



## GENERAL FUSION

INNOCENTIVE®

generalfusion

### CHALLENGE SPECS

CHALLENGE TYPE  
Theoretical

PROJECT ROOMS  
229 from 44 countries

SUBMISSIONS  
64 from 17 countries

CHALLENGE TYPE  
RTP

PROJECT ROOMS  
684 from 59 countries

SUBMISSIONS  
16 from 11 countries

CHALLENGE TYPE  
Ideation

PROJECT ROOMS  
201 from 44 countries

SUBMISSIONS  
46 from 18 countries

General Fusion is transforming the world's energy supply with clean, safe and abundant fusion energy. They ran a pilot of three Challenges with InnoCentive, each of different Challenge types and each focusing on different technical fields – plasma science, mechanical engineering and engineering physics. They ended up making a total of \$36,500 in awards to six Solvers, gaining valuable ideas from places they wouldn't usually look and receiving increased media interest in both General Fusion and their Challenges.

*"As a scientific company, we are experimental by nature and we wanted to experiment with crowdsourcing to see what kind of ideas we could get by going outside our organization and the more traditional avenues of problem solving."*

Brendan Cassidy, Open Innovation Manager at General Fusion

#### Method for Sealing Anvil under Repetitive Impacts against Molten Metal

- **Background:** General Fusion was seeking a new method to seal a metal cylinder and the metal surface of the cylindrical hole.
- **Result:** Awarded \$20,000 to MIT-trained mechanical engineer and inventor listed on 35 patents. General Fusion have since contracted the Solver to integrate his design into their specific setup.

#### Data-Driven Prediction of Plasma Performance

- **Background:** General Fusion was interested in identifying patterns in their experimental plasma shot data, asking Solvers to produce an algorithm capable of early prediction of overall shot performance. The Challenge included a live leader scoreboard and Solvers were provided with extensive data from one of General Fusion's experimental plasma injectors.
- **Result:** Awarded a total of \$6,500 to two Solvers, one from Italy and one from Canada. The latter was a technical Oscar winner for his work in Hollywood image processing - General Fusion are currently discussing possible future collaboration opportunities with them.

#### Fast Current Switch in Plasma Device

- **Background:** General Fusion was looking for a method to quickly and reliably induce a substantial current to jump a 5-10 cm gap within a few hundred microseconds.
- **Result:** Awarded a total of \$10,000 to three Solvers – two from the USA and one from Canada. The solutions were novel ideas that General Fusion had not previously considered.