

# **DR DAMIAN MARKHAM-SMITH**

## Director

Damian has a strong understanding of computational modelling having undertaken a PhD in computation fluid dynamics. In 2003 Damian joined Gifford as a graduate engineer and over a period of 15 years, first with Gifford, Ramboll and forty4consulting banner, gained significant experience working on a variety of projects across a range of sectors.

Damian headed-up computation modelling for Gifford and lead building sustainability for the Southampton office. His sector experience is wide ranging and includes industrial buildings, schools, offices, hospitals, museums, retail, residential, and public services.

Delivering sustainable holistic designs, looking at site characteristics, built form, renewable strategies and Part L, Damian has worked on a number of award winning projects including RHS Harrlow Carr Visitors Centre, Crouch Hill Primary School, The Novium Chichester District Museum, Crawley Library, Elm Court SEN School, The Victory School and the Mary Rose.

Damian was one of the first CIBSE accredited L2A Assessors, presented at the CIBSE conference (2006). He is a Level 5 accredited Low Carbon Energy Assessor and can undertake EPCs on any nondomestic building in England and Wales.

With a proven track record working within design teams either for end clients, architects, main contractors or M&E subcontractors, Damian takes a holistic approach, understanding the needs of clients and the project. He aims to meet client aspirations in a practical and cost effective manner, looking at projects from multiple viewpoints to achieve best outcomes.



#### CONTACT INFORMATION Damian Markham-Smith

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Damian also has a history of working with local academic institutes he is a Part Time Lecture at Portsmouth University and has guest lectured at Solent University and the Bournemouth Arts institutes all within the architectural fields. He has written for publications including the CIBSE Journal and the Telegraph, and has been quoted within Buildings magazine. He has presented at Sustainable Cities Portsmouth 2011 and has spoken at a number of events for organisations including RIBA, IMechE, CIBSE and Kier.



## CAREER

#### 2014 - Current Director – HDSgreentech Southampton

Set up and developed HDSgreentech including client development, marketing and technical delivery.

## 2013 - 2014

## **Director – Forty4consulting Southampton**

Set up and developed a southern base for forty4consulting including client development, marketing and technical delivery.

#### 2003 - 2013

## Graduate Engineer to Principal Engineer - Gifford / Ramboll

Worked way his way up from Graduate Engineer within the Building Science team to Principal Engineer heading up Computation modeling for the company and Building Sustainability for the Southampton office.

#### 1998

## Student Engineer, ICI

Worked within the Building Management team, undertook numerous roles assisting in the smooth operation of the international headquarters office.

#### 1996-1997

#### Student Engineer, Urbis Lighting

Worked within the design development section, worked on a number of roles including prototypes and produce evaluation.

## **EDUCATION**

1999-2003 Doctor of Philosophy – Computational Fluid Dynamics Brunel University, London, United Kingdom

#### 1995-1999

Bachelor of Engineering – Mechanical Engineering Brunel University, London, United Kingdom

#### **COURSES/CERTIFICATIONS**

CIBSE ESOS Lead Assessor, 2014 CIBSE Green Deal Advisor, 2013 CIBSE Low Carbon Design Engineer, 2008 CIBSE Low Carbon Energy Assessor, 2008 CIBSE Low Carbon Simulation Engineer, 2007



#### PROJECTS

2007-2011

## Tower Street Chichester District Museum Chichester District Council, United Kingdom Sustainability Engineer

 $\pounds$ 6.5m new build, review and advice on building strategies, thermal modelling, daylighting, analysis of build regulation and renewable energy strategies. Detailed assessment of the pros and cons of open loop GSHP.

## 2006-2008

## Crawley Library West Sussex County Council, United Kingdom Sustainability Engineer

New library and civic offices building opened in 2008. A landmark design, it is currently the most sustainable building in West Sussex. The building adopts low carbon fuel in the form of woodchip biomass for heating.

## 2006-2010

## Bramall Learning Centre, RHS Harlow Carr Gardens The Royal Horticultural Society, United Kingdom Sustainability Engineer

This project specifically develops the education program of the RHS by providing educational facilities for 10,000 children every year. The building is sited on the boundary of the existing garden and earth bermed to adapt to the existing garden contours. The building has won numerous Awards for its sustainable features.

## 2006-2009

## Bognor Secondary School West Sussex County Council, United Kingdom Sustainability Engineer

£30m new build secondary school. Advice on building strategy, orientation, ventilation, solar control. Review of renewable energy strategy, advice on how to achieve additional funding for sustainable design through the DCSF carbon calculation. Biomass scheme.

#### 2005-2008

## Lambeth SEN Schools Willmott Dixon, United Kingdom Sustainability Engineer

Refurbishment and large extension of existing SEN School Computational modelling, advising on environmental performance. Renewable viability. Part L2A and L2B Building Regulation compliance.



2008-2012

St Aldhelms – Church Hall Radipole Church Council Sustainability Engineer

£2m new build church connected to existing church. Advice on building strategy, orientation, ventilation, solar control. Review of renewable energy strategy, Computational modelling L2A as designed and as built.

2003-2013

# Mary Rose - The Final Voyage Mary Rose Trust, United Kingdom Sustainability Engineer

Use of computational software to undertake Computational Fluid dynamic simulations and thermal analysis of the space to maximise air movement and maintain strict design criteria. Undertook Part L compliance and EPC works and agreed sensible routes to compliance with building control for a unique building.

# **TEACHING EXPERIENCE**

2014 - current Part Time Lecture, Portsmouth University - School of Architecture 2008-2013 Guest Lecture, Portsmouth University - School of Architecture 2008-2011 Guest lecture, Solent University - Architectural Technologists 2009-2010 Guest lecture, Bournemouth Arts Institutes - Department of Architecture