

## 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.

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🌐 [www.math2market.de](http://www.math2market.de)

The logo for Math2Market, featuring the word "MATH" in large red capital letters, a small "2" in red, and the word "MARKET" in smaller grey capital letters below it.

### Organisation type

Small or medium-sized enterprise

### Sectors

No specific sector

### Employees

10 up to 49

### Turnover

€2m - €10m

### Funding

The logo for GeoDict, with "GEO" in red and "DICT" in grey, both in capital letters.

## About this organisation

**Main areas covered**      Materialsimulationssoftware

**Infrastructure**

**Certifications**

**Keywords**

**Memberships**      Composites United e. V., Interpore

## Overview of lightweighting expertise

|                                                                                                                     | Research | Development | Manufacturing<br>& Supply |
|---------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------------------|
| <b>Offer</b>                                                                                                        |          |             |                           |
| <i>Products</i>                                                                                                     |          |             |                           |
| <b>Services &amp; consulting</b><br>Testing and trials, Prototyping, Validation,<br>Simulation, Technology transfer | ✓        | ✓           | ✓                         |

## Overview of lightweighting expertise

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

## Overview of lightweighting expertise

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

## Overview of lightweighting expertise

|                                                                                                                                                                                                                                                                                                                                                                                                                                           | Research | Development | Manufacturing<br>& Supply |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------------------|
| <b>Material</b>                                                                                                                                                                                                                                                                                                                                                                                                                           |          |             |                           |
| <b>Biogenic materials</b><br>Bioplastics, Biocomposites, Wood                                                                                                                                                                                                                                                                                                                                                                             | ✓        | ✓           |                           |
| <b>Cellular materials (foam materials)</b><br>Closed-pore, Open-pore, Syntactic foams                                                                                                                                                                                                                                                                                                                                                     | ✓        | ✓           |                           |
| <b>Composites</b><br>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 | ✓        | ✓           |                           |
| <b>Fibres</b><br>Aramid fibres, Basalt fibres, Glass fibres, Ceramic fibres, Carbon fibres, Metal fibres, Natural fibres                                                                                                                                                                                                                                                                                                                  | ✓        | ✓           |                           |
| <i>Functional materials</i>                                                                                                                                                                                                                                                                                                                                                                                                               |          |             |                           |
| <b>Metals</b><br>Aluminium, Intermetallic alloys, Magnesium, Steel, Titanium                                                                                                                                                                                                                                                                                                                                                              | ✓        | ✓           |                           |
| <b>Plastics</b><br>Thermoset plastics, Elastomers, Thermoplastics                                                                                                                                                                                                                                                                                                                                                                         | ✓        | ✓           |                           |
| <b>Structural ceramics</b><br>Monolithic ceramics, Non-oxidic ceramics, Oxidic ceramics, Ultra-high-temperature ceramics                                                                                                                                                                                                                                                                                                                  | ✓        | ✓           |                           |
| <b>(Technical) textiles</b><br>Yarns, rovings, Meshes, Laid webs, Crocheted fabrics, Woven fabrics, Knitted fabrics, Nonwovens, mats                                                                                                                                                                                                                                                                                                      | ✓        | ✓           |                           |

Contacts

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