (Red Auditorium) - Dr. P. Romano & Pr. L. Ounalli & Pr. M. Chabab
16:40 - 17:00	Coffee break & Poster session 2 & Close First Day 2 (Hall)
Saturday, November 29, 2025	
09:00 - 10:15	Work-Shop N°1: Pr Mustapha KRIM, ISSS, UH1, Settat, Morocco Monte Carlo Simulation and Dose Calculation Algorithms in Radiotherapy: Advances and Practical Applications P1 N°2: Pr Otman JAI, EST, USMBA, Fez, Morocco Harnessing Scientific Machine Learning for Breakthroughs in Science and Engineering: Bridging Data and Physics P2 N°3: Dr. Tatsuhiko Sato, PhD, Japan Atomic Energy Agency, Japan Recent improvements of the PHITS code and its applications P3 N°4: Pr. Rajaa Sebihi, FSR, UM5, Rabat, Morocco Is it safe to have X rays while the women is pregnant P4 N°5: Pr. Haddouch Khalid & Boulaalam Abdelhak, ENSA, USMBA, Fez, Morocco Smart Tourism and Smart Traditional Crafts Red Auditorium
10:15 - 10:45	Coffee break & Poster session 3 (Hall)
11:00 - 13:00	Parallel session 2:Topic 3: Innovative Energy Systems, water for a Sustainable Future (Red Auditorium) - Pr. B. Ould Bouamama, Pr. Y. Naimi, Pr. Y. El Madani El Alami
11:00 - 11:10	› Technological Innovation, Energy Transition, and CO ₂ Emissions: Key Drivers for Sustainable Growth in MENA Countries? - ISSAM ASSOUIH , <i>Université Mohammed V de Rabat</i>
11:10 - 11:20	› Heavy metals in Cannabis sativa seeds cultivated in Northern Morocco: A health risk assessment study using Monte Carlo simulation - <i>Aarab Iliasse, National Centre for Nuclear Energy, Science and Technology</i>
11:30 - 11:40	› Insights on Climate Change Effects on Agricultural Productivity and Food Security in Developing Countries, FATIMA AZDAGAZ (LSEPP, FEG, UIT de Kenitra), OMAR ZIRARI (LARETA, FEG, UH1 de Settat) & MARIEM LIQUAEDDINE (LSEPP, FEG, UIT de Kenitra)
11:40 - 11:50	› A Review On Automated and Semi-Automated Cleaning Systems for Photovoltaic Panels to Enhance Power Efficiency - <i>Abed OUBARI, Université Ibn Tofail</i>
11:50 - 12:00	› Modeling of X-ray and Gamma Irradiator at the CNESTEN Calibration Laboratory Using MCNP simulation Monte Carlo: Beam Homogeneity Study and Uncertainty optimization - <i>Talbi Zidouz, Abdelatif Talbi, Elmehdi ALIBRAHMI, Najoua Elidrissi</i>
12:00 - 12:10	› Waste Management Strategies for Sustainable Development: Exploring Alternatives to Waste Incineration to Minimize Ecological Footprints? <i>Tarik Louzizi, El Mahjoub Chakir, Zouhair Sadoune</i>
11:00 - 13:00	Parallel session 2:Topic 2: Medical Physics and Advanced Technologies and Healthcare (P1) - Pr. E M.Chakir, Pr. Nouneh, Pr. N. Rassai, Pr. F. Dib
11:00 - 11:10	› Pixel Intensity in Mammography: A Factor of Error in Breast Cancer Detection - WAHIBA AISSAOUI , <i>Watch Laboratory for Emerging Technologies Hassan First University of Settat</i>
11:10 - 11:20	› Investigation of the heavy ion depth-dose distribution employed in hadron therapy utilizing the PHITS code - <i>Hassane EL BEKKOURI, , Faculty of Sciences, Ibn Tofail University</i>
11:20 - 11:30	› Evaluation of Proton Beam Transport in External Magnetic Fields with Geant4/GATE - Adil Bardane , <i>Materials Physics and subatomic Laboratory faculty of sciences, Iben Tofail University Kenitra</i>
11:30 - 11:40	› Direct Electron-Induced DNA Damage in the Nucleosome: A GATE Monte Carlo Study - Fatima Zahra EL HADRI , <i>LPTPME, Faculty of sciences, University Mohamed 1st, Oujda, Morocco,</i>

11:00 - 13:00	Parallel session 3:Topic 6: Artificial Intelligence and Smart Technologies: Transforming Industries and Society (ENLIGNE) - Pr. M. Lazaar Pr. K. Haddouch
11:00 - 11:10	› Artificial intelligence and the effectiveness of human resources practices (selection and recruitment) in Moroccan companies - <i>Ahmed El hammoumi, FPT</i>
11:10 - 11:20	› Smart Grid Integration in Super High-Rise Intelligent Buildings for Optimized Renewable Energy Use - <i>Zhiyuan Gu, CHINA STATE CONSTRUCTION SCIENCE AND TECHNOLOGY LIMITED, Hong Kong, China</i>
11:20 - 11:30	› Belt and Road Research On the Intelligent Risk Assessment and Automatic Early Warning System of China's Foreign Direct Investment Under the Background - <i>Qin Cheng, Master , Faculty of Built Environment , University of Malaya , Kuala Lumpur, Malaysia , 50603</i>
11:30 - 11:40	› Research On the Application of Human Body Interaction, Brain-Computer Interface and Intelligent System In The Medical And Health Field - <i>Qiang Huang, Master/candidate,Shanghai Institute of Technology,Shanghai,China.</i>
11:00 - 13:00	Parallel session 3:Topic 4: Advances in Physics and Materials Science: From Nanotechnology to High-Energy Applications (ENLIGNE) - Pr. K. Allabouche, Pr. H. Dekhissi Pr. Z. Aqachmar, Zidouz Taibi
11:00 - 11:10	› Advanced Efficiency Calibration of HPGe Detectors Using the Sigmoid Function - <i>LAHCEN EL AMRI, Mohammed V University, Rabat, Morocco.</i>
11:10 - 11:20	› Research on multimodal data fusion technoloay based on LLM and attention mechanism - <i>Boqian You, Master, Beihang University ,Beijing, China, 100191</i>
11:30 - 11:40	› A Breakthrough in Manufacturing Fibers from Non-Pressure-Spinnable Polymeric Solutions Using Core-Sheath Pressure-Spinning Method - <i>Nanang Qosim, Department of Mechanical Engineering, University College London London WC1E 7JE, UK</i>
11:00 - 13:00	Parallel session 3:Topic 3: Innovative Energy Systems, water for a Sustainable Future (ENLIGNE) - Pr. M. El Hassnaoui, Pr. S. Mouslih, Pr. H. Labrim, Iliasse Aarab
11:00 - 11:10	› A Hybrid Method for Semantic Disambiguation Combining Contextual Similarity and Geometric Optimization - <i>Brissam El janati, Ibn Tofail University, Kenitra.</i>
11:10 - 11:20	› Evaluation of the Adsorptive Efficiency of Natural Clays (Oulja-Sale, Had Kourt, and Ain Dourij) for Pb(II) Removal from Synthetic Wastewater in Morocco - <i>Hichame Es-sahbany, Université Ibn Tofail</i>
11:20 - 11:30	› Distribution and Environmental Impacts of Rare Earth Elements in Soils from Gold Mining Areas in Sudan - <i>Minas E. Ahmed, Sudan University of Science and Technology [Khartoum]</i>
11:30 - 11:40	› Enhancing Earthquake Resilience in Super High-Rise Buildings with Integrated Photovoltaic Systems - <i>Zhiyuan Gu, CHINA STATE CONSTRUCTION SCIENCE AND TECHNOLOGY LIMITED, Hong Kong, China</i>
11:40 - 11:50	› Evaluation of Heavy Metals in Oil Palm Plantation Farmlands in Ondo State, Nigeria - <i>Abimbola Odudu, Oluwakemi Oyebojoro</i>
11:50 - 12:00	› Assessment of the AKK (Ajaokuta-Kaduna-Kano) Gas Project in Nigeria: Engineering Management Perspectives and Future Implications - <i>Abdulkadir Mustapha, Üsküdar university</i>
12:00 - 12:10	› Forecasting Electricity consumption of Tetouan city via Hybrid LSTM-XGBoost Model - <i>Hanae EL FAHFOUHI, Laboratory of Applied Sciences and Emerging Technologies, National School of Applied Sciences of Féz</i>
12:10 - 12:20	› Shaping a Sustainable Future: Interactions between Health, Access to Water, Energy Transition, and the Environment in Morocco - <i>Ahmed BOUZIT, Université Ibn Tofail - Mariem Liouaeddine, Université Ibn Tofail - SAID TOUNSI, Université Mohammed V</i>
12:20 - 12:30	› Modeling and numerical simulation of argon and hydrogen plasma sheaths with secondary electron emission - <i>Aziza ASSERGHINE, Mohammed First University, Oujda, Morocco</i>
11:00 - 13:00	Parallel session 3:Topic 2: Medical Physics and Advanced Technologies and Healthcare (ENLIGNE) - Pr. A. Bilya Pr. R. Touti Pr. R. Mesradi, Zoubir El Afia
11:00 - 11:10	› Monte Carlo simulation of the scatter fraction metric in Positron Emission Tomography - <i>Mahmoud El Katib, Private Hospital of Beni Mellal, AKDITAL holding, Ibn Tofail University</i>

11:10 - 11:20	› Monte Carlo Simulation of 6 MV Photon Beams in a Medical LINAC Using GATE/Geant4: Energy Spectrum and Dose Distribution Analysis - Nssiri Abdelhalim , <i>Laboratory of Physics of Radiation and Matter, Faculty of Sciences,</i>
11:20 - 11:30	› Evaluation of cumulative effective dose in oncology patients undergoing multiple [18F]FDG PET/CT at the Nuclear Medicine Department of Ibn Rochd University Hospital Center - Abdel Amide GBADAMASSI , <i>Nuclear Medicine Department, Ibn Rochd University Hospital, Casablanca.</i>
11:30 - 11:40	› Nuclear Forensic Science: A Tool for Mitigating Environmental Impact and Risks Associated with Nuclear Wastes - <i>Stephen Friday OLUKOTUN, North-West University [South Africa], Obafemi Awolowo University</i>
11:40 - 11:50	› Monte Carlo Dosimetry. Assessment of 72As and 18F-FDG Using Tetrahedral Mesh Phantoms: Comparison with ICRP Reference Data - FATIMA ZAHRA AHLAF , <i>Immuno-Genetics and Human Pathologies Faculty of Medicine and Pharmacy.</i>
11:00 - 13:00	Parallel session 3:Topic 5: Economic and Legal Challenges in the Energy Sector (ENLIGNE) - Pr. H. Baddih Pr. A. El Makrani Pr. M. Cherkaoui, Abdelwahab Badague
11:00 - 11:10	› Competitive aggressiveness and Financial Performance of SMEs: The moderating role of Environment - Muhammad Magaji , <i>Federal Polytechnic Kano, Kano State Nigeria</i>
11:10 - 11:20	› The impact of health system governance in Morocco: a panel data analysis - Ahmed BOUZIT , <i>Université Ibn Tofail</i>
11:20 - 11:30	› Building Information Modeling for Asset Management in Tanger Med Passenger Port - Salma FATHALLAH , <i>Ecole Nationale Supérieure d'Électricité et de Mécanique [Casablanca]</i>
11:30 - 11:40	› La régulation des déchets radioactifs au Maroc : Enjeux juridiques et conformité aux normes internationales - Mounia Elouilladi , <i>Centre National de l'Énergie, des Sciences et des Techniques Nucléaires = National Center for Energy, Science and Nuclear Techniques</i>
11:40 - 11:50	› Electricity Production and Greenhouse Gas Emissions: What Role Does the Energy Mix Play? A Comparative Analysis of the Cases of Morocco and France - Mohammed AKNOUCH , <i>Université Mohammed V de Rabat</i>
11:50 - 12:00	› Multi-class Text Classification of National Energy and Climate Plans Using TextGCN Enriched with SciBERT Embeddings - Meryem Amri , <i>Sidi Mohamed Ben Abdellah University, Laboratory of Applied Sciences and Emerging Technologies, ENSA, Fez</i>
12:00 - 12:10	› Inequalities in access to healthcare in Morocco: issues and perspectives - Ahmed BOUZIT , <i>Université Ibn Tofail</i>
12:10 - 12:20	› The impact of mental health on entrepreneurs: a theoretical approach - Ahmed BOUZIT , <i>Université Ibn Tofail - Mariem Liouaeddine, Université Ibn Tofail- SAID TOUNSI, uniiversity mohamed v</i>
12:20 - 12:30	Employee Training and Firm Productivity in MENA Economies: Evidence from Propensity Score Matching youssra JOUHARI, Mohamed Saad KHOLTI, mariem LIOUAEDDINE
13:05 - 14:05	Lunch (Hall)
14:05 - 14:35	Artificial Intelligence Inspired Power Electronics Renewable Energy (ENLIGNE, (Red Auditorium)) - Pr. S. Padmanaban SENU, Norway
14:40 - 15:10	Neutron Activation Analysis at CENM: a scientific lever serving environmental protection and geochemical exploration (Red Auditorium) - Dr. H. Bounouira, CNESTEN, Morocco
15:15-15:45	Using the ICP plasma and catalyst for enhanced Bi-methane reforming forsyngas (ENLIGNE, (Red Auditorium)) - Pr. M. BAN-SALMAN, Daejeon, Korea
17:15-17:45	Coffee break
17:00-18:00	Certificate and close conference & Close First Day 3

Full Program (Poster session)

Poster session

P015	Biohydrogen Production from Agro-Industrial Waste: Toward Sustainable Clean Energy	Britel, I., Moummou, H., Elyadini, M., Abdelmoumen, H.
P001	⁵⁶ Fe capture cross sections analysis in ASPIS Iron88 benchmark using JENDL-4.0 evaluation	<i>Mohammed Kaddour</i>
P016	Evaluation of Multi-Leaf Collimator Performance Using the PTW 1600 SRS Detector Array	M. Driouch, Y. Adib, Adeb A.S.A. Almaamari, M. A. Youssoufi, E. Chakir, E. Al Ibrahmi, H. Elkacemi, T. Kebdani And K. Hassouni
P002	Neutronic and thermal-hydraulic performance analysis of a novel thorium-based fuel in dual-cooled annular assemblies for SMR applications	Hanan Rifai, Ouadie Kabach, Sinem Uzun, Hamid Amsil, El Mahjoub Chakir, Zouhair Sadoune
P017	Cultivates Proteins: Innovative Production Approaches for Sustainable Food	<i>Hanane Moummou, Ilyass Britel</i>
P006	Evaluation of some thorium-based fuel mixtures against UO ₂ : Neutronic and thermal-hydraulic behavior in advanced SMR assemblies	Hanan Rifai, Ouadie Kabach, Sinem Uzun, Hamid Amsil, Fadi EL Banni El Mahjoub Chakir, Zouhair Sadoune
P007	Assessment of Radiological Dispersal Devices in Densely Populated Areas: Simulation and Emergency Response Planning	Yassine El Khadiri, Ouadie Kabach, El Mahjoub Chakir
P023	A First-Principles Study of the Electronic and Optical Properties of Copper Antimony Sulfide in Its 2D and 3D Forms.	Ridouane Bakkali
P018	Anthropogenic Pressures And Conservation Challenges In The Tahaddart Estuary (Morocco)	Otmane Khalfaoui, Nezha Mejjad, Mounia Tahri, Abdelfettah Benchrif, Laurent Dezileau, Otmane Raji, Aboumaria Khadija
P019	Assessment of environmental impacts of dams by numerical simulation: Strategies to minimize infiltration and stabilize downstream slopes	Hafsa El Harrak
P020	Comparative Analysis of Neural Network Architectures for Short-Term Wind Velocity prediction in Dakhla	Houda Kacimi, Sara Fennane, Hamza Mabchour, Fatehi Altalqi, Adil Echchelh
P029	Contribution on Breast Cancer in Morocco: Current Situation and Prospects for Improvement	Otmane Allaoui, Abdessamad Didi, Mohamed Allaoui, Khalid Nabaoui, Ouadie Kabach, El Mahjoub Chakir, Elmehdi Alibrahmi, Zouhair Sadoune
P021	Deep Learning-Based Approaches for Short-Term Solar Irradiance Forecasting: A Comparative Evaluation	Sara Fennane, Houda Kacimi, Hamza Mabchour, Fatehi Altalqi, Adil Echchelh
P008	Depth, lateral, and secondary particle dose calculations: an intercomparison between Proton and Helium 4 beams for hadron therapy applications	Otmane Allaoui, Abdessamad Didi, Mohamed Allaoui, Khalid Nabaoui, Ouadie Kabach, El Mahjoub Chakir, Elmehdi Alibrahmi, Zouhair Sadoune
P009	Evaluation of radiation risks and patient dose in adult head CT procedures: A Moroccan Hospital Study	Wijdane Chaanoun, El Mahjoub Chakir, Ouabi Hmad
P010	Evaluation of Radon-222 Concentration in Classrooms and Internal Radiation Dose in Primary Schoolchildren in Kenitra, Morocco	Abdeslam Lachhab, Anas Otmani, Brahim El Azzaoui, Ouadie Kabach, Yassine El Khadiri, Meryame Jabbade, Mouhamed Bouziani Idrissi, Mohammed El Bouch, Abdellatif Nachab, El Mahjoub Chakir

- P026 Evaluation of short-term stress stability in real-time using PMU measurements and artificial intelligence : towards a self-healing smart grid
- P003 Evolving Nuclear Security: Physical Protection Systems from Conventional Reactors to Small Modular Reactors
- P024 First-Principles Investigation of Structural, Electronic, and Optical Properties of 3R-CuAlO₂ for Photovoltaic Applications
- P004 Impact of Neutron Irradiation on Polyethylene Properties in Nuclear Environments: Analysis of Samples Irradiated in the TRIGA Mark II Reactor
- P025 Magnetoconductivity Behavior Governed by Electron–Electron Interactions, Weak Localization, and Zeeman Effects in 2D p-Si/SiGe/Si
- P011 Performance Assessment of a Mobile Anthropogammametry System for In Vivo Monitoring of the Thyroid and Lungs
- P012 Prediction of Membrane Fouling in NF and RO Systems Using a PSO-Optimized Artificial Neural Network
- P013 Radiation Dose and Risk Assessment in Pediatric Head CT in A Moroccan Hospital
- P027 Search for Higgs boson pair production in the bbWW single lepton resolved final state with 140 fb⁻¹ of pp collision data with the ATLAS detector
- P005 Small Modular Reactors (SMRs): State of the Art, Cogeneration, and Potential for Low-Carbon Hydrogen Production

Jaouad Qrich

Hamza Menaouar, El Mahjoub Chakir, Oudie Kabach

Khalid Elmekkaoui, Abderrahim Raidou, Mohamed Lharch, Mounir Fahoume, Redouan Bakkali

Khalid Nabaoui, Abdessamad Didi, Otmene Allaoui, Elmehdi Alibrahmi, Hamid Bounouira, Hamid Amsil

Hamza Mabchour, Mounir El Hassan, Abdelhamid El Kaaouachi, Adil Echchel

Bouchra Lebied

Bouchra Abbi, Azzeddin Touazit, Mohammed Igouzal

Wijdane Chaanoun, El Mahjoub Chakir, Hmad Ouabi

Amine Alida

Oumaima Taibi, Oudie Kabach, El Mahjoub Chakir, Mohamed Goughri

INVITED SPEAKERS

Pr. Sarah BAATOUT, Deputy Institute Director Nuclear Medical Applications at SCK CEN - Belgian

Nuclear Research Centre, Belgium



Biography: *Professor Sarah BAATOUT is the Deputy Director of the Institute of Nuclear Medical Applications at the Belgian Nuclear Research Center (SCK CEN) in Mol, Belgium. Leading a team of 100 staff members, she specializes in radiopharmaceutical development, medical radioisotope production and cancer treatment research, with a focus on promising radioisotopes for targeted radionuclide therapy. She chairs the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), advises the European Nuclear Society and the European Space Agency, and teaches at UGent and KULeuven in Belgium. With over 200 publications and nearly 30 PhD mentees, her work significantly impacts medical radiopharma and cancer field.*

Dr. Paul ROMANO, Argonne National Laboratory, USA



Biography: **Paul ROMANO** is a Computational Scientist at Argonne National Laboratory. He holds a Doctor of Philosophy (Ph.D.) in Nuclear Science and Engineering from the Massachusetts Institute of Technology (MIT). His work involves research and development in the areas of particle transport, nuclear reactor physics, fusion energy, high-performance computing, multiphysics simulations, and nuclear data. He is the original author and project lead for OpenMC, a community-developed open-source framework for Monte Carlo particle transport simulation that is widely used across laboratories, industry, and academia. He has also advised management and participated in strategic planning as a member of the Board of Directors for the Harvard and MIT Coop bookstores. He served on various committees of the board and co-chaired the Audit Committee for two years. Additionally, he is a lecturer at The University of Chicago.

Dr. Tatsuhiko SATO, PhD, Japan Atomic Energy Agency, Japan



Biography: **Tatsuhiko Sato** is the principal investigator of the development team for the Particle and Heavy Ion Transport code System (PHITS), which has been used by more than 10,000 researchers from over 70 countries in a wide range of research areas, such as radiation shielding. He has also used the code himself for cosmic-ray research and medical physics and developed the PHITS-Based Analytical Radiation Model in the Atmosphere (PARMA) and the Stochastic Microdosimetric Kinetic (SMK) Model. Since 2017, he has been a member of the International Commission on Radiological Protection (ICRP) Committee 2. He has published more than 200 peer-reviewed papers, including 53 as the corresponding author, and they have been cited approximately 10,000 times (according to Google Scholar)

Pr. Dr. Abdul-wali ajlouni, Scientific Consultatnt, and expert in nuclear Security, Radiation Safety, and Security in Science.anfas medical group, Saudi Arabia



Biography: **Pr. Abdul-Wali Ajlouni**, Expert and consultant in Radiation Safety, Nuclear Security, and Security in Science, Anfas Medical Group, Riyadh, Kingdom of Saudi Arabia. I worked as an Assistant Prof. of Radiation and Nuclear Physics for Umm AlQura University for 3 years, and then for Naif Arab University for Security Sciences (NAUSS) from Sep. 2012 to June 2019 - College of Forensic Sciences (CFS), as an assistant prof. of nuclear security and vice dean of the CFS from 2014 to 2018, I served as an assistant Dean of the Faculty of Science, assistant professor of nuclear and radiation physics, and the chair of the Applied Physics Department of Tafila Technical University, Jordan during the period Sep. 2006-Sep. 2011, And for the Ministry of Energy and Mineral Resources, Jordan from Sep. 2011 to August 2012 and as a researcher on radiation safety from 1990 to 1998 and from 2004 to Sep.2006. I have received training on radiation protection and radiological emergency preparedness in Jordan, Turkey, the United States, Czechoslovakia, Egypt, and Syria. I have published more than 80 refereed papers, and 3 books, on the subject, and presented more than 200 presentations at international conferences on nuclear energy and its applications around the world. I received the SCOPUS Scientific Research Award in 2009.

- Founder and Chair of The Arab Scientific Forum for Radiation Scientists and Professionals
- Founder and Administrator of the scientific program: Easy Sciences
- Founder and Administrator of the scientific research program: Applications of Nano Forensic Sciences
- Founder and Administrator of the scientific research program: Enhancement of the Security and Safety of Dual-Use Materials: Chemical, Biological, Radiological and Nuclear (CBRN)

Pr. Leila Ounalli, Associate Professor (Medical Physicist), Department of Nuclear Safety, CNSTN, Tunisia



Biography: Pr. Leila Ounalli is an Associate Professor in Medical Physics at the National Center for Nuclear Science and Technology (CNSTN) in Tunisia. She works in the Department of Nuclear Safety (Instrumentation), where she actively contributes to research and development in the field of nuclear applications.

With over 20 years of experience, Leila Ounalli has specialized in several areas related to nuclear sciences, including:

Medical Physics - expertise acquired at ETH Zurich (www.ethz.ch)

Radiation Protection - trained at the University Hospital of Vaud (CHUV), Institute of Radiation Physics (IRA) (www.chuv.ch/fr/ira)

Radiation Detection - advanced knowledge developed at the University of Neuchâtel (www.unine.ch)

Through her work and dedication, she contributes to enhancing the safety and efficiency of nuclear applications, particularly in the medical and industrial sectors. Her research and expertise in nuclear instrumentation, radiation protection, and radiation detection make her a key reference in her field.

Pr. Sanjeevikumar PADMANABAN, Faculty of Technology, Natural Sciences, and Maritime Sciences, South-Eastern Norway University, Norway



Biography: Sanjeevikumar Padmanaban received a Ph.D. degree in electrical engineering from the University of Bologna, Bologna, Italy 2012. He is a Full Professor in Electrical Power Engineering at the University of South-Eastern, Norway. S. Padmanaban has authored over 750+ scientific papers and received the Best Paper cum Most Excellence Research Paper Award from IET-SEISCON'13, IET-CEAT'16, IEEE-EECSI'19, IEEE-CENCON'19, and five best paper awards from ETAEERE'16 sponsored Lecture Notes in Electrical Engineering, Springer book. He is a Fellow of the Institution of Engineers, India, the Institution of Electronics and Telecommunication Engineers, India, and the Institution of Engineering and Technology, U.K. He received a lifetime achievement award from Marquis Who's Who - USA 2017 for contributing to power electronics and renewable energy research. He is listed among the world's top 2 scientists (from 2019) by Stanford University USA. He is an Editor/Associate Editor/Editorial Board for refereed journals, in particular the IEEE SYSTEMS JOURNAL, IEEE Transaction on Industry Applications, IEEE ACCESS, IET Power Electronics, IET Electronics Letters, and Wiley-International Transactions on Electrical Energy Systems, Subject Editorial Board Member—Energy Sources—Energies Journal, MDPI, and the Subject Editor for the IET Renewable Power Generation, IET Generation, Transmission and Distribution, and FACETS Journal (Canada).

Pr. Mosab BANISALMAN, (N2CORE) Technology, Daejeon , Republic of Korea



Biography: Mosab Jaser, Professional catalyst development has completed his PhD in Nuclear Material Modeling and Simulation at Seoul National University, ranked 36th in the QS World University Rankings, under the supervision of Professor Takuji Oda. He also holds a Master's degree in Nuclear and Quantum Engineering from KAIST University, ranked 41st globally. Jaser obtained his Bachelor's degree from the Nuclear Engineering Department of Jordan University of Science and Technology (JUST). He furthered his research career as a Postdoctoral Research Fellow at the Computational Science Center at the Korea Institute of Science and Technology (KIST), the 5th-ranked R&D institution worldwide. Throughout his academic journey, Jaser earned multiple awards, including the GSFS scholarship for excellent foreign students during his PhD course, the KINS-KAIST scholarship, and the Best Award of the Year from Woojin Inc.

Pr. Belkacem OULD BOUAMAMA, Polytech Lille (France), Head of Research Group « PERSI » with CRISTAL Laboratory CNRS 9189



Biography: *Pr. Belkacem OULD BOUAMAMA* is full Professor and head of the research at « Ecole Polytechnique de Lille, France ». His main research areas developed at CRISTAL laboratory CNRS9189 where he leads “PERSI” group, concern Integrated Design for Supervision of System Engineering. Their application domains are mainly intelligent transport, energy, and mechatronic systems. He is the author of more than one hundred international publications in this domain. He is co-author of five books in bond graph modeling and Fault Detection and Isolation area. Research and teaching activities can be consulted at: <https://drive.google.com/file/d/1hxUxTA9ZKY5Ol44WoTUS2eXZOTTABlgW/view?usp=sharing>

Pr. Mohamed CHABAB, FSS, Cadi Ayyad University, Marrakech, Morocco



Biography: *Pr. CHABAB* was born in Casablanca, Morocco. He received his PhD degree from Montpellier University (France) in the field of theoretical high energy physics in 1992. From 1992 to 1996, he was awarded several research fellowship in France, Italy as postdoctoral researcher and as assistant professor at Tripoli University in Libya. He is currently full professor of physics and head of the physics department at Cadi-Ayyad University in Marrakech. He is also an expert affiliated with the National Centre for Scientific Research (CNRST), and President of Moroccan Society of High Energy Physics. Chabab main fields of research cover Higgs physics beyond the Standard Models, thermodynamics of black holes and neutrino physics. Chabab is the team leader of the Marrakech group within KM₃NeT and ANTARES collaborations, He was nominated in 2018 as associate editor of Frontiers in Physics (high energy and astroparticle physics section). Prof. Chabab is the author/co-author of more than 170 papers and the supervisor of about 35 Master and 15 Ph.D theses.

Pr. Youssef NAIMI, FST, FSBM, UH2C, Casablanca, Morocco



Bibliography: *Pr. Youssef NAIMI* is a full Professor in physical chemistry at the Faculty of Sciences Ben M'Sick, Hassan II University of Casablanca. He obtained his DEA (Diplôme des Etudes Approfondies) in 1990 and a PhD thesis (optimization of the hydrogen electrode in H₂/O₂ solid polymer fuel cells) in 1994 at the Pierre and Marie Curie University, Paris, France. He joined the Faculty of Sciences Ben M'Sick, Hassan II University of Casablanca as an associate professor in 1996. He conducted research on the optimization of electrodes of PEM (Proton Exchange Membrane) fuel cells, in collaboration with the CNAM (Conservatoire National des Arts et Métiers) of Paris, and obtained his State doctorate in Morocco in 2006. Prof. Dr. Youssef Naimi conducts research in electrochemistry for applications in renewable energy, environmental chemistry. He has supervised dozens of doctoral theses and several Master's final-year project internships. He has coordinated the Master of Renewable Energy and Materials (MERM) since 2017. He has also been director of the Physical Chemistry of Materials Laboratory (LCPM) since 2023.

Dr Hamid BOUNOUIRA, CNESTEN, Rabat, Morocco



Biography: *Dr. Hamid Bounouira* is the Head of the Neutron Activation Analysis Laboratory at the National Center for Nuclear Energy, Science, and Technology (CNESTEN-Morocco). He received a double PhD degree from the Pierre and Marie Curie University in Paris in Environmental Geoscience and from the Ibn Tofail University in Kenitra in Nuclear Physics (2007). His expertise lies in Neutron Activation Analysis (NAA) and its applications, contributing significantly to this field. He has served as an expert for the International Atomic Energy Agency (IAEA) in various coordinated projects and has an extensive academic record, with over 50 articles published in prestigious international journals. Dr. Bounouira has delivered more than 100 presentations at international conferences and congresses, and he has supervised more than 20 PhD and Master's students throughout his career.

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