Intellegens

Deep learning for industrial formulations and materials

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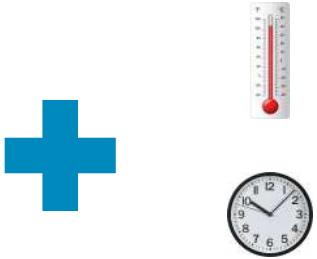
Optimize industrial formulations and materials

INGREDIENTS

PROCESSES



PROPERTIES

Strength
Conductivity
Cost
Weight
Environmental impact

Challenge

Contemporary materials design is **expert driven** and **iterative**

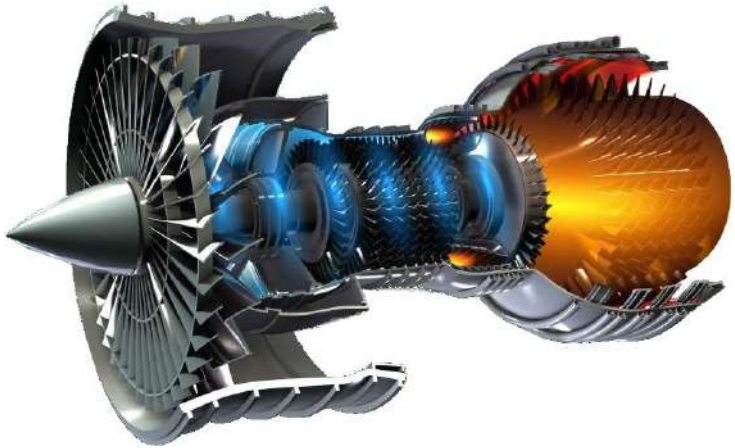
Identification and optimisation can cost **>$10m**

Our unique selling point

Unique deep learning tool for sparse and noisy data

Deliver an optimized, data driven R&D process creating reduction in cost and time to market

Application: alloys for jet engine



Accelerated discovery and validation to 2 years

Nickel alloys for discs

Molybdenum alloys for forging

Alloy for **additive manufacturing**

More details in patents and six papers:
https://www.intellegens.co.uk/paper.html

Traction and funding

Multiple **paid** projects across materials, chemicals, and drugs

Paid for **full stack solution** with major chemical company

Alchemite™ engine integrated with reseller, Optibrium, in pharmaceuticals

Team

Ben Pellegrini
CEO, co-founder

Dr Gareth Conduit
CTO, co-founder

Engineering

Dr Robert Parini
Head of platform

Sebas Higler
Developer

Commercial

Jamie Smith
Commercial director

Dr Andrea Olguin
Marketing manager

Sue Flatman
Financial controller

Scientific

Dr Tom Whitehead
Head of machine learning

Dr Mattia Cinelli
Scientist

Pavao Santak
Scientist

Board

Dr Elaine Loukes
University investor

Graham Snudden
Angel investor

Ben Pellegrini
Gareth Conduit

Funding objectives

Grow team to develop a **generic** platform

Develop **IP** strategy and portfolio

What we want from program

Collaborate with customer R&D teams on current advanced materials problems

Identify opportunities to develop **new material IP**

What Intellegens can bring to the program

Unique deep learning technology

Team experienced in delivering commercial benefit, here focusing on materials and processes for

- heat resistant & lightweight alloys
- composites
- processes for additive manufacturing

Information

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Website https://intellegens.ai
Inventor https://www.tcm.phy.cam.ac.uk/~gjc29/

Papers

https://www.intellegens.co.uk/paper.html

Demonstrator

https://app.intellegens.ai