

Communicating European Research 2005

Communicating European Research 2005

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Edited by

Michel Claessens

European Commission, Brussels, Belgium

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The authors were all speakers at the “Communicating European Research 2005” conference which was organized by the European Commission in Brussels on 14 and 15 November 2005. More information on the Conference, including the programme and speakers’ presentation, is available on the web site: <http://europa.eu.int/comm/research/cer2005.html>

The conference was the first ever organised by the Commission on *communicating research*. It shows the growing importance and recognition of public communication of science and technology.

The conference was a major success, as illustrated by the sheer number of participants (2,100+), the number of sessions and the quality of the speakers. The present book is a logical extension of such an original and enriching event.

Brussels
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Mima, Noyuri is a Deputy Director of the National Museum of Emerging Science and Innovation, specializing in the field of Research, Development and Education. Prior to this post, she conducted researches on cognitive science and human computer interaction. Meantime, she served on several government committees, relating to science, technology and education. Additionally, she was involved in the establishment of the museum as a member of the planning committee. Currently, by utilizing her experience as a researcher and a learning theory in cognitive science, she is responsible for many aspects of the museum's implementation, working to build bridges between the public, researchers and the science policy makers.

Minoli, Luisa is responsible for EU Projects in API Varese – the Association of Small and Medium Enterprises of Varese Province – promoting the interests of, and providing services to, associated SMEs. She is involved in dissemination and stimulation actions, informing the associated enterprises about European R&D programmes, and promoting their participation in EU-financed projects. Luisa is the co-ordinator of the technical committee of "Innovare", the magazine of the Italian Confederation of SMEs, and author of numerous articles focused on European research.

Morris, Tara, with a doctorate in sciences, has eight years experience working with European Institutions in Brussels. He is currently editor-in-chief for the IST Results service, reporting on the fruits of EC funded ICT research projects, helping to bring emerging technologies closer towards business communities. Over these years he was actively involved in managing communication and awareness activities in the field of European R&D and policy, working primarily with DGs Information Society,

Research and Enterprise. He has hands-on experience in both print and electronic media at all stages ranging from conception, design, construction and maintenance.

Oehlenschläger, Jörg has a PhD in biochemistry. After some years at the University in Hamburg as assistant professor he joined in 1977 the Department for Seafood Research in Hamburg, Germany, where he is actually scientific director and is responsible for research on seafood quality, nutrition and seafood related legislation. As professor he is teaching technology of aquatic food products at two German Universities. He is chairing many international and national groups focussing on seafood quality and safety and is speaker of the German delegation to CCFFP since 1986. In the management team of the IP SEAFOODplus he acts as the dissemination and communication manager.

Pasveer, Bernike is assistant professor at the Faculty of Arts and Culture of the University of Maastricht. She studied sociology and completed her PhD in 1992. Her work focuses on issues of technology and the human body, old and new media, and of late also on (medical) technologies and research for development of the South. In 2005 and 2006 she worked at the Rathenau Institute on issues of political and public engagement with science and technology.

Pérez Ballesta, Pascual joined the DG Joint Research Centre of the European Commission in 1993, after completing his PhD in chemistry at the University of Murcia. Since then, his research at the European Reference Laboratory of Air Pollution was related to the monitoring of organic pollutants (BTEX, VOC & PAH). He has participated in numerous working groups for the development of European air quality legislation and contributed to the establishment of international standard methods. His current interest includes the development of monitoring approaches for population exposure to air pollutants.

Peters, Hans Peter is Senior Researcher at the Program Group Humans-Environment-Technology of the Research Center Jülich, Germany, and Adjunct Professor of Science Journalism at the Free University Berlin. His research deals with the formation of public opinion on science and technology under the conditions of a media society. In particular, he focuses on the interactions of journalists and scientific experts and on the impact of scientific knowledge on public meaning construction. He is member of the Scientific Committee of the International Network on Public Communication of Science and Technology (PCST).

Potočnik, Janez is the Commissioner responsible for Science and Research. He studied economics to doctoral level and has worked as an economic analyst in an agency before taking up a position as assistant director at the Institute of Macroeconomic Analysis and Development (IMAD) in his home country of Slovenia. From 1988 to 1993, he was senior researcher at the Institute for Economic Research and returned to the IMAD as director between 1993 and 2001. In 1998, he was head of the negotiating team for Slovenia's accession to the EU. Then, in 2000, he became acting director of the Government Office for European Affairs, joined the prime minister's cabinet in 2001

before taking up a post, in 2002, as minister for European Affairs. Janez Potočnik is a European Commissioner since May 2004.

Reding, Viviane has a Doctor of Human Sciences from Paris Sorbonne University. A native Luxemburger, she worked as a journalist for 20 years while at the same time pursuing her political career. She was a Member of the Luxemburg Parliament from 1979 to 1989 and subsequently served as a Member of the European Parliament until 1999. Mrs Reding was appointed European Commissioner for Education, Culture, Youth, Media and Sport in 1999 and is currently serving her second term, now as Commissioner for Information Society and Media.

Revuelta, Gemma is associated professor of Science Communication at the Universitat Pompeu Fabra (UPF). Assistant director of the Observatori de la Comunicació Científica (Science Communication Observatory) of the UPF. Head Editor of the journal Quark: Ciencia, Medicina, Comunicación y Cultura. Co-director of the Proyecto Quiral, from 1997 (medicine and health in the Spanish daily press). Lecturer and academical coordinator of the Master of Science Communication at the UPF. Member of the European Network of Science Communication Teachers (ENSCOT). She is the author or coauthor of several studies, specially focused on the media coverage of health and medicine, as well as on the relationship between scientific journals and mass media and science centres.

Ribele, Marta who was the news editor of “Dienas Bizness,” Latvia’s daily business newspaper, is now the head of the business news group of the major morning daily “Diena”. Both newspapers are part of Bonnier group, one of the biggest Scandinavian media companies with subsidiaries in twenty European countries. Marta Ribele received the prize for outstanding achievements in journalism by Bonnier group and Latvian press publishers association in 1999. She holds a masters degree in social sciences from the University of Latvia. She is fluent in English and has a basic knowledge of French.

Roffi, Giuseppe, a physicist with a technological background, is director of the CNR-EU Liaison Office, the European office of the Italian Research Council in Brussels. Lately Head of international activities at CNR, he has strong connections with all European research institutions. He has pioneered networking of European scientific excellence, bilateral and multilateral cooperation in all fields of science including social and communication science. Scientific Attaché to the Italian Embassy in London for several years, he has developed considerable skills as promoter of scientific exchanges and has achieved interesting results in national and European cross-fertilization of academic and industrial research.

Roland, Marie-Claude is a linguist with a PhD in Didactics and Language Science she has specialized in the promotion of interdisciplinary research, developing a methodology based on reflective practice to improve scientists’ communication skills, and helps develop effective and creative research teams. Her most recent interests extend to mediation and facilitation as means for creating new communication and collective learning modes among multiple stakeholders.

Schreiner, Camilla is educated as geophysicist and has recently completed a PhD in science education. She is now a postdoctoral researcher on the project ROSE (The Relevance of Science Education: see <http://www.ils.uio.no/english/rose/>) at the University of Oslo. Her research interest involves cross-cultural aspects of youth's attitudes and interests related to science and science education. She draws on sociological perspectives on youth culture for understanding Western youth's views on science and technology.

Sheridan, Cormac is a freelance science journalist specialising primarily in biotechnology. He is a frequent contributor to *Nature Biotechnology* and *Nature Reviews Drug Discovery*. He reports on the European biotechnology industry, particularly in Ireland, Scandinavia, Switzerland & Southern Europe, for the US biotechnology industry publication *BioWorld International*. He is also a contributor to *Technology Ireland* magazine and, occasionally, to the *Irish Times*. He is guest lecturer on genetics & media on the B.Sc Genetics course at University College Cork. Cormac is currently president of the Irish Science & Technology Journalists Association.

Sjøberg, Svein is Professor in science education at Oslo University, Norway. His research interests are the social, cultural and ethical aspects of science education, science education and development, gender and science education in developing countries, and issues of scientific literacy and public understanding of science. In 2005 he was awarded the price of the International Union of Pure and Applied Physics for outstanding contributions to physics education. He was member of the Advisory Group on the Science and Society action plan for FP6. Organizer of ROSE (The Relevance of Science Education), a comparative project in 40 countries on pupils' interests, attitudes etc. of importance to science teaching and learning.

Stipsits, Michaela is managing editor of the Austrian magazine "Business People" that is published every two months as a supplement to "WirtschaftsBlatt", the leading national business newspaper. "Business People" is a manager magazine with focus on Austria's leading companies, entrepreneurs and promising start-ups. As a freelance journalist for several years, she joined "Business People" in May 2002, in the position of managing editor. Her job is to order and discuss stories with the editorial staff and freelance writers, plan the issues, edit stories, and to look after deadlines. She is also still investigating and writing stories for the magazine.

Terry, Andrew is a Project Officer for the IUCN Regional Office for Europe in Brussels. He works with the Programme Coordinator to develop and implement IUCN's European Programme. Part of his role is to act as a focal point for IUCN activities relating to threatened species and Protected Areas. He is also the European Coordinator for IUCN's World Commission on Protected Areas. As a research biologist he worked at the University of Copenhagen on the evolution of animal Communication and the use of animal behaviour as a tool for monitoring populations in the wild.

Tola, Elisabetta is a lecturer in microbiology and has a Master in science communication. Besides writing for different magazines, she produces and presents science

radio programmes and is currently a presenter for Radio 3 Scienza, the daily science programme of the Italian national radio, RAI. She also works as a communication consultant for different scientific institutions. She has been involved in SCIRAB, a European project aimed at building a network of science radio programmes throughout Europe. Together with other colleagues, she has recently started off a new science communication agency based in Bologna, Italy.

Trench, Brian is Head and senior lecturer of School of Communications, Dublin College University, member, scientific committee, Public Communication of Science and Technology network. Brian Trench has been an adviser and trainer on communication for community-based and non-governmental organizations. He has organized media and communication skills training workshops for academics, state agency employees, postgraduate researchers, and community organizations. Brian Trench's research interests are in science communication, online journalism and social uses of technology. He is currently working on analysis of the policy and media discourses around the "knowledge society" and impacts of the Internet on communication of science.

Türk, Volker is Project Coordinator at the Wuppertal Institute for Climate, Energy and Environment. He studied Land Resources Management and Environmental management and Policy in Germany and Sweden. His work currently centres on the sustainability assessment of new technologies. Volker has worked extensively on Information and Communication Technologies, Nanotechnologies, and Technology Assessment, and he was involved in various projects and activities with the European Commission, national governments, universities, business and NGOs. Co-ordinating the Nanologue project, he is member of several expert committees on the societal implications and governance of new technologies.

Wehle, Christiane studied political science at the University of Bonn. Since 2002 she has been a co-worker at the EU-Bureau of the Federal Ministry of Education and Research in Germany where she is responsible for the National Contact Points ERA-Net, Scientific Support to Policies and NEST (New and Emerging Science and Technologies) of the 6th framework program. She coordinated two EU-projects, one of which aimed to promote the dialogue with the research community on emerging scientific and technological developments (NEST-IDEA). Interdisciplinarity as well as the framework for the funding of interdisciplinary projects were among the main issues the project dealt with.

Zhu, He is project manager of Children and Youth Science Center of China Association for Science and Technology. She graduated from Peking University with a Master Degree in Law. She has been working as the chief coordinator in the research programme for preparing the National Scheme of Scientific Literacy for all Chinese since 2003. The Scheme is aimed to enhance scientific and technological literacy of all Chinese people and the Outlines of the Scheme has been formally issued as a policy document by the State Council of China in February 2006.

CHAPTER 1

WHY COMMUNICATING EUROPEAN RESEARCH?

Introduction

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The ‘Communicating European Research 2005’ (CER 2005) conference took place on 14 and 15 November 2005 in Brussels. It was organised by the European Commission (Directorate-General for Research) with the aim of providing participants in European Union’s funded research projects with information on good practices and professional services in science and technology communication.

The conference was attended by over 2 100 participants, including project co-ordinators, journalists and other communication professionals, as well as press officers and representatives from research organisations.

The event focused on the manifold aspects of science communication and provided a forum and meeting place for scientists, communication professionals and journalists. Through plenary and parallel sessions, a huge exhibition and press briefings, participants promoted mutual understanding of their respective roles, shared best practice and defined strategies to improve communication, outreach and dissemination of research results to the public and the press at a European level.

The present book includes summaries of sessions that took place during the conference. The various articles cover the main aspects of science and technology communication today. They address interesting and topical issues and questions such as:

- Is science journalism necessary *at all*?
- Should communication be one of the basic skills of scientists, such as thinking, testing and experimenting?
- Should scientific literacy be a, if not the, first target of the school science curriculum?
- Do we need *science critics*?

- Does the coverage of science in the media reflect the choice of the editors or the public's interest?
- How does one promote science on local, commercial or entertainment radio?
- Why would we need standards in science communication?
- How does one remove the obstacles which impair communication *among* researchers and *between* researchers.

The different chapters in this book cast light on these issues and many others related to science communication today, and some of them provide original insight, in particular on the relationships between scientists and journalists, on Internet communication, etc. Several articles recall the fact that science communication is an integral component of the production fabric of scientific knowledge: communication *of* science cannot be isolated from communication *in* science (see, for example, Roland and Roffi *et al*). Other articles touch upon the media and supports of science communication, and show in particular that radio is effective in putting a local issue in a global context.

In parallel to the sessions, over 200 journalists attended the media briefings where latest research results and current scientific activities were presented. In the exhibition hall, 250 stands featured selected research initiatives, as well as the communication strategies of research organisations. In addition, dissemination networks, media associations, relevant publications and editorials, together with companies and service providers in the field of information and communication, presented their products and services.

CER 2005 highlights the fact that communicating research is a European Commission priority in the framework of its research programmes. The Commission wishes to draw the attention of participants in the European Union's funded projects to the fact that they can no longer ignore the 'public communication' dimension of their activity.

According to a survey published in June 2006 by The Royal Society, 70% of UK scientists believe that "Funderson of scientific research should help scientists to communicate with the non-specialist public" and 46% of them do not "feel well equipped to engage with the non-specialist public"¹.

Dissemination of results is a contractual obligation for participants in research initiatives supported under the European Union's Sixth Framework Programme 2002–2006. The specific aim of this provision is to promote knowledge sharing, greater public awareness, transparency and education. Communication is key in a knowledge-based society.

The European Commission's Directorate-General for Research is heavily involved in communicating the results of European Union's funded research to the media and also to the general public. Support and help are provided to assist project coordinators and team leaders to generate an effective flow of information and publicity about the objectives and results of their work, the contributions made to

¹ The Royal Society, *Science communication Survey of factors affecting science communication by scientists and engineers, June 2006*. <http://www.royalsoc.ac.uk/downloaddoc.asp?id=3074>

European knowledge and scientific excellence, the value of collaboration on a Europe-wide scale, and the benefits to European Union's citizens in general.

Together with guidelines and information publicly available, the CER 2005 conference was one of the activities undertaken by the Commission to help researchers design and implement their CER activities.

By encouraging participants in European Union's funded projects to develop 'public communication' activities, the European Commission highlights the fact that they are also in an excellent position to improve the image of science and technology among a broad public.