Math2Market GmbH

About this organisation

Die Math2Market GmbH wurde im September 2011 von den Entwicklern der GeoDict Software aus dem Fraunhofer Institut für Techno- und Wirtschaftsmathematik (ITWM) in Kaiserslautern ausgegründet. Dort wurde bereits von Andreas Wiegmann und seinem Team ab 2001 der Grundstein zu GeoDict gelegt.

Die Software GeoDict®, der innovative und einfach zu bedienende Materialsimulator, bietet die Komplettlösung zur Multi-Skalen 3D Bildverarbeitung, Modellierung von Materialien, Visualisierung, erfolgreichen Charakterisierung von Materialeigenschaften, simulationsgetriebenen Materialentwicklung und Optimierung von Prozessen. Ob für neu entwickelte oder bestehende Werkstoffe, computergestützte Simulationen mit GeoDict ermöglichen ein qualitatives und quantitatives Verständnis der geometrischen und physikalischen Eigenschaften von Werkstoffen. Einige der simulierten Eigenschaften sind im Labor nur schwer oder gar nicht messbar. Häufig zerstört der Labortest die Probe und macht sie für die Analyse anderer Eigenschaften unbrauchbar. Der Einsatz von Simulationen ergänzt und vervollständigt somit die Labormessungen und liefert nicht nur detaillierte Informationen, sondern auch neue Erkenntnisse.

Richard-Wagner-Str. 1
67655 Kaiserslautern
Rhineland-Palatinate
Germany
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Organisation type
Small or medium-sized enterprise

Sectors
No specific sector

Employees
10 up to 49

Turnover
€2m - €10m

Funding

Math2Market GmbH

About this organisation

Main areas covered	Materialsimulationssoftware
Infrastructure	
Certifications	
Keywords	
Memberships	Composites United e. V., Interpore

Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Offer			
Products			
Services & consulting Testing and trials, Prototyping, Validation, Simulation, Technology transfer	✓	✓	✓

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Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Field of technology			
Design & layout Lightweight manufacturing, Lightweight design, Hybrid structures, Lightweight construction concepts, Lightweight material construction	✓	✓	
Functional integration Material functionalisation	✓	✓	
Measuring and testing technology Visual analysis (e.g. microscopy, metallography), Materials analysis, Non-destructive analysis	✓	✓	
Modelling and simulation Loads & stress, Life-cycle analysis, Optimisation, Processes, Structural mechanics, Materials	✓	✓	
Plant construction & automation			
Recycling technologies			

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Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Manufacturing process			
Additive manufacturing 3D printing	✓	✓	
Coating (surface engineering)			
Fibre composite technology Fibre spraying, Filament winding, Casting (concrete), Manual lamination, Resin infusion process, Resin transfer moulding, Pre-preg processing, Spinning (concrete), Spraying (concrete), Vacuum infusion	✓	✓	
Forming			
Joining			
Material property alteration			
Primary forming			
Processing and separating			
Textile technology Fibre manufacturing, Yarn & roving production, Preforming, Nonwoven & mats production, Weaving, Knitting, laid web production	✓	✓	

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Overview of lightweighting expertise

	Research	Development	Manufacturing & Supply
Material			
Biogenic materials Bioplastics, Biocomposites, Wood	✓	✓	
Cellular materials (foam materials) Closed-pore, Open-pore, Syntactic foams	✓	✓	
Composites Aramid fibre composites, Basalt fibre-reinforced plastic, Glass-fiber reinforced plastics (GFRP), Ceramic matrix composite (CMC), Carbon-fiber reinforced plastics (CFRP), Short fibre-reinforced concrete, Metal-fibre-polymer composite, Metal-ceramic composite, Metal matrix composite, Nanocomposites, Natural fibre reinforced plastics (NFRP), Laminates, Particulate composites, Textile-reinforced concrete	✓	✓	
Fibres Aramid fibres, Basalt fibres, Glass fibres, Ceramic fibres, Carbon fibres, Metal fibres, Natural fibres	✓	✓	
Functional materials			
Metals Aluminium, Intermetallic alloys, Magnesium, Steel, Titanium	✓	✓	
Plastics Thermoset plastics, Elastomers, Thermoplastics	✓	✓	
Structural ceramics Monolithic ceramics, Non-oxidic ceramics, Oxidic ceramics, Ultra-high-temperature ceramics	✓	✓	
(Technical) textiles Yarns, rovings, Meshes, Laid webs, Crocheted fabrics, Woven fabrics, Knitted fabrics, Nonwovens, mats	✓	✓	

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Contacts

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