Imagine Intelligent Materials is the leading Australian developer of graphene-based applications for industry. Imagine IM's solutions are delivered as master-batch and can be incorporated into geotextiles, geogrids, and geomembranes. Imagine IM's value proposition is to improve both product performance and profitability for its licensees.

The company was founded in 2014, to create disruptive solutions that utilise graphene and can be integrated into existing manufacturing processes. We enable the unique capabilities of graphene to be realized in geosynthetics.

More importantly our licensees achieve improved ROI while delivering technological solutions that meet increasing regulatory standards. We develop and specify the graphene chemistry and then monitor manufacturing processes to ensure product replicability. We are all about attention to detail.

Imagine IM’s certification model means participants in the supply chain can integrate graphene into manufacturing processes with confidence.

Our market entry product imgne™ X3 provides easy and inexpensive leak detection technology manufacturable at scale.

Graphene is the most electrically conductive material known. It has been proven to be impervious to all gases, deliver strength greater than steel and is harder than diamond. Graphene has controllable chemistry that also allows tailored interactions with other materials - such as hydrophobicity or hydrophilicity.

Contact us to learn more about how our graphene based products can help you.

Call today - 415 448 6090 or email info@imgne.com
Imagine IM: Geosynthetic Materials for the 21st Century

Regulatory requirements for landfill, dam and highway construction are increasing. Subsidence in embankments, dams, roads and railways is an expensive and sometimes dangerous occurrence.

Enter Imagine Intelligent Materials.

We use graphene to develop new solutions for the geosynthetic industry. Our proprietary graphene master-batch formulations transform familiar materials and make them “smart”. But that isn’t enough.

The Imagine Intelligent Materials’ certification and licensing business model means that graphene based materials are quality assured throughout the supply chain. We take the risk out of using graphene in manufacturing.

At the same time our master-batch approach to delivering solutions minimises manufacturing risk.

Our licensing partners are able to differentiate themselves from their competitors. Together we provide the market with cost effective next generation solutions. Everyone wins.

Graphene’s discoverers were awarded the Nobel Prize in 2010. Graphene is the first two dimensional “super-material”. It delivers extremely high electrical and thermal conductivity, high strength, tailorable hydrophilicity, and can be impermeable to gases.

Imagine IM is developing large scale sensing materials that allow real time monitoring of defects, strain, temperature and moisture. Our aim is to provide inexpensive ultra-large area sensing. Changes in the local environment cause graphene to change electrical resistance. Our technology maps zones in geosynthetic installations and reports on zones experiencing change. We are developing coatings for geosynthetics that will detect and map strain.

Imagine IM: Geosynthetic Materials for the 21st Century

Graphene is a material with amazing properties. These are only reliably delivered at scale with rigorous quality control and an understanding of the manufacturing processes in which the graphene is used. Imagine IM focuses on the end user’s needs and the manufacturing steps across the entire supply chain, from the feedstock graphite through to the coatings company and the installer.

To ensure quality assurance throughout the value chain, Imagine IM has developed the imgne™ Certification Program. The trademark is your guarantee of replicability of functionality.

imgne™ X3 is a graphene-based industrial coating designed to be applied to non-woven geotextiles. imgne™ X3 provides electrical conductivity, transforming ordinary geotextile into an ideal, simple to install, low cost leak detection system. No added materials, no complicated install. Just use existing electrical leak detection methods.

Coatings for Leak Detection

imgne™ X5 is a coating that transforms hydrophobic synthetic geotextiles into highly wetting materials. Where water transport is required, such as under roads, in embankments or for dewatering sludge and waste, imgne™ X5 for geotextiles delivers rapid wetting, low hydrostatic head and most excitingly, wicking, even against gravity.

Water Wicking and Wetting

Graphene Solutions

imagine Intelligent Materials and Certification Labs

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