


Name	Charles S. "Chip" Barnaby
Photograph	
Email address	cbarnaby@wrightsoft.com
IBPSA affiliation	IBPSA-USA
Position and function in IBPSA local/world	President, IBPSA-World Affiliate representative, USA Board member, IBPSA-USA (also past President and past Treasurer)
Member of IBPSA since..[years]	Ca 1995
Affiliation	Vice-President of Research, Wrightsoft Corporation, Lexington, MA, USA
Short paragraph describing background and interests not exceeding 200 words	<p>Career focus: Implementation of software for design automation, building performance prediction, and energy code compliance. Emphasis on both model quality (physics) and software quality (efficiency, usability, robustness, error handling, reporting, maintainability ...). Example work --</p> <ul style="list-style-type: none"> • Thermal simulation. Lead developer of the California Simulation Engine (CSE) residential simulation code. Prior major roles in CALRES and CALPAS3 development. Use and enhancement of EnergyPlus and DOE-2. • Load calculations. Implementation of heating and cooling load calculation methods in Wrightsoft products. Application of heat balance methods to production load calculations. • Component models. Complex fenestration systems, conduction, radiant exchange, residential HVAC equipment. • Interoperability. Data exchange and building model transformation. • Weather data. Generation of modeled data for simulation, such as solar radiation. <p>Education: B.A., Engineering and Applied Physics (Harvard) and M.Arch. (University of California, Berkeley).</p> <p>Other activities: ASHRAE standards and technical committees.</p>