

# Dr Apostolos Papadopoulos

## Qualifications

Executive MBA, 10,000 Small Businesses Sponsored by  
Goldman Sachs Aston Business School, 2013 – 2014

PhD – School of Biosciences  
The University of Nottingham (Fully Funded by  
BBSRC), 2003 – April 2007

MSc Crop Science and Management  
The University of Nottingham (Fully Funded by ESF),  
2002 – 2003

BSc (Hons) Agriculture  
University of Plymouth (Seale-Hayne)  
1999 – 2002

BSc Extended Degree Agriculture  
University of Plymouth (Bicton College),  
1998-1999

## Nationality

Dual - British/Greek

## Year of Birth

1980

## Languages

English, Greek

## Contact

cwa@cwa.uk.com  
<http://www.cwa.international>  
+44 (0) 20 7242 8444

## Current Position at CWA

External Consultant

## Specific Expertise and Experience

Dr Papadopoulos has gained extensive knowledge on crop nutrition during his studies and working for several companies under the R&D Manager role. He has developed many formulations of fertilisers ranging from simple blends to complex agrochemical inputs. He has also developed and patented technologies that increase crop productivity sustainably. He has extensive knowledge and expertise in the area of biological products based on bacteria and enzymes that affect soil chemistry and plant uptake. His PhD in soil science linked with plant root effects on hydrology and chemistry has allowed a built up of expertise that allow a full understanding of

Page 1 of 6  
CWA International Ltd

the crop nutrient system. Further expertise has been developed in crop nutrient chemistry and photocatalysts.

## **Summary of Previous Employment**

**January 2012 – Current**

**Crop Intellect Ltd**

Director of R&D and CEO

Research and development for the discovery of new actives to improve agriculture and the environment. Increase efficiency of crop nutrient supply to crops enhancing the produce quality and reducing the environmental burden. Collaboration with multinationals to support their R&D interests for development of innovations that can be protected by patents. Performance of research and preparation of patents for submission. Proposal writing and coordination with other companies and subcontractors to obtain financial support for the R&D activities. Supporting the business development to promote the technologies and products in a global market. Strategic planning for the development of the market and technical marketing support for distributors and collaborators. Consultancy for specialised field and greenhouse trials to third parties for innovative products. Experienced in agricultural projects with sulphur reducing bacteria to study sulphide presence in waterlogged soils. Sulphur solubilising bacteria expertise from product trials under field condition. Extensive work on doped photocatalytic material to capture NO<sub>x</sub> and convert it to nitrate.

Dr Papadopoulos has gained extensive knowledge on crop nutrition during his studies and working for several companies under the R&D Manager role. He has developed many formulations of fertilisers ranging from simple blends to complex agrochemical inputs. He has also developed and patented technologies that increase crop productivity sustainably. He has extensive knowledge and expertise in the area of biological products based on bacteria and enzymes that affect soil chemistry and plant uptake. His PhD in soil science linked with plant root effects on hydrology and chemistry has allowed a built up of expertise that allow a full understanding of the crop nutrient system. Further expertise have been developed in crop nutrient chemistry and photocatalysts.

**2012 – Current**

**University of Lincoln**

Holding an Academic Honorary Position

Lecturer in Agriculture

Lecturing on crop nutrition and soil science at the BSc in Agriculture and the Environment course. Running practical training for crop and soil modules and supervising BSc and MSc projects. Proposing projects for the MSc students under Crop Intellect Ltd to link industry and academic experience for the students. Supporting with exams, external examinations and industrial collaborations for the University of Lincoln.

*Page 2 of 6*  
*CWA International Ltd*

**February 2010 – January 2012      Branston Ltd**

Research and Development Manager

Managing all R&D aspects, directing sales and technical of biocontrol products, development of specialty liquid fertilisers and biopesticides, increasing fresh produce self-life, adding value to by-products, research to provide new innovative products for supermarkets and improve existing, training and support to the agronomy team, GEP field and greenhouse trials for product evaluation, improving agrochemicals of other companies by providing customized innovative additives, UK & EU funding grants for research.

**August 2008 – January 2010      Plant Impact plc**

Project Manager in Research and Development

Managing R&D Projects, responsible for product efficacy trials, support the development of new agrochemical products, technical training for the sales team, scientific writing and funding proposal preparations and PR Support.

**April 2007 – August 2008      Lancaster University**

PostDoc – Environmental Sciences, Lancaster University - SuperGRaSS Project (Selected Genes for Grass Roots and Soil Structure) (BBSRC). Multidisciplinary Collaboration with IGER Aberystwyth, IGER North Wyke and Rothamsted Research. Aimed at reducing flooding by using grasses with long root traits and evaluating their ability to increase water percolation and changes in the soil structure for water flow.

**1996 – 1998 (Summers)      Developed Agriculture Ltd, Greece**

Assistant Agriculturist

Support the sales of agro-chemicals, Pest and disease diagnosis in the field, Agricultural advisor and article writer.

### **Selected Publications**

1. Papadopoulos A., 2019. Soil health and foliar fertilisers (Chapter). In: "Soil Health" by Springer.
2. Papadopoulos A., Bird N. R. A., Whitmore A. P. and Mooney S. J. 2014. Does organic management lead to enhanced soil physical quality? *Geoderma*. Vol. 213. P. 435-443.
3. Papadopoulos A., Bird N. R. A., Whitmore A. P. and Mooney S. J. 2011. Quantification of the differences in soil structure between organically and conventionally managed soils.

4. Papadopoulos A., Macleod C.J.A., Whalley W.R., Haygarth P.M., Humphreys M.W., Turner L.B., Skot L., Watts C. and Binley A. 2011. Quantification of temporal changes in soil structure induced by specially bred grass varieties using X-ray Computed Tomography.
5. Papadopoulos A. 2011. Organic farming, effect on the soil physical environment. p. 526-528. In: Glinski J., Horabik J., Lipiec J. 2011. *Encyclopedia of agrophysics*. 1<sup>st</sup> Edition. Springer, Netherlands.
6. Papadopoulos A. 2011. Soil aggregates, structure and stability. p. 736-740. In: Glinski J., Horabik J., Lipiec J. 2011. *Encyclopedia of agrophysics*. 1<sup>st</sup> Edition. Springer, Netherlands.
7. Crawley, A., Curtis, R., Birkett, M., Powers, S. Papadopoulos, A., Pickett, J., Blackshaw, R and Kerry, B. 2010. Signalling and behaviour of potato cyst nematode in the rhizosphere of the trap crop, *Solanum sisymbriifolium*. *Aspects of Applied Biology* 103: 45-51.
8. Turner, L. B., Macleod, C. J. A., Watts, C., Whalley, W. R., Binley, A., Papadopoulos, A., O'Donovan, S., Haygarth, P. M., King, J., Humphreys, M. W. 2010. Dissecting *Festulolium* chromosome 3 to locate rooting and drought resistance traits In: Sustainable Use of Genetic Diversity in Forage and Turf Breeding, Huyghe, C. (Ed.) Chapter 70, (Part 5), 471-477.
9. Gregory A.S., Macleod C. J. A., Webster C., Papadopoulos A., Haygarth P. M., Humphreys M. W., Turner L.B., Skot L., Watts C., Binley A., Whalley W. R. 2010. The effect of different grasses on soil hydraulic properties. *Soil Science Society of America Journal* 74: 753-761.
10. Papadopoulos A., Bird N. R. A., Whitmore A. P. and Mooney S. J. 2009. Investigating the effects of organic and conventional management on soil aggregate stability using X-ray Computed Tomography. *European Journal of Soil Science* 60 (3): 360-368.
11. Marks J. D. and Papadopoulos A. 2009. The synergistic activity of essential oils as an innovative botanical pesticide towards sustainable and safer crop protection: an *A. Gossypii* control example. Proceedings of the 5<sup>th</sup> International Conference on Biopesticides.
12. Papadopoulos A., Binley A. Macleod C. J. A., Haygarth P. M., Humphreys M. W., Turner L. B. and Whalley W. R. 2008. Quantifying temporal changes of soil structure affected by grass roots using X-ray Computed Tomography. Geophysical Research Abstracts, EGU, Vol. 10. EGU2008-A-01580.
13. Al-Raoush R., Binley A. and Papadopoulos A. 2010. Representative elementary volume analysis of porous media using X-ray Computed Tomography. *Powder Technology* 200:69-77.
14. Papadopoulos A., Whitmore A. P., White R. P., Mooney S. J. and Bird N. R. A. 2008. Combining spatial resolutions in the multiscale analysis of soil pore size distributions. *Vadose Zone Journal* 8:1-9.
15. Papadopoulos A., Mooney S. J., Whitmore A. P. and Bird N. R. A. 2008. Fractal analysis of pore roughness in images of soil using the slit island method. *Vadose Zone Journal* 7: 456-460.

16. Papadopoulos A., Mooney S. J. and Bird N. R. A. 2006. Quantification of the effects of contrasting crops in the development of soil structure: an organic conversion. *Soil Use and Management* 22: 172-179.
17. Papadopoulos A. and Alderson P. 2006. A new method for collecting isothiocyanates released from plant residues incorporated in soil. *Annals of Applied Biology* 151: 61-65.
18. Papadopoulos A., Bird N. R. A., Whitmore A. P. and Mooney S. J. 2006. The effects of organic farming on the soil physical environment. *Aspects of Applied Biology* 79, What will organic farming deliver? COR 2006, pp. 263-267. (ISSN 0265-1491)

### Scientific Activities

- Honorary Position at the University of Lincoln (2012 – current)
- Associate Editor of 5 Agricultural Scientific Journals
- Honorary Research Fellow – Lancaster University (2008-2011)
- Reviewer for journals”, “European Journal of Soil Science”, “Scientia Agricola”, “Soil and Tillage Research”, “Vadose Zone Journal”, “Soil Science Journal”, “Water, Air and Soil Pollution” “Journal of Agricultural Science”.
- Reviewer of research proposals for government funding for “Agriculture and Agri-food Canada” and “National Science Foundation”.
- Session organizer, Convener and Co-convener, EGU 2009 and 2008. “X-ray Computed Tomography in Geo-sciences: 3D visualization and quantification” Soil System Sciences, SSS37 & “Soil aggregates: a concept at different spatial and temporal scales” Soil System Sciences, SSS31, SSS30 (2008).

### Conferences

#### Oral Presentations

- November 2019. ICL Ltd. Polysulphate use in agriculture. Belton Woods, UK.
- Sept. 2018. Agritech Conference. London, UK.
- March. 2017. Research in Agriculture and the Environment. China.
- 20<sup>th</sup>-21<sup>st</sup> July. 2011. e-Agri: Preparing the Way for Europe, KTN/NERC, Manchester
- 7<sup>th</sup>-10<sup>th</sup> March. 2011. Innovation, Industry and Investment Workshop, International Agri-Technology Centre Ltd, Bangkok Thailand, UKTI.
- 26<sup>th</sup>-30<sup>th</sup> April. 2009. 5<sup>th</sup> International Conference on Biopesticides. IHC, India.
- 17<sup>th</sup> - 18<sup>th</sup> Sept. 2007. Inner Space: Science & Fiction of X-ray Tomography. University of Abertay, Dundee, UK.
- 19<sup>th</sup> - 22<sup>nd</sup> Aug. 2007. X-ray Computed Tomography of soil. University of Guelph, Canada.

- 15<sup>th</sup> - 20<sup>th</sup> April 2007. European Geosciences Union (EGU) General Assembly 2007. Vienna, Austria.
- 4<sup>th</sup> - 6<sup>th</sup> Oct. 2006. 11<sup>th</sup> Hellenic Soil Science Conference (Biennial). Arta, Greece.
- 9<sup>th</sup> - 15<sup>th</sup> July 2006. 18<sup>th</sup> World Congress of Soil Science. Philadelphia, USA.

CV ex CWA Website