

# Indoor Environmental Quality – Global Alliance

## Background

Today energy consumption and energy efficiency of buildings is a very hot topic in most developed countries. This is exemplified by the increased amount of research, buildings codes, standards related to energy compared to a much lower activity level in relation to the indoor environment. There exist several international organisations dealing fully or partly with the indoor environment; but their voice is often neglected. As the indoor environmental quality is a multidisciplinary issue involving architects, engineers, health specialist, occupational health specialist etc. there is not one organisation/society, which in a significant way can make sure that all parties in the chain for providing the indoor environmental quality will do the work.

## Vision

The vision of the Indoor Environmental Quality-Global Alliance (IEQ-GA) is to be the world's primary source for information, guidelines and knowledge on the indoor environmental quality in buildings and places of work around the world

## Mission

The mission of IEQ-GA is to provide an acceptable indoor environmental quality, to occupants in buildings and places of work around the world. Another mission is to make sure the knowledge from research on IEQ get to be implemented in practice.

## Objective

The objective of the alliance is to get the organizations to think together, work together and speak with the same voice. The alliance is formed as an interdisciplinary, international working group of organizations interested in indoor environmental quality (thermal comfort, air quality, acoustic, lighting) science, technology, and applications to stimulate activities that will help in a significant way to improve the actual, delivered indoor environmental quality in buildings.



**BJARNE W. OLESEN**  
ASHRAE Treasurer  
bwo@byg.dtu.dk

The alliance will consider research, design, commissioning, operations, and standards. The alliance will engage all segments of the indoor environmental community, including research, manufacturing, design, assessment and remediation, government, and others as determined by the alliance.

## Type of memberships

The founding members are:

- AIHA- American Industrial Hygiene Association
- AIVC-Air Infiltration and Ventilation Centre
- ASHRAE
- AWMA- Air and Waste Management Association
- IAQA-Indoor Air Quality Association
- REHVA- Federation of European Heating, Ventilation and Air Conditioning Associations

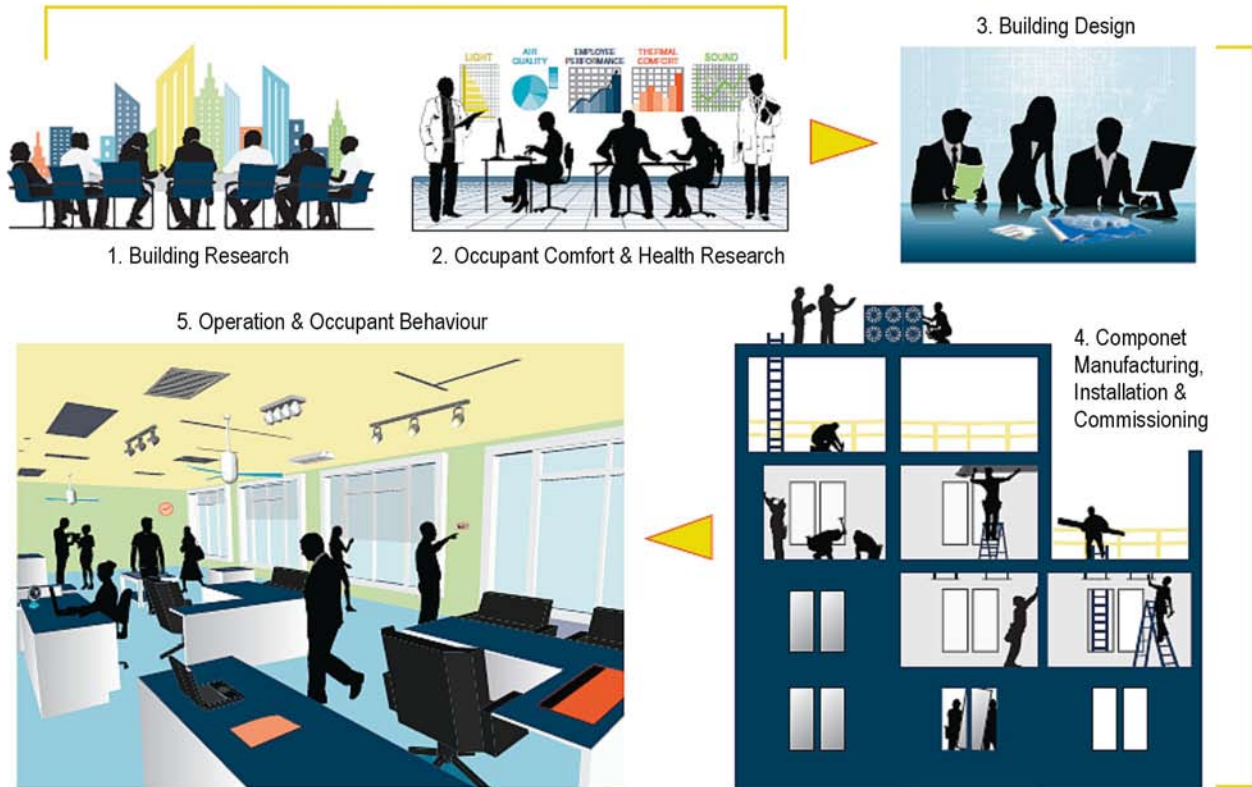
There is a need also to include societies that represent acoustic, lighting and societies that work more on health. These organisations are all non-profit and with members not representing a special product or product group. Besides the alliance have also affiliate members that can be trade organisations or governmental organisations that are dealing with the indoor environment.

## Activities

Issues that are addressed by the alliance are:

- How can we involve and work with government bodies?
- What are the research needs?

## THE VALUE CHAIN OF I<sup>2</sup>IEQ



- Reduction of science to practice in design, assessment, and remediation
- Tools for evaluating indoor environmental quality as a design parameter.
- Integration of IEQ with other building design and operation considerations such as energy and water use
- The economic case for better IEQ.

The possible outcome of the activities can be

- Research recommendations
- Proposals for publications and educational courses.
- Influencing and/or propose standards.
- Common position documents
- Combined conferences

Until now the IEQ-GA has organised several seminars at different conferences. It has also been decided to develop a guide “Review of international standards and guidelines for Indoor Environmental Quality”. Standards and guidelines concerning indoor environmental quality are developed and used around the world by a variety of organizations without a high degree of coordination.

Some are the product of international standards organizations for global use, while others have been developed using a more limited national or regional perspective but have been more widely adopted over time. As a preliminary step toward the development of a consistent global approach to all aspects of IEQ, this guide will contain a review of these existing documents.

### The value chain of indoor environmental quality

The intend is that the alliance shall cover all partners involved in the value chain of IEQ from research, design, manufacturing, construction (building properties), installation (building service systems), operation, inspection to the behaviour of the occupants (see figure).

### Future outlook

The alliance is still working on procedures on how to run the alliance and get new memberships to cover all parts of the indoor environment. At the moment we are looking for international organization representing lighting and acoustic. It is possible to follow the IEQ-GA on the web-site: [www.ieq-ga.net](http://www.ieq-ga.net) . Here it is also possible to sign up for a newsletter. ■