



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Łukasz, Sadowski
Type (Academic or Industrial): Academic
Country: Poland
Leadership position in the COST: Participant
Working Group in which you are involved: WG3
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Laboratory/Company:
Wroclaw University of Science and Technology (WUST)

Laboratory/Company info (limited to 400 characters):

Wroclaw University of Science and Technology (WUST) is an inheritor of the tangible property of the Königliche Technische Hochschule Breslau, and also the intellectual and scientific heritage of Lviv Polytechnic. From the beginning in 1945 WUST was an important centre of technical education. Today it is one of the biggest and best technical universities in the country with over 27 000 students being educated by more than 2100 academic teachers in 16 faculties.

Link to the home page of the Laboratory/Company:
<http://z1-wbliw.pwr.edu.pl/pracownicy/lukasz-sadowski>

Fields of expertise:

- sustainable development,
- concrete,
- non-destructive testing,
- surface morphology,
- acoustic techniques,
- artificial intelligence.

5 Main publications or patents:

- Sadowski, Ł. (2019). Adhesion in Layered Cement Composites. Springer,
- Sadowski, Ł., Piechówka-Mielnik, M., Widziszowski, T., Gardynik, A., & Mackiewicz, S. (2019). Hybrid ultrasonic-neural prediction of the compressive strength of environmentally friendly concrete screeds with high volume of waste quartz mineral dust. Journal of Cleaner Production, 212, 727-740,
- Seghir, N. T., Mellas, M., Sadowski, Ł., & Žak, A. (2018). Effects of marble powder on the properties of the air-cured blended cement paste. Journal of cleaner production, 183, 858-868.
- Chowaniec, A., Sadowski, Ł., & Žak, A. (2020). The chemical and microstructural analysis of the adhesive properties of epoxy resin coatings modified using waste glass powder. Applied Surface Science, 504, 144373.



- Szymanowski, J., & Sadowski, Ł. (2019). The influence of the addition of tetragonal crystalline titanium oxide nanoparticles on the adhesive and functional properties of layered cementitious composites. *Composite Structures*, 111636.

Collaborations:

- Ecole Centrale de Lyon (France),
- La Trobe University (Australia),
- University of Minho (Portugal),
- Universidade NOVA de Lisboa (Portugal),
- Brandenburg Technical University (Germany).

Facilities:

- 3D LASER morphological scanner
(<https://www.youtube.com/watch?v=XD1mQipkDF4>)
- NDT testing equipment.