### CV of Prof. Dr. Reinhard Böhm

#### **Personal Information**

Family Name: Böhm First Name: Reinhard Date of Birth: 22.12.1943 Place of Birth: Berlin, Germany



#### Activities in ISAH

1976: member of the ISAH 1994–2007: Board Member 2009: Honorary Member of the ISAH

#### **Education**

1949–1962: School in Berlin finished with the Abitur (university entrance diploma) at the Hans Carossa Gymnasium, Berlin-Spandau, Germany;

1962–1979: Study of veterinary medicine at Justus-Liebig-University, Giessen, Germany;

1969–1970: Assistant in veterinary practice;

1970–1989: Scientific career at the University of Hohenheim, Stuttgart with the following main fields of research: bacteriology and serology of Bacillus species especial *Bacillus anthracis*, rapid and automatic diagnostic procedures in bacteriology, chemical and thermal inactivation of microorganisms, animal production and environment, vaccines and vaccine development;

1974: Doctoral thesis "Rapid detection of spores of *Bacillus anthracis*" at the Institute of Hygiene and Microbiology, Veterinary Faculty of the Justus-Liebig-University, Giessen, Germany;

1983: Habilitation (*venia legendi*) at the Agricultural Faculty of the University of Hohenheim, Stuttgart, Germany;

1989–1991: Head of the group "Microbiology" at the army research centre for ABC-protection on Munster, Germany;

1989: Professor for the field of bacteriology and animal hygiene;

1991–1994: Professor for environmental and animal hygiene at the University of Hohenheim, Stuttgart;

1994–2007: Chair of environmental and animal hygiene at the University of Hohenheim, Stuttgart;

2010: Retirement.

#### **Research activities**

He started his career as scientist in the field of bacteriology with research on rapid detection of zoonotic agents in the environment. He investigated the applicability of methods based on immunologic, physical and molecular techniques. Later he started to investigated mechanism and effects of physical and chemical treatment on the

inactivation of microorganisms, viruses and prions in different matrices, and the application of molecular methods for tracing the transmission of pathogens via the environment. He was responsible or partner in more than 50 research projects until his retirement, on themes summarized below:

- Research on rapid and automated methods in bacterial diagnostics;
- Research on Bacillus taxonomy by DNA-hybridization;
- Research on "Open Air Factors" on the survival of selected zoonotic agents on surfaces exposed in the environment;
- Research on applicability of molecular fingerprinting for tracing pathogens in the environment;
- Research on inactivation of viral and bacterial pathogens as well as prions and parasites' eggs in the environment and in biotechnological, physical or chemical processes;
- Research on presence and fate of bacterial and parasitic zoonotic agents in dog droppings on grassland and meadows;
- Research on save rendering technologies in recycling animal by-products according to EU-legislation;
- Research on improvement of laboratory methods in testing chemical disinfectants;
- Research on effectivity of DNA-vaccines in animals;
- Research on analysis of and suitable methods for measuring bioaerosols from waste treatment and animal houses.

## **Teaching activities**

1991–2010: University of Hohenheim, Stuttgart:

- General Environmental and Animal Hygiene;
- Infectious Diseases of Animals and Health Protection;
- Introduction into Cell and Molecular Biology;
- Environmental Microbiology and Parasitology;
- Advanced Projects in Environmental and Animal Hygiene;
- Food Safety and Drinking Water Quality;
- Microbiological Quality Management and Hygienic Monitoring.

1991–2010 University of Stuttgart, Stuttgart:

• Environmental Hygiene.

1991–2010 Teaching activities in other organizations and for other purposes than academic education:

- Training course for State Veterinarians in Stuttgart, Germany; lectures on Disinfection Measures in Epidemic Disease Control.
- 1970–1994: Supervision of about 80 Diploma and Doctoral Theses.

1970–1994: Supervision of 4 Habilitation Treatises.

# Activities in National Organizations

### Scientific Societies

- Member of the German Veterinary Society (DVG);
- Organizer of the Scientific Symposium of the DVG "*Hohenheimer Seminar*" at the University of Hohenheim from 1995;
- Chairman of the "Disinfection Committee" of the DVG;

- Member of the German Societies for Hygiene and Microbiology (DGHM);
- Member of the Society of Hygiene, Environmental and Public Health Services;
- Member of the Wastewater Technological Association (ATV).

### Academic self-administration

- 1994–2010: Chairman of the "Commission on Biological Safety" of the University of Hohenheim;
- 1991–2010 Member of the Commission on Planning and Supervision Curricula in Agricultural Sciences (*Kommission Studienangelegenheiten Agrarwissenschaften*) of the University of Hohenheim;
- Dean for a period of two years.

### Other Official Activities

- Chairman of the DIN Standardization committee on test methods for chemical disinfectants for institutional areas, food production and veterinary medicine (NAL DT);
- Member of the DIN Standardization committee on test methods for chemical disinfectants in human medicine (NA Med);
- Member of the "Scientific Advisor Council on Fertilization and Fertilizers" of the Federal Republic of Germany;
- Member of the commission for the "Seal of Quality" of the Bundesgütegemeinschaft Kompost;
- Expert for the Commission on Disinfection in epidemic disease control of the German Ministry for Agriculture;
- Member of the Scientific Advisor Council of the Federal Institute for Risk Assessment" (BfR);
- Member of the Scientific Advisor Council of the Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS).

### Activities in International Organizations

#### Scientific Societies

- Member of the International Society for Animal Hygiene;
- Member of the Austrian Society for Hygiene, Microbiology and Preventive Medicine (ÖGHMP);
- Member of the American Society for Microbiology (ASM).

### International Organizations

- Temporary Member of several working groups of and invited expert for the WHO (Anthrax, Salmonellosis);
- Temporary Member of several working groups of and invited expert for the European Commission (Rendering, Waste Management, Animal Hygiene);
- Temporary Member of several working groups of EFSA;
- Member of the CEN TC 216;
- Commissioner of UNMOVIC for the United Nations.

### **Other International Activities**

- Member of the RAMIRAN Network;
- Invited Expert giving advice to administrations in several foreign countries (*e.g.* Austria, Hungary).

## **Publications**

### Papers and Oral Presentations

- More than 250 scientific papers.
- More than 300 oral presentations.

#### Editor or Co-Editor

- Strauch/Böhm: Reinigung und Desinfektion in der Nutztierhaltung und Veredelungswirtschaft, 2. Auflage, Enke, Stuttgart, 2002;
- Co-author in several national and international standards.

#### Contributions to Textbooks

More than 20 contributions in the fields of bacteriology, epidemiology, agricultural wastes and by-products from animal husbandry, municipal wastes and wastewater, disinfection and sterilization, environmental protection, behaviour of pathogens in the environment, aerosols from agriculture, industrial and municipal sources.