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# SECURING A FUTURE FOR CHEMISTRY EDUCATION RESEARCH AND PRACTICE

With this issue, CERP completes its fifth volume/fifth year of publication. Its publication has been an experiment which in general can be judged as successful. The quality of papers published has been high, with the result that CERP is widely recognised as a serious, high-quality, interesting and useful journal, publishing educational research reports and research-informed papers on the practice of chemistry education. The success is the consequence of: (i) the quality manuscripts submitted; (ii) the editorial policy; and (iii) the excellent scientists/educators who have been and are involved in the review process.

I thank all authors who have submitted manuscripts. Special thanks are due to the established/experienced authors who contributed with invited or reviewed papers. I also thank all those who contributed to the review process. Their expert and timely comments have resulted not only in the proper judgment of manuscripts, but also (for the large majority of manuscripts) in their larger or smaller improvement. Last but not least, I thank the two associate editors, Dr *Norman Reid* and Dr *Keith S. Taber*, for their invaluable help both as reviewers of manuscripts and in the running of the journal.

I should like to emphasise that we (reviewers, the editor, and associate editors), in CERP, all worked and are working hard to help/encourage new authors to bring their (sometimes initially problematic) manuscripts to a satisfactory publishable standard. Our guiding principle is that "a balance needs to be struck between, on the one hand, maintaining standards, and, on the other hand, providing (especially inexperienced) authors opportunities to be part of the community." (See also Editorial in May 2000 issue). Needless to add that in many cases, I had to disappoint authors by rejecting manuscripts, or by 'leading' them to withdrawing their manuscripts (because of the recommendations for revised manuscripts). Note that there have been (as far as I know) two cases of rejected by CERAPIE/CERP manuscripts which were later published in other well-known journals.

Has everything which we envisioned been achieved so far? No! To be honest, one should expect at least an expansion of the journal, with expanding volumes (more pages and more issues per volume). Instead, as can be seen from the data given below, there has been more or less a stable output per volume.

## A look at the past: Statistical data about the five volumes of CERAPIE/CERP

#### Statistical information about papers, authors, and reviewers

Table 1 gives general statistical information about the papers published in the five volumes of CERP so far. As noted above, a remarkable near stability over the five volumes is

	No.	No.	Aver.	Invited	No. of	No. of	No. of	Aver.	No. of	No. of
	of	of	pages	papers	research	papers on	authors	no.	re-	re-
	papes	pages	/		reports	practice		authors	viewers	viewed
			paper					/paper	/vol.	MSs
Vol. 1	41	423	10.3	7	20 (59%)	14 (41%)	56	1.4	38	96
Vol. 2	25	345	13.8	11	8 (57%)	6 (43%)	36	1.4	19	34
Vol. 3	23	384	16.7	4	10 (53%)	9 (47%)	34	1.5	32	77
Vol. 4	26	410	15.8	2	12 (50%)	12 (50%)	44	1.6	38	70
Vol. 5	19	357	18.9	5	10 (71%)	4 (29%)	44	2.3	*	*
Total	134	1919		29	60 (56%)	45 (44%)	214		127	277
Aver. /	26.8	384	14.3	5.8	12.0	10.3	43	1.7	32	69
Vol										

**TABLE 1.** *Statistical information about the papers, the authors, and the reviewers of the Volumes 1-5 of CERAPIE / CERP.* 

\* Full data are not yet available.

observed. Invited papers represent one fifth of the total number of published papers. Research reports had a higher share than papers on practice, and this demonstrates the strong point of CERP, as opposed to other established chemical-education journals. In addition, research reports are characterised by standards similar (in terms of methodology, analysis, quality, quantity, and form and length of presentation) to those published in standard science-education journals. On the other hand, papers on the practice of chemistry education should be, and in many cases have been, characterised as being educational-research informed.

#### Subject categorisation

Table 2 gives a categorisation of the papers according to the thirteen categories/subjects used by the journal. Categories 0-11 are used since the beginning of the journal, while category 12 (*History and philosophy of science/chemistry, HPS*) is a recent addition. Certain papers have been categorised under more than one subject (normally two). In general, this categorisation scheme has worked more or less successfully.

Concepts have attracted one third of the papers, and this shows their popularity as a topic of research. The quite general category *Methods and issues of teaching and learning* follows with almost one fifth of papers. However, *Concept teaching and learning* does not compare well with *Concepts*, pointing out that we still need studies and ideas that would convincingly overcome the problems associated with concepts. On the other hand, *Attitudes* and *Teacher education and training* are lagging well behind. This demonstrates important areas of research and practice where more work is needed.

#### Acceptance rate and revisions of manuscripts

The number of reviewed published papers is 105. The number of rejected manuscripts so far has been 57. Hence the acceptance rate has been 105/162 = 65%. Notice that in the Editorial article of Vol. 1, No. 2 (after publication of first two issues), the acceptance rate was reported 68%.

Another indicator of the quality of the review process, hence of the quality of the papers published and the journal, is the whole review process. With the exception of papers from the  $5^{th}$  and the  $6^{th}$  ECRICE, the papers were reviewed anonymously. In addition, 80% of

		Vol. 1	Vol. 2	Vol. 3	Vol. 4	Vol. 5	TOTAL*
	Editorials**	4	2	2	2	4	14
	General issues in science/	2	1	2	2	5	10 (7.5%)
	chemistry education						
1 1	Methods and issues of teaching	8	5	3	5	3	24 (17.9%)
	and learning						
2	Concepts	7	14	16	6	1	44 (32.8%)
3	Concept teaching and learning	3	1	2	0	3	9 (6.7%)
4	Problem solving & HOCS	3	2	1	4	1	11 (8.2%)
5	Assessment	1	2	0	2	2	7 (5.2%)
6	Science-Technology-	2	1	2	1	7	13 (9.7%)
	Environment-Society (STES)						
7	New educational technologies	4	0	0	3	2	9 (6.7%)
	(NET)						
8	Attitudes	1	0	1	1	0	3 (2.2%)
9	Curricula & policies	6	1	1	3	2	13 (9.7%)
10	Teacher education and training	2	0	1	0	1	4 (3.0%)
11	Experiments and practical work	3	1	0	4	3	11 (8.2%)
12	History and philosophy of	0	2	0	1	3	6 (4.5%)
	science/chemistry (HPS)						

**TABLE 2.** Subject categorisation of the 134 papers published in Volumes 1-5 of CERAPIE/CERP.

\*) Certain papers have been categorised under more than one subject (normally two). For this reason, the sum is more than 100%. [Percentages were calculated against total number of published papers (134).]

\*\*) Including guest editorials and prefaces to theme issues or special themed sections.

the manuscripts published went through one or more revisions. (73% was the corresponding figure reported for the first two issues). Table 3 has more detailed data about the number of revisions.

TABLE 3. Data	for the number	of revisions	through w	which published	manuscripts underwent.

No	No	One	One	Two	Two		
Revision	Revision +	Revision	<i>Revision</i> +	Revisions	Revisions+		
21 (20.0%)	8 (7.6%)	52 (49.5%)	9 (8.6%)	11 (10.5%)	4 (3.8%)		
	One Re	evision	Two Revisions				
-	60 (57	7.1%)	24 (22.9%)				
-			Revised				
	84 (80.0%)						

# A move forward: From 2005 (with Volume 6) *Chemistry Education Research and Practice* to be published by the *Royal Society of Chemistry*

Is there a move forward that not only would secure CERP's future, but more importantly would give it a higher status? The pleasing answer is yes! After long discussions with the *Royal Society of Chemistry* (RSC) (with the editors of the electronic journal *University Chemistry Education* Professor *Pat Bailey* (UMIST) and Dr. *Stephen Breuer*, (University of Lancaster), and with Dr *Tony Ashmore*, Registrar of the RSC, an agreement has been reached.

The journals, *Chemistry Education Research and Practice*, published from the University of Ioannina, and *University Chemistry Education*, published by the RSC, are merging with effect from 1 January 2005. The new, fully electronic, journal will be published by the RSC under the title: *Chemistry Education Research and Practice*, and, as both its predecessors, it will continue to be available free of charge on the Internet. There will be four issues per year.

The new journal will be edited by Georgios Tsaparlis (gtseper@cc.uoi.gr) and Stephen Breuer (s.breuer@lancaster.ac.uk) and will maintain the high standards set by its predecessors. The new URL will be

http://www.rsc.org/cerp

Links to the previous issues of both CERP and UChemEd are going to be provided through the site of the new CERP.

### Editorial Policy of new 'Chemistry Education Research and Practice'

*Chemistry Education Research and Practice* is the journal for teachers, researchers and other practitioners in chemical education. It is the place to publish papers on:

- research, and reviews of research in chemistry education;
- effective practice in the teaching of chemistry;
- in depth analyses of issues of direct relevance to chemistry education.

Contributions can take the form of full papers, preliminary communications, perspectives on methodological and other issues of research and/or practice, reviews, letters relating to articles published and other issues, and brief reports on new and original approaches to the teaching of a specific topic or concept.

The new journal welcomes contributions of the type described above. The language of the manuscripts must be English. They should include an abstract of not more than 200 words, a list of keywords, and address of corresponding author, including e-mail address. Manuscripts should be sent, in electronic form only, to both editors, in the first instance. Only one copy, carrying the authors' names should be submitted.