Transport of Radon and Thoron in Polymers

21-22 MARCH 2019, Faculty of Physics, Sofia University “St. Kliment Ohridski”

Workshop in the framework of Activity A.2.3.3 of WP 2 of MetroRADON

PROGRAMME

21 March 2019

09:30    Welcome
09:35    S. Georgiev et. al., Study of the Partition Coefficient and the Diffusion Length of Radon in Polymers at Different Temperatures: Experimental Approach and Results
10:05    L. Tommasino, D. Pressyanov, A Better Understanding of the gas Sorption in Plastics Conducive to Correct Radon Measurements and to Advanced Radon Monitors
11:05    Coffee break
11:30    D. Pressyanov, Anti-thoron polymer membranes and their influence on radon measurements – the problem and the surprise
12:30    Lunch
14:00    B. Sabot, Production of mixed radioactive gas atmosphere and proposition of setup to test Rn-220 and Rn-222 separation by polymer foils
15:00    Coffee break
15:30    K. Mitev et. al., Remark on the potential influence of the way of polymer production on their radon absorption properties.
16:00-17:00 Discussions

22 March 2019

09:30 – 12:30 Laboratory visit and discussions on the experimental methods for determination of \( L_D \), \( K \) and \( P \) and their temperature dependence.
12:30    Lunch
14:00    Round table: Review of the presented data and discussions on the applicability of different filters/foils/membranes that might serve as selective thoron barriers whilst not reducing radon penetration significantly.
16:30    Closure of the workshop