

## POSTER SESSION 1 (Room 108 First floor)

- 1 PRELIMINARY STUDY OF THE DOSE DISTRIBUTION IN THE X-RAY BEAM FORMED BY POLICAPILLARY LENS  
*K. Matusiak, P. Wróbel, A. Jung, J. Dudała*
- 2 APPLICATION OF <sup>64</sup>CU RADIOTRACER FOR INVESTIGATION OF LEACHING COPPER ORE  
*T. Smoliński, M. Rogowski, M. Pyszynska, A. G. Chmielewski*
- 3 FORMATION OF POLYMERIZATION RETARDERS VIA HIGH-TEMPERATURE RADIOLYSIS OF LIGNIN  
*I. Gorbarev, E. Kholodkova, S. Skiba, Y. Pavlov, A. Ponomarev*
- 4 APPLICATION OF RADIOTRACERS FOR COPPER LEACHING FROM FLOTATION TAILINGS  
*M. Rogowski, T. Smoliński, M. Pyszynska, A. G. Chmielewski*
- 5 RADIOLUMINESCENCE AND TIME-RESOLVED OPTICALLY STIMULATED LUMINESCENCE OF LiAlO<sub>2</sub> AND LiMgPO<sub>4</sub>  
*B. Marczewska, P. Bilski, W. Gieszczyk, A. Kilian, M. Kłosowski, D. Kulig, A. Mandowski, E. Mandowska*
- 6 DETECTION OF IONIZING PARTICLES TRACKS USING RADIOLUMINESCENCE OF LITHIUM FLUORIDE  
*B. Marczewska, P. Bilski, W. Gieszczyk, M. Kłosowski, T. Nowak, M. Naruszewicz*
- 7 SOL-GEL SYNTHESIS OF SILICON-BASED COATINGS ON ZIRCONIUM ALLOYS FOR HIGH TEMPERATURE CORROSION RESISTANCE IMPROVING  
*M. Miłkowska, B. Sartowska, W. Starosta*
- 8 REMOVAL OF ABSORPTION ARTEFACTS IN THE MACRO-XRF IMAGING OF PAINTINGS  
*P. Wróbel*
- 9 EFFECT OF POLYETHYLENE CROSSLINKING FOR PROPERTIES OF FOAMS  
*W. Głuszewski, A. Stasiak, A. Raszewska-Kaczor, D. Kaczor*
- 10 INVESTIGATION OF THERMAL NEUTRON DETECTION CAPABILITY OF A CDZnTe SEMICONDUCTOR DETECTOR IN A MIXED GAMMA-NEUTRON FIELDS  
*H. Yucel, R. Bora Nartturk, S. Zumrut, G. Gedik, M. Karadag*
- 11 EFFICIENT APPROACH FOR FEATURES REDUCTION OF BREAST CANCER IMAGES BASED ON TEXTURAL FEATURES  
*M. Tokhy*
- 12 THE EFFECT OF GAMMA IRRADIATION ON INTERACTION OF NANOCELLULOSE WITH WATER STUDIED BY DIFFERENTIAL SCANNING CALORIMETRY AND MM-WAVE SPECTROSCOPY  
*K. Cieśla, G. Pandey, H. Rahier, J. Stiens*
- 13 PREPARATION AND IONISING RADIATION EFFECT ON THE ACTIVE STARCH-PVA-NANOCELLULOSE FILMS  
*J. Drewnik, M. Grabowska, K. Cieśla*
- 14 INDUSTRIAL WASTES AS A POTENTIAL SOURCE OF URANIUM  
*K. Kiegiel, D. Gajda, G. Zakrzewska-Kołtuniewicz*
- 15 INDOOR AIR PARTICULATE MATTER POLLUTION IN HISTORIC CHURCHES  
*L. Samek, L. Furman*

- 16 APPLICATION OF THE RADIOMETRIC METHOD FOR MEMBRANE PROCESSES INVESTIGATION  
*A. Miśkiewicz, G. Zakrzewska-Kołtuniewicz, B. Sartowska, S. Pasieczna-Patkowska*
- 17 ELECTRON BEAM FOR PRESERVATION OF WATER-DAMAGED PAPER  
*M. Wójcik, D. Chmielewska, W. Migdał*
- 18 APPLICATION OF DIFFERENT METHODS FOR EVALUATION OF PAPER PROPERTIES AFTER DECONTAMINATION WITH ELECTRON BEAM IRRADIATION  
*D. Chmielewska, M. Wójcik, W. Migdał, J. Sadło, K. Kopeć*
- 19 SIEA-KNIFE SORBENT –FROM THE SYNTHESIS THROUGH RADIONUCLIDES SORPTION TO THE VITRIFICATION WITH SOL-GEL METHOD  
*D. Chmielewska, M. Siwek, M. Henczka, B. Sartowska, W. Starosta, D. Wawszczak, J. Dudek*
- 20 APPLICATION OF ISOTOPIC TECHNIQUES USING MATHEMATICAL MODELS IN ENVIRONMENTAL PROCESSES  
*M M Salem Wafaa*
- 21 ILU-6 TYPE ELECTRON ACCELERATOR MODIFICATION FOR LOW ENERGY ELECTRON BEAM SURFACE MICROBIOLOGICAL DECONTAMINATION.  
*S. Bułka*
- 22 THE USEFULNESS OF DIFFERENT ANALYTICAL METHODS FOR THE ELEMENTAL ANALYSIS OF TISSUE SAMPLES  
*A. Skoczeń, K. Płaneta, K. Matusiak, Z. Setkowicz, A. Kubala-Kukuś, I. Stabrawa, J. Chwiej*
- 23 EFFECT OF IONIZING RADIATION ON THE PROPERTIES OF PBAT  
*M. Rzepna, G. Przybytniak, J. Sadło*
- 24 MONTE CARLO MODELLING OF TH-PB FUEL ASSEMBLY WITH CALIFORNIUM NEUTRON SOURCE  
*M. Oettingen, P. Stanis*
- 25 APPLICATION OF <sup>210</sup>PO RADIONUCLIDE ACTIVITY DISTRIBUTION IN DIFFERENT PARTS OF MOSSES FOR TRACING AIR POLLUTION SOURCES  
*M. Długosz-Lisiecka*
- 26 APPLICATION OF CHEMICAL AND ENERGY SECTOR BYPRODUCTS FOR RADIOACTIVE WASTE IMMOBILIZATION IN MINERAL-POLYMER COMPOSITES  
*P. Szajerski, A. Gąsiorowski, M. Długosz-Lisiecka*
- 27 ORIGINS OF SILVER AND PRODUCTION OF JEWELRY (SŁUSZKÓW) AND COINS IN EARLY MEDIEVAL POLAND  
*P. Kalbarczyk, E.A. Miśta, E. Chajduk, J. Dudek, W. Duczko, A. Turos, D. Wyczółkowski, M. Widawski*
- 28 OPTICALLY STIMULATED LUMINESCENCE (OSL) READER “HELIOS” MADE IN POLAND  
*K. Maternicki, A. Mandowski*

## POSTER SESSION 2 (Room 123 first floor)

- 1 HONEY AS BIOINDICATOR OF LESSER POLAND AND LOWER SILESIA VOIVODESHIPS POLLUTION  
*A. Boryło, G. Romańczyk, B. Skwarzec*
- 2 LICHENS AS BIOINDICATORS OF ENVIRONMENTAL POLLUTION IN POLAND (POMERANIAN, KUYAVIAN-POMERANIAN, LOWER SILESIA AND LESSER POLAND VOIVODESHIPS)  
*A. Boryło, G. Romańczyk, B. Skwarzec*
- 3 EXTRACTION EFFICIENCY OF 210PO IN POLISH HERBAL TEAS  
*G. Olszewski, D. Strumińska-Parulska, M. Szymańska, M. Westa, A. Boryło, B. Skwarzec*
- 4 210PO AND 210PB IN POPULAR FOOD PRODUCTS FROM DIFFERENT TYPES OF AGRICULTURE  
*D. Strumińska-Parulska, G. Olszewski, A. Boryło, B. Skwarzec*
- 5 EVALUATION OF POSITION CORRECTION WITH PRE-TREATMENT VERIFICATION SYSTEM IN RADIOTHERAPY  
*S. Petkovska, M. Ginovska, H. Spasevska, Y. Acarbas, A. Krleski*
- 6 IRRADIATION OF WASTEWATER FROM SOLVAY PROCESS  
*M. Sudlitz, Z. Zimek, A. G. Chmielewski, W. Głuszewski*
- 7 CONSERVATION OF WILD MUSHROOMS THROUGH ELECTRON BEAM IRRADIATION  
*A. Fernandes, A. L. Antonio, A. Rafalski, C.M. Barreira, M. Beatriz P.P. Oliveira, A. Martins, Isabel C.F.R. Ferreira*
- 8 EXTRACTION OF MUSHROOMS RELEVANT COMPOUNDS THROUGH GAMMA AND ELECTRON BEAM IRRADIATION  
*A. Fernandes, A. L. Antonio, Pedro M. P. Santos, S. Cabo Verde, C.M. Barreira, M. Beatriz P.P. Oliveira, A. Martins, I. C. F. R. Ferreira*
- 9 GAMMA RADIATION-INDUCED EFFECTS ON THE RECOVERY OF PHARMACOLOGICALLY ACTIVE POLYPHENOLS FROM TUBERARIA LIGNOSA MEDICINAL PLANT  
*J. Pinela, M. A. Prieto, L. Barros, A. L. Antonio, S. Cabo Verde, A. M. Carvalho, M. Beatriz P.P. Oliveira, I. C. F. R. Ferreira*
- 10 THE STUDIES ON SILICON INCORPORATION INTO ZIRCONIUM ALLOY SURFACE LAYER USING TIG TECHNOLOGY FOR HIGH TEMPERATURE CORROSION RESISTANCE IMPROVEMENT OF ZIRCONIUM CLADDINGS  
*M. Barlak, W. Starosta*
- 11 RADIONUCLIDE NEUTRON SOURCE TRAJECTORIES IN CLOSE NUCLEAR FUEL CYCLE  
*P. Stanis, J. Cetnar, M. Oettingen*
- 12 THE STUDIES ON SILICON INCORPORATION INTO ZIRCONIUM ALLOY SURFACE LAYER USING TIG TECHNOLOGY FOR HIGH TEMPERATURE CORROSION RESISTANCE IMPROVEMENT OF ZIRCONIUM CLADDINGS  
*M. Barlak, P. Kołodziejczak, W. Starosta*
- 13 EXHALATION RATE OF RADON-222 FROM CONCRETE AND CEMENT MORTAR  
*A. Perna, S. Paschuk, Janine C., V. Denyak, Flávia Del Claro, D. Narloch*
- 14 99MO /99MTC GENERATOR BASED ON ALUMINA 99MO-MOLYBDATE (VI) GEL OF HIGH RADIONUCLIDIC PURITY  
*T. Fasih*

- 15 DETERMINATION OF 6LI ABUNDANCE IN LI<sub>2</sub>O AND LIOH APPLYING THERMAL NEUTRON ABSORPTION TECHNIQUE  
*M. Ciechanowski, T. Kuc, W. Pohorecki*
- 16 NEW KINDS AND PROPERTIES OF TRACK MEMBRANES PRODUCED WITH HEAVY ION BEAM IRRADIATION  
*O. Orelovich, B. Sartowska, A. Presz*
- 17 PRECISE SOURCE OF HIGH VOLTAGE AND LOW POWER, REGULATED TO 65 000,000 V APPLIED TO RESEARCHES WITH MAKING AND DETECTING X-RAY RADIATION.  
*T. Kotowski*
- 18 SUITABILITY OF ROCKS AND SEDIMENTS FROM BRZESZCZE AND SILESIA COAL MINES AS BUILDING MATERIALS  
*M. Duliński, M. Śleziak*
- 19 RADIOACTIVITY IN THE GAS PIPELINE NETWORK IN POLAND  
*J. Nowak, P. Jodłowski, J. Macuda, C. Nguyen Dinh, K. Liszka*
- 20 SC-47 AND CU-67 AS NOVEL RADIOISOTOPES FOR RADIOPHARMACEUTICALS  
*I. Cieszykowska, D. Pawlak, W. Wojdowska, T. Janiak, M. Żółtowska, J. Leon Parus, R. Mikołakczak*
- 21 DEGRADATION OF THE ANTIHYPERTENSIVE LOSARTAN IN AQUEOUS SOLUTION BY GAMMA RADIATION  
*Z. Amira, N. Ahlem, J. Haikel*
- 22 GAMMA RADIATION INDUCED COLORIMETRIC PROPERTIES OF E127 AND E 132 DYES : ROUTINE DOSIMETRIC USE  
*A. Zaouak, A. Noomen, H. Jelassi*
- 23 PRE-TREATMENT OF RADIOACTIVE WASTE USING DESTRUCTIVE PROCESSES OF ORGANIC COMPOUNDS FOLLOWED BY CONCENTRATION OF RADIONUCLIDES  
*D. Gajda, A. Abramowska, A. Miśkiewicz, B. Filipowicz, K. Kiegiel, G. Zakrzewska-Kołodziej*
- 24 NAA AND XRF STUDY OF ARCHAEOLOGICAL BRONZES.  
*E. Glimos, A. Bolewski, B. Ostachowicz, P. Wróbel, K. Dziegielewski, E. Przytarska*
- 25 APPLICATION OF LOW ENERGY ELECTRON BEAM IN ELIMINATION OF PLANT PATHOGENS FROM ORNAMENTAL BULBS  
*U. Gryczka, W. Migdał, D. Chmielewska-Smietanko, M. Ptaszek, A. Jarecka-Boncela*
- 26 POSSIBILITY OF USAGE OF MODIFIED GRAPHENE OXIDE WITH MNO<sub>2</sub> IN NEUTRON ACTIVATION ANALYSIS NAA AND INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY ICP-MS  
*E. Chajduk, M. Pyszynska, P. Kalbarczyk, H. Polkowska-Motrenko, L. Stobiński, E. Miśta*
- 27 STUDY OF CHEMICAL SPECIATION OF TRACE ELEMENTS IN INFANT FORMULAS BY NEUTRON ACTIVATION ANALYSIS AND OTHER TECHNIQUES  
*E. Chajduk, M. Pyszynska, P. Kalbarczyk, H. Polkowska-Motrenko*