Home > ... > FP7 >

Development of Foundry Casting Methods for Cost-Effective Manufacture of Medical Implants





Development of Foundry Casting Methods for Cost-Effective Manufacture of Medical Implants

Fact Sheet

Project Information		
MEDCAST		Funded under Specific programme "People" implementing the
Grant agreement ID: 251269		Seventh Framework Programme of the European Community for research, technological
Project closed		development and demonstration activities (2007 to 2013)
Start date 1 September 2010 31 Au	End date 31 August 2014	Total cost € 1 570 036,00 EU contribution € 1 570 036,00 Coordinated by DEPUY IRELAND UNLIMITED
		COMPANY I Ireland

Objective

This project will aim to advance the state of art in investment casting processes for medical devices by intersectoral cooperation between DePuy Ireland and University of Birmingham to develop the concept of the automated "Foundry of the Future".

Research would be carried out into the constituent process technologies, the workflow between them and the impact on the constituent materials. The objectives would be to achieve significant breakthroughs in the understanding of the processes to improve adaptability to new design requirements, reduce cycle time, increase quality yield, minimise human intervention and waste. Results should yield methods to improve new product design processes and hence to significantly reduce unit costs but most importantly allow for more complex medical products to be developed and produced in Europe. Technologies so developed would greatly enhance the effectiveness of European high level casting and promote further intersectoral research collaboration in this field. The partners have complementary skills and facilities. University of Birmingham (UoB) Mechanical Engineering Department is a leading Centre of Expertise in casting processes. DePuy Ireland is part of DePuy Corporation, a \$4.5 billion global entity in medical orthopaedic implants. DePuy employ 6000 people worldwide of which some 600 are employed in DePuy Ireland. It is part of Johnson and Johnson Corporation. New innovative concepts developed in UoB's laboratories can be tested under scaled up and automated conditions in DePuy Ireland's medical device foundry. The project is estimated to take 48 months to complete and is based exclusively on secondments with 16 researches being seconded from UoB to DePuy and 11 researches from DePuy to UoB.

Fields of science (EuroSciVoc) 3

engineering and technology > mechanical engineering

medical and health sciences > medical biotechnology > implants

6

Programme(s)

<u>FP7-PEOPLE - Specific programme "People" implementing the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007 to 2013)</u>

Topic(s)

FP7-PEOPLE-2009-IAPP - Marie Curie Action: "Industry-Academia Partnerships and Pathways"

Call for proposal

FP7-PEOPLE-2009-IAPP See other projects for this call

Funding Scheme

MC-IAPP - Industry-Academia Partnerships and Pathways (IAPP)

Coordinator



DEPUY IRELAND UNLIMITED COMPANY

EU contribution

€ 847 715,00

Total cost

No data

Address

LOUGHBEG P43 Ringaskiddy Ireland

Region

Ireland > Southern > South-West

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation C Website C Participation in EU R&I programmes C HORIZON collaboration network

Participants (2)

THE UNIVERSITY OF BIRMINGHAM

United Kingdom

EU contribution

€ 722 321,00

Address

Edgbaston

B15 2TT Birmingham 🛛 🗳

Region

West Midlands (England) > West Midlands > Birmingham

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation C Website C Participation in EU R&I programmes C HORIZON collaboration network

Total cost

No data



UNIVERSITY OF LIMERICK

Ireland
EU contribution

No data

Address

NATIONAL TECHNOLOGICAL PARK, PLASSEY

- Limerick 🛛 💕

Region

Ireland > Southern > Mid-West

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation C Website C Participation in EU R&I programmes C HORIZON collaboration network

Total cost

No data

Last update: 1 August 2019

Permalink: https://cordis.europa.eu/project/id/251269