TBIS

Topic of the Speech:
Textile Structures Emitting Human Body Radiation

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Dr. Dana Kremenakova is working in the Department of Material Engineering, Faculty of Textile Engineering, Technical University of Liberec, Czech Republic. She works in the field of Textile Sciences, focusing on textile materials and technology. She is focusing mainly on thermal transport properties and barrier properties of fibrous structures, development of special metrology, prediction of geometrical and mechanical properties of fibrous assemblies, modelling of textile structures in line fibre – yarn – fabrics, prediction of thermal comfort, optical and mechanical properties of side emitting polymeric optical fibres, and their application in textile structures. She has published nine books (as author and co-author), with 139 documents indexed in Scopus, 938 citations, and an h-index of 15. She is a co-author of two international patents, three national patents, and five utility patents. She was a member of the research team or coordinator of about 20 research projects. She is a guarantor and lecturer for the subject "Nanotechnology in the Textile Branch" within the WE-TEAM Erasmus Mundus Joint Master's Degree program (AUTEX).

Main projects: Czech – Chinese project TM03000010 CAFICO - Composite reinforced with carbon fibers filled with graphene/graphite designed especially for the protective box of batteries in cars with electric drive (2022-2024). Microplastics released from textiles in aquatic ecosystems: identification, characterization and evaluation of effect (TEQUATIC)s, INTER-ACTION-LUAUS23, MŠMT LUAUS23054 (2023-2026). Advanced structures for thermal insulation in extreme conditions, GAČR Junior Star 21-32510M (2021-2025). Textile structures combining protection against viruses and comfort (VIRATEX), CZ.01.1.02/0.0/0.0/20_ 321/0024467 Aplikace MPO (2021 – 2023). Hybrid materials for hierarchical structures (HyHi), OP VVV, CZ.02.1.01/0.0/0.0/16_019/0000843 (2018-2022), head of research activities of group 1.