



EUROPEAN
COMMISSION

Community Research

THE JURY

PRESIDENT OF THE JURY

Dr. Ulf Merbold (DE)

**European Space Agency/European Space Research and Technology Centre,
Noordwijk, Netherlands**

Ulf Merbold graduated from Stuttgart University in 1968 with a diploma in physics and in 1976 received a doctorate in Sciences. Dr. Merbold became an astronaut in 1978 and was the first European Space Agency (ESA) astronaut in space and the first non-American to fly on the Space Shuttle. In 1983 he was assigned to fly on the first Spacelab mission STS-9 on board Space Shuttle Columbia. In January 1992, he flew as Payload Specialist on Space Shuttle Discovery and on 3 October 1994, Euromir took him on a 32-day mission to the Russian Space Station MIR making him the first ESA astronaut to fly to the MIR space station. Since the end of 1999, Dr. Merbold has been responsible for the Utilisation Promotion Management in the Microgravity Promotion Division of the ESA Directorate of Manned Spaceflight and Microgravity, at ESTEC, Noordwijk, Netherlands.

MEMBERS OF THE JURY

Dr. Dominique Fonteyn, (BE)

BIRA-IASB, Brussels, Belgium

Research at the Belgian Institute for Space Aeronomy

Dominique Fonteyn completed his doctoral studies in 1989 in the field of low-temperature, solid-state physics before becoming a researcher at the Belgian Institute for Space Aeronomy. His main expertise is in the field of modelling atmospheric chemistry. He has successfully extended this to chemical data assimilation using a comprehensive chemical transport model, the 4D-VAR method. His fields of interest range from aerosols, heterogeneous stratospheric chemistry, mesospheric chemistry to planetary atmospheres chemistry (Martian atmosphere). Dr. Fonteyn is also involved in many international collaborations and is co-principal investigator of SPICAM-Light onboard the ESA/Mars Express probe.

Prof. Pauline Slosse (BE)

Université Libre de Bruxelles

Pauline Slosse studied Chemistry at the Université Libre de Bruxelles, where she obtained her Ph.D. degree in Organic Chemistry. She completed her thesis on the characterisation by physical-chemical methods of alkaloids extracted from plants and the synthesis of their analogues. Following her doctorate, she co-ordinated practical courses in chemistry for engineering students. Professor Slosse has been working at the Centre Universitaire de Didactique pour l'Enseignement de la Chimie (CUDEC) of the Université Libre de Bruxelles since 1990. She also designs computer-based chemistry lectures using multimedia technology and is responsible for the first-year chemistry course (undergraduate level) at the university. Her teaching experience allows her to monitor the learning strategies of those using the multimedia lectures and to gauge the impact of multimedia on learning skills.

Prof. Vagn Lundsgaard Hansen (DK)

Department of Mathematics, Technical University of Denmark, Lyngby, Denmark

Vagn Lundsgaard Hansen earned a master's degree in mathematics and physics from the University of Aarhus, Denmark, 1966, and a Ph.D. in mathematics from the University of Warwick, England, 1972. He held positions as a research fellow at the University of Warwick (1969-72); associate professor, University of Copenhagen, Denmark (1972-80) and was a visiting professor at the University of Maryland, College Park, United States in 1986. He is the author of numerous research papers and several books on topology, geometry and global analysis and is the author of several publications including "Geometry in Nature" and "Shadows of the Circle". Professor Lundsgaard Hansen has been President of the Danish Academy of Natural Sciences since 1984. He was a member of the Danish Natural Science Research Council 1992-98, four of these as vice-chairman and was elected member of the European Academy of Sciences in 2004. He is currently professor of mathematics at the Technical University of Denmark and chairman of the Raising Public Awareness of Mathematics committee of the European Mathematical Society.

Michèle Peron (FR)

European Northern Observatory, Garching, Germany

Michèle Peron obtained her Master's degree in applied mathematics from the University Pierre and Marie Curie, Paris in 1985. She started her professional career as an engineer at the Institut d'Astrophysique de Paris. In 1989 she joined the European Southern Observatory (ESO) where she continues to work. She participated in the development of MIDAS, a data analysis system widely used by the astronomical community to process observational data. In 2000, she became Head of the Data Flow Systems Group (DFS) at the ESO which comprises around 30 physicists, mathematicians and software engineers with responsibility for the design and implementation of a set of software components which are critical for the end-to-end operations of the Very Large Telescope (VLT) located in Chile's Atacama desert. The VLT observatory is the World's largest and most technologically advanced ground-based optical astronomical facility.

Prof. Pál Ormos (HU)

Director of the Institute of Biophysics Biological Research Centre of the Hungarian Academy of Sciences, Szeged, Hungary

Pál Ormos studied physics at the Szeged University in Hungary during which time he became interested in biological problems. Upon graduating in 1975, he started to work in the Institute of Biophysics, Biological Research Centre of the Hungarian Academy of Sciences in Szeged and after a long career there he became its director. During his scientific career his field of interest has been the physical aspects of the function of proteins and the molecular mechanism of biological energy transduction. Recently, he moved into the field of nanotechnology where he is engaged in building nano-machines that are produced and driven by light. He is president of the Hungarian Biophysical Society, vice-president of the International Union of Pure and Applied Physics, and chair of its Commission on Biological Physics.

Prof. Jane Grimson (IE)

Vice Provost, Trinity College, Dublin, Ireland

Jane Grimson obtained her bachelors degree in Engineering from Trinity College Dublin and her Master's and Doctorate in Computer Science from the Universities of Toronto and Edinburgh respectively. She is currently Vice-Provost of Trinity College Dublin and President of the Healthcare Informatics Society of Ireland. She was previously President of the Institution of Engineers of Ireland, the Irish Academy of Engineering and of the Irish Computer Society. She is a member of the European Research Advisory Board, of the Executive Board of the European Science Foundation and of the Board of Science Foundation Ireland. Professor Grimson has also been active in promoting engineering as a career among young women. She believes that engineering is about providing innovative solutions designed to improve the quality of life and contends that women have a key role to play in shaping its future.

Prof. Daphne Atlas (IL)

Hebrew University of Jerusalem, Israel

Daphne Atlas obtained her bachelor degree in Chemistry from the Hebrew University of Jerusalem and her Master's and Ph.D. from the Weizmann Institute of Life Sciences in Rehovoth, Israel. She is currently leading a research team at the Hebrew University of Jerusalem and teaching at the Institute of Life Sciences. Her main research interest is the molecular mechanism of transmitter release. She also applies various electrophysiological, molecular biology and biochemistry techniques in her studies. In addition she is involved in developing novel drugs for the treatment of neurodegenerative diseases such as Parkinson's, Alzheimer's and multiple sclerosis. She has founded her own company to use her research to develop one of the drug compounds - it is now at the last stages of preclinical trials.

Dr. Paola Agostini (IT)

University of Milano-Bicocca, Milan, Italy

Paola Agostini graduated in Biological Sciences at the University of Milan in 1973 and took up her permanent position as a teacher in 1975. Since then, she has been teaching Biology, Biochemistry and Ecology in high schools. Dr. Agostini has been active in promoting life science and research methods among young people preparing projects for National Contests. She has published in the areas of environment and high-school education, and co-operated with the Italian Ministry of Education in planning new programmes in life sciences for public schools. She has also organised training courses for teachers in ecological, chemical and biological fields. Recently she moved to the University of Milano-Bicocca where she is in charge of the organisation of masters courses in the fields of bioinformatics and environmental sciences.

Dr. Indriķis Muiznieks (LV)

University of Latvia, Riga

Indriķis Muiznieks studied Biology at the University of Latvia and obtained his doctoral degree in soil microbiology from the Moscow University of Agriculture. Later he spent five years in Germany working in molecular microbiology at the universities of Regensburg and Cologne. After returning to Riga he headed the department of Microbiology and Biotechnology. For the last three years he has been the vice-rector for research of the University of Latvia. His main research interests are targeted at structural stability of plasmid and virus genomes, as well as studies of the regulation of cloned gene expression by geometry and topology of DNA. His second field is immunomodulators of bacterial and fungal origin, and mechanisms of non-specific immune defence. Dr. Muiznieks is president of the Latvian Society of Microbiologists and is a member of several national and international expert panels on higher education and research.

Johannes Steenbakker (NL)

European Patent Office, Munich, Germany

Jan Steenbakker studied mechanical engineering at the University of Delft, Netherlands. Graduating in 1976, he immediately took up a post at the Dutch Patent Office, moving in 1979 to the European Patent Office, where he became one of its Principal Directors in 2002. In addition to his background in mechanics, he has substantial experience of assessing inventions across a wide range of technical fields including telecommunications, biotechnology and vehicles, and has a particular interest in medical and agricultural applications. As a Principal Director he is responsible for all matters relating to the search, examination, granting and opposition of European patents in the field of telecommunications.

Dr. Piotr Chrzastowski-Wachtel (PL)
University of Warsaw, Poland

Piotr Chrzastowski-Wachtel completed his master's and doctoral studies at the Institute of Informatics, Warsaw University in the area of concurrency. Dr. Chrzastowski-Wachtel has held the position of vice-director of the Institute of Informatics at Warsaw University and was vice-president of the Foundation for Information Technology Development. He was also a member of the Programme Committee of Olympiad in Informatics in Poland, for which he designed over 20 original problems during the last 12 years. He is the author of many articles about mathematics and computer science, and takes an active part in the popularisation of science in Poland.

Prof. Helena Maria De Oliveira Freitas (PT)
Departamento de Botanica, Universidad de Botanica, Coimbra, Portugal

Helena Freitas graduated in Biology and obtained her Ph.D. at the University of Coimbra, Portugal, in 1993. In 1995 she completed her post-doctoral work at Stanford University in the United States. She was also president of the Portuguese NGO for nature conservation in 1999-2002. Professor Freitas is currently Professor of Plant Ecology at the Department of Botany and is responsible for the co-ordination of an interdisciplinary unit involved in several national and international projects on Mediterranean ecosystems, bio-diversity, plant soil interactions and nature conservation.

Prof. Nadezhda Bagdasaryan, (RU)
Member of the Russian Academy of Natural Sciences, Moscow, Russia

Nadezhda Bagdasaryan is the first social scientist to be invited as a jury member. She has published extensively in the areas of university education, sociology, philosophy of culture, and cross-cultural communications and has also worked in collaboration with Unesco. Since 1969 she has held a post at the Bauman Moscow Technical University where she is currently the Dean of the Social Sciences and Humanities Department, and Senior Professor of Sociology and Cultural Sciences.

Dr. Colin Osborne (UK)
University of Sussex, Brighton, UK

Colin Osborne studied chemistry at the University of Sussex and was then awarded a Ph.D. in physical organic chemistry. He started work in patents and industrial property but after two years changed career to teach in schools in London and Brighton for 24 years. He now manages the Royal Society of Chemistry's education programme for schools which involves the production of books, videos, CD-ROMs, events for students and teachers and careers material. He still finds chemistry fascinating, especially in its application and relevance to daily life.