

## **Candidates for At-Large Directors: IBPSA 2018 Elections**

**Name: Charles S. "Chip" Barnaby**

### **Statement**

I have been involved in IBPSA since its founding. The association has evolved by incrementally adding initiatives, including the Building Simulation conferences, the Newsletter, the Journal of Building Performance Simulation, and the Awards program. The next Board must both maintain these activities at a high quality level and add new efforts in support of our field.

I am currently President of IBPSA (since 2014), was Vice President 2010-2014, Treasurer (2002-2010), and IBPSA USA Affiliate representative (2001-2014). Within IBPSA USA, I have served as Treasurer (2001-2013), President (2000-2001) and Board member. I am also active in ASHRAE. I am a Fellow of both IBPSA and ASHRAE.

I was one of three principle organizing committee members for Building Simulation 2017 (San Francisco) and served as Scientific Committee co-chair.

Professionally, my career has focused on building modeling methods and software development. I was a founder of Berkeley Solar Group, a consulting firm that applied simulation tools to the design of many innovative buildings in the 1970s and 80s. I was the principal developer of the CALPAS3, CALRES, and CSE detailed residential simulation models. CSE is used in current California residential energy code compliance procedures.

In my view, IBPSA should be directly involved in advancing the state of the art by assembling critical assessments of methods in use, identifying research needs, defining rigorous terminology, and advocating for science-based modelling. Achieving these aspirations is challenging given the volunteer nature of IBPSA. Undertaking scientific and policy work will require fundraising, coordination with other organizations, fostering multi-Affiliate joint ventures, and other creative approaches. My long Board experience at both the Affiliate and World levels of IBPSA will allow me to contribute to the ongoing development of our association.

**Name: Ian Beausoleil-Morrison**

### **Statement**

I have developed and applied BPS tools for over 25 years. Models I have developed have been implemented into ESP-r, EnergyPlus, TRNSYS, and other BPS tools, have been applied for predicting the energy performance of more than a million buildings, have been used to establish building code requirements, and have been recommended in the ASHRAE Handbook of Fundamentals. Currently I teach a graduate level course on BPS methodologies at Carleton University, where I also lead a research group that extensively employs BPS tools (ESP-r, TRNSYS, EnergyPlus) in the evaluation and development of innovative building energy system.

In 2001 I founded IBPSA-Canada's biennial eSim conference series and served as that Affiliate's President for four years, and as Board member for 12 years. I have served on

IBPSA-World's Board continuously over the past 14 years and served as Vice-President from 2006 to 2010 and President from 2010 until 2015. I have served continuously on IBPSA's Conference committee since 2006, was the Scientific Chair for Building Simulation 2005, and have been a member of the Scientific Executive Committee for seven other Building Simulation conferences. Jan Hensen and I co-founded IBPSA's Journal of Building Performance Simulation in 2007 and we have worked together as Co-Editors since that time.

IBPSA has made many significant contributions to the field of BPS. Its Journal of Building Performance Simulation published more than 700 pages annually of archival material on model developments, calibration and validation, model predictive control, and teaching methods to name only a few. Its biennial conferences provide an excellent forum for the exchange of ideas and the establishment of collaborations. I am seeking re-election to help IBPSA to build upon these successes, and specifically to help focus the organization on advancing the field through innovations and continuous developments.

**Name: Andrea Gasparella**

**Statement**

I am a founding member and currently vice-president of IBPSA Italy. I have been member in the Scientific and chair of the Organizing Committee of IBPSA Italy "Building Simulation Applications" Conferences, BSA2013, 2015 and 2017, at the Free University of Bolzano. I have been at large director of IBPSA World and I am co-chairing the Organizing Committee of BS2019, Rome, September 2-4.

My research activity started at the Padua University (1997 – 2010) with desiccant applications for industrial, agriculture and residential buildings' air conditioning and ventilation. It has then extended to the use of BPS to evaluate, through multi-objective and multi-domain analysis, contrasting building energy (heating, cooling and lighting) and non-energy (thermal, visual and acoustic comfort) performances. Part of the aim is to combine simulation and measurements, to generalize experimental outcomes while improving modelling capabilities. Applications include all different contexts (offices, schools, industries) and special conditions (heating vs cooling dominated climates) where high environmental quality is required. I have produced around 250 publications, 53 on scientific journals. I had the opportunity to develop courses on BPS for university students and practitioners.

I believe that the BPS potential for both research and practice has to be shown and actualized, fostering the most recent trends and possibilities, such as novel modelling-measurement approaches, novel integrated applications to enhance the design effectiveness or the operation phase, through multi-domain and multi-scale performance analysis (from the occupants' perspective – behavior, comfort, costs – to the indoor and the outdoor environment). To this aim, professional experiences have to be combined with applied research, and materials and expertise in BPS education have to be shared.

Collaborations between affiliates have to be strengthened, through regional and cross-regional conferences and workshops, and practitioners and students' interest and awareness have to be increased, through events and opportunities to highlight best design practices with BPS.

**Name: Matthias Haase**

**Statement**

I am senior researcher at SINTEF Building and Infrastructure in the Department for Architecture, Materials and Structures (PhD in Architecture, MEng in Resource Management, Dipl.-Ing. Mechanical Engineering, BSc in Energy studies).

I have more than 20 years project management and consultancy experience from German (1996-2002), Chinese (2003-2007) and Norwegian (2007-2016) construction industry, mainly focus on daylight, glare and energy simulations. I was project manager for more than 20 R&D projects in SINTEF (2007-2014) and participated in 8 EU-projects and 2 IEA projects (2003-2016) in different roles. I am author of a large number of publications involving building simulation in the built environment, and editor of Journal of Green Building and associate editor of the International Journal of Sustainable Built Environment, Elsevier.

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

Since 2014 I was IBPSA ExCom and board member (director-at-large), 2014 – 2016. Since then I have chaired the IBPSA Projects committee that has the aim to define the structure and set up the process of approving and executing projects under the umbrella of IBPSA. In addition, I am contributing to work in Communication, Publications, Education committees. In my capacity as Chair of IBPSA Project committee during the past four 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.

**Name: Rajan Rawal**

**Statement**

My interaction with Building Performance Simulation community started in 2006. I am engaged in teaching and research activities pertaining building performance simulation and building energy efficiency at CEPT University Ahmedabad, India.

With encouragement and support from thought leaders of IBPSA, I was instrumental in establishing IBPSA India affiliate in 2009-10. I along with my Indian colleagues at IBPSA India we could popularise IBPSA India affiliate amongst academia and professionals in India. I served as a founder secretary of IBPSA India during its formative years before the restructuring of it in 2014. I host a national workshop on building performance simulation every two years at CEPT University since 2014.

Since 2009, I regularly participate in IBPSA's flagship biennial conference. I contributed to IBPSA communication committee and web committee, before leading education committee and its efforts since 2013. During 2016-17, I could manage IBPSA education webinar series, offering 14 sessions over 14 months. I also initiated IBPSA Conference keynote collection series and IBPSA special edition webinar series. My efforts are geared towards popularising domain of building performance simulation amongst academia and practitioners.

I believe that IBPSA needs to make inroads into building design and operational practices. Building Performance Simulation (BPS) has tremendous potential to help meet environmental challenges faced by mankind. By sharing knowledge generated in academia and by building a cadre of skilled BPS professional, IBPSA has potential to contribute to society. IBPSA also needs to spread its wings to collaborate with other domains such as computer sciences, social sciences, and environmental sciences. Deep research and development in collaboration with allied field surely will enhance capabilities of BPS to contribute towards design and operation of built habitat.

**Name: Pieter de Wilde**

**Statement**

I am a professor at the University of Plymouth, UK, specialized in the use of building simulation in the building design, services and engineering community. I have been engaged with IBPSA since attending the Building Simulation conference in Prague in 1997, and have not missed one of the conferences since. Originally I was a member of IBPSA-NVL; after moving to the UK in 2005 I served on the Board of IBPSA-England (as Secretary from 2006 to 2014, and as Chair from 2014 to 2018). In this capacity I have helped to host various regional and national symposia and conferences.

On the international level, I have been chair of the IBPSA Award and Fellows Committee (2012-2016) and am presently serving as ExCom member and Secretary of IBPSA (2015-current).

I am a member of the Editorial Board of JBPS since early 2018. My latest and largest contribution to the field is the book 'Building Performance Analysis', the 2nd book to be endorsed by IBPSA, which will be available from May/June this year. I am putting myself forward for an At-large Directorship of IBPSA in order to be able to continue to serve on an international level, while opening up opportunities for the next generation at the Affiliate level in England.

**Name: Yiqun Pan**

**Statement**

As one of the forefront researchers on building simulation in China, I'm honored to participate in the IBPSA Director election.

With nearly 20 years of research experience, I have a wide range of research interests in building performance simulation, green building technology and community energy planning.

As a key professor of Tongji University, I've been the principal leader of many international/domestic research projects, such as US-China clean energy partnership program: Research on building low carbon standards and systems for response to climate change, and 12<sup>th</sup> five-year National Sci-Tech Support Plan project: Key technology research and demonstration of low-carbon urban construction and planning.

In recent years, I've been working at the application of building simulation for building performance studies. The main projects include the national key R&D plan 2017 project: Kernel development of whole building performance simulation platform, the Ministry of Education- China Mobile Research Foundation 2014 Project: Energy simulation model development and validation for China Mobile office buildings, the development of a Chinese EnergyPlus Interface: VisualEPlus, and the study on energy modeling of prototypical shopping mall in Shanghai.

I've authored the *Building Energy Simulation Handbook* and over 30 high-quality scientific journal papers. These papers span methodologies of simulation calibration, preparation of weather files that account for climate change, supervisory control of HVAC systems, linking simulation programs, and building performance optimization.

Serving as an IBPSA member, IBPSA education committee member, IBPSA journal editorial committee member and the vice chairman of Chinese Society of HVAC simulation special committee, I was recommended and elected to the IBPSA Fellows in Aug. 2017. Previously, I've been the Chair and successfully hosted the 1st Asia conference of International Building Performance Simulation Association, ASim2012. As the main investigator of Annex 66, I've also hosted the Seminar of Occupant Behavior Modeling in Buildings in 2018 in Tongji Univ.