Institut für Baubiologie + Oekologie Neubeuern IBN Institute  $\bigcap f$ Building Biology + Ecology Neubeuern

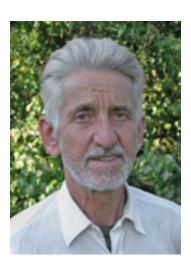
## The Institute Stitute

The Institute of Building Biology + Ecology Neubeuern IBN was founded in 1983. It grew out of the work of the "Arbeitsgruppe Gesundes Bauen + Wohnen" (Work Group Healthy Building + Living) since 1969 and the former "Institute of Building Biology," since 1976.

Prof. Dr. Anton Schneider, Ph.D., was and is the founding director of all these institutions.

The institute's mission is to present its clients with objective information and to offer a holistic approach to building biology.

The institute is economically and politically independent.



In addition to the IBN, a non-profit foundation was established in 1996 to promote a healthy, ecologically and socially responsible living environment. It is called "Stiftung Baubiologie - Architektur - Umweltmedizin" (Foundation for Building Biology - Architecture - Environmental Medicine).

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## **Building Biology**

Homes or dwellings can be seen as organisms. The term third skin accurately describes the intimate relationship between humans and their living space. It vividly illustrates how closely we are interrelated with our living environment and also in how many ways we are dependent on it. We define building biology as the study of the holistic interrelationships between humans and their living environment.

### 25 Principles of Building Biology

- Building site without natural and humanmade disturbances
- Residential homes away from sources of emissions and noise
- 3. Low-density housing with sufficient green space
- 4. Personalized, natural, human- and family-oriented housing and settlements
- 5. Building without causing social burdens
- 6. Natural and unadulterated building materials
- 7. Natural regulation of indoor air humidity through humidity-buffering materials
- 8. Low total moisture content of a new building that dries out quickly
- 9. Well-balanced ratio between thermal insulation and heat retention
- 10. Optimal air and surface temperatures

## Biology

- 11. Good indoor air quality through natural ventilation
- 12. Heating system based on radiant heat
- 13. Natural conditions of light, lighting and color
- 14. Changing the natural balance of background radiation as little as possible
- 15. Without human-made electromagnetic and radiofrequency radiation exposure
- 16. Building materials with low radioactivity levels
- 17. Human-oriented noise and vibration protection
- 18. Pleasant or neutral smell, without outgassing toxins
- 19. Reduction of fungi, bacteria, dust and allergens as much as possible
- 20. Best possible drinking water quality
- 21. Causing no environmental problems
- 22. Minimizing energy consumption and utilizing as much renewable energy as possible
- 23. Building materials preferably from the local region without promoting exploitation of scarce and hazardous resources
- 24. Application of physiological and ergonomic findings to interior and furniture design
- 25. Consideration of harmonic measures, proportions and shapes



# **Education**

### Correspondence Course "Building Biology IBN"

The one-year correspondence course "Building Biology IBN" is certified by the Accreditation Agency of Continuing Studies in Germany. Since its inception in 1977, every year more than 200 architects, civil engineers, tradespeople, medical doctors, naturopaths and other individuals with a genuine interest in building biology and ecology are taking the course.

The teaching material comprises of 25 volumes and is send to the students in a 2 month turn. Two three-day research seminars on Building Biology Testing Methods SBM and structural theory complete the course of studies. All graduates have the opportunity to stay informed about the latest developments in building biology and to expand their knowledge in new areas with our annual supplementary information.

The authors and instructors of the course are experienced architects and designers, engineers, chemists, biologists, environmental doctors, journalists and craftsmen.





Cherbonhof Bamberg, Architect: Theodor Henzle

### **Seminars and Field Trips**

For correspondence course graduates and other interested individuals, the IBN offers seminars on such topics as Building Biology Testing Methods SBM, clay building, natural finishes and their applications, marketing and book-keeping for consultants etc. and field trips to ecological communities and projects.

Continued studies in Building Biology Testing Methods SBM allow successful graduates to perform inspections of homes, workplaces and properties according to the "Standard of Building Biology Testing Methods (SBM)".

## Publications at lons

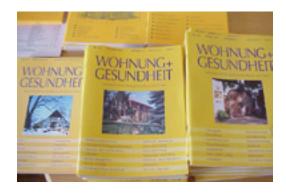
### **Gesunde Wohnumwelt** (Healthy Living Environment)

Healthy living series.

Books and movies on

- Building materials and building methods in new an old homes
- Ecologically and socially responsible housing and land development
- Solar architecture
- Sick building syndrome
- Electromagnetic pollution, radiation, noise, indoor toxins
- Renewable energies
- Waste water recycling
- Indoor climate and heating
- Environmental medicine etc.





### Wohnung + Gesundheit (Home + Health)

Journal for ecological building and living.

Published four times a year since 1978, this journal features technical articles on housing and land development, health and social issues.

Wohnung + Gesundheit is the most comprehensive source for up-to-date information on current events, publications and products.

It is the organ of the "Verband Baubiologie" (Building Biology Union) and platform for the Building Biology Consulting Offices IBN as well.

All publications are at the moment only available in German.

# Consulting 11 in g

### **Building Biology Consulting Offices IBN**

The IBN, together with a network of more than 100 IBN-certified Building Biology Consulting Offices and Testing Specialists in Germany and abroad, offer support to house-owners, tenants, medical persons and professionals in the construction and real estate business in matters of:

- Design and construction, also for house renovations
- Assessment of building material, equipment, homes, properties, job descriptions, building costs, designs etc.
- Contact addresses of architects, engineers and craftsmen experienced in building biology, as well as manufacturers and suppliers of natural building products

All Building Biology Consultants IBN are correspondence course graduates and are regularly informed about new products and scientific results by the IBN.

They are working independently and committed themselves to unbiased consultancy.





# Testing -

### **House Inspections**

When people are chronically tired, often sick or depressed, it might be due to their housing environment. Insufficient shielding from electrical wiring, outgassing toxins or fungi and bacteria are risk factors for this kind of health problems.

The IBN and the Building Biology Testing Experts IBN inspect homes, workplaces and properties according to the Standard of Building Biology Testing Methods (SBM). The Standard offers guidelines on how to perform specific measurements and assesses possible health risks. All testing results, instruments and procedures are documented in a final written report. In case potential problems are identified, an effective remediation strategy is presented.

The Standard of Building Biology Testing Methods (SBM) was first published by Baubiologie Maes together with the IBN in 1992.





### **Standard of Building Biology Testing Methods (SBM)**Tested items:

#### Fields, Waves and Radiation

- AC electric fields (ELF)
- AC magnetic fields (ELF)
- Electromagnetic waves (RF)
- Static electric fields (DC)
- Static magnetic fields (DC)
- Terrestrial radiation
- Radioactivity (gamma radiation & radon)
- Sound & vibrations (airborne and solid-conducted)

### Environmental Toxins, Poisons, Indoor Climate

- Formaldehyde and other toxic gases
- Solvents and other volatile organic compounds
- Biocides and other semi-volatile organic compounds
- Heavy metals and other inorganic toxins
- Particles and fibers (dust, suspended particles, asbestos...)
- Indoor climate (temperature, humidity, air ions, CO<sub>2</sub>...)

#### Fungi, Bacteria, Allergens

- Molds (spores and metabolites)
- Yeasts and their metabolites
- Bacteria and their metabolites
- Dust mites and other allergens

## Expertise ertise

#### **Expert's Reports for Businesses**

Since many years, the IBN offers Expert's Reports on building materials, construction, installation and complete buildings to business companies.

In order to obtain a positive report from the IBN, products have to meet strict requirements like the Standard of Building Biology Testing Methods (SBM).

The Institute currently plans to establish a IBN-Certificate for recommended products.

### **Expert's Reports for Private Houseowners** and Tenants

Private tenants and houseowners can also get their home certified by the IBN.

Reports are done on moisture and mold problems, toxins, indoor climate, electromagnetic pollution, building material, construction, installation and complete buildings.

The IBN developed a check-up routine, which allows cost-efficient judgment of houses according to the criteria of building biology.



### **Research and Support**

- Development of new building materials, building concepts, standards etc.
- Research on building biology and ecology
- Assistance with establishing eco communities
- Financial support for projects and research through "Stiftung Baubiologie - Architektur - Umweltmedizin" (Foundation of Building Biology - Architecture -Environmental Medicine)

#### **Information**

Request from the institute:

- Contact details for products
- Addresses of building biology consultants and designers
- Addresses of building biology organizations and institutes in Germany and abroad

Please contact us or visit our homepage

www.baubiologie.de

### **IBN**

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