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BOOK OF ABSTRACT

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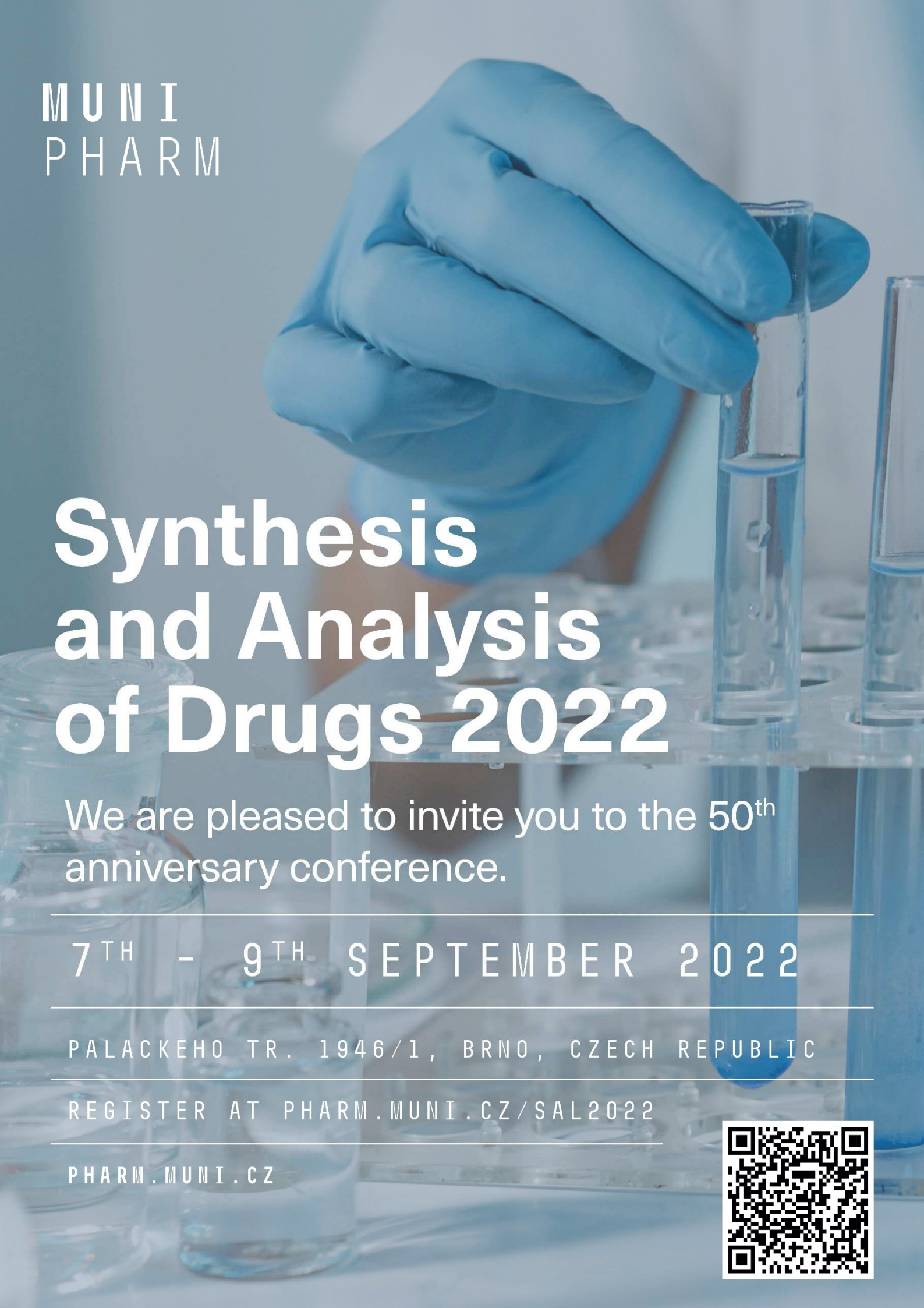

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STRUCTURAL HYBRIDS OF FLUOROQUINOLONS AND THEIR PROSPECTS AS NEW ANTIMICROBIAL MEDICINES

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Nowadays the creation of novel antimicrobials still belongs to challenging task despite the fact that medical scientists all over the world have contributed greatly to this issue. Moreover, new diseases that appear together with the problem of resistance of microorganisms create a vast area for united chemical and pharmacological research.

Therefore, our scientific team has been fruitfully working with fluoroquinolones and their hybridization based on docking studies with further investigation of the antibacterial activity of the obtained compounds. Our findings as well as the results of the other scientists [1-3] in this area prove that representatives of the second generation of fluoroquinolones can be modified in the C-3 or C-7 position with the creation of new biologically active molecules.

Through the course of our research ciprofloxacin and norfloxacin substituted with 1,2,3-triazole moiety at C-7 revealed moderate activity against *St. aureus* ATCC 25923, *E. coli* ATCC 25922, *B. subtilis* ATCC 6633, *P. aeruginosa* ATCC 27853, *C. albicans* NCTC 885-653. Furthermore, C-3 substituted arylsulfonyl derivatives were synthesized and their activity is under study now.

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