

**INTEC-2024**

# International Nuclear Sciences and Technologies Conference

**5-7 September 2024**Ege University Atatürk Cultural  
Center, IZMIR

## Final Programme

### 5 September 2024

Hall 1		
9:30-10:00	Registration	
10:00-10:30	Opening Ceremony	
10:30-10:45	Coffee Break	
	Session Chairs: <b>Prof. Dr. Şenol Sert</b>	
10:45-11:15	Invited Lecture 1 Needs of Medical Physicists in Diagnostic Radiology and Nuclear Medicine: Presentation of the IAEA staffing algorithm <b>Assoc.Prof.Dr. Leila OUNALLI</b>	
11:15-11:45	Invited Lecture 2 The reconstruction of global change impacts on the coastal zone by using <sup>210</sup> Pb-dated sediment cores <b>Prof.Dr. Ana Carolina RUIZ-FERNANDEZ</b>	
11:45-12:00	Foto	
12:00-13:30	Lunch	
	Session Chairs: <b>Prof.Dr. Aysun Uğur Görgün</b>	
13:30-14:00	Invited Lecture 3 Plutonium in corals: a good Anthropocene marker? <b>Prof.Dr.Joan Albert SANCHEZ-CABEZA</b>	
Hall 1		Hall 2
	Session Chairs: <b>Prof. Dr. Serap Teksöz</b>	Session Chairs: <b>Prof.Dr. Ralph Santos Oliveira</b>
14:00-14:15	Absorbed Doses for <sup>68</sup> Ga-PSMA PET/CT Prostate Imaging <b>Erkan SEZGİN</b>	Luminescence Characterization of Nanophosphors CaGdAlO <sub>4</sub> Doped with Terbium and Praseodymium <b>Arzu Ege</b>
14:15-14:30	Development of a Methyl Thymol Blue-Loaded Alginate Hydrogel for Quantitative Detection of Sr(II) Ions in Water <b>Alparslan E. Oral</b>	Thermoluminescence Characteristics of CaF <sub>2</sub> :Tb Irradiated with Beta Radiation <b>Alara Çan</b>
14:30-14:45	Synthesis and In Vitro Evaluation of <sup>99m</sup> Tc Radiolabeled Salinomycin Loaded Mesoporous Silica Nanoparticles On Cervix and Ovarian Cancers <b>Özge Kozguş Güldü</b>	PIXE Analysis of Vegetation Samples from Mining Site, Dange- Shuni LGA, Sokoto State <b>Yusuf Ahijjo Musa</b>
14:45-15:00	Development of a novel Zr-89 Radiolabeled Multimodal Nanoparticle System <b>Oğuz Çetin</b>	Possible applications of zeolitic rocks in the nuclear waste field <b>Nina Nikolova</b>
15:00-15:15	Coffee Break	
	Session Chairs: <b>Assoc. Prof. Dr. Ayfer Yurt Kılçar</b>	Session Chairs: <b>Dr. Michael Duncan Yoho</b>
15:15-15:30	Comparison of Four Image and Single Image Estimated Renal	Heavy Metal Pollution in Sediments from Bosphorus Derived from

	Dosimetry Results in 177Lu-Psma Treatment <b>Bilal Kovan</b>	210Pb and 137Cs <b>Serkan Gürleyen</b>
15:30-15:45	New Approach to CRPC with [99mTc]Tc-XCT-790: In Vitro Therapy with Auger Energy <b>Emre Uygur</b>	Assessment of Radionuclide Concentrations in Construction Materials Employed in Housing Structures within İzmir Province <b>Aysun Uğur Görgün</b>
15:45-16:00	Synthesis, Characterization, and Application of Cys-graft-poly(2-hydroxyethyl methacrylate) Nanopolymers Radiolabeled with Technetium-99m for Biomedical Applications <b>Emre Uygur</b>	Effect of Gamma Irradiation on conductivity Cd1-xFexTe <b>Zarifa Ahmadzada</b>
16:00-16:15	Sedimentation Rate and Chronology of Çınarcık Basin, the Marmara Sea <b>İdris Koraltan</b>	Investigation of the Usability of Ce and N Doped Hybrit Carbon Quantum Dots for the Removal of Neodymium Ions <b>Berkant Şentürk</b>
	Session Chair: <b>Prof. Dr. Ana Carolina Ruiz-Fernandez</b>	Session Chair: <b>Prof. Dr. Joan Albert Sanchez-Cabeza</b>
16:15-16:30	Radio ecology in India: Strategies for Improved Understanding and Mitigation of Radiation Impact <b>Amitansu Pattanaik</b>	Radiologic Risk Assessment of Outdoor Gamma Dose Rate in Çorum Province, Turkey <b>İlayda Yılmazkaya</b>
16:30-16:45	Impact of Uranium on the Environment: A Machine Learning Perspective <b>Amitansu Pattanaik</b>	Generation of Nuclear Reaction Cross-Section Data by Artificial Intelligence <b>Ramzi Maalej</b>

## 6 September 2024

09:30-17:00	Poster Presentation Session Chairs: <b>Dr. Caner TAŞKÖPRÜ, Dr. Özge KOZGUŞ GÜLDÜ, Dr. Berkan ÇETİNKAYA, Prof. Dr. Galina LUJAIENE</b>	
	Hall 1	
	Session Chairs: <b>Prof. Dr. Derya İlem Özdemir</b>	
09:30-10:00	Invited Lecture 4 Nanoradiopharmaceuticals applications and cases <b>Ralph SANTOS-OLIVERIA</b>	
10:00-10:30	Invited Lecture 5 Nuclear Medicine as a World-Heritage: Current Status and Future Perspectives <b>Prof. Dr. Murat Fani BOZKURT</b>	
10:30-10:45	Coffee Break	
	Hall 1	Hall 2
	Session Chairs: <b>Prof. Dr. Fatma Yurt</b>	Session Chairs: <b>Assoc. Prof. Dr. Leila Ounalli</b>
10:45-11:00	Imaging Potential of 89Zr Radiolabelled Trastuzumab Conjugated Magnetic Nanoparticles in Breast Cancer <b>Derya Özel</b>	Variation of soil gas 222Rn/220Rn concentration ratios along the Balçova-Narlıdere segment of the İzmir Fault <b>Ceren Altun</b>
11:00-11:15	In Vitro Efficacy of 177Lu-DOTA-Trastuzumab Targeted Carbon@Silica Nanostructures for HER2-POSITIVE Breast Cancer <b>Ayça Tuncel</b>	Assessment of soil gas radon variations in terms of seismicity in Yalova, Türkiye <b>Osman Günay</b>
11:15-11:30	Soft Error Risk Assessment in	Investigation of Indoor Radon

	Heavy Ion Radiation Therapy for Prostate Cancer <b>Makoto Sakai</b>	Levels in Schools in the Bornova District of Izmir Province <b>Gülse Masruoğlu</b>
11:30-11:45	Radiation Shielding Properties of New Knitted Fabric-Reinforced Composites at Nuclear Medicine Energies <b>Melek Can</b>	Determination of Radon ( <sup>222</sup> Rn) Levels in Halkapınar Springs and its relation with seismicity. <b>İlayda Sapmaz</b>
11:45-13:30	Lunch	
	Hall 1	
	Session Chairs: <b>Assoc.Prof. Dr. Mutlu İçhedef</b>	
13:30-14:00	Invited Lecture 6 Assessing Radon Monitoring Data for Precursory Studies in Taiwan: Relevance to Recent Seismic Events <b>Vivek WALIA</b>	
14.00	Social Programme	
<b>7 September 2024</b>		
	Hall 1	
	Session Chairs: <b>Prof. Dr. Yüksel Altaş</b>	
09:30-10:00	Invited Lecture 7 Environmentally Friendly Sorbents Based on Nanotechnology for the Removal of Pollutants from Aqueous Solutions <b>Galina LUJANIENE</b>	
10:00-10:30	Invited Lecture 8 Development Studies of Molten Salt Reactor Project in TÜRKİYE <b>Dr. Reşat UZMEN - FİGES A.Ş.</b>	
10:30-10:45	Coffee Break	
	Hall 1	Hall 2
	Session Chairs: <b>Prof. Dr. Michele Guida</b>	Session Chairs: <b>Prof. Dr. Şenol Sert</b>
10:45-11:00	Strontium removal by activated carbon produced "Posidonia oceanica" Seagrass <b>Doğukan Alkım Türközü</b>	Analysing the Relationship between Electricity Generation and Environmental Impact of Coastal Nuclear Plants in the European Union <b>Ercüment Aksoy</b>
11:00-11:15	Investigation of the use of electrospun graphene based ZnO nanofiber in uranium(VI) adsorption <b>Gözde İkbal Kaptanoğlu</b>	Radionuclides ( <sup>40</sup> K, <sup>232</sup> Th, <sup>238</sup> U) and Trace Elements in Sediment and Seagrass ( <i>Cymodocea nodosa</i> ) on the Aegean Coast <b>Nurdan Akakçe</b>
	Session Chairs: <b>Prof. Dr. Sabriye Yuşan</b>	Session Chairs: <b>Prof. Dr. Serpil Aközcan Pehlivanoglu</b>
11:15-11:30	Synthesis and Characterization of Bio-Based Solvents for the Separation of Thorium, Uranium and Rare Earth Elements <b>Bekir Özkan</b>	Diurnal variation of soil gas radon ( <sup>222</sup> Rn) and carbon dioxide (CO <sub>2</sub> ) concentrations around İzmir Fault Zone (IF) <b>Mutlu İçhedef</b>
11:30-11:45	Synthesis and Characterization Studies of CMC/NCC Nanocomposites Derived from Textile Waste for the Adsorption of Lanthanum Ions from Aqueous Solutions <b>Hasan Türkmen</b>	Investigation of Radon Adsorption Capacity of Metal Organic Frameworks by Using Solid-State Nuclear Track Detectors <b>Caner Taskopru</b>
11:45-12:00	Evaluation of TPA (terephthalic acid) as an Adsorbent for Ce(III)	Failure of Electron Spin Resonance Technique to Detect Irradiated

	and Sr(II) Adsorption from Aqueous Solution <b>Şenol Sert</b>	Foods: Poppy (Papaver Somniferum) Seeds <b>Ufuk Paksu</b>
12:00-13:30	Lunch	
	Hall 1	
	Session Chairs: <b>Prof. Dr. Şule Aytaş</b>	
13:30-14:00	Invited Lecture 9 The THERADE international Center for Research and Advanced Studies on Innovative Technologies for Radiations applied to Environment, Cultural Heritage Conservation and Protection, and Health Risks: A multidisciplinary intraeuropean fan of projects with the vision of pursuing sustainability, inclusion and well-being. <b>Michele GUIDA</b>	
14:00-14:30	Invited Lecture 10 Current Status and Distribution of Radioactive Nuclides in Central India: Advances in Environmentally Friendly Removal Technologies <b>Santosh KUMAR SAR</b>	
	Hall 1	Hall 2
	Session Chairs: <b>Assoc.Prof.Dr. Banu Yoho</b>	Session Chairs: <b>Prof. Dr. Günseli Yaprak</b>
14:30-14:45	Photocatalytic Degradation of Pharmaceutical Compound Efavirenz Using Green Synthesized Titanium Dioxide Nanoparticles <b>Maryam Amra Jorjaan</b>	Calculation the Form factors of the nucleons in a higher approximation <b>Mohammadreza Shojaei</b>
14:45-15:00	The Use of BPW34 as a Sensor in Radiation Detection <b>Nuray Meric</b>	Even-Odd Proton rich N=49 Isotones Nuclear Structure Investigations <b>Nadjet Laouet</b>
15:00-15:15	Coffee Break	
	Session Chairs: <b>Prof. Dr. Süleyman İnan</b>	Session Chairs: <b>Assoc. Prof. Dr. Berkay Camgöz</b>
15:15-15:30	Assessment of Cs-137 Radioactive Contamination Levels in the Salda Lake <b>Osman Günay</b>	Shell Model Calculations in Isotopic Chain Beyond Doubly Magic 56Ni core <b>Benrachi Fatima</b>
15:30-15:45	Development, Characterization and Investigation of Sorption Properties of Graphene Oxide/Alginate Based Nanobiocomposites for Strontium Removal <b>Yusuf Azmi Akbaş</b>	The role of RS and GIS Methods in Nuclear Leakage Spatial Risk Assessment: A Sample Study <b>C. Bertan Güllüdağ</b>
15:45-16:00	Adsorption of Strontium Using Magnetic Biochar Obtained from Tree of Heaven (Ailanthus Altissima) <b>Melike Doğmuş</b>	Microscopic analysis of electric dipole strengths in 185,187Re <b>Ayşenur Özçetin</b>
16:00-16:15	Correlation Between the Atomic Radius of Dopant Elements and the Photocatalytic Efficiency of Titanium Dioxide (TiO <sub>2</sub> ) <b>Sedratı Hichem</b>	A theoretical study on the oblate shape of 191,193Ir nuclei <b>Zülal Gökmen</b>
	Session Chair: <b>Assist. Prof. Dr. Gözde İkbal Kaptanoğlu</b>	Session Chair: <b>Assoc. Prof. Dr. İlker Sert</b>
16:15-16:30	Measurement of Indoor Radon Concentration using Different Types of Devices and Accompanying Health Hazards <b>Serpil Aközcan Pehlivanoglu</b>	The Isovector Giant Dipole Resonance in 195Pt <b>Kader Akkaya</b>

16:30-16:45	Natural Radioactivity Measurements and Dose Assessment in Beach Sands Collected Along the Coastline of the Campania Region, Southern Italy <b>Serpil Aközcan Pehlivanoglu</b>	Nuclear Ground State Properties in Halo Nuclei <b>Mohammadreza Shojaei</b>
16:45-17:00	Polymeric Nanoparticles Loaded With 99mTc Radiolabeled Zolmitriptan: Synthesis, Characterization and In Vitro Evaluation <b>İbrahim Sarıkavak</b>	Adaptive Neuro-Fuzzy Inference System (ANFIS) Modelling of First and Second Photonuclear Sum Rules in Giant Dipole Resonance <b>Ayşenur Özçetin</b>

## POSTERS

		Session Chairs: Assist. <b>Prof. Dr. Caner TAŞKÖPRÜ, Dr. Özge KOZGUŞ GÜLDÜ, Dr. Berkan ÇETİNKAYA, Prof. Dr. Galina LUJAIENE</b>	
ID	Code	Title	Name
5513	P-01	Clofoctol (o-CLO): Isolation from cave environment, radioiodination and its antibiofilm effect	Fazilet Zumrut Biber Muftuler
5531	P-02	Preparation, Optimization, and Stability of Dye-Loaded Protein Structured Nanocolloids as a Novel Radiopharmaceutical Candidate	Derya İlem Özdemir
5536	P-03	Quantitative Imaging Characteristics of Terbium-161	Yasemin Parlak
5540	P-04	Natural Radionuclide Concentrations in Coal and Combustion Wastes in Medium Scale Industry	Elçin Ekdal Karalı
5542	P-05	Complexation Behaviour of Caffeic and Cinnamic Acids Towards La(III), Sm(III), Th(IV) and UO <sub>2</sub> (II) Ions	Serap Teksöz
5545	P-06	Utilization of Cyanex-272 Impregnated Amberlite XAD Resins for Uranium Adsorption	Süleyman İnan
5556	P-07	89Zr-Labeled DFO@DURVALUMAB-HSA Nanoparticles: In Vitro Potential for Triple-Negative Breast Cancer	Fatma Yurt
5565	P-08	Investigation of Radon, Radium, Ph and Conductivity Values of Drinking Water: Menemen Region	Murat Saç
5567	P-09	Synthesis of Naphthelene Diimide Derivative Targeting G-Quadruplex Structures	Hilal Kızıılışık
5568	P-10	Radiolabeling and Quality	Meliha Ekinci

		Control Studies of Dexketoprofen Trometamol Loaded Chitosan Nanoparticles	
5569	P-11	Seagrass Active Carbon / Pectin Composite (AC-P) Formation for Strontium Adsorption	Şule Aytaş
5571	P-12	Fly Ash-TiO <sub>2</sub> Composites for Adsorption of Sr <sup>2+</sup> from Aqueous Solution	Emine Nostar Aslan
5585	P-13	Luminescence Properties of BaSO <sub>4</sub> Doped with Gd Synthesized by Solid State Reaction Method	Hakan Eroğlu
5586	P-14	Natural Radioactivity of Soils in Aydin-Germencik Geothermal Region	Filiz Gür
5588	P-15	Radioiodination of AuFe Nanoparticle Conjugated Topoisomerase Inhibitor Camptothecin and Evaluation of It's Efficacy on Cancerous Cells	Emin İlker Medine
5621	P-16	(e, $\gamma$ ) reaction of methane(CH <sub>4</sub> ) Final state correlation and Molecular orientation effects	Kada Imene
5653	P-17	The Sorption Properties of Strontium on High Poros Polyhype/Nanoclay Composite	Ümran Hiçsönmez
5714	P-18	Aspergillus niger as a Biosorbent: pH Influence on Radiostrontium Removal Efficiency	RNDr. Marek Hupian
5718	P-19	Radiosensitization Potential of Betulinic Acid and Bismuth Nanoparticle Combination in Melanoma Cells	Filiz Bostan
5719	P-20	Assessment of Indoor Radon Concentrations Using Solid-State Nuclear Track Detectors (LR-115)	Buket Gülsoy
5723	P-21	The effect of irradiation methods on soft-error generation in carbon ion radiotherapy	Hiroshi Sakurai
5727	P-22	A New Explanation for the Decay of Nuclei of Heavy Elements Such as Uranium	Gh. Saleh
5728	P-23	A New Explanation for Nuclear Fission of All Elements in the Universe	Gh. Saleh
5729	P-24	A New Calculation of Frequencies of Electrons and Atomic Nucleus	Gh. Saleh
5730	P-25	Validation of methods for measuring the number of	Makoto Sakai

		soft errors in particle therapy	
5732	P-26	Sorption Characteristics of <sup>111</sup> In-labeled Hydroxyapatite Nanoparticles	Martina Bugriová
5733	P-27	Environmental impact and risks associated with radioactive contamination of Aquatic ecosystems	BOUHILA Ghania
5735	P-28	Investigation of monomers ratios in a 2M mixture by positron annihilation spectroscopy	Katarína Cifraničová
5787	P-29	Efficiency of Nanocrystalline Cellulose Reinforced Carboxymethyl Cellulose Nanocomposites Obtained from Textile Wastes in Neodmium Adsorption	Hasan Türkmen
5789	P-30	Synthesis of Cerium and Nitrogen Doped Hybrid Carbon Quantum Dots for Environmental Monitoring Applications	Berkant Şentürk
5793	P-31	Determination of Natural Radioactivity and Radiological Risk Distribution of Surface Soils in Aliğa District Industrial Zone and its surroundings	Filiz Gür
5802	P-32	Radioiodination of saponin derivative, C1, isolated from Astragalus sp.	Ayfer Yurt Kılçar
5804	P-33	In Vitro Efficacy of Pemetrexed-Conjugated GO/ZnO Nanoparticles Produced by Green Synthesis Method on Lung Cancer	Zeliha Eren
5806	P-34	Immobilization of Cobalt Wastes in Glass Ceramic Matrices	Sema Erentürk
5647	P-35	The Spatial Distribution of Thorium(IV) ion Concentration in the Shivnath River Basin in Chhattisgarh State	Neha Verma
5649	P-36	An Investigation into the Spatial Distribution of Uranium in Durg and Rajnandgaon District of Chhattisgarh , Focusing on its Presence in Soil, Rocks, Water, Plants, and its Constituents	Ranu Singh
5652	P-37	Green Steps for Bio decorated material:AMBP	Ms. Poonam Deshmukh

		(Aegle marmelos bark powder) a Promising Scavenger towards Radionuclide Adsorption	
5848	P-38	Investigation of thorium(IV) removal utilizing reduced graphene oxide - zinc oxide nanofibers with response surface methodology	Ikbal Gozde Kaptanoglu
5674	P-39	Correlation between short hardness and lec behavior of HDPE loaded with carbon black	Zemouri Zahia
5760	P-40	Efficient Removal of Lanthanum (La <sup>3+</sup> ) from Aqueous Solutions Using Dried Brown Algae: Understanding Adsorption Mechanisms and Optimization	Latifa Boukarma
5558	P-41	The Use of <sup>7</sup> Be, <sup>137</sup> Cs and <sup>210</sup> Pb in the Evaluation of the Contemporary and Medium Term Sediment Deposition on the Meric River Floodplains	Nedime Irem Elek
5562	P-42	Sedimentation Rate of the Meriç Floodplains by <sup>137</sup> Cs technique	Günseli Yaprak
5758	P-43	Adsorption of Lanthanum Ions Using Magnetic Nanoparticle/Clay Mineral Composite: A Study on Kinetics, Isotherms, and Box-Behnken design	Abdelali Aboussabek