Mr. Prof. Ing. Miloš Drdácký, DrSc., (M) Director of ITAM, experienced in research into material, structural and urban research of architectural heritage and historic settlements, author of more than 420 publications and editor of about 20 books, and coordinator or partner in 23 European projects in which the issues of cultural heritage safeguarding have been treated. Chair of the Council for Research of the Czech Minister of Culture, representative of the Czech Republic in the CH JPI Governing and Executive Boards, Professor of the CTU in Prague teaching at several European universities.

### **Curriculum vitae**:

# Miloš F. DRDÁCKÝ

Assoc.Professor, CEng., PhD, DrSc., Dr.h.c.

Mr. Drdácký was born in 1945 in Czechoslovakia and he received his Diploma Engineer degree in 1968 from Czech Technical University in Prague in two branches: Civil Engineering and Theory of Structures, a special branch of individual study for selected students. He was awarded a CSc., (corresponding to Ph.D.), in 1978 by the Czechoslovak Academy of Sciences in the field of Mechanics of Rigid and Deformable Bodies. He defended his Doctor of Science Thesis in 2001, was awarded a DrSc. by the Czech Technical University (further CTU) in Prague and habilitated (Associated Professor (Doc.)) by the Technical University in Brno in 2004 in the field "Theory of Structures".

He has undertaken additional post graduate studies at Faculty of Mechanical Engineering of CTU Prague in Experimental Mechanics (1974-75), at Charles University of Prague in English Language for Experts (1976-78), at the Institute for Forensic Engineering of TU Brno in Forensic Engineering (1980-82) and a special course of Experimental Mechanics at CISM Udine in Italy (1983).

Mr. Drdácký has been working since 1968 in the Institute of Theoretical and Applied Mechanics of the Academy of Sciences of the Czech Republic (formerly Czechoslovak Academy of Sciences) as Chief Research Fellow and Director. His recent positions include:

1985 – 1990 Project Leader of 5 large research teams from Czech Universities and research centres at investigations into the real behaviour of civil engineering structures

1986 – 1993 Head of the Central Laboratory of Experimental Mechanics,

1988 – 1990 Vice-Director of the Institute,

1990 – 1993 Scientific Secretary of the Institute,

1994 – 1998 Head of Associated Research Centre for Historic Structures and Sites (ARCHISS)

1998 – present Director of the Institute.

The Institute of Theoretical and Applied Mechanics is the only Research Institute of the Academy oriented into Civil and Structural Engineering and it is since 2000 recognised as an European Centre of Excellence ARCCHIP (Advanced Research Centre for Cultural Heritage Interdisciplinary Projects).

1990 – present he has practiced as a civil and structural engineering Consulting Engineer 1992 – 1997 Director of a private company ARTOS Praha Ltd. Oriented to consultancy,

research and testing of civil engineering structures 1992 – 1999 He was charged as Head of Town Architect Office in a World Heritage City Telč listed as UNESCO Monument

Except of English, Mr. Drdácký has a good working knowledge of Russian, French, Slovak, basic German and Polish. Stays abroad include Université de Liege (1974), Chalmers University of Technology Göteborg (1982 and 1989), International Centre for Mechanical Sciences Udine (1983), U.S. Universities with Wood Engineering programme (USAID Fellowship for environmental research 1997).

### PROFESSIONAL EXPERIENCE

Mr. Drdácký is a licensed professional engineer in Civil Engineering and he has been responsible for more than 120 design projects, studies and architectural competition proposals. They include, e.g. international competitions Plateau Beaubourg Paris (France) – structural design, psychiatric Hospital "Schloss Werneck" (Germany), Pahlavi National Library Teheran (Iran), reconstruction projects of ancient structures and medieval houses in Czech historic cities, new design of special structures, urban planning documentation.

### **AWARDS**

Four Highest Winner Awards in an Architecture Competition, 1971, Industrial Construction of Dwelling Houses,

Czechoslovak Academy of Sciences Award, 1982 Theoretical Works on Thin-Walled Bridge Structures.

Doctor Honoris Causa, Technical University "Ljuben Karavelov", Sofia, Bulgaria, 2007.

# EXPERT AND FORENSIC ENGINEERING EXPERIENCE

Mr.Drdácký has been active for more than 30 years as expert in Civil Engineering Structures Performance and, since 1983, authorised in Forensic Engineering as Expert or Expert Witness for Building Assessment, Building Defects or Damages and Failure Analysis. He elaborated more than 400 written experts opinions which include, i.a. heavily damaged structures or buildings due to fire, wind storms and 2002 flood damages in Prague.

# TEACHING EXPERIENCE

Mr. Drdácký was an Assistant Professor at Department of Structural Mechanics, Faculty of Civil Engineering, Czech Technical University in Prague in the years 1975-1980, and an External Reader in Mathematics, Mechanics and Theory of Structures at Department of Architecture, University of Industrial Arts in Prague in the years 1984-1990, from1995 – till now he is External Reader at Faculty of Architecture, Technical University Liberec (Structure and Form) and at Civil Engineering Faculty, Technical University Brno (steel and wood), since 2002 at Faculty of Architecture, Czech Technical University in Prague. (Associate Professor). Since 2007 he is lecturer in two subjects at the international course "Structural Analysis of Historic materials and Structures" organized within the ERASMUS MUNDUS programme.

He is or was member of Scientific Boards of the CTU in Prague, of the Civil engineering faculty of the CTU, of Advisory Boards of Postgraduate programmes at the Faculty of Architecture (CTU), the Mechanical engineering faculty (CTU), Civil engineering faculty (CTU), Nuclear engineering faculty (CTU). Further he is Member of the Advisory Board for postgraduate studies and cooperation with universities of the Czech Academy of Sciences. Mr. Drdácký was invited to teach in Post-graduate advanced study courses on cultural heritage organised by the University College of London – Bartlett School (M.Cassar) and

supported from EC FP5 Grants: EVK4-2001-00125 Science and Technology of the Environment for Sustainable Protection of Cultural Heritage, Advanced Study Course, 2002 and EVK4-2002-00124 Cultural Heritage Protection in a Sustainable Society (CHEPRISS), Advanced Study Course, 2003.

# PROFESSIONAL AND PUBLIC ACTIVITIES

Mr. Drdácký is member of the Int. Assoc. For Bridge and Struct. Eng. (IABSE), Chairman of the Czech Working Commission Structural Performance; member of the American Society of Civil Engineers (ASCE); member of the IASS – founding member of the Working Group "Historic Structures"; Czech Association of Civil Engineers; Czech Society for History of Sciences and Technology, member founding its special group "History of Civil Engineering"; Association of Forensic Engineers of the Czech Republic; Chamber of Building Assessors of the Czech Republic, Czech Society for Biology; Member of ICOMOS (working in ICOMOS CIVVIH, ISCARSAH and ICSC Scientific Committees), Honorary member of CICOP Italy.

Mr. Drdácký is Vice-Chairman of Examining Board of the Czech Chamber of Certified Engineers and Technicians for licence in testing of building materials and structures.

He has been working or was working at the RILEM Technical Committees (past 138-MTW headed by Prof.Peköz for testing of thin-walled structures, current 207 INR, the newly established AST for structural timber and the SAM for historic masonry).

He is a Member of Editorial boards of international journals ASCE J. Performance of Constructional Facilities, Acta Technica CSAV and the Int. J. of Architectural Heritage: Conservation, Analysis and Restoration.

He was responsible for building of a Czech National Information System on Structural Failures, which was set up in 1992. He organised a series of international conferences "Lessons from Structural Failures", an International Conference on "Experimental model research and testing of thin-walled structures". At presents he co-ordinates research into problems of built heritage and organised recently a series of 18 workshops in this field in the framework of an EC supported project (ARCCHIP Centre of Excellence) and in 2006 the European Conference on Research into Cultural Heritage.

Mr. Drdácký has been providing expert services to the Czech Grant Agency since the year 1999 as a member of the Committee for Technical Sciences (1999-2001) and the Sub-Committee for Architecture and Building Industry. He has been providing expert services to the European Commission (since 2000) as well as to the Council of Europe (since 1995) and since 2004 to the European Science Foundation. He has been further an expert of several Czech Ministries and their research and grant programmes (Ministry for Education, Sports and Youth, Ministry of Industry and Commerce, Ministry of Culture, Ministry of Finance). Mr. Drdácký has been responsible for evaluation of research project proposals and has been acting as reporter of several on-going projects (national and international).

He is also an advisor to the Senator of the Parliament of the Czech Republic and Chairman of its Committee for cultural heritage Mr. Minister for Culture Mgr. Václav Jehlička.

Mr. Drdácký is member of the Advisory Board for European integration of the Czech Academy of Sciences. He is a coordinator of the Working Group 6 of the Focus Area Cultural

Heritage of the European Construction Technology Platform preparing the EC 7th Framework Programme for Research and Development, chairman of the Czech national FACH group.

### **RESEARCH INTERESTS**

Research interests involve mechanics of thin-walled metal systems, stability and post buckling behaviour of thin walls with random defects. Experimental methods in mechanics, testing of materials and structures, databases and information systems. Analysis and prevention of failures in building industry. Theory of creation of optimum structural systems under sustainability constraints. Historic structures and materials in an interdisciplinary context and holistic approach to their safeguarding. Documentation and planning of territories with a historic value.

# **GRANT AND OTHER PROJECTS (selected)**

He was awarded about 30 research grants – national and international. The results are published in more than 320 publications, and in 21 edited Proceedings or books. Selected international projects:

GETTY Grant for Architectural Conservation of the St. Jacob's Church in Rovná at Sříbrná Skalice, (monitoring and analysis of damages), 1998-1999 (monitoring 2003)

U.S.-Czech Engineering Research: In-Situ Evaluation of Historic Wood Buildings, (with NCSU Raleigh), NSF supported 2001-2004 (in USA), in CR supported under the Ministry of Education KONTAKT ME660 Project)

ICA1-CT-2000-70013 ARCCHIP Centre of Excellence (Advance Research Centre for Cultural Heritage Interdisciplinary Projects), supported in the 5th EC Research Framework Programme

EVK4-CT-2001-00060 ONSITEFORMASONRY (NDT Methods for Historic Masonry), supported in the 5th EC Research Framework Programme

EVK4-CT-2002-30011 HISTOCLEAN (Control Device for Stone Laser Cleaning), supported in the 5th EC Research Framework Programme

CIBHER – ARI programme, CSTB Jules Verne Wind Tunnel tests on historic materials, 2004 NOAH'S ARK (FP 6) "Climate change" SSP1-CT-2003-501837

CULTSTRAT (FP 6) "Air pollution effects" SSP1-CT-2003-501609

I-SAMCO (FP 6) "Structural health monitoring" NMP2-CT-2004-003766

7th EC Conference on Research of cultural heritage (FP6) in Prague – SAUVEUR Project SSPI No. 022697

CHEF (FP6) project on protection of cultural heritage against flood (2007-2010) STONECORE (FP7) project on stone consolidation (2008-2011)