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Royal Society – Wolfson Research Merit Award holder (2012-2017)
EPSRC Established Career Fellow (2014-2019)
Fellow of the Society for Experimental Mechanics, 2013
Editor-in-Chief, Strain (Wiley), 2010-

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- 1989** Engineering Degree from École Nationale Supérieure d'Électricité et de Mécanique in Nancy (France), major in Mechanical Engineering.
 - 1990** Master of Science (DEA) in Mechanics and Thermodynamics from Institut National Polytechnique de Lorraine (with honors).
 - 1994** PhD (Doctorat) in Macromolecular Materials and Composites from Lyon I University, France, obtained with the highest grade.
 - 1998** 'Habilitation à Diriger les Recherches' (HDR) from Clermont-Ferrand University, France (French degree necessary to supervise PhD students and apply for professorships).

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- 2012-** Professor at the University of Southampton (Chair of Solid Mechanics).
 - 1999-2012** Professor at École Nationale Supérieure d'Arts et Métiers (ENSAM) in Châlons en Champagne (France).
 - 1994-1999** Assistant-professor at École Nationale Supérieure des Mines de Saint-Étienne (France), in the Mechanical and Materials Engineering Department.

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- Head of Engineering Materials Research Group (2015-)
 - Head (1999-2008) of the Mechanical Engineering and Manufacturing Research Group (LMPF, certified by the French Ministry for Research, www.lmpf.net). I created this research group from scratch at ENSAM Châlons when I arrived in 1999 (there was no research there at that time).

University of Southampton

- 2012-: Year 1 solid mechanics (FEEG1002). Basics of solid mechanics, stress, strain, elasticity. Class of 450+ students.
- 2009-: MSc (SESG6031, then SESG6045) Experimental Mechanics course.
- 2012-: Year 4 Group Design Project, Year 3 individual project and MSc project supervision.

- Mechanical testing of materials.
- Composite materials and structures.
- Full-field deformation measurements: the grid method (including deflectometry), speckle interferometry, digital image correlation, digital volume correlation, magnetic resonance elastography, noise smoothing for strain derivation, metrology (resolution, spatial resolution), including measurements at the microscopic scale.
- Inverse problems concerning the identification of mechanical parameters from mechanical tests. Includes specific approach for full-field measurements (Virtual Fields Method).
- High strain rate testing of materials, including high-speed deformation imaging.
- Infrared thermography and thermomechanical couplings.

- Co-founder of the MatchID company, commercial DIC/VFM software platform, www.matchidmbc.com.

- 2010 SAGE Best Paper Award for the paper:
Pierron F., Identification of Poisson's ratios of standard and auxetic low density polymeric foams from full-field measurements, *Journal of Strain Analysis for Engineering Design*, vol. 45, n° 4, pp. 233-253, 2010.
<http://dx.doi.org/10.1243/03093247JSA613>
- Royal Society Wolfson Research Merit Award, 2012.
- Appointed SEM Fellow (Society for Experimental Mechanics), 2013.
- BSSM Measurement lecture (2015).

Current PhD supervision

- Principal supervisor for: Mr Aleksander Marek, Ms Sarah Dreuilhe, Ms Sari Octaviani.
- Co-supervisor for: Mr Palaniappan Jaya Seelan, Mr Alex Marter, Mr René Kaufmann.

Past PhD supervision

- Principal supervisor of 14 and Co-supervisor of 6 graduated PhD students.

- European grant holder, sectorial grant of the BRITE/EURAM programme (18 months). 1990 – 1992 (PhD thesis).
- Optimisation of the coating and machining procedures of refractory alloys for forging matrices (OPTIMAT), 428 k€(2002-2004) – PI. Champagne-Ardennes Regional Council.
- Development of a methodology of full-field kinematic data processing by inverse analysis in order to identify the mechanical properties of interfaces and surface coatings, 75 k€(2002-2003), Co-I. French Ministry for Research (ACI project).
- Novel methodologies for the identification of composite material mechanical properties from full-field optical measurements, £45k (2004-2005), Invited Researcher. EPSRC GR/T07213/01.
- Full-field measurement at the micro and nanoscales (NANODEF), 577 k€(2004-2006), Co-I. Champagne-Ardennes Regional Council.

- Development and optimisation of a new type of concrete (DONBAP), 237 k€(2006-2008), Co-I. Champagne-Ardennes Regional Council.
- Photomechanics: innovative strategies for the identification of the constitutive behaviour of materials (Photofit), 266 k€(2006-2008), PI. French Ministry for Research (ANR project).
- Identification of the mechanical behaviour of superconducting materials and structures, 134 k€(2009-2001), PI. CEA Saclay, France.
- Exploration of novel heterogeneous multi-axial high strain rate tests of materials, 204k USD (2014-2016), PI. US Air Force EOARD FA8655-13-1-3041.
- Innovative photomechanical approaches in identification of the dynamic mechanical behaviour of materials, £1.2M (2014-2019), PI. EPSRC Established Career Fellowship EP/L026910/1..
- Rooting for sustainable performance, £615k (2015-2019), Co-I. EPSRC EP/M020177/1.
- Novel imaging procedures for the identification of the high strain rate behaviour of soft materials, 230k USD (2015-2016), PI. US Air Force EOARD FA9550-15-1-0293.

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- Editor-in-Chief, *Strain* (Wiley), July 2010 -
 - Associate Technical Editor for *Experimental Mechanics*, Springer (2009-2011)
 - Associate Technical Editor for *Mécanique & Industries*, EDP Sciences (2009- 2010)
 - Member of the Editorial Council of the international journal “*Strain*” (Blackwell Publishing). Composed of 5 academics, it helps the Editor-in-Chief with strategic issues. About two meetings per year (2007-2010)
 - Member of the Editorial Board of the international journal “*Strain*” (Blackwell Publishing). About two meetings per year (2005-)
 - Guest editor for the *CompTest2003* (vol. 35, n° 7-8, 2004), *CompTest2004* (vol. 37, n° 2, 2006), *CompTest2008* (vol. 40, n° 12, 2009) and *CompTest2015* (ongoing) special issues of the journal “*Composites Part A*” (Elsevier).
 - Guest editor (with Y.-L. Lo, Taiwan) for a special issue of *Experimental Mechanics* (Springer) on Inverse problems in experimental mechanics (vol. 48, n° 4, 2008).
 - Guest editor for a special issue of *Composites Part A* (Elsevier) on full-field measurements applied to composites (vol. 39, n° 8, 2008).
 - Guest editor for a special issue of *Royal Society Phil. Trans. A* dedicated to 100th anniversary of the Hopkinson bar.

Studies and sabbaticals abroad

- 1988-1989: final year student at the University of Bath (Mechanical Engineering) as part of my engineering curriculum in France (exchange student).
- 1990: 6 months stay at the Department of Materials Science of the University of Bath for my DEA (MSc) research project. Supervisors: Prof. Bryan Harris and Prof. Alain Vautrin.
- 1990-1992: 18 months (12 + 6) at the Department of Materials Science of the University of Bath for my PhD through a European BRITE/EURAM grant. Supervisors: Prof. Bryan Harris and Prof. Alain Vautrin.
- 1 year sabbatical at the University of Bristol (UK), 2004-05. Department of Aerospace Engineering (Prof. M.R. Wisnom).

Student exchange management

- Director of ENSAM double degree programme with the UK (MSc level) at the national level. 35 final year students sent each year to MSc courses in the UK (Imperial College, Bristol, Cranfield etc.)

- Broad experience of undergraduate student exchanges (ERASMUS/SOCRATES, UK, USA, Germany etc.), first at Ecole des Mines, then at ENSAM.
- From 2006 to 2012: management of the final year project abroad of 16 students per year at Arts et Métiers ParisTech. All students placed worldwide using my own research contacts.

Teaching

- Participation as lecturer to the ERASMUS ICP-93-B1040/06 intensive course entitled “Analysis, Design, Manufacturing and Testing of a Composite Structural Component” (1 week). Course held at the University of Kaiserslautern in 1995 and 1996 and organized by me in 1997 in St-Etienne. Exercises on classical lamination theory and project on prediction of composite failure.
- Participation to a BSSM intensive course on experimental mechanics since 2010 at the University of Southampton, UK (also SESG6031 MSc course). Lectures on optics, grid method, interferometry, smoothing and strain calculations and data processing with the virtual fields method. Practical lab on the grid method and practical full-field data processing.
- Co-organizer with Dr Pascal Lava (KU Leuven, Ghent campus, Belgium) and Dr Philip Reu (Sandia National Laboratory) of international training sessions on Digital Image Correlation diccourse.matchid.org. 20 students, January 13-16 2014, January 12-16 2015 and January 11-15 2016 in Ghent, Belgium and 13-17 June 2016 in Philadelphia, USA.
- Lecturer in the 2015 CISM course entitled ‘Modelling, simulation and characterization of multi-scale heterogeneous materials’, Sept. 28 – Oct. 2 2015 in Udine, Italy.

Research

- Wide range of international research collaborations (Bristol, Loughborough and Southampton Universities, UK, University of South Carolina, USA, Washington University in St Louis, USA, UTAD University in Vila Real, Portugal, Aalborg University, Denmark, PosTech, Korea, etc.), including formal collaborations through EPSRC funded contracts (UK) and joint publications.
- International training courses on the Virtual Fields Method
 - One day course at the annual SEM conference from 2005 to 2008, and in 2012 and 2015. About 15 participants each year.
 - Two-day course at Loughborough University, organized by BSSM (British Society for Strain Measurements), June 2006. 10 participants.
 - One day course at the next Photomechanics conference in Loughborough, July 2008, <http://www.lboro.ac.uk/departments/mm/conferences/photomechanics/>
 - One day course at the University of Ancona (Italy), 21st January 2009.
 - One day course at the UTAD University in Vila-Real, Portugal, 8th July 2013 (25 participants)
 - Two-day course at IIT Madras, India, February 2015. 30 participants.

Conference organization

CompTest conferences

- Co-Chairman and organizer of the first “Composites Testing and Model Identification” (CompTest2003) conference held in January 2003 in Châlons en Champagne (France) Invited editor for a CompTest2003 special issue of the journal “Composites Part A” (vol. 35A, n° 7-8, 2004).
<http://www.camfit.fr/comptest2003/>
- Co-Chairman of the “Composites Testing and Model Identification” (CompTest2004) conference held in September 2004 in Bristol (UK) – 140 participants from 25 countries.
<http://www.aero.bris.ac.uk/comptest2004/>

- Co-Chairman of the “Composites Testing and Model Identification” (CompTest2006) conference held in April 2006 in Porto (Portugal).
<http://paginas.fe.up.pt/comptest2006/>
- Co-Chairman of the “Composites Testing and Model Identification” (CompTest2008) conference held in October 2008 in Dayton (Ohio, USA).
<http://academic.udayton.edu/stevendonaldson/comptest2008.html>
- Co-Chairman of the “Composites Testing and Model Identification” (CompTest2011) conference held 14-16 February at EPFL in Lausanne, Switzerland.
<http://comptest2011.epfl.ch/>
- Co-Chairman of the “Composites Testing and Model Identification” (CompTest2013) conference to be held 22-24 April 2013 in Aalborg, Denmark.
<http://www.comptest2013.dk/>
- Co-chair of the organising committee of the national meeting of the University Mechanics Association (AUM), 31 August to 1 September 2000 in Troyes.
- Co-chair of the organizing committee of the French Conference on Mechanics (1200 participants) held in Troyes in September 2005.
<http://www-cfm2005.utt.fr/>
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Others

- Chair of the joint Dymat/IOP conference on high speed imaging for materials and structures, to be held at the IOP in London, 22-24 November 2013. 73 participants from 13 countries.
<https://www.eventsforce.net/iop/frontend/reg/thome.csp?pageID=113753&eventID=279&eventID=279>
- Co-chair of the 16th International Conference in Experimental Mechanics (ICEM16, conference of the EURASEM, www.icem16.org) held 7-11 July 2014 in Cambridge, UK. 500 participants.

Workshops

BSSM (British Society for Strain Measurements, www.bssm.org)

- Chairman of the workshop on “Experimental mechanics in biological tissues”, 23rd June 2009 in Loughborough, UK.
- Co-chairman of the workshop on “New Approaches for Performance Definition of Composite Materials and Structures”, 11 March 2010 at NPL in Teddington, UK.
- Co-chairman of the showcase on “High speed imaging”, 23rd November 2010 at NPL in Teddington, UK.
- Co-chairman of the workshop on “State of the art and future challenges in X-ray computed tomography for material mechanical behaviour assessment”, 26th January 2012, University of Southampton, UK.
- Co-chairman of the showcase on “Leading edge experimental techniques”, 3rd and 4th November 2014, National Physical Laboratory, London. In celebration of the 50th anniversary of BSSM.

Invited research seminars

- ENSAM Paris (France), 21st March 2001 (Prof. Jacques Verdu)
- INSA Rouen (France), 29th November 2001 (Prof. Edoardo Souza)
- The Open University (UK), 9th December 2004 (Dr Salih Güngör).
- Loughborough University (UK), 14th December 2004 (Prof. Jon Huntley)
- Southampton University (UK), 16th December 2004 (Prof. Janice Barton)
- Sheffield University (UK), 2nd March 2005 (Prof. Costas Soutis)
- Reading University (UK), 23rd June 2005 (Prof. George Jeronimidis)
- University of Technology of Compiègne (France), 10th November 2005 (Prof. Pierre Villon)
- ONERA Lille (France), 15th June 2006 (Dr Bertrand Lengrand)

- EPFL (CH), 23rd June 2006 (Prof. John Botsis)
- ONERA Châtillon, 2nd April 2008 (1 day short course)
- University of Glasgow (UK), November 2008 (Prof. Margaret Lucas)
- University of Cardiff (UK), September 2009 (Prof. Karen Holford)
- University of South Carolina (USA), February 2010 (Prof. Mike Sutton)
- University of Texas at Arlington (USA), February 2010 (Prof. Erian Armanios)
- University of Exeter (UK), March 2010 (Dr Chris Smith)
- Oxford University (UK), May 2010 (Dr Clive Siviour)
- Aalborg University (DE), 19th January 2011 (Prof. Ole Thybo Thomsen)
- Ecole Centrale de Nantes (France), 24th February 2011 (Prof. Arnaud Poitou)
- Bath University (UK), 7th April 2011 (Dr Richard Butler)
- Southampton University, 1st April 2011 (Prof. Janice Barton)
- Beijing University of Technology (China), 21 October 2011 (Prof. Pengwan Chen, Shock Physics/Chemistry group)
- Tsinghua University (China), 21 October 2011 (Prof. Huimin Xie)
- Cavendish Laboratory, University of Cambridge (UK), 24 May 2012 (Dr Stephen Walley)
- CalTech (USA), 8 June 2012 (Prof. G. Ravichandran)
- Sandia National Laboratories (USA), 6 June 2012 (Dr Phillip Reu / Dr Sharlotte Kramer)
- University of Technology of Troyes, 20 December 2012 (Prof. Khemais Saanouni)
- Cardiff University (UK), 30th January 2013 (Prof. Stéphane Bordas)
- TWI (Cambridge, UK), 12 February 2013 (Dr Marcus Warwick)
- University of Bristol (UK), 12th March 2013 (Prof. Michael Wisnom)
- Sherbrooke University (Canada), 26th March 2013 (Prof. Alain Berry)
- Polytechnique Montréal (Canada), 27th March 2013 (Prof. Martin Lévesque)
- University of Wisconsin Madison (USA), 20th August 2013 (Prof. Wendy Crone)
- Forest Product Laboratory (Madison, USA), 20th August 2013 (Dr John Considine)
- Cardiff University (UK), 14th September 2014, Newport and District Material Society presentation (Prof. Sam Evans)
- Rennes University (France), 6th May 2015 (Prof. J.-B. Le Cam)
- Johns Hopkins University (USA), 2nd June 2015 (Prof. KT Ramesh)
- Drexel University (USA), 3rd June 2015 (Dr Leslie Lamberson)

Affiliation to Societies

- British Society for Strain Measurement (BSSM)
 - Co-opted as member of the National Technical Committee (NATCO), 2006-2014.
 - Member of the SATCO committee (workshop and seminars), 2009-2014.
- Society for Experimental Mechanics (SEM)
 - President of the Technical Division entitled “Inverse Problem Approaches” (2007-2009).
 - Member of the Executive Board (2009-2011).
- Institute of Physics (IOP, UK).
- DYMAT

Book on the Virtual Fields Method (2012)

<http://www.springer.com/materials/mechanics/book/978-1-4614-1823-8>

International refereed journal articles: 102

h-index: 31 (Scopus, March 2016)

List of publications on <http://www.researcherid.com/rid/D-2332-2011>