Scientific Program

02 MAY 2019 THURSDAY

09:00 – 10:30 **REGISTRATION**		
10:30 – 11:00 **OPENING CEREMONY**		
11:00 – 11:30 Opening Talk **Prof. Dr. Abdullah AYDIN** **Recent developments in nuclear energy in Turkey**		
11:30 – 12:00 Inv. Talk: **Dr. Ovidiu NITESCU** **Study of the effect of newly calculated phase space factor on β-decay half-lives**		
HALL 1 Chair: Prof. Dr. Abdullah AYDIN	HALL 2 Chair: Prof.Dr. Eyyup TEL	HALL SC Chair: Dr. Ercan YILDIZ
13:00 – 13:15 (ID:120) Hasan GUMUS Positron CSDA range and stopping power calculations in some human body tissues for 20 eV to 100 MeV with the modified Rohrlich–Carlson model by using Tietz screening function	13:00 – 13:15 (ID:3) Serkan AKKOYUN Some energy transitions in Ti and its yields after photonuclear reaction	13:00 – 13:08 (ID:14) Shahryar MALEKIE Calculation of WER values of three (Al, PMMA and, PS) potential dosimetric materials applied in helium ion beam therapy up to 150 MeV/u 13:08 – 13:15 (ID:16) Armin MOSAYEBI Fabrication of low electrical percolation threshold polystyrene/multi-walled carbon nanotube nanocomposites via a mixed solution
13:15 – 13:30 (ID:21) Telat AKSU Experimental investigation of gamma radiation attenuation coefficients for some materials used for radiotherapy	13:15 – 13:30 (ID:130) Burcu UCAR A solution of Bohr Hamiltonian for γ=0° with pseudo-harmonic potential	13:15 – 13:23 (ID:45) Mohammad Amin HOSSEINI Investigating the dosimetry properties of two carbon nanostructures in the presence of a Co-60 irradiation source of radiation processing 13:23 – 13:30 (ID:47) Mohammad Amin HOSSEINI A preliminary analysis of the dosimetry properties of nano-carbon structures in the presence of the electron beams at high doses levels
13:30 – 13:45 (ID:50) Yasemin SAVAS Investigation of gamma ray attenuation properties in different doped concrete samples	13:30 – 13:45 (ID:19) Sevki SENTURK On the ground-state nuclear properties of superheavy Hs, Ds and Cn nuclei	13:30 – 13:38 (ID:29) Nesrine MEZERREG Study of redistribution of Cs-137 in forest land forsoil erosion assessment 13:38 – 13:45 (ID:30) Mehmet ERDOGAN Radon activity in well water and radiation dose estimation in the granite-rich regions of central Anatolia, Turkey
13:45 – 14:00 (ID:46) Mohammad Amin HOSSEINI investigating radiation shielding properties of the nanocomposites including high density polyethylene and nano-oxide tungsten	13:45 – 14:00 (ID:86) Elif SOMUNCU Theoretical evaluation of intensity of light scattering spectrum for nuclear materials using Yukawa potential	13:45 – 13:53 (ID:143) Jamal AL ZAIN Neutronic study of fuel depletion for the MNSR reactor using DRAGON5 code 13:53 – 14:00 (ID:84) Assia ARECTOUT Estimating thickness of the reflection layer Al_2O_3 of the NaI (Tl) 3" * 3" detector
14:00 – 14:15 (ID:26) Aydan ALTIKULAC Determination of radiogenic heat production of mica minerals	14:00 – 14:15 (ID:99) Necla CAKMAK Half-life values for first-forbidden transitions of the even-mass Au isotopes within pn-QRPA	14:00 – 14:08 (ID:85) Satimbay POLVONOV Investigation of the excitation of isomeric states in the reactions (γ,n) and (n,2n) on ^{45}Sc, ^{82}Se and ^{81}Br 14:08 – 14:15 (ID:93) Houda El YAAKOUBI Fuel burnup calculations of the NHR5 reactor using DRAGON5 and DONJON5 deterministic codes
14:15 – 14:30 **BREAK**		
HALL 1 Chair: Prof. Dr. Hasan GUMUS	HALL 2 Chair: Prof. Dr. Serkan AKKOYUN	HALL SC Chair: Dr. Yusuf KAVUN
14:30 – 15:00 Inv. Talk: **Prof. Dr. Kaan MANISA** **The nuclear matter equation of state: VMC calculations**		

15:00 – 15:15 (ID:27) Aydan ALTIKULAC Radiogenic heat productions of zeolite minerals from quarries from Gördes (Manisa), Turkey	15:00 – 15:15 (ID:100) Necla CAKMAK Beta decay logft values for Pr, Nd, Sm, Gd isotopes in mass range A=142 by Pyatov's method	15:00 – 15:08 (ID:102) Mohamed LAHDOUR Implementation of the SN method in cartesian 2D geometry in a pedagogical tool to solve the neutron transport equation 15:08 – 15:15 (ID:105) Monia El BARBARI Thermal neutron scattering data for graphene
15:15 – 15:30 (ID:73) Gokmen SEKER Calculation neutron flux of uranium and minor actinide doped fluids in a hybrid reactor	15:15 – 15:30 (ID:4) Serkan AKKOYUN Theoretical calculations of energy levels and transition probabilities for even-even Si, S and Ar isotopes	15:15 – 15:23 (ID:107) Hafssa ZIANI Solving the neutron transport equation by the spherical harmonics method (PN method) 15:23 – 15:30 (ID:101) Ehsan NAZEMI Intelligent estimation of beam non-uniformity of X-ray tubes used in industrial digital radiography
15:30 – 15:45 (ID:71) Mehtap DUZ The radial investigation of radiation damage in structural material for thorium and minor actinide doped fluids in hybrid reactor	15:30 – 15:45 (ID:129) Burcu UCAR Bohr Hamiltonian for $\gamma=30^{\circ}$ with pseudo-harmonic potential	15:30 – 15:38 (ID:117) Asiye GUROL The effect of level density models on the $^{58}Ni(n,x)^{57}Co$ reaction cross sections 15:38 – 15:45 (ID:132) Hasan UNLU Phase transitions in low dimensional systems
15:45 – 16:00 (ID:75) Hilal BARDAKCI Calculation of radiation damage in structural material for uranium and minor actinide doped fluids using Monte Carlo method	15:45 – 16:00 (ID:12) Mikail DIREKCI Comparative optical model analysis of $^{8}He+ ^{208}Pb$ elastic scattering systems around barrier energy	15:45 – 15:53 (ID:133) Baris SARDOGAN Production cross–section calculations of ^{237}Pu isotope have been investigated via (a,2n), (d,2n) and (p,n) reactions 15:53 – 16:00 (ID:83) Buket CECEN Effects of CT device parameters on imaging
16:00 – 16:15 **BREAK**		
HALL 1 Chair: Prof.Dr. Huseyin Ali YALIM	HALL 2 Chair: Prof.Dr. Filiz KORKMAZ GORUR	HALL SC Chair: Dr. Hasan OZDOGAN
16:15 – 16:30 (ID:72) Mehtap DUZ The effects on the heating of thorium and minor actinide doped fluids in hybrid reactor	16:15 – 16:30 (ID:48) Nabila Yasmina AOUINA Positron and electron elastic collisions with DNA nucleobases from 10 eV to 100 keV	16:15 – 16:23 (ID:144) Nina TUNÇEL To assess the CTDI value at cone beam computed tomography device by circular and elliptical cylinder phantoms 16:23 – 16:30 (ID:146) Nina TUNÇEL Investigation of the efficiency of standard uptake values acquired by hybrid PET-CT imaging device
16:30 – 16:45 (ID:59) Hasan BIRCAN Monte Carlo simulation of photon radiation transfer for 1D by using Excel	16:30 – 16:45 (ID:15) Shahryar MALEKIE Experimental evaluation of dose-response of high density polyethylene/multi-walled carbon nanotube nanocomposite against gamma rays through a resistive dosimeter	16:30 – 16:38 (ID:17) Armin MOSAYEBI Effect of added guard electrode on electric field uniformity of a real-time dosimeter based on polymer-nanotube nanocomposite using finite element method 16:38 – 16:45 (ID:28) Fatiha KADEM Systematics studies of (n,n'p+d) reaction cross sections at 14.5 MeV neutrons energy
16:45 – 17:00 (ID:76) Hilal BARDAKCI The effect of uranium and minor actinide doped fluids on convert $^{238}U(n,\gamma)^{239}Pu$ using Monte Carlo method	16:45 – 17:00 (ID:192) Jakub VISNAK The computer simulation of vibrationally resolved luminescence spectra of important uranyl complex species	16:45 – 16:53 (ID:60) F. Z. BİBER MÜFTÜLER Effect of bitter melon extract on uptake of radiolabeled-Paclitaxel 16:53 – 17:00 (ID:82) Coskun HARMANSAH Development of radiation measurement system for a laboratory-type thin layer radio chromatography
17:00 – 17:15 (ID:74) Gokmen SEKER Investigation of neutronic calculations in uranium and minor actinide doped fluids of a hybrid reactor using Monte Carlo method	17:00 – 17:15 (ID:48) Yusuf KAVUN Radii and density calculations of ^{100}Mo by using Skyrme-Hartree-Fock method	17:00 – 17:08 (ID:113) Mehmet BUYUKTURKMEN Inelastic scattering of DT neutrons from ^{27}Al, ^{32}S targets 17:08 – 17:15 (ID:116) Asiye GUROL Research of the excitation functions of the $^{58}Ni(d,n+2p)$ reaction by level density model
17:15 – 17:30 (ID:138) Ozlem Y. T. CIFTLIKLI Investigation of field size dependence of transmission properties of mega voltage x rays	17:15 – 17:30 (ID:8) Mikail DIREKCI $^{8}B+^{12}C$ Elastic scattering system: investigation of radius sensitivity and long-absorption mechanism of imaginary potential	17:15 – 17:23 (ID:117) Zehra Nur ERENGIL Modeling a 3D magnetic sector analyzer for ion beam studies 17:23 – 17:30 (ID:106) Hatice BILGIN Calculation of nuclear reaction cross section of $^{46,47,49}Ti$ and ^{41}K nuclei induced by alpha particles

03 May 2019 FRIDAY

HALL 1 Chair: Dr. Ovidiu NITESCU	HALL 2 Chair: Prof. Dr. Ridvan UNAL	HALL SC Chair: Dr. Mert SEKERCI
09:00 – 09.30 Inv. Talk: **Prof. Dr. Zehra YEGINGIL** **Recent developments of optically stimulated luminescence (ODL) dosimetry in medical use**	**09:00 – 09.30 Inv. Talk:** **Dr. Maria CHUSHNYAKOVA** **Eighty years of the Kramers problem in the nuclear fission theory**	
09:30 – 09.45 (ID:109) Elif KEMAH Giant dipole resonance (GDR) in ^{235}U	09:30 – 09.45 (ID:67) Havva AKGONUL A statistical evaluation of radon measurements for the bituminous coal mines in Turkey	09:30 – 09.45 (ID:125) Ferhan AKDENIZ Nucleon densities of Fe isotopes
09:45 – 10:00 (ID:110) Gamze HOSGOR A theoretical study of the low-lying electric dipole (E1) strength in ^{163}Dy within the QRPA	09:45 – 10:00 (ID:66) A. Alpaslan KOCER An investigation on height dependence of atmospheric indoor radon concentration	09:45 – 10:00 (ID:141) Ridvan UNAL A review on shielding calculations by TAEK RSGD-KLV-006 and NCRP 147
10:00 – 10:15 (ID:44) Senol KAYA Influences of Co-60 gamma irradiation on structural, optical and electrical characteristics of the amorphous and crystalline titanium	10:00 – 10:15 (ID:63) Serdar DIZMAN Determination of tritium concentrations in seawater samples along the east coastline before nuclear power plant in Sinop province	10:00 – 10:15 (ID:140) Yusuf ZALAOGLU A detailed research on the IRLS characteristics of sediment samples taken from the sea of Marmara at different temperatures
10:15 – 10:30 35 (ID:88) Afaf El MTILI Validation of code OpenMC by calculating k_{eff} of a Slowpoke-2 reactor	10:15 – 10:30 (ID:38) Huseyin Ali YALIM Natural radioactivity levels in association with geological structure of Afyonkarahisar	10:15 – 10:30 (ID:125) Bekir ORUNCAK Radon and radium gas changes in the Omer geothermal region
10:30 – 10:45 **BREAK**		
HALL 1 Chair: Prof. Dr. Zehra YEGINGIL	HALL 2 Chair: Dr. Maria CHUSNHYAKOVA	HALL SC Chair: Dr. Nurdan KARPUZ DEMIR
10:45 – 11:15 Inv. Talk: **Prof. Dr. Sefa ERTURK** **Recent development on gamma-ray and neutron detection systems**		
11:15 – 11:30 (ID:112) Elif KEMAH Investigation of the electric dipole response of even-even deformed ^{154}Gd nucleus above neutron separation energy	11:15 – 11:30 (ID:68) Havva AKGONUL A correlation study between atmospheric radon concentration and other mine parameters for 5 coal mines at the bituminous coal basin of Turkey	11:15 – 11:30 (ID:132) Mehmet OZKAN Radon and radium gas measurements in the Gecek geothermal region of Afyonkarahisar
11:30 – 11:45 (ID:111) Gamze HOSGOR Electric dipole structure of ^{192}Os in the 0-20 MeV energy range	11:30 – 11:45 (ID:62) A. Alpaslan KOCER A study on accuracy of long term E-PERM system for indoor radon measurements	11:30 – 11:45 (ID:119) Vildan OZKAN BILICI Neutron Absorption in FLiBe
11:45 – 12:00 (ID:90) Esra UYAR Modeling of a HpGe detector using phits for the calculation of full energy peak efficiencies	11:45 – 12:00 (ID:61) Filiz KORKMAZ GORUR Tritium concentrations in various water samples collected from Bolu province of Turkey	11:45 – 12:00 (ID:120) Ahmet BULBUL Calculations of absorption and reaction rate of ^{56}Fe target nuclei
12:00 – 12:15 (ID:39) Senol KAYA Influences of gate oxide thickness on the irradiation sensitivity of the NurFET dosimeters	12:00 – 12:15 (ID:145) Ridvan UNAL Usak area deep well water study on radon activity	12:00 – 12:15 (ID:41) Huseyin Ali YALIM Excitation cross-sections of some autoionizing states of helium at 200 eV
12:15 – 12:30 (ID:24) Gizem BAKIR Homogeneous and heterogeneous fuel core analyses in accelerator driven systems and fusion-fission hybrid reactors	12:15 – 12:30 (ID:114) Nilay AKCAY Activity concentrations of ^{137}Cs in some first exile tea samples grown in the central district of Rize province, Turkey	12:15 – 12:30 (ID:40) Huseyin Ali YALIM Excitation of the autoionizing states of Helium by electron impact
13:30 – 18.30 **EXCURSION** **AMASYA**		
19.30 – …. **GALA DINNER**		

04 MAY 2019 SATURDAY

HALL 1 Chair: Dr. Serdar DIZMAN	HALL 2 Chair: Prof.Dr. Emre GULER	HALL SC Chair: M.Murat YASAR
09:00 – 09.15 (ID:35) Kemal TASDOVEN Angular elastic neutron distribution of ^{197}La target	09:00 – 09.15 (ID:81) Berat ARAL Dosimetric verification with T-ball cube phantom in radiation therapy	09:00 – 09.15 (ID:58) Aysun INAL The effect of geometric errors on dosimetric parameters in linear accelerator device
09:15 – 09.30 (ID:79) Eyyup TEL Investigation of electromagnetic properties ^{182}W nucleus	09:15 – 09.30 (ID:37) Cansu KAYAS Radioiodinated Baicalein as novel agent targeted for brain cancer and neurodegenerative diseases	09:15 – 09.30 (ID:123) Emre GULER Elastic constants of fcc palladium
09:30 – 09.45 (ID:52) Abdullah KAPLAN Neutron emission spectra of ^{90,94}Zr at 26.8 and 45.2 MeV alpha energies	09:30 – 09.45 (ID:89) Veysi GUCKAN Blue light sensitivity of calcium sulfate doped with rare earth elements using luminescence technique	09:30 – 09.45 (ID:122) Melek GULER A theoretical investigation for the mechanical properties of platinum
09:45 – 10:00 (ID:55) Mert SEKERCI The effects of level density models on some proton induced reactions for ^{67}Cu production	09:45 – 10:00 (ID:91) Fatih EKINCI The investigation of Bragg curve parameters and lateral scattering of proton and carbon beam in different energy in the water phantom	09:45 – 10:00 (ID:126) Emine ALDIRMAZ Calculating the elastic constants of lead
10:00 – 10:15 (ID:57) Hasan OZDOGAN Theoretical investigation of cross-section calculations for ^{62}Ni(p,γ)^{63}Cu and ^{63}Cu(γ,n)^{62}Cu reactions	10:00 – 10:15 (ID:103) Murat SIRIN Calculation of gamma-ray kerma coefficients in different solid-state forms of Bi1.7Pb0.3Sr2Ca2Cu3O10 superconductor	10:00 – 10:15 (ID:127) Emine ALDIRMAZ Computing the mechanical properties of lead
10:15 – 10:30 (ID:64) Tugce GULUMSER Cross–section calculations of ^{67}Zn(d,2p)^{67}Cu, ^{68}Zn(d,^{3}He)^{67}Cu, ^{70}Zn(d,x)^{67}Cu and ^{nat}Zn(d,x)^{67}Cu reactions up to 50 MeV energy	10:15 – 10:30 (ID:104) Murat SIRIN Determination of photon kerma coefficients for CuO, CaO, $SrCO_3$, PbO and Bi_2O_3 compounds	10:15 – 10:30 (ID:120) Abdullah AYDIN Determination of the parameters of producing ^{210,211}At medical radioisotopes in cyclotron
10:30 – 10:45 **BREAK**		
HALL 1 Chair: Dr. Ismail Hakki SARPUN	HALL 2 Chair: Prof.Dr. Sefa ERTURK	HALL SC Chair: Nuri YORULMAZ
10:45 – 11:00 (ID:77) A. Armagan GOK Calculations of mean free path for ^{90}Zr shielding material at 14-15 MeV neutron incident energies	10:45 – 11:00 (ID:124) Emre GULER Some mechanical properties of fcc palladium	10:45 – 11:00 (ID:80) Eyyup TEL Investigation of (n,p) and (γ,p) reactions for fusion reactor shielding materials Sn isotopes
11:00 – 11:15 (ID:43) Ercan YILDIZ Cross sections and thermonuclear reaction rates for ^{50}Cr(a,n)^{53}Fe	11:00 – 11:15 (ID:121) Melek GULER A theoretical study for the elastic constants of platinum	11:00 – 11:15 (ID:118) Vildan OZKAN BILICI Neutron Absorption in B
11:15 – 11:30 (ID:120) Abdullah AYDIN A study on the effects of level density models for (g,n) and (g,2n) reactions on ^{120,122,124}Sn targets	11:15 – 11:30 (ID:138) Yasin GAYLAN Investigation of neutron shielding behavior in B4C /stainless steel 316L composite	11:15 – 11:30 (ID:65) Tugce GULUMSER Production cross–section calculations of medical radioisotope ^{67}Cu for some (α,xp) and (α,x) reactions
11:30 – 11:45 (ID:120) Ahmet BULBUL Diffusion coefficients for certain moderators at thermal energy	11:30 – 11:45 (ID:115) Serdar BULUT Accelerator based radionuclides/ radiopharmaceuticals trends and TAEK PAF	11:30 – 11:45 (ID:56) Hasan OZDOGAN Angular distribution of neutron emission spectra of ^{56}Fe in alpha induced reaction
11:45 – 12:00 (ID:137) Mehmet Murat YASAR Investigation of mass attenuation coefficients of $Bi_2O_3B_2O_3$ glass materials by using the Monte Carlo method	11:45 – 12:00 ID:70) Gorkem TUREMEN A Multi-purpose proton beam irradiation setup and beam characterization studies at TAEA-PAF	11:45 – 12:00 (ID:54) Mert SEKERCI Neutron emission spectra of ^{107,109}Ag isotopes for (p,xn) reactions at 18, 22 and 25 MeV proton incident energies
12:00 – 12:15 (ID:137) Yusuf ZALAOGLU Prominent investigation of temperature dependence of IRLS characteristics of sediment samples extracted from the sea of Marmara	12:00 – 12:15 (ID:131) Nuri YORULMAZ Calculation of mass attenuation coefficients of Cu doped ZnS thin film for radiation shielding by the Monte Carlo method	12:00 – 12:15 (ID:49) Yusuf KAVUN The calculation of nuclear structure properties of ^{40}K
12:15 – 12:30 (ID:53) Abdullah KAPLAN Investigation of neutron emission spectra on some proton, deuteron and alpha particle incident reactions with different energies	12:15 – 12:30 (ID:69) Emre DEMIREL Investigation of the effect of ambient humidity on winding insulation resistance parameters in synchronous generators	12:15 – 12:30 (ID:36) Ismail Hakki SARPUN Theoretical cross section calculation of elastic neutron scattering from ^{197}Au, ^{182}W and ^{186}W
12:30 – 13.00 **CLOSING CEREMONY**		