VYSOKÉ UČENÍ TECHNICKÉ V BRNĚ
OPEN ACCESS AT BRNO UNIVERSITY OF TECHNOLOGY

Erasmus International Staff Week
Université de Liège, May 2017

Jan Skupa
BUT Central Library
General information

founded 1899
Largest technical university
8 faculties
22000 students
Institutional repository

BUT Digital library

2008-2011 DigiTOOL
From 2012 Dspace (now v5.3)
https://dspace.vutbr.cz

At first only for thesis
(must be publicly access by law)
Other records

Journals (2300 articles)
Conference papers (700 papers)
Research articles

2013 – signing Berlin declaration
– Open access policy
 (but not mandatory!)
Research articles

DSpace is connected to internal information system
Reporting is mandatory (R&D evaluation)
Upload fulltext is only few steps

In Dspace implemented:
Plumx metrics
Citation tool
Staphylococcus aureus and MRSA Growth and Biofilm Formation after Treatment with Antibiotics and SeNPs

Methicillin-resistant Staphylococcus aureus (MRSA) is a dangerous pathogen resistant to -lactam antibiotics. Due to its resistance, it is difficult to manage the infections caused by this strain. We examined this issue in terms of observation of the growth properties and ability to form biofilms in sensitive S. aureus and MRSA after the application of antibiotics (ATBs)—ampicillin, oxacillin and penicillin—and complexes of selenium nanoparticles (SeNPs) with these ATBs. The results suggest the strong inhibition effect of SeNPs in complexes with conventional ATBs. Using the impedance method, a higher disruption of biofilms was observed after the application of ATB complexes with SeNPs compared to the group exposed to ATBs without SeNPs. The biofilm formation was intensely inhibited up to 99% ± 7% for S. aureus and up to 94% ± 4% for MRSA after application of SeNPs in comparison with bacteria without antibacterial compounds whereas ATBs without SeNPs inhibited S. aureus up to 79% ± 5% and MRSA up to 16% ± 2% only. The obtained results provide a basis for the use of SeNPs as a tool for the treatment of bacterial infections, which can be complicated because of increasing resistance of bacteria to conventional ATB drugs.

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OA fund

From 2014 –

Every year – 1 milion CZK (approx €40000)
- Max $3000
- WoS/Scopus
- First or correspondence author
- From 2017 - CC, DOAJ
Question

How to increase number of publications?

is very simple to publish via internal system
we organize seminars about OA
and copyright issues
start to direct email to authors

Not really good response
150 fulltext (but 60 only for this year)
Promoting OA

OA initiative CZ

Translation of think.check.submit
(vimkdepublikuji.cz)
OA book

Open Access to scientific information
18 authors across Czech republic
Foreword by Peter Suber

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