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of the European Union

Composite materials with high temperature resistance 300°C-1000°C having a cementitious matrix using industrial residues

MOSS composites is an SME located in Belgium

- produces composite products
- develops composite materials together with VUB, material physics and KUL MTM
- Participates in the SIM research program Mares "Materials from solid and liquid industrial process Residues" and SBO GHRANTE
- General information about our company
please visit : <https://www.moss-composites.com>

SINGAPORE

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Performing up to the task energy-effective and environmentally friendly materials using industrial residues

Development of new energy-effective and environmentally friendly materials using industrial residues, copper slag, GGBFS(,Ground-granulated blast-furnace), recycled glass, carbon fibre ,..

Development of a composite material with an inorganic cementitious matrix.

Development of Fiber(Virgin and recycled fiber) reinforced cementitious materials capable of resisting impact , high temperatures and fire resistance

Development of composite materials with an inorganic cementitious matrix, a matrix 4- 10.. cheaper than high end epoxy .. Polyimide resins

We want to turn these huge amounts of industrial residues : fayalite slag generated for the last decades in e.g. copper production , GGBFS, milled glass, carbon fibre ,(windmill blades)..into

- Useful construction materials
eg , flax , jute milled glass, milled carbon fibre , felt
- Advanced composites for high end application as an economical and at least equally performing alternative for existing expensive ceramic composite solutions
eg Astroquartz radomes hypersonic flight , Nextel thermal motor shields, battery cells thermal separators

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WHAT WE NEED

- Improving maturity and robustness of matrix precursor supply chain of industrial residues .
standardization , interchangeability of suppliers ,..
- Further development characterization technology of these materials at very high temperatures and extreme conditions , space orbit, impact ,blast, fire ,..
- Further development and research in matrix and fiber-matrix combinations
- Grants for demonstrator development for astroquartz radomes and Nextel motorshields as show case for the high end capabilities of these materials .
- Pilot production lines to show possibility of industrialization of the technology
- New material technologies are slow to adapt , known to destroy capital and thus carry high market risk :SME need co-venture capital and/or 100% Grants .