

THE PCST NETWORK

SEEN THROUGH 341 ABSTRACTS

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The deadline for submitting abstracts had formally passed more than a month earlier and we continued to receive proposals, each one more brilliant than the last. Finally, we had to get strict and on the January the 10th, we took the 341 abstracts that had arrived so far and sent them to the reviewers. As we waited for their comments, we realised that those hundreds of texts, sent to us from all over the world in response to our call, were much more than proposals for a congress; they were the best definition of the PCST network that we could have imagined! It was therefore enough to study them thoroughly (scientifically, of course) to find out what we mean when we say public communication of science and technology network.

El plazo para la presentación de abstracts había finalizado formalmente hacía más de un mes y seguíamos recibiendo propuestas, a cuál más brillante. Finalmente, tuvimos que ponernos firmes, el día 10 de enero recogimos los 341 abstracts que habían llegado hasta el momento y los remitimos a los revisores. Esperando sus comentarios nos dimos cuenta que aquellos cientos de textos, procedentes de todo el mundo en respuesta a nuestra llamada, eran mucho más que propuestas para un congreso, jeran la mejor definición de la red PCST que pudiéramos haber imaginado! Bastaba entonces con estudiarlos a fondo (científicamente, por supuesto) y sabríamos realmente de qué estamos hablando cuando decimos public communication of science and technology network.

Organising a congress is a job for lunatics; especially if, as well as thinking about the event, you have to continue with the thousand other activities which habitually occupy your professional (and personal) life. Organising a congress means work, nerves, fires to be put out and so on, but it also means that hundreds of people from your professional environment are going to come to your city and are going to share experiences and, very likely, this will give rise to projects, new professional (and personal) networks, etc. This is the big up-side to all the effort put in not only by the organisers, but by the participants as well.

In the case of the 8th Congress of the PCST network, we feel sure that the impact of this event on the area of public communication of science and technology worldwide will more than compensate the effort we have put into it. This is no mere intuitive conviction. We have objective data which confirm it. Firstly a history that shows the growth of the network in

quantitative and qualitative terms over the successive international meetings held since 1989. For the 2004 edition, we also have a theme, a programme and a panel of speakers that also lead us to believe that the congress will be really relevant. And there is a third, even more important factor: the contributions of the people who will be present at the conference, in the form of their abstract proposals. The 341 proposals we received from all over the world in response to our request. This edition of *QUARK* reviews the first two aspects (the history of the PCST and the thematic centres of the Barcelona conference). Here, we will concentrate on the information provided by the abstracts; information which, as well as confirming that the Barcelona congress is going to be highly interesting, offers us a very accurate vision of what the PCST network is and whom it is made up of, what are the main questions we pose and what continue to be our main challenges. Behind each of the figures given is valuable information and a cause for future reflection...

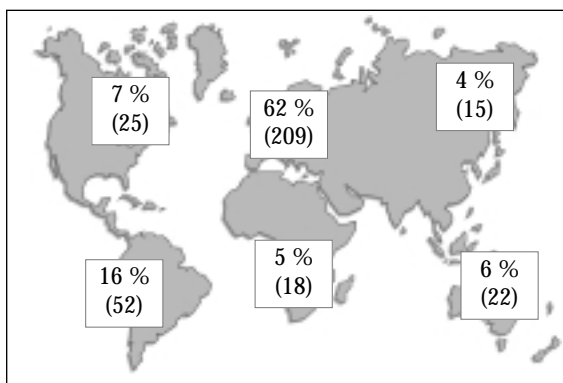


Figure 1 Distribution of PCST-8 abstracts in continents

The network in the world

Despite the fact that the call for submission of abstracts officially closed on 30 November 2003, we have continued to receive calls and e-mails from people asking us to include their proposal, practically up to the time of writing this article. But the dynamics of the organisation of this meeting mean that we must have time for the abstracts to be reviewed by the scientific committee, to communicate to the authors the decisions of the reviewers, to plan the exhibition of the proposals as an oral communication or as a poster, to ask the authors for a text of their paper, etc. All this process takes several months and so we finally took the decision not to accept any new abstracts from 10 January 2004.

The number of abstracts that met both of the minimum requirements in order to be considered for review (arriving before 10 January and sticking to the basic con-

tents of the event) was, finally, 341. Of these, following the review by the scientific committee, 282 were accepted (183 for the oral presentation and 99 for the poster). The numbers given below are from the 341 sent within the deadline, regardless of whether they were accepted or not.

One first observation is that the PCST network is present on all the continents, judging from the distribution of the abstracts (see figure 1), although there is clear predominance of Europe (a subject for reflection for future actions of the network if we really want to guarantee its extension to a large part of the world's cultures). Obviously, this data also shows that the choice of an Asian country (Korea) as a future site for the congress was a very good idea since Asia is the continent with the least representation in relation to its population. In the same line, it was a good idea to have bolstered the Korea event (2006) with an intermediate work meeting in China (2005), which should be the first step in the 'expansion' of the network towards Asia.

The fact that Latin America has a large presence in this edition is also a cause for satisfaction as the PCST-8 organisation has tried to encourage this participation, with the particularly active help of two members of the network's scientific committee: Lisbeth Fog and Luisa Massarani.

If we observe the distribution by country, we see that within each continent, some places have more presence in the network than others. Specifically, the following table shows that the abstracts received came from 36 different countries:

Table I		Precedence and distribution to PCST-8 abstracts			
Country	Number Abs.	Country	Number Abs	Country	Number Abs.
Spain	95	Belgium	5	Armenia	1
United Kingdom	32	Greece	4	Bolivia	1
Brazil	30	Ireland	4	China	1
USA	23	Colombia	3	Korea	1
Italy	23	New Zealand	3	Eritrea	1
Australia	19	Poland	3	Finland	1
Mexico	18	Austria	2	Iran	1
South Africa	17	Canada	2	Latvia	1
France	12	Denmark	2	Qatar	1
Portugal	10	Netherlands	2	Russia	1
Germany	9	Japan	2	Switzerland	1
India	7	Norway	2	Thailand	1

Obviously, the country with most representation is Spain ($n = 95$), especially the community of Catalonia ($n = 50$), as Barcelona is hosting the event. This first, evident, piece of data is, however, of enormous relevance as it indicates just how important the hosting of this conference is in activating the PCST community of a country and, in this case, an autonomous community. It is highly probable that Neither Spain nor Catalonia have participated before to such an extent in this congress. Furthermore, this is not one-off participation, but the opportunity to jump onto an international train with an already solid trajectory.

In fact, the countries which have hosted previous editions of the congress also generate a considerable number of proposals and are among the first on the list (as in the case of Australia, South Africa, France and Germany). This indicates that the congress activates a group of people who perhaps previously worked in isolation and since the meeting, they have become integrated in the network, forming an active part of it.

Finally, it is worth noting that the UK, Brazil, the US, Italy, Mexico and Portugal, despite never having hosted the congress, are among the top positions in terms of numbers of abstracts submitted.

Main questions

In order to analyse the central themes of the PCST network, we have taken as a reference the keywords chosen by the authors to define their proposals. These words reflect the essence of the abstracts. That is, on the one hand they provide general information on the activities of the members of the network and on the other, they help us to see whether there is a parallel between the sub-themes proposed for the specific edition of the Barcelona congress and the proposals submitted. Specifically, the theme for this congress is «Scientific Knowledge and Cultural Diversity», divided into three sub-themes: «Indigenous knowledge and current science», «Science communication: historical perspectives and new trends» and «Science communication and social inclusion». Hence, if the proposed sub-themes were also of interest to the members of the network, it would be logical to suppose that the keywords reflect these questions.

Remember that members could choose from a list of 74 terms, prepared by the local organising committee. The authors had to choose a maximum of 3 keywords, ordered according to their ability to define the main question of the proposal. In this way, we were able to obtain a list of the keywords most cited in first, second and third place.

When we placed the most cited keywords –in first, second and third place– on a radar chart, we ended up with the figure of a sailing boat. We have decided to use this metaphor of the *boat on the radar screen* to see how the PCST network is *sailing*.

So, this chart reveals that the ship of the PCST network can be described in the following manner:

- 1) on the *main mast* of the boat is hoisted the term COMMUNICATION (the word most commonly cited in first place);
- 2) if we look at the words most cited in second place, we have the expressions PUBLIC UNDERSTANDING and EDUCATION, which form a large *boom* and MEDIA AND JOURNALISM, which sticks out like a large *oar*;
- 3) the words most cited in third place were SCIENTIFIC KNOWLEDGE and POPULARISATION, which clearly outline the keel of the boat.

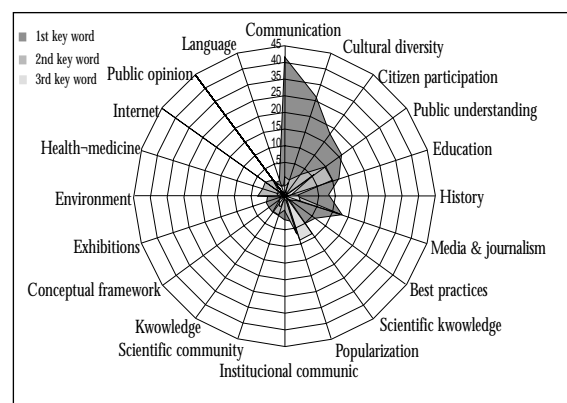


Figure 2 The most cited keywords in first, second and third place in the abstracts presented in PCST-8

It is worth pointing out, however, that this chart does not show some words we thought would be significant. We refer particularly to the keyword, SCIENCE MUSEUMS. Despite the fact that a large proportion of the members of this network work in institutions of this

Table II

PCST-8 abstracts (%) distribution and professional profile

	Number	%
University	203	59.6
Research centres	70	20.5
Science museums and centres	23	6.7
Entities for promoting science	20	5.9
Media	11	3.2
Associations and foundations	9	2.6
Others	5	1.5
Total	341	100

type (as shown by the information provided by the authors and displayed below), when defining their abstracts, they have not opted for the term SCIENCE MUSEUM, but rather for others, such as COMMUNICATION, SCIENTIFIC KNOWLEDGE, etc.

Furthermore, the chart also highlights some terms which are probably a result of the congress theme (CULTURAL DIVERSITY, CITIZEN PARTICIPATION, HISTORY, etc.) indicating that the theme proposed by the PCST's scientific committee coincides with the questions concerning the network's participants. However, to be exact, we must acknowledge that this presumption is not one hundred per cent. We were somewhat frustrated by the fact that some of the keywords which corresponded to questions we wished to emphasise (as we stated when we defined the themes of the congress) have not been reflected in the abstract proposals. We are referring to terms such as GENDER or ETHICS, which had a poor showing among the words chosen by the authors.

Work systems and environments in PCST

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In this section, we will see some details of the way participants in the network work. Do they work individually or in groups? What type of institution do they belong to?

Most of the proposals are signed by a single author. This is uncommon in other areas of knowledge, such as congresses in the field of bio-medicine, for example, where most of the abstracts are signed by several authors. This probably indicates that in the area of the PCST, there is a certain individuality about the way the mem-

bers work, at least when it comes to presenting themselves before the rest of the professional community. At the opposite extreme, we found two abstracts that were signed by eight and nine authors, respectively.

To study the professional field the authors belong to, we took as a reference the name of the institution of the first author of each abstract, establishing seven categories. The result of this grouping is that there is a predominance of the university sector (59.6 %), followed by research centres (20.5 %), science centres and museums (6.7 %), entities devoted to promoting and disseminating science (5.9 %), the media (3.2 %) and, finally, associations and foundations (mostly dedicated specifically to journalism and science communication) (1.5 %).

Of note here is the fact that while the media are one of the principle centres of attention of the PCST network (as seen from the keyword analysis), few authors say they belong institutionally to the media.

On the other hand, while many authors say they belong to science centres and museums, the concept, SCIENCE MUSEUM is not among the keywords defined by the same authors when explaining their work.

Some reflections

The data and observations set out in this modest collection pose some questions that we hope will serve as a reason for reflection in future conferences of the PCST network. Here are some of them:

- How do we extend the network to cultures or geographical areas with little presence?

- Are the host countries aware of the catalysing effect of the conference on those professionals devoted to the public communication of science and technology?
- Whereas concepts such as COMMUNICATION, PUBLIC UNDERSTANDING OF SCIENCE, EDUCATION, MEDIA AND JOURNALISM, SCIENTIFIC KNOWLEDGE and POPULARISATION seem to be among the main questions the work of the members of the network focuses on, other concepts such as SCIENCE MUSEUMS have very little presence among the keywords, despite the fact that many authors say they work in such institutions. Exactly what role do science museums play in the PCST network?

- Similarly, whereas concepts such as CULTURAL DIVERSITY, CITIZEN PARTICIPATION and HISTORY, which were among the points to be discussed at the Barcelona meeting, were also points of interest to the authors, other themes, such as ETHICS or GENDER showed little response. Is it true that these subjects are not very central to the members of the network?
- In the professional field of the authors, there is a predominance of the university sector and research centres. Would it be useful to think of some specific action to increase the participation of other, less represented sectors? ¶



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