

# DEPARTMENT OF MATHEMATICS COLLABORATE WITH KERRY



## BACKGROUND

AlphaGal™ is a unique enzyme, manufactured by Kerry that enhances the value of animal feed by improving digestibility and effectively lowering the overall cost of feed through less expensive raw materials.

## THE NEED

Kerry approached CIT Department of Mathematics to extrapolate relevant qualitative and quantitative data, which could be used to determine the impact of AlphaGal™ 280P on the performance and nutrient digestibility of broilers (chickens raised for meat production).

The collaboration with Kerry stemmed from CPD Workshops facilitated by Dr Seán Lacey, Dept of Mathematics, and delivered in Kerry's Global Technology & Innovation Centre in Nass, Co. Kildare.



## THE SOLUTION

Dr Lacey's meta-analysis was completed using 23 independent randomized controlled trials conducted worldwide. It confirmed with greater statistical significance that AlphaGal™ 280P, an  $\alpha$ -galactosidase based enzyme formulation, is an effective strategy for improving the performance and apparent metabolizable energy of broiler chickens.



## BENEFITS OF THE ENGAGEMENT

Sara Llamas-Moya PhD, Global Application Manager for Animal Nutrition and Pet Food at Kerry, said the collaboration has helped Kerry to translate the often difficult message from complex statistical analysis into a clear value proposition for their global animal nutrition enzyme product portfolio.

Dr Lacey's findings were displayed in poster form at the International Production and Processing Expo in Atlanta, Georgia in February 2019, with the results of the metaanalyses being published thereafter.

**"AS THE ANIMAL NUTRITION MARKET IS VERY TECHNICAL, HAVING THE SUPPORT OF DR LACEY AND THE DEPT OF MATHEMATICS AT CIT INCREASES THE CREDIBILITY OF THE SCIENCE THAT WE HAVE GENERATED FOR THIS INDUSTRY SEGMENT."**

**- Sara Llamas-Moya PhD, Global Application Manager for Animal Nutrition and Pet Food at Kerry.**