

Candidates for At-Large Directors : 2017 Elections

Dru Crawley

I have been an At-Large Director on the IBPSA board since 1998, IBPSA Regional Affiliate Liaison/Chair of Regional Affiliate Development Committee since 2006, was IBPSA board Secretary 2006-2010, and an IBPSA Fellow since 2013. I am also Vice President (2017-2019), past Treasurer (2013-2017) and At-Large Director of IBPSA-USA since 2013. I have been on the scientific committees of Building Simulation conferences from 1993-2015 and on the organizing or scientific committees for multiple SimBuild, eSim, and BSO conferences.

I serve on multiple ASHRAE technical and standards committees (TC 4.7 Energy Calculations, TC 4.2 Climatic Information, others; Standards 90.1, 140, 169, 189.1, 209P, others). I am Vice Chair of the US Green Building Council's LEED Energy and Atmosphere TAG (2013 to 2018, 2007 to 2009).

I have used building simulation since my university days to support research at PNNL, US EPA, US Department of Energy, and Bentley Systems. At DOE, I managed building simulation development– DOE-2, OpenStudio, and others; and initiated and lead EnergyPlus development for 15 years.

I founded and managed the Building Energy Tools Directory at DOE. I co-authored the EPW neutral climatic data format and ensured climatic data was widely available (20 simulation programs now read EPW). I co-founded <http://Climate.OneBuilding.org>, providing high quality climatic data from around the world.

On the IBPSA board, I have focused on growing IBPSA membership. I believe that IBPSA will increase the prominence of building simulation throughout the world. Although IBPSA has grown to 4000 members, many simulation practitioners still do not know that IBPSA has resources that can make their work more productive. We must grow beyond IBPSA's traditional core of building energy simulation to embrace other disciplines – lighting, acoustics, and even building design and construction simulation. Building knowledge of IBPSA and its resources is critical for IBPSA over the next years.

Matthias Haase

I am Co-founder of IBPSA-Nordic, the Nordic affiliate of IBPSA for four countries Denmark, Finland, Norway and Sweden (in 2011); IBPSA-Nordic board member since then.

I am working actively in IBPSA-Nordic as secretary as well as chairing the WG Education. I am interested in teaching issues and dissemination. I co-organized several IBPSA-Nordic events (BuildSim-Nordic 2012 and 2016 as well as IBPSA-Nordic Simulation seminars in co-operation with the Nordic HVAC association in 2012, 2014 and 2016.

My aspiration to represent IBPSA-Nordic in IBPSA-World Board was rewarded in 2015 when I was elected as Director-at-Large. Since 2016 I am chairing the IBPSA Project committee as well as participating in publication and Communication committee.

I would like to continue my contributions in IBPSA Board as Director-at-Large.

With more than 20 R&D projects in SINTEF (2007-2014) I am an experienced international project manager; participation in 8 EU-projects and 2 IEA projects. Since 2014 I am mainly involved in EU project management.

From 2010 – 2014 I was Associate Professor at Norwegian University of Science and Technology (NTNU), Department of Architectural Design, History and Technology, Trondheim, Norway.

My work included teaching (on BA and MSc level) Building physics, Energy calculation methods and regulations, building performance simulation, Integrated Energy Design, Building simulation software (with practice in lab) and the supervision of 5 PhD students in various fields and 10 MSc students in Sustainable Architecture at NTNU.

In my PhD research topic (2003-2007): Double-skin facades for hot and humid climate I was trying to find a climate responsive approach using CFD as well as dynamic building simulation and developed a tool for double-skin facades for design.

After first degrees in 1995 (B.Sc. and Dipl.-Ing.) I gathered 7 years experience in project management and consultancy in German construction industry, mainly focus on daylight, glare and energy simulations 1996-2002.

Christina Hopfe

I am a chartered engineer, a Fellow of CIBSE, and a Fellow of the HEA. I am a Senior Lecturer in Sustainable Building Design at Loughborough University (LU), England. In my role at Loughborough I am also the Programme Leader for Low Carbon Building Design and Modelling and the LU Director of the RAENG Centre of sustainable design.

My expertise covers areas, such as: uncertainty and sensitivity analysis; decision support techniques in the design process also under the consideration of uncertainties; new techniques in the optimization of buildings (multi-objective optimization techniques, meta-models) in BPS. I have been teaching modules in building performance simulation and low carbon design/ modelling the past 9 years. I am currently supervising nine PhD students conducting research in the BPS domain.

I have published numerous papers on topics related to BPS. My work on uncertainty analysis in BPS for design support has been widely cited. I have also co-edited a special edition of IBPSA Journal of Building Performance Simulation on the combined treatment of heat and moisture transfer.

I have been the IBPSA Newsletter Editor-in Chief since 2011, a member of the communication committee since 2011, and the project committee since 2015. Since 2016, I have also been responsible for the IBPSA modelling competition.

In my capacity as Editor-in Chief of IBPSA News and as an At-Large Director during the past three years, I have gained a broad understanding of the workings of IBPSA and its affiliates. I would like to continue serving IBPSA through an active engagement on its Board of Directors.

Lori Barbara McElroy

Experience:

Throughout my career, I have championed routine use of simulation in design practice – initially as a practitioner and later by transferring modelling from research to practice. I was principal investigator on two associated European and UK funded research projects, one of which became IBPSA Scotland. I am now Director of Building Energy Performance and Research at the Building Research Establishment in Scotland, working with our Centre at Strathclyde University to encourage greater uptake of modelling. I have a PhD in Embedding Simulation in Design Practice.

Contributions:

I have participated in IBPSA since 1997 as presenter, session chair or reviewer. I am a founder member of IBPSA Scotland and became Affiliate representative in 2001 and have been a Board member since then, Chairing the Awards Committee from 2005 until 2012; as Secretary from 2009 until 2015, working with Communications and Web Committees on improved outreach to the membership; in 2015 became IBPSA Vice President and Chair of the

IBPSA Development Committee, working with the Futures Committee to consolidate a sustainable future for IBPSA. I co-chaired BS2009 in Scotland.

Aspirations:

I believe that better buildings can improve people's lives, but that achieving this requires technical rigour, an understanding of how buildings work and what people want from them. Simulation has a key role to play and this can be pursued through IBPSA. My experience demonstrates my commitment and determination to make a difference. My current job provides scope to pursue this. To this end I am currently researching a potential IBPSA approach to Quality Assurance in modelling.

Through previous Board roles, I have good working knowledge of the range of distinguished and new IBPSA talents. I would work towards greater diversity on the Board, with more women and younger contributors actively participating. I will work to promote and support this as an IBPSA objective.

Liam O'Brien

Since I discovered the world of building performance simulation through the DOE Software Tools Directory during a completely unrelated graduate degree (Aerospace Engineering) about a decade ago, I knew I'd found my calling. This led me to a PhD in Building Engineering, which focused on developing a design tool for solar houses. Since my PhD, I have aspired to contribute to IBPSA and the BPS community through education, research, and community outreach.

Now as a professor, I lead a research group called the Human Building Interaction Lab, which is focused on modelling, designing, and controlling buildings for occupants. Since 2007, my graduate students and I have published over 80 peer reviewed articles on BPS-related topics and have won several prestigious research awards. At the undergraduate level, I teach two courses – Green Building Design and Indoor Environmental Quality - that rely heavily on development of building models and use of BPS tools.

I had been on the IBPSA-Canada board for the past five years, during which I served as Vice President for two years and President for the past three years (my term lasts until May 2018). In 2014, I chaired IBPSA-Canada's biennial conference, eSim. During my terms on the IBPSA-Canada board, we've seen enormous growth in eSim participation (10-60% year-over-year increases). Moreover, we have remained one of the largest IBPSA Affiliates and have spawned four local IBPSA Chapters across the country. These chapters hold regular networking events, seminars, and discussions on local BPS and code issues. In my term as President of IBPSA-Canada, I am seeking to tighten the BPS community in Canada through more regular communication and newsletters and develop a white paper on the state and future directions of BPS education in Canada.

Veronica Soebarto

Relevant experience and achievements:

I am the first female recipient of IBPSA Outstanding Young Contributor Award. Since 1995 I have presented papers at Building Simulation (BS) Conferences. One of my journal articles, extended from a BS1999 paper, co-authored by Terry Williamson, "Multi-criteria Assessment of Building Performance: Theory and Implementation" (Building & Environment) receives more than 120 citations to date.

I have been teaching building performance simulation (BPS) within the architecture and building engineering disciplines for around 20 years. I am one of the very few people in Australia who teach BPS at a tertiary level. I also supervise PhD students whose research relating to BPS.

Contributions:

I was the convener of IBPSA Australasia (1999-2006). In 2006 I held the first IBPSA Australasia fully-refereed

conference. In 2007 I served as a member of IBPSA (World) Public Relations Committee. I was the Editor-in-Chief of IBPSA News (2009 -2011) and have been the Chair of the IBPSA Communications Committee since 2011.

I have been member of the Scientific Committees of BS conferences, was the Chair of the Executive Scientific Committee of BS2011 in Sydney, and an Executive Scientific Committee member of BS conferences in 2013 and 2015. I am also a member of the Editorial Board of Journal of Building Performance Simulation.

Aspirations:

As someone with an architecture background, my aim is to bring BPS closer to the architecture profession, through initiating/fostering communication, becoming one of the 'agents' to bridge the gap between BPS and architecture, and providing insights from the architecture profession to IBPSA in developing training/education material. I would also like to see that BPS becomes one of the key knowledge and skills that architecture and building engineering students and graduates possess, and would like to contribute my thinking to achieving this goal through my role as an IBPSA Director.

Michael Wetter

Experience:

For IBPSA, I have been Treasurer (2010-2016), Member of Board of Directors (since 2010) and Chair of the College of Fellows (since 2015). For IBPSA-USA, I have served as Member of Board of Directors (2006-2014), Vice President (2008-2010) and President (2010-2012). For the Building Simulation conferences, I am the Scientific Committee Co-Chair (2017), and have been Member of the Scientific Committee of all conferences since 2009. For IBPSA-USA's SimBuild Conferences, I have been Co-Chair of the Scientific Committee (2008) and Member of the Scientific Committees (2010, 2012, and 2014).

I have been member of ASHRAE since 2002, member of Modelica Association since 2008 and member of Board of Directors, North America Modelica Users' Group, since 2013.

Achievements:

At LBNL I am developing the Modelica Buildings library, the rearchitecture of the EnergyPlus Engine (Spawn of EnergyPlus), the OpenBuildingControl platform, the Building Controls Virtual Test Bed, co-simulation tools based on the FMI standard and the GenOpt optimization program. I am the co-operating agent of the IEA EBC Annex 60 (2012-17) that develops open-source tools based on Modelica and FMI for building and community energy systems. I am also the co-operating agent of IBPSA Project 1, which continues some of Annex 60's work as the first R&D project conducted under the umbrella of IBPSA. I am a recipient of the Outstanding Young Contributor Award of IBPSA and a Fellow of IBPSA.

Aspirations for IBPSA:

My aspiration is to transition IBPSA from a volunteer to a semi-professional organization as needed to remain the key organization in building simulation. I plan to give input directly and through the College of Fellows as requested by the Board. I will also contribute to this transition through leading its first R&D project called IBPSA Project 1, to be conducted from 2017 to 2022 (<https://ibpsa.github.io/project1/>).