



PLEA 2017 EDINBURGH

Design to Thrive

Materials and Carbon Accounting FORUMS (28+29)

Royal Society of Edinburgh (RSE): **Swann Room 10**

July 4th

| | TIME | min | | | | |
|--|-------|------|------|-----------|-------------|---|
| 10:00 - 11:00 Carbon and life cycle assessment of buildings | | | | | | |
| Chair: Francesco Pomponi | | | | | | |
| 1 | 10:00 | 0:08 | 0826 | Milena | Stevanovic | Evaluating the hospital building sustainability: Applying a screening LCA and LCC to the new general hospital in Mechelen |
| 2 | 10:08 | 0:08 | 0734 | Rosina | Rieder | Impact assessment of the criticality of raw materials on the realization of resource-efficient buildings |
| 3 | 10:16 | 0:08 | 1203 | Lindsay | Rasmussen | Addressing Embodied Carbon in High Performance Design |
| 4 | 10:24 | 0:08 | 0425 | Sweta | Haldar | Development of a Framework for Carbon Footprint Assessment of Building Construction Systems |
| 5 | 10:32 | 0:08 | 48 | Luisa | Brotas | The impact of building height and construction on life cycle analysis calculations |
| Ds | 10:40 | 0:20 | | | | DISCUSSION + Q&A |
| 11:00 - 12:00 Innovation in Materials | | | | | | |
| Chair: Sam Chapman | | | | | | |
| 8 | 11:00 | 0:08 | 0606 | Jan | Cremers | A new printed and spatial transformed ETFE foil to provide shading and to improve natural light and thermal comfort for membrane structures |
| 9 | 11:08 | 0:08 | 1170 | Adriana | Castro | Effects of Weather Exposure on Solar Reflectance of External Paintings |
| 10 | 11:16 | 0:08 | 1238 | Androniki | Giannatou | Low carbon clay-based external renders with significant waterproofing and Vapor Permeable properties |
| Ds | 11:24 | 0 | | | | DISCUSSION + Q&A |
| 12:30 - 13:30 Opportunities in Materials | | | | | | |
| Chair: Sam Chapman | | | | | | |
| 8 | 12:30 | 0:08 | 0339 | Keith | Baker | Seeing the miraculous in the common: Re-mainstreaming the use of sustainable building materials |
| 9 | 12:38 | 0:08 | 1653 | Irmak | Turan | From Sink to Stock: The Potential for Recycling Materials from the Existing Built Environment |
| 10 | 12:46 | 0:08 | 0387 | Ibrahim | Niang | Experimental characterization of an agromaterial based on Typha fibers and clay |
| 11 | 12:54 | 0:08 | 1242 | Yomna | Elghazi | Responsive Plant-inspired skins: A review |
| 12 | 13:02 | 0:08 | 0465 | Achilles | Ahimbisibwe | Vernacular Architecture: Volcanic Stone Construction as a Viable Alternative to Burnt Brick in Mountainous Areas of Southwestern Uganda. |
| Ds | 13:10 | 0 | | | | DISCUSSION + Q&A |