Research and Development Council

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From the Policy Statement of the Government of the Czech Republic, Prague, August 2002

"The Government shall create conditions for the development of a knowledge society in which research and development together with education shall have an unambiguous priority. The integral factor of these efforts shall be both the creation of space for investment growth in this complex as a whole and optimising its management aimed at a functional integration of its components.

In essence, the Government shall strengthen the development of science and research at universities and schools and support the convergence, in particular of basic research, at non-university institutions, with university research and development.

The Government shall promote basic and applied research by increasing the share of public funds allotted to this support. Simultaneously it shall promote investment in research and development from non-state funds and foreign investors.

The Government shall also enhance the effectiveness of allotted means while increasing the share of costs for advanced technologies. In this context it shall stimulate the acceleration of transfer of basic and applied research results to industrial research and development. The emphasis on regular and objective assessment of research and development results shall be part of governmental policy as well. The amount of financial support of the Government shall follow from regular and objective assessment of these results.

The Government shall further support the development of international co-operation in research and development, particularly within the European Union, and strive for broader and more active involvement in the development of the European Research Area.

The aforementioned aims and provisions shall be stipulated in detail in a new National Research and Development Policy which shall be produced by the Government in co-operation with research and development organisations and staff personnel, universities and with the representatives of research and development output users."

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RESEARCH AND DEVELOPMENT COUNCIL

Sphere of activity and tasks

The Research and Development Council (hereinafter "the Council"), pursuant to the provisions of §35 of Act No. 130/2002 Coll., on State-Funded Research and Development Support and on the Amendment of Some Related Acts, such as the Act on the Support of Research and Development, is a professional and advisory body of the Government of the Czech Republic (hereinafter "the Government") in the area of research and development (R&D) and fulfils the tasks following from this act, in particular:

- a) clarifies long-term principle trends and proportions of the progress of research and development in the Czech Republic through its advisory bodies, which are professional commissions for individual areas of research and development,
- b) carries out regular annual analyses and assessments of the existing state of research and development and the comparison with the situation abroad and presents it to the Government,
- c) performs the function of an administrator and operator of a research information system pursuant to §30 and approves the operational rules of the research and development information system,
- d) assembles the various viewpoints regarding materials presented to the Government in the area of research and development,
- e) deals with advisory bodies for research and development of the European Communities and with the research and development councils of individual member states of the European Communities and other countries,
- f) fulfils other tasks and duties stipulated by law, specific legal regulations or assigned by the Government,
- g) proposes a medium-term perspective of research and development support,
- h) proposes the amount of total costs on research and development from individual budget chapters and recommends their distribution pursuant to §5 section 5 of the Act.

Members of the Council

The Council consists of fifteen members including the Chairman. The Government on the proposal of the Chairman of the Council appoints and recalls the members except for the Chairman. Membership in the Council is a public function. The term of office of members of the Council (except for the Chairman) is four years. A member of the Council may be appointed for no more than two subsequent terms of office. A non-member may not serve as a substitute on the Council.

The members of the Council are appointed by the Government from among notable scientists and experts working in institutions engaged in R&D (*e.g.*, the Academy of Sciences of the Czech Republic), at public universities and branch and other research institutes or are representatives of budget chapters, administrators or regional administrative units providing support to research and development from public funds or who are the representatives of the professional public.

The Council is presided by the Chairman who is a member of the Government and is appointed and dismissed by the Government on the proposal of the Prime Minister. The Chairman of the Council is responsible for the activity of the Council to the Government and provides a link between the Government and the Council, which is its advisory body.

The Presidium of the Council consists of the Chairman and three vice-chairmen. The Presidium of the Council controls the activity of the Council between sessions, assesses and approves the supporting materials and draft agendas of the sessions of the Council and co-ordinates the activity of professional commissions and advisory bodies of the Council on the preparation of proposals of long-term principal trends of research and development progress in the Czech Republic.

The vice-chairmen of the Council are appointed by and from the members of the Council. The first vice-chairman of the Councils substitutes for the Chairman in his absence and in particular is responsible for the co-ordination of activities related to the preparation and elaboration of materials which are presented by the Council to the Government. The responsibilities of the other two vice-chairmen are divided as follows. One is responsible for the activity of the Council in the area of research and for the fulfilment of tasks related to the Grant Agency of the Czech Republic, and the other is accountable for the activity of the Council in the area of development.

Secretariat of the Council

The activity of the Council is supported by the Secretariat of the Council. The Secretariat is an independent division of the Office of the Government of the Czech Republic. It is divided into the Department of Research and Development Budget and the Department of Research and Development Information System. The director of the Secretariat of the Council, who is also the Secretary of the Council, controls and is responsible for the activity of the Secretariat. In compliance with the Act on Research and Development Support, the resolution of the Government No. 267/2002 Coll., on the Research and Development Information System, other legal regulations and the research and development information system approved by the Government, the Secretariat also fulfils the function of operator of the research and development information system.

Formation of the Council

The Council of the Government of the Czech Republic for Scientific Activities and Development of Technologies as a professional and advisory body of the Government in the field of scientific activities and development of technologies was established in 1992 by Act No. 300/1992 Coll. of the Czech National Council, on Scientific Activities and Development of Technologies.

The name of the Council was changed to the Research and Development Council of the Government of the Czech Republic by Act No. 1/1995 Coll. which amended and completed the original act into the act on state support of research and development (later amended by Act No. 220/2000 Coll.).

In 2002, the act on the support of research and development through which the **Research and Development Council** was formed as a professional and advisory body of the Government was included in the legal order of the Czech Republic.

ACTIVITIES OF THE COUNCIL BETWEEN 1992 AND 2002

During the first years after the formation of the Council at the end of 1992 and until the adoption of the first Principles of the Government for Research and Development in 1994, the activity of the Council was basically devoted to the preparation and enforcement of the principal concept of R&D in the wake of the social and economic changes in 1989 and the subsequent establishment of the Czech Republic. It substantially participated in the formation of the Grant Agency of the Czech Republic and permanently co-operates with it. Through public tenders on standard R&D projects, the subjects of which are chosen by the proposing recipient, the Grant Agency of the Czech Republic supported the best projects from all scientific branches irrespective of their legal form or the resort membership of the holder of the project.

With the formation of the Central Register of Research and Development Projects in 1993, the Council laid the basis for the establishment of a research and development information system which is still being developed.

Between 1994 and 1996 the Council concentrated predominantly on targeted R&D financing and on the preparation of related legal regulations. It proposed the amendment to the Czech National Council's Act No. 300/1992 Coll. — Act No. 1/1995 Coll. on State Support of Research and Development which chiefly introduced the condition of public tender for the allotment of targeted state funds to the sphere of R&D and also unified the terminology with OECD countries.

In the first half of 1997 the Government adopted new Principles of the Government for Research and Development. The Principles established both the system and the amount of state support of research and development, and legal regulations and all other documents in this field pertaining to the forthcoming accession of the Czech Republic to the European Union. One of the aims which the Government stipulated by these principles was to increase – regularly and according to economic possibilities – the direct financial support of research and development so that the support at the moment of the accession of the Czech Republic into the European Union represents at least 0.7 % of the gross domestic product. Another important step in fulfilling the new principles was the formulation of the "Rules of Assessment of Research Intentions and Results of Organisations for the Purpose of Provision of Institutional Support to Research and Development".

In 1998 the "Principles of Scientific Policy of the Czech Republic at the Beginning of the 21st Century" were drawn up. This document was adopted by the Government as the principal conceptual document from which shall follow the formulation of the national R&D policy based on the needs of the Czech Republic and comparable with R&D policies of the European Union member states.

One of the major supporting materials for the preparation of the National Research and Development Policy was the "Analysis of Previous Trends and the Existing State of Research and Development in the Czech Republic", formulated in 1999. The Government assigned the preparation of this document to the Ministry of Education, Youth and Sport and the Council in co-operation with the Academy of Sciences of the Czech Republic and other bodies and institutions.

In 1999 the Council participated significantly in the formulation of the proposal of the "Research Centres" programme as a new element of R&D support in the Czech Republic.

At the beginning of the year 2000 the Government adopted the "National Research and Development Policy of the Czech Republic." This proposal was prepared by the Ministry of Education, Youth and Sport and the Council in the co-operation with other bodies and institutions.

The National Research and Development Policy of the Czech Republic of 2000 articulates the principal attitude of the State toward research and development in the forthcoming years and expresses the principles of the Government in the area of research and development. Addressed to the bodies and staff personnel of the state administration, research and development institutions, it is a complex of information for EU and OECD bodies and is the response to the declaration of the world conference on science, "Science for the 21st century".

In May 2000 Act No. 59/2000 Coll. on State Support took effect. The application of this act, which has an important impact upon the process of providing state support to research and development, was discussed repeatedly by the Council with the Office for the Protection of Competition. The Council, amond other things, drew the attention of individual governmental departments to the impact of the "Methodological Instruction for the Assessment of State-Funded Research and Development" which was formulated by the Office for the Protection of Competition pursuant to Act. No. 59/2000 Coll.

In compliance with the "Rules for the Assessment of Research Intentions and Results of Organisations with regard to the Provision of Institutional Support for Research and Development", the assessment of research intentions was made at the level of the Council.

The Council in co-operation with the Ministry of Education, Youth and Sport prepared the proposal of the regulation of the Government on the conditions of targeted research and development financing and the transfer of data to the central register of projects financed from the State Budget. This regulation was published in the Collection of Laws on February 28, 2001 under No. 88/2001 Coll. and took effect the same day.

The same resolution by which the Government approved the "National Research and Development Policy of the Czech Republic" also authorised creation of two independent new acts – one on research and development and the other on public research institutions. The Government also decided upon the elaboration of the proposal of the National Oriented Research Programme.

A new act on research and development, Act No. 130/2002 Coll., on State-Funded Support of Research and Development and on the Amendment of Certain Related Acts, was prepared by the Council in co-operation with the Ministry of Education, Youth and Sport and a large number of other relevant bodies and institutions with respect to the incoming accession of the Czech Republic to the European Union. The act governs the system of research and development support from public funds, public tenders in research and development, procedures of research intentions assessment, the provision of information on research and development, and stipulates the rights, obligations and assignments of bodies, authorities and institutions involved in research and development. The tasks and position of the Council were also newly stipulated. The act became effective on July 1, 2002.

The preparation of three legislative instruments related to the act on research and development support – regulations of the Government – commenced as early as in the second half of the year 2001. The Council submitted the draft regulation of the Government on the research and development information system, the Ministry of Education, Youth and Sport submitted the draft regulation of the Government on targeted support and on public tenders in research and development and the draft regulation of the Government on institutional support of research and development and the assessment of research intentions.

The Council participated significantly in the elaboration of the "Analysis of the Previous Trends and Existing State of Research and Development in the Czech Republic and Comparison with the Situation Abroad", which was presented to the Government in May 2002 and which is one of the principal supporting materials for the formulation of a new national research and development policy of the Czech Republic.

The Council has annually prepared for the Government proposals of the allotment of State Budget funds to research and development. The Council also annually reports on its activities to the Government.

The Council had provided for the assessment of research and development programmes proposed and announced by the Grant Agency of the Czech Republic and by the state administration central bodies (pursuant to Act No. 300/1992 Coll.), formulated governmental positions on research and development programmes according to the act on research and development support, and elaborated a new concept of research and development information system. It also assessed documents necessary to file grant project proposals of the Grant Agency of the Czech Republic.

Principal and up-to-date information on the activity of the Council is published on the web site of the Research and Development State Administration of the Czech Republic

http://www.vyzkum.cz

PRINCIPAL OBJECTIVES OF THE COUNCIL

Stipulation and allotment of state-funded research and development support

Pursuant to the act on research and development support the principal objectives of the Council include an elaboration of proposed middle-term prospects of research and development support as well as the compilation of the proposal of the amount of total costs on research and development of individual budget chapters and their proposed allotment (pursuant to §5 section 5 of the above-mentioned act).

The compilation of the proposed total costs on research and development is a time-consuming process which is also very demanding from the standpoint of organisation. It proceeds during the first half of the year preceding the year for which the proposal is being prepared. The Council evaluates the possibilities and needs of research and development in the Czech Republic and in co-operation with the administrators of individual budget chapters in several gradual steps, compiles the proposal which is presented to the Government in final form.

In 2002, the Council for the first time also worked out the proposal for a middle-term prospect of research and development support which shall be updated consistent with actual conditions and shall provide the basic guidelines for the stipulation of research and development progress and their priorities in the following years. A middle-term prospect takes into account both international obligations of the Czech Republic and the financial guarantee of vital research activities.

The development of the amount of total state-funded research and development support since 1993 is illustrated by the following graph:

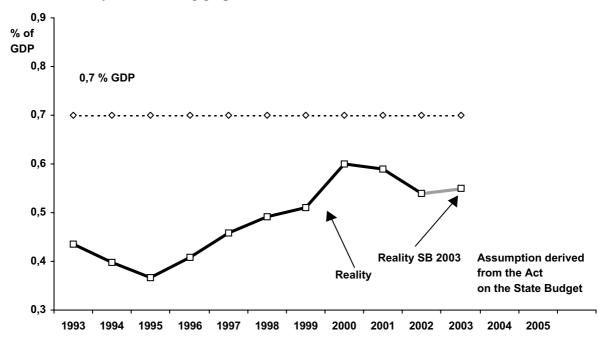


Fig. 1: Research and development support from the State Budget, 1993-2003

It is obvious from this figure that the amount of research and development support from state funds expressed by the standard indicator (i.e., share of the GDP) had been increasing only until 2000 when it reached the peak value during the existence of the Czech Republic -0.6% of GDP. A slight decrease in 2001 and a substantial decrease in 2002 was due to the fact that the Government and individual governmental departments began to give preference to short-term measures with instant outcomes over longer-term ones, research and development being among the latter. The obligations of the Government both to the EU and to Czech society expressed by the governmental resolutions thus were not fulfilled.

State-funded research and development support may be granted in the form of targeted or institutional support. Their principal stipulation is incorporated in the act on research and development support. More detailed specification of their provision and use are governed, in particular, by governmental regulations:

- Regulation of the Government, No. 461/2002 Coll., on State-Funded Targeted Research and Development Support and Public Tenders in Research and Development, and
- Regulation of the Government, No. 462/2002 Coll., on State-Funded Institutional Research and Development Support and Assessment of Research Intentions.

Research and Development Information System - R&D IS

The Act on R&D support stipulates the purpose and goals of the R&D information system, determines its content and regulates rights and obligations with respect to presenting and providing R&D information system data. Pursuant to this act the passing of stipulated data and their inclusion into the R&D information system is a prerequisite for the provision of state-funded research and development support. The R&D information system is the principal source of information on the present state of research and development and their results for the Council and other bodies as well as for the public.

The R&D information system is a state administration information system which ensures the collection, provision and use of data on research and development supported from state funds. Its components which among others include Central Register of R&D Projects (CEP), Central Register of Research Intentions (CEZ), Register of Information on Results (RIV) and Register of Public Tenders in Research and Development (VES), are integrated into one common database.

The regulation to implement the Act on Research and Development Support, Governmental Regulation No. 267/2002 Coll., on Research and Development Information System determines some concepts, defines CEP, CEZ, RIV and VES data. It regulates the procedure of the support provider while making available the data on announced public tenders in research and development and their assessment, the procedure of support provider while making available the data on projects and research intentions and their results, procedure which includes data conveyed by the support provider to the information system in keeping with the manner and terms of data provision from the information system.

The R&D Information System has been developed gradually pursuant to the needs of the users. The Central Register of Projects financed from the State Budget (CEP) was formed in 1993. The CEP data are used for the preparation and assessment of programme proposals, for shaping individual governmental departments or grant agencies, for analysis of the state of R&D, and last but not least, for identifying ineffective duplicate financing of R&D projects. In 1995 the Register of Information on Results of state-supported research and development (RIV), resulting from the original register of scientific publications for the purpose of assessment of results of both targeted and institutionally supported R&D to inform scientific and other public on those results, was formed. Now RIV includes the results of projects incorporated into CEP or research intentions included in CEZ. To control institutional financing and rule out double financing of projects and research intentions the Central Register of Research Intentions of institutions financed from the State Budget (CEZ) was established in 1999. In 2000 the Central Register of Public Tenders and Public Orders (VES) was created. Its task is to provide the public basic data on the announcement and assessment of public R&D tenders to provide support for R&D from state funds. VES does not include data on public orders after 2001 as those are consolidated with others at the central web address (http://www.centralni.adresa.cz).

The preparation of the proposal of the Research and Development State Budget for which the Council is also responsible is closely connected to the R&D Information System.

In 2001 the Council decided to create an integrated information system which unites data from originally separated individual sources of information. In 2002 the development of original R&D databases was completed conceptually. The Council as an administrator of this system worked out the conception for the following five years which it then presented to the public for discussion after which the Government approved it by its resolution No. 488 of May 15, 2002.

Publicly accessible data from CEP, CEZ, RIV and VES are available on the State Administration Research and Development web sites http://www.vyzkum.cz.

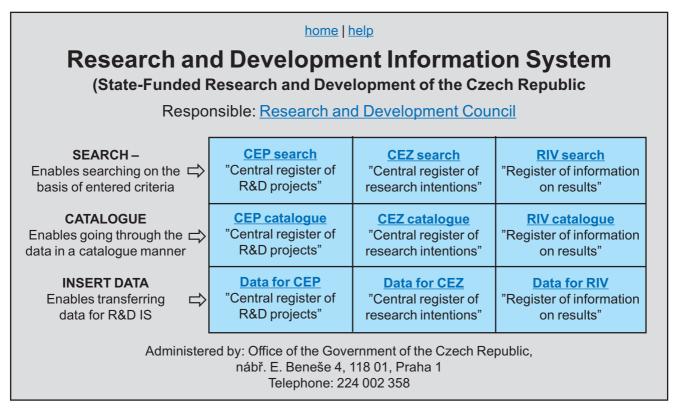


Fig. 2

Long-term tasks

The Act on Research and Development Support amplifies the conceptual character of the system of R&D support in the Czech Republic. The responsibility for the preparation of principal documents on long-term trends of research and development and their support was divided by the Act between the Council and the Ministry of Education, Youth and Sport.

The Council annually produces and submits to the Government analyses and assessments of the research and development situation in the Czech Republic and their comparison with the situation abroad. The above-mentioned Act established three professional commissions which are the advisory bodies of the Council and prepared the proposals of long-term directions and proportions of research and development in the Czech Republic. Professional commissions are composed of chief research workers. The commissions, while proposing long-term principal trends, follow from annual analyses, other supporting documents and from a good knowledge of the situation and trends of the development of particular scientific spheres in the Czech Republic and abroad.

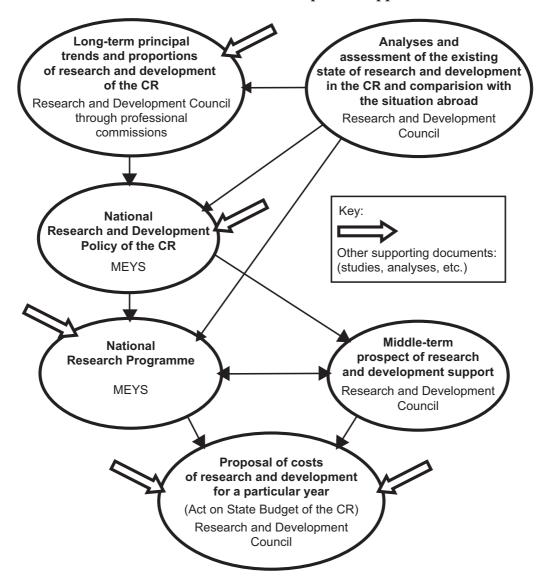
In keeping with the analyses and long-term principal trends, the Ministry of Education, Youth and Sport formulates the National Research and Development Policy of the Czech Republic in co-operation with other bodies and institutions and submits it to the Government for approval. The National Research and Development Policy expresses the principal goals of research and development support, total amount and allotment of financial support for the period of four to six years and additional measures for the implementation of the policy.

One of the main tools for the implementation of the National Research and Development Policy is the National Research Programme which is also prepared and submitted to the Government by the Ministry of Education, Youth and Sport. A substantial part of the targeted research and development support in the Czech Republic should be concentrated on the National Research Programme. It is anticipated that the programme shall be available also for citizens of EU member states.

A proposal for the financial guarantee of both the National Research and Development Policy and the National Research Programme is prepared and submitted to the Government by the Council in the form of middle-term perspectives of research and development support. The Council prepares a particular proposal for the amount of costs of research and development and their allotment in the current year. The proposal is one of the supporting documents for the Act on the State Budget for the current year.

The scheme of principal phases of preparation of long-term trends of R&D support and mutual relations of those phases are illustrated in Fig. 3.

Fig. 3
Principal phases of state-funded R&D support preparation pursuant to Act No. 130/2002 Coll.,
on Research and Development Support

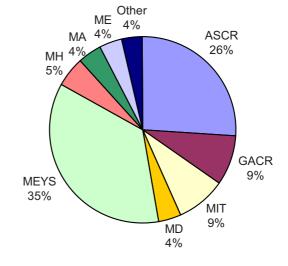


Co-operation with other bodies and institutions

While fulfilling its tasks and goals, the Council co-operates closely with the Ministry of Education, Youth and Sport which pursuant to the Act on Research and Development Support represents the central administration authority responsible for R&D. It is necessary to mention particularly the co-operation of the Council with the Grant Agency of the Czech Republic, with the Academy of Sciences of the Czech Republic, with the Ministry of Industry and Trade and with the Ministry of Finance. Those bodies and institutions which have a substantial impact upon R&D in the Czech Republic are mentioned in the enclosed table (page 14).

Total financial funds for research and development in 2003

Government Department	Thousands of CZK
ASCR	3 651 134
GACR	1 197 097
MIT	1 195 000
MD	530 555
MEYS	4 981 899
MH	738 739
MA	582 406
ME	536 993
Other	506 762
Total	13 920 585

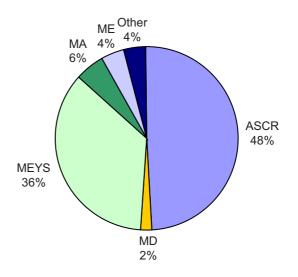


Status as of February 1, 2003

Institutional funds for research in 2002

Government Department	Thousands of CZK		
ASCR	2 356 221		
MD	106 400		
MEYS	1 718 785		
MA	266 733		
ME	201 707		
Other	181 641		
Total	4 831 487		

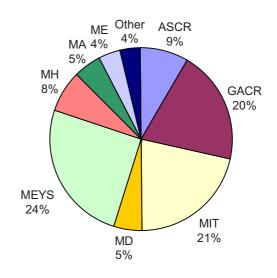




Targeted funds for research and development projects in 2002

Government Department	Thousands of CZK
ASCR	449 280
GACR	1 036 126
MIT	1 099 938
MD	260 412
MEYS	1 299 617
MH	400 314
MA	248 305
ME	205 553
Other	190 113
Total	5 189 658

Status as of February 1, 2003



Addresses of the state administration central bodies and other bodies and institutions from the budget chapters of which research and development is funded and/or which have a substantial influence on research and development in the Czech Republic:

• Ministry of Transport and Communication (MTC)

nábř. L. Svobody 12, 110 15 Praha 1 http://www.mdcr.cz

- Ministry of Finance (MF)
 Letenská 15, 118 10 Praha 1
 http://www.mfcr.cz
- Ministry of Informatics (MInform) Havelkova 2, 130 00 Praha 3 http://micr.cz
- Ministry of Culture (MC)
 Milady Horákové 139, 1600 00 Praha 6
 http://www.mkcr. cz
- Ministry of Local Development (MLD) Staroměstské nám 6, 110 15 Praha 1 http://www.mmr.cz
- Ministry of Defence (MD)
 Tychonova 1, 160 00 Praha 6
 http://www.army.cz
- Ministry of Labour and Social Affairs (MLSA)
 Na poříčním právu 1, 128 00 Praha 2 http://www.mpsv.cz
- Ministry of Industry and Trade (MIT) Na Františku 32, 110 15 Praha 1 http://www.mpo.cz
- Ministry of Justice (MJ)
 Vyšehradská 16, 128 10 Praha 2
 http://www.justice.cz
- Ministry of Education, Youth and Sport (MEYS)

Karmelitská 7, 118 12 Praha 1 http://www.msmt.cz

- Ministry of Interior (MInter) Nad Štolou 3, 170 00 Praha 7 http://www.mvcr.cz
- Ministry of Foreign Affairs (MFA)
 Loretánské nám. 5, 125 10 Praha 1
 http://www.mzv.cz

- Ministry of Health (MH)
 Palackého nám. 4, 128 01 Praha 2
 http://www.mzcr.cz
- Ministry of Agriculture (MA) Těšnov 17, 117 05 Praha 1 http://www.mze.cz
- Ministry of Environment (ME) Vršovická 65, 100 10 Praha 10 http://www.env.cz
- Academy of Sciences of the Czech Republic (ASCR)
 Národní 3, 117 20 Praha 1 http://www.cas.cz
- Czech Security Intelligence Service (CSIS) Nárožní ul. 1111/2, 158 80 Praha 5 http://www.bis.cz
- Czech Mining Authority (CMA) Kozí 4, 110 01 Praha 1 http://www.cbusbs.cz
- Czech Office for Surveying, Mapping and Cadastre (COSMC)
 Pod Sídlištěm 9, 182 11 Praha 8 http://www.cuzk.cz
- Grant Agency of the Czech Republic (GACR)

Office of the Grant Agency of the Czech Republic Národní 3, 110 00 Praha 1 http://www.gacr.cz

- National Security Authority (NSA)
 Bubenečská 20, 160 00 Praha 6
 http://www.nbu.cz
- State Office for Nuclear Safety (SONS) Senovážné nám. 9, 110 00 Praha 1 http://www.sujb.cz
- Office of the Government of the Czech Republic (OGCR)

nábř. Edvarda Beneše 4, 118 01 Praha 1 http://www.vlada.cz

ADVISORY AND WORKING BODIES OF THE COUNCIL

The Council has established its advisory and working bodies for the fulfilment of the stipulated tasks.

Advisory bodies of the Council include:

- 1. Professional Commission for Animate Nature Sciences
- 2. Professional Commission for Inanimate Nature Sciences and Engineering Science
- 3. Professional Commission for Social Sciences

A major function of professional commissions is to prepare proposals of long-term principal trends and proportions of the progress of research and development in the Czech Republic, assess prospective trends in the sphere of basic research and recommend support of priority trends of applied research and development following from the needs of Czech industry and society.

Each commission consists of twelve members. The term of office of the members is four years. Members of the professional commission may be appointed for no more than two consecutive terms of office. Members of the professional commission are appointed by the Chairman of the Council on the proposal of the Council. The choice of members of the professional commission is governed by the Statutes of the Council. Membership in the professional commission is incompatible with the simultaneous membership in the Council, the Presidium and branch commissions of the Grant Agency of the Czech Republic and the Presidium of the Academic Council of the Academy of Sciences of the Czech Republic.

A professional commission works independently. The Chairman of the professional commission, appointed by the Chairman of the Council on the proposal of the Council, manages the commission and is responsible for it. The tasks of the professional commission are assigned by the Council through the correspondent appointed from among the members of the Council.

Working commissions represent working bodies of the Council. The Council may establish working commissions for the elaboration of supporting materials unless such elaboration is in the competence of the professional commission. The members of the professional commissions are appointed by the Chairman of the Council on the proposal of the Council. The Chairman of the working commission appointed by the Chairman of the Council on the proposal of the Council manages the activity of the working commission and is responsible for it.

In 1997 the Council established the **Bio-ethical Commission** for the solution of assignments related to bio-ethical aspects of research. The Bio-ethical Commission consists of prominent specialists dealing with these issues from the point of both science and legislation. The Chairman of the Bio-ethical Commission is the Vice-Chairman of the Council.

For the solution of particular tasks the Council appoints a **correspondent** from among its members. It always appoints a correspondent for the duties assigned to professional commissions.

For the solution of large-scale tasks the Council may constitute a **working group** from among the members of the Council which is managed by a correspondent.

The Chairman of the Council, the Chairman of the working commission and the correspondent may **invite experts** who are not members of the Council for the solution of a specific problem.

COMPOSITION OF PROFESSIONAL COMMISSIONS

Professional Commission for Animate Nature Sciences

Prof. MUDr. Michal Anděl, CSc. internal medicine, metabolism

Prof. MUDr. Milan Elleder, DrSc. metabolism

Ing. Josef Fulka, DrSc. reproduction biology Prof. Ing. Pavel Hobza, DrSc. quantum chemistry Prof. RNDr. Václav Hořejší, CSc. molecular biology

Doc. Ing. Jan Krekule, DrSc. botany
Prof. RNDr. Ing. Michal V. Marek, DrSc. ecology

Prof. MUDr. Bohuslav Oštádal, DrSc. physiology, bio-medicine

Prof. RNDr. Václav Pačes, DrSc. molecular biology

Prof. RNDr. Blanka Říhová, DrSc. zoology, evolution biology

Prof. Ing. Kamil Wichterle, DrSc. immunology
Doc. RNDr. Jan Zrzavý, CSc. physical chemistry

Professional Commission for Inanimate Nature Sciences and Engineering Science

Prof. Ing. Tomáš Čermák, CSc. electrical engineering

Prof. RNDr. Pavel Drábek., DrSc. mathematics
RNDr. Vladimír Dvořák, DrSc. theoretical physics

Prof. Ing. Jaroslav Fiala, CSc. inorganic chemistry, material sciences

Ing. Karel Jungwirth, DrSc. plasma physics

Prof. Ing. Vladimír Kučera, DrSc. computer science, regulation Prof. Ing. Jan Macek, DrSc. mechanical engineering Ing. Karel Matocha, CSc. material engineering

Prof. RNDr Jan Palouš, DrSc.

Ing. František Pazdera, CSc.

Ing. Karel Šperlink, CSc.

Prof. Ing. Miroslav Václavík, CSc.

astrophysics

nuclear physics

material engineering

mechanical engineering

Professional Commission for Social Sciences

Prof. JUDr. Josef Bejček, CSc. commercial law

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 ${\bf Ing.\ Rostislav\ Mach, DrSc.}$



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Prof. RNDr. Jiří Zlatuška, CSc.



Prof. Ing. Petr Zuna, CSc., FEng.

Biographies of Members of the Research and Development Council

PhDr. Petr Mareš, CSc.

Chairman of the Research and Development Council, Vice-Premier for research and development, human rights and human resources

Born in Prague on 15th January 1953.

Following a year study stay at the Faculty of History of Warsaw University he began his studies at the Philosophical Faculty of Charles University where he graduated in 1978 in philosophy-history. At the same faculty he defended his thesis in 1983 and in 1988 his CSc. thesis in the field of world history.

Between 1980 and 1981 he worked as an assembler in Strojinvest in Prague, from 1981 to 1984 as a scientific research assistant, later as an expert at the Institute of Czechoslovak and World History of the Czechoslovak Academy of Sciences. From 1987 to 1988 he was employed as an archivist in the Trades Unions archive, and between 1988 and 1990 as a scientific worker at the Department of History and Theory of Film in the Czechoslovak Film Institute.

From 1990 he worked at the Faculty of Social Sciences of Charles University, where he held successively the function of the Secretary of the Faculty of Political Sciences, Vice-Dean for study matters and head of the Department of American Studies of the Institute of International Studies. During the summer term of 1996 he worked at the Faculty of History of the University of Calgary in Canada. From 1998 to 2002 he was Chairman of the Committee for Science, Education, Culture, Youth and Sport of the Chamber of Deputies of the Parliament of the Czech Republic.

He is author of the book *Presidents of the USA* (Práh 1994) and co-author of the second volume of *A History of the Crown Lands of Bohemia* (Paseka 1992). Together with Jiří Fidler he wrote the book *A History of NATO* (Paseka 1997). He has published many professional studies and educational papers particularly in the magazines *Soudobé dějiny, Iluminace, Dějiny a současnost* and *Reflex*.

Prof. PhDr. Martin Potůček, CSc. MSc.

First Deputy to the Chairman of the Research and Development Council

Born in Prague on 2nd September 1948.

He studied philosophy, mathematics, political science and sociology at the Masaryk University in Brno. In 1976 he was awarded his PhDr. degree here. Until 1989 he worked as a researcher at the Department of Complex Modelling, Sportpropag, and later at the Institute of Social Medicine and Organisation of Health Care.

In 1989 he completed his Ph.D. degree in the Theory of Management. Then he studied at the London School of Economics and Political Science (1990-1991) and took part in professional fellowships and exchange programmes of Eisenhower Exchange Fellowship in the USA (1992), at Oxford University (1993-1994), at Konstanz University (1997-2000), at the Institute of Human Sciences in Vienna (1998) and at CEU in Budapest (1998-2000). In 1990 he joined the newly established Faculty of Social Sciences at Charles University in Prague. He habilitated there in 1992 in sociology and in 1998 he gained full professorship in public and social policy at the new study programme of which he was co-founder. Between 1994 and 2003 he was Director of the Institute of Sociological Studies and since 2000 he has been Head of the Centre for Social and Economic Strategies there. In 2002 he was appointed the Permanent Guest Professor at the Konstanz University.

In the past, he studied the teleonomic qualities of differentiated social actors, processes of cultivation and utilisation of human potential, factors influencing health and health policy. At present he concentrates on the research of processes of forming and implementing public policy in the Czech Republic and particularly the regulatory functions of the market, government and civic sector, on the European

context and global dimension of public and social policy, and on the problems of public administration reform. He coordinates the comprehensive forecasting project at the national level. He published six monographs (three as the head of the author's teams), 60 original articles in scientific journals, five textbooks and 90 research papers and policy projects.

In 1995 he was elected the Chairman (1994 and 1996 Vice-Chairman) of the Masaryk Czech Sociological Association and in 1997 a member of the Steering Committee of the international non-governmental organisation Network of Institutes and Schools of Public Administration in Central and Eastern Europe (NISPAcee). Between 2000 and 2002 he held the position of the President of this organisation.

MUDr. Vladimír Viklický, CSc.

Vice-Chairman for Research

Born in Prague on 27th November 1938.

He studied at the Faculty of General Medicine, Charles University, Prague and obtained his MUDr. degree in 1963. He obtained his CSc. degree in 1968. Since then he has been working as a research scientist at the Institute of Molecular Genetics of the Academy of Sciences of the Czech Republic in Prague. Between 1981 and 1989 he was responsible for the research activities of the Department of Biology of Immunocytes. From 1989 he was head of the Department of Biology of Cytoskeleton and since 1991 he has been deputy director of the Institute of Molecular Genetics of the ASCR.

From 1964 to 1981 he was working mainly on projects investigating the induction of immunological tolerance and the meaning of histocompatibility antigens in immune processes. Since 1981 he has been studying the structure and function of cytoskeleton. Recently he has been concentrating on problems relating to rapid transfer of new scientific knowledge into practice.

He actively participated in a number of scientific conferences and has lectured in France, Finland, Austria and the USA and was invited for several short-term stays in these countries. He is author of 157 original scientific papers published in internationally recognised journals, co-author of two monographs and a series of short communications. According to SCI, his papers have been cited more than 1,300 times. He is also co-author of more than 20 copyright certificates.

Since 1975 he has been lecturing at the Faculty of Science, Charles University in Prague and he has supervised a number of graduate and CSc. students. During 1995-1997 he was presiding the Grant Agency of the ASCR. Since the establishment of the grant system in the Czech Republic he has been a member of several boards of the Grant Agency of the ASCR as well as of the Grant Agency of the Czech Republic. He also worked in the organisational committees of several international and world congresses.

His activities have been awarded the National Prize of the Czech Republic for the introduction of hybridoma technology in Czechoslovakia, twice the Prize of the Czechoslovak Academy of Sciences, and with the Prize of the Academy of Sciences of the Czech Republic. In 1999 he obtained the Purkyně Medal of the ASCR.

Ing. Miroslav Janeček, CSc.

Vice-Chairman for Development

Born in Ostrava on 3rd May 1945.

He studied at the University of Chemical Technology in Pardubice from where he graduated in 1967. At the same University he obtained his CSc. degree in 1983. He also completed postgraduate studies on "Technology of Dyestuffs and Intermediates", a long-term manager course (European Round Table), and a course at the Institute of Corporate Governance.

Between 1968 and 1975 he was employed at VCHZ (Eastern-Bohemia Chemical Plants) Synthesia Pardubice as a technologist, later named head of the laboratory of analytical methods and head technologist of dyestuff production. From 1986 to 1991 he worked at the Research Institute of Organic Syntheses a.s. Pardubice-Rybitví as head of its research department. In 1991 he worked at the firm of Dr. Heubach in Germany. In the same year he returned to VCHZ Synthesia, where he later became Deputy Director for strategic management, then Director for strategy, Director for research and development and from February 1, 1997 General Director of the Research Institute for Organic Syntheses a.s. Rybitví (daughter company of Synthesia a.s.). Since October 1, 2001 he has been a private advisor.

During his scientific career, besides publishing his CSc. dissertation, he has been lecturing at several conferences and also at the University of Chemical Technology in Pardubice. He is author and co-author of more than 30 authorial certificates and improvement proposals.

His other activities include: member of the Scientific Board of the University of Chemical Technology in Pardubice; President of the Association of Research Organisations, and participant in a number of other committees and institutions. He is also a former member of the National Czech Council EUREKA.

Ing. Josef Bouška, CSc.

Born in Stehelčeves in the district of Kladno on 25th March 1944.

Following the completion of secondary school he started to work as a technician at the Forrest Company at Klášterec nad Ohří. In 1965 he transferred to the Forrest Company at Petrohrad. In 1970 he began working at the State Farm Podbořany as a technician. Between 1975 and 1993 he was employed in the Research Institute of Animal Production in Prague-Uhříněves, at first as a technician and from 1981 as a researcher. During this period he was studying livestock breeding at the Agronomical Faculty of the University of Agriculture in Prague, graduating in 1981. In 1984 he obtained CSc. degree. In the period 1988-1990 and again in 1993 he held the position of Deputy Director of the institute.

From 1994 to 1996 he was Director of the Czech Holstein Association. Then he returned to the research institute and was Deputy Director for two years. On January 1st 1999 he was appointed Director of the Research Institute of Animal Production in Prague. During his research career, in 1985, 1990, and in 1995, Ing. Bouška took part in study stays in prominent foreign institutions involved in animal production including the Research Institute of Animal Production in Zeist in the Netherlands, the International Livestock and Management School in Kemptville in Canada, the Holstein Association USA, Inc., Brattleboro, USA and the University of Wisconsin also in the USA.

He is author or co-author of 40 original scientific publications, 48 final reports of research projects and 96 other professional communications as book chapters, methodologies, etc. Prior to his appointment director of the Research Institute of Animal Production in Prague, he concentrated mainly on problems of genetics and cattle breeding. He headed teams involved in the solution of these problems. At present he is a member of the Scientific Council of the Czech Agriculture University in Prague and the Research Institute of Animal Production in Nitra. He is also a member of branch councils for postgraduate CSc. study for the field of special livestock breeding of the Czech Agriculture University in Prague and South-Bohemian University in České Budějovice. He is the Chairman of the Commodity Advisory Council of the Ministry of Agriculture for milk and beef.

Prof. JUDr. Jan Dědič

Born in České Budějovice on 4th January 1952.

In 1970, Jan Dědič was accepted at the Law School of Charles University in Prague, from which he graduated in 1975. He was granted the academic title JUDr. in 1979 on the basis of a postgraduate thesis in the field of civil material and procedural law. In 1993 he defended his habilitation (second doctoral thesis) in the area of commercial law at the Law School of Charles University and was granted the title of an Associate Professor. In 1995 he was appointed Professor in the field of law in business. Prof. Dědič has been active in various academic positions at the University of Economics in Prague where he has been head of the Law Department of the Faculty of International Relations since 1992. He also lectures at the Law School of Charles University in Prague, he is a member of its Scientific Council, of the departmental committee for commercial law and an external member of the commission for state and CSc. examinations. He has participated in activities of the Grant Agency of the Czech Republic.

Prof. Dědič is a sought-after expert in the field of corporate, securities, commercial and financial law, banking and the capital market. He is an attorney-at-law in the law firm Kocián Šolc Balaštík in Prague, in which he became a partner in 1998.

Prof Dědič participates significantly in legal drafting in compliance with European standards, he is one of the authors of the amendment to the Commercial Code and the amendment to the Securities Law. He is an expert in the consortium for the approximation of Czech law with EU law, he is a member of the Commercial Law Commission of the Czech Government Council and in the past he participated actively in the drafting of many acts. He is also Chairman of the Appeals Committee of the Czech National Bank, a member of the Supervisory Board of Expandia Holding, a.s., a member of the board of the Prague Foundation for the Development of Economic Education and in the past he was also a member of the board of SPT Telecom, a.s.

Prof . Dědič is author or co-author of many monographs and articles contained in book monographs, in professional journals as well as in the daily press, and is author of several textbooks and university textbooks. He has taken active part in many professional conferences.

Ing. Milan Holl, CSc.

Born in Prague on 13th July 1943.

After he completed his secondary school studies in 1960 he was trained as a fitter. He was enrolled at the Faculty of Mechanical Engineering of the Czech Technical University in Prague in 1962, from which he was graduated in 1967. That year he took up a position in the Research and Testing Aviation Institute (VZLÚ), Department of Driving Units. He completed his external scientific postgraduate study in 1977 at the Czech Technical University at the Department of Strength and Elasticity. He completed the following post-graduate courses: "Fracture Mechanics and the Theory of Machine and Structure Reliability" at the Faculty of Nuclear and Physical Engineering (1974-1976), "Marketing in the Aviation Industry" – USA (1989-90), "Strategy of Survival" organised by the French-Czech Institute together with the School of Economics in Prague (1993) and the "Aviation Law of the USA" organised by the Technical University in Brno and the John Marshall Law School in Chicago, USA.

At the Research and Testing Aviation Institute he was first employed as an engineering assistant, he did his military service in 1968, then he worked as a senior engineering assistant until 1972. Between 1972 and 1977 he was employed as a research worker and from 1977 to 1984 as an independent research worker. In 1984 he was appointed head of a development team, in 1990 head of a marketing department, in 1992 Director of the Institute and since 1995 he has been occupying the position of Director General of the Research and Testing Aviation Institute (VZLÚ, a.s.).

He is a member of the Czech Scientific and Technical Society, and the Engineering Academy of the Czech Republic. Currently he is the President of the Association of Aircraft Manufacturers. Ing. Holl

is also active in the Scientific Council of the Mechanical Engineering Faculty of the Czech Technical University in Prague. Between 1993 and 1996 he was the national co-ordinator of the NATO Advisory Group for Aviation Research and Development (AGARD); now he is a member of this body. From 1995 to 1998 he was the national co-ordinator of the NATO Advisory Group for Armaments Industry (NIAG), now he is a member of the Czech representation. He is a member of the board of the European Association of Aircraft Manufacturers (AECMA). He is also a member of the International Association for Aeroengines (ISABE) and of the International Council of Aeronautical Sciences (ICAS).

Ing. Holl is the editor-in-chief of the journal *Letecký zpravodaj* and a member of the Supervisory Board of AEROMEDIA – publishing the magazine *Letectví a kosmonautika*. He is the author of 18 important research papers, 23 development reports, a series of articles published in both Czech and international magazines. He has participated actively in numerous international conferences.

Prof. MUDr. Cyril Höschl, DrSc., FRCPsych.

Born in Prague on November 12th 1941.

He graduated from the Faculty of General Medicine in Prague. He worked as a psychiatrist and research worker in the Research Psychiatric Institute and as a university teacher at the 3rd Medical Faculty of Charles University, the Dean of which he was between 1990 and 1997. At present he is the Director of the Psychiatric Centre Prague and the Centre of Neuropsychiatric Studies. He has lectured at universities in Canada and the USA, and he is active in educational institutions in Denmark and Austria.

He is a member of the British Royal College of Psychiatrists, Academic Society of the Czech Republic and many other international and Czech professional societies.

He has published more than 100 works in the fields of psychoneuroendocrinology, psychopharmacology and psychiatry. The most important are the monograph "Neuroendocrinology in Psychiatry", "Psychiatry for General Practitioners" and a pioneering work on psychotropic activity of matters influencing metabolism of calcium in nerve cells. He is the editor-in-chief of *Psychiatry* journal and a member of the editorial boards of *Vesmír* journal, foreign journals *Neuroendocrinology Letters*, *International Journal of Psychiatry in Clinical Practice*, etc. He devotes himself to the popularisation of science and journalism. Articles he published between 1996 and 2001 mainly in *Mladá fronta Dnes* and *Lidové noviny* have been condensed and published in the book *Angle of view*. He is also known for his regular radio broadcasts in "Guest to the House" aired on Radio Praha, programmes of Radio CLASSIC FM, appearances on Czech TV and regular columns in *Reflex* magazine.

Ing. Rostislav Mach, DrSc.

Born in Uherské Hradiště on 30th September 1943.

In 1965 he completed his studies of nuclear physics at the Faculty of Nuclear Physics and Engineering of the Czech Technical University in Prague. In 1967 he started to work at the Nuclear Physics Institute of the Czechoslovak Academy of Sciences (now Academy of Sciences of the Czech Republic), where he has been working until the present time as a research worker. Earlier, he was a senior scientist at the Nuclear Theory Department; now he is head of the Radiopharmaceutical Department. He was awarded CSc. degree by the Joint Institute of Nuclear Research in Dubna, Russia in 1976, and the DrSc. at Charles University in Prague in 1996. Between 1990 and 1998 he was Director of the Nuclear Physics Institute of the Academy of Sciences in Řež.

Investigation of particle reaction with atomic nuclei is his main field of scientific activities. He supervised many diploma and several CSc. theses in this field. Recently he has been managing several large-scale projects in the area of applied research. These projects include the introduction of research and production of radiopharmaceuticals in the Nuclear Physics Institute Řež and the programme of

transmutation of nuclear waste through sub-critical reactors. In recent years he has been lecturing on the "scattering theory" at the Faculty of Nuclear Physics and Engineering of the Czech Technical University.

Since 1999 he has been working in the Academic Council of the Academy of Sciences and from 1993 to 2000 he was a member of the Supervisory Board of the Grant Agency of the Czech Republic, since 1990 he has been the plenipotentiary of the Government of the Czechoslovak Federative Republic (later Czech Republic) in the Joint Institute of Nuclear Research in Dubna, since 1996 he has been representing the Czech Republic in OECD Nuclear Energy Agency and since 1999 is one of the two representatives of the Czech Republic in Euroatom.

He participated in research scholarship in the Joint Institute of Nuclear Research in Dubna from 1975 to 1978, at the University of Hannover in 1985 and 1987, and the Paul Scherrer Institute in Villigen, Switzerland in 1990 and 1992. He also was on short stays in Italy, Israel, USA, etc.

Ing. Vladimír Nekvasil, DrSc.

Born in Paris on 20th April, 1944.

In 1967 he completed his studies of the Solid State Physics at the Faculty of Technical and Nuclear Physics of the Czech Technical University in Prague. In 1969 he began graduate studies at the Institute of Solid State Physics of the Czechoslovak Academy of Sciences (now the Institute of Physics of the Academy of Sciences of the Czech Republic), where he presently works as a senior research worker. He defended his thesis, "Contribution to the study of magnetic properties of neodymium in garnets", in 1973, in 1974 he was awarded the scientific title of CSc. by the Czechoslovak Academy of Sciences. The title of DrSc. he was granted by Charles University in Prague in 2001 for his work "4*f* electrons in rare earths cuprates".

His research activities are concentrated on the theoretical study of magnetic and optical properties of compounds containing transitive elements. At present he is occupied primarily with the relations between magnetism and superconductivity in perovskite materials and the study of electron excitations in oxides applicable in lasers. His principal foreign partners are the University of Sherbrooke, Canada (joint laboratory), and the Institute of Max Planck in Stuttgart.

He has written 85 publications in internationally reviewed magazines and has been cited 450 times by foreign authors. He has lectured at numerous international conferences, summer schools and post-graduate courses. In 1987 he was awarded (together with P. Novák) the Prize of the Czechoslovak Academy of Sciences for their work "Microscopic Theory of Magnetism of Ferrites with Garnet Structures". He participated in long-term stays at research institutions in the USA (1977 – Yale University), France (1980 – CNRS – Bordeaux; 1991/1992 – CNRS and University J. Fourier – Grenoble (Visiting Professor)).

At the Institute of Physics of the Academy of Sciences of the Czech Republic he was the Chairman of the Scientific Council (1994 and 1996), Attestation Commission (1994-97) and the Commission for Rectifying Injustice. Between 1990 and 1992 he was a member of the Chamber of elected representatives of the Czechoslovak Academy of Sciences, since 1993 he has been a member of the Academic Assembly of the Academy of Sciences. He is a member of scientific councils of the Czech Technical University in Prague and the Faculty of Mathematics and Physics of Charles University and the Ministry of Defence Council for Defensive Research. From 1999 to 2002 he was a member of the council of the Ministry of Education, Youth and Sport programme "NATO Science Fellowships". He is engaged in the OECD commission for scientific and research financing.

plk. prof. Ing. Václav Přenosil, CSc.

Born in Humpolec on 9th April 1952.

He graduated from the Military Academy in Brno in 1975. Between 1975 and 1980 he occupied various positions of technical assurance at the 10th Aviation Army in Hradec Králové. From 1980 to 1986 he was employed in several technical and organisational functions in the computer centre of the Military Academy in Brno.

Between 1981 and 1987 he completed his research assistantship and in 1988 he defended his CSc. thesis, "Systems of Display of Information at the Control Panel of an Aircraft", in the field of Technical Cybernetics at the Faculty of Aeronautics and Anti-Aircraft Protection. From 1985 he lectured at the Department of Automated Systems of Command and Computer Science. In 1998 he habilitated as Associate Professor in Military Electronics, Computer Science and Cybernetics. Since 1996 he has been Vice-Rector for Research Activities at the Military Academy in Brno.

His scientific activity concentrates primarily on the application of computer graphics in the systems of display of information, construction and diagnostics of numerical systems, conceptions of systems with enhanced reliability. Recently he has devoted himself to the conception and complex use of simulation systems in the armed forces of NATO member states and the Army of the Czech Republic. In 2000 he spent three months at the University of Central Florida on a research fellowship, where he participated in processing statutory documents of the university in the sphere of research work and he also worked at the Institute for Simulation and Training.

In the course of his professional, pedagogical and scientific career he has published more than 70 scientific articles, he is the author or co-author of 16 university textbooks and texts. He is the manager and co-manager of 10 scientific assignments, and he is an active participant in a series of national and international conferences and seminars. He has also been a member of commissions and councils in the competence of the Ministry of Defence and the Ministry of Education, Youth and Sport. He is a member of the Scientific Council of the Czech Technical University in Prague and a regular guest of the Scientific Council of the Military Academy in Brno. He has taken active part in panel studies, including an Analysis and Simulation panel (SAS) and NATO Modelling and Simulation Group (NMSG) of the NATO Research and Technology Organisation as a plenipotentiary of the Ministry of Defence. In addition, he is a contact person for the implementation of international assistance of FMF of the U.S. Congress concerning the introduction of simulation and flight simulators technology into the Army of the Czech Republic.

Prof. Ing. Jaroslav Purmenský, DrSc.

Born in Rybí on 1st December 1943.

He graduated from the Metallurgical Faculty of the Mining University in Ostrava in 1967. In 1980 he defended his candidate thesis and in 1992 he was granted the title of the Associate Professor in the field of mechanical engineering technologies. His defended his DrSc. thesis, "Structural Stability of CrMO a CrMoV of Steels and the ImpactThereof on the Durability of Equipment for Energy and Chemistry Sectors", in 1994 and in 1995 he was appointed Professor in the field of machinery technology.

Since 1968 he has been occupying numerous research and development and managing positions at the Research Institute of VÍTKOVICE, a.s. OSTRAVA, and since 1994 he has been Director of the company VÍTKOVICE – Výzkum a vývoj, s.r.o. Under his management this research institute was transformed into one of the leading institutions of applied research in the field of metallurgical and material sciences both in this country and abroad and was a manager of national and international projects in this sphere.

His professional interest is focused on complex research and development of creep-resisting and hydrogen-resisting steels and their technological processing. He has already published 198 articles in professional magazines and he has presented at the international conferences and symposia, in many

cases as a highly sought-after author. He is author of 200 concluding research reports and seven patents. He was awarded two important long-term scientific scholarships, namely at CNIITMAŠ Institute in Moscow (1972) and the University College of Swansea, Wales (1991), where he took an active part in developing methods of small samples for the stipulation of the utility value of metal materials and their application in determining the level of degradation of steel construction, facilities in energy and chemical engineering, etc.

Currently he lectures at the Mechanical Engineering Faculty of the Mining University in Ostrava in the field of mechanical engineering technologies, where he also supervises CSc. students.

He is active in many professional societies and institutions concentrating on materials and technologies, he is a member of the Research Council of the Mining, University in Ostrava, member of the Presidium of the Association of Research Organisations of the Czech Republic, member of the committee of the Czech Society for New Materials and Technologies, Chairman of the Scientific and Technical Society VÍTKOVICE, member of EIRMA (European Industrial Research Management Association), member of ASM International (American Society for Materials).

Prof. Ing. Zdeněk Vostracký, DrSc., dr.h.c., FEng.

Born in Plzeň on 15th May 1941.

He studied at the Pilsen Institute of Technology, from which he graduated in 1964. In 1976 he was awarded the CSc. and in 1988 DrSc. degree at the Faculty of Electrical Engineering of the Czech Technical University in Prague. In 1990 he was appointed Professor. In addition to this, he has taken postgraduate courses in psychology and pedagogy for engineers and participated in other programmes and courses in the Netherlands and the United States.

He was working as a design engineer at Škoda Pilsen and at the Škoda Research Institute in Pilsen for ten years. From 1992 he was an external lecturer at the Pilsen Institute of Technology and an internal lecturer at the University of West Bohemia in Pilsen where he has been head of the Department of Innovations and Projects and Rector since 1998.

His main areas of interest include the theory and design of high voltage and very high voltage electrical apparatuses for distribution points and transport, medical apparatuses, transonic gas flow and its interaction with arc and electrical fields, application of thermal plasma physics, mechanics and management of research and development strategy.

He has written more than 270 publications including five monographs and university textbooks. He is the author of 49 inventions, he implemented a series of engineering projects. He was awarded the research prize of the Siemens Company.

He has been lecturing at the University of West Bohemia as well as many universities abroad – Erlangen, Germany, Portland, Oregon and Milwaukee, Wisconsin – and was invited to give lectures in 13 countries. He is a member of many scientific and research societies – the Engineering Academy of the Czech Republic, CIGRE (International Council on Large Electric Systems - France), IEEE (Institute of Electrical and Electronic Engineers - USA) and others. He is also a member of the scientific councils of several universities and co-operates with a number of institutes of the Academy of Sciences of the Czech Republic. He is the founding member of IA CR, and in 2000 he was appointed a honorary doctor of sciences in London.

Prof. RNDr. Jiří Zlatuška, CSc.

Born in Brno on 15th September 1957.

In 1981 he completed his studies of theoretical cybernetics and mathematical computer science at the Faculty of Science of Masaryk University in Brno. In 1997 he was awarded the CSc. degree in the field of mathematical computer science for the work for successfully defending his thesis, "Functional Data Modelling".

After graduating the university he worked at ÚVT MU at first as a mathematician-analyst, and from 1987 as Deputy Director for scientific and research activities. In 1990 he was awarded the title of Associate Professor of mathematical computer science and in 1995 he was appointed Professor in the same field. In 1998 he was selected to be Rector of the Masaryk University in Brno.

Besides, he was a Visiting Associate Professor at the Department of Computer and Information Sciences of the University of Delaware. He also worked for short periods at universities in London (City University), Coimbre and Pisa.

His research interests include the information society, computer science and mathematical logic, logical programming, lambda-calculus, and the man-machine communication. In this field he has published two books and more than 50 papers and research reports, more than 100 reviews and made a series of appearances at scientific meetings.

In addition to his large pedagogical activity, he has held and continues to hold a number of academic functions at the Masaryk University as well as the Military Academy in Brno, Czech Technical University in Brno, and elsewhere.

Prof. Ing. Petr Zuna, CSc., FEng.

Born in Prague on 21st March, 1941.

He graduated from the Department of Material Science at the Faculty of Mechanical Engineering of the Czech Technical University in Prague in 1963. Afterwards he started to work at the Faculty as a lecturer, and he received the academic title of candidate of technical sciences in 1972 in the field of Physical Metallurgy and Limit Conditions of Material. In 1989 he was appointed Associate Professor and in 1992 Professor of Material Science. In 1985 and 1986 he passed a short-term attachment in ČKD Praha.

Between 1991 and 1997 he was Dean of the Faculty of Mechanical Engineering of the Czech Technical University in Prague, from 1997 to 1999 the Rector of the Czech Technical University in Prague, and at present he is the Dean of the Faculty of Mechanical Engineering in Prague and deputy head of the Institute of Material Engineering of the same faculty. He is the vice-president of the Czechoslovak Society for New Materials and Technologies.

He is a founding member of the Engineering Academy of the Czech Republic, and he was its President for eight years; currently he occupies the function of the Past President. For the year 2002 he was elected President of the International Association of Engineering Academies CAETS. He is a member of the Russian and Slovak Engineering Academies. He participated in founding of the Grant Agency of the Czech Republic as a member of the Presidium, on which he served for eight years. He was a member for three years of the Committee for Physical and Technical Sciences of the European Science Foundation (ESF).

Between 1999 and 2001 he was a member of the Presidium of AERO Vodochody. He has been the Chairman or a member of the Scientific Councils of the Czech Technical University in Prague, Faculty of Mechanical Engineering of the Czech Technical University in Prague, Academy of Sciences of the Czech Republic (until 2001), Institute of Nuclear Research in Řež, Mechanical Engineering Faculty Brno, Engineering Faculty of the State Technical University Bratislava (until 1999), the Institute of Plasma Physics of the Academy of Sciences of the Czech Republic (until 1995), and the Technical

Museum. He is a member of the Academic Assembly of the Academy of Sciences of the Czech Republic, member of the editorial board of *Technik* and *MM*, member of the Department of Defensive Research of the Ministry of Defence and a member of the Commission of the Union of Industry and Transport for Research and Development.

He is co-author of one monograph, author and co-author of 16 articles in foreign magazines and anthologies, 65 contributions in Czechoslovak professional magazines, 21 invitational lectures and panel papers, 23 university textbooks and secondary school textbooks, and creator of one invention. He was the principal co-manager of the National Oriented Research Programme's project.

He received short-term fellowships with lectures and training in Japan, Great Britain, Russia, Poland, Germany and Indonesia. He was awarded the Medal of the First Degree of the Ministry of Education, Youth and Sport, Golden Felber Medal, Golden IGIP Medal, Memorial Medal of the Czechoslovak Union of Freedom Fighters and other medals of universities in the Czech Republic and Slovakia.