

“STUDII ȘI CERCETĂRI ȘTIINȚIFICE” – A DECADE

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Ten years ago came from the printing shop the first issue of **STUDII ȘI CERCETĂRI ȘTIINȚIFICE – CHIMIE ȘI INGINERIE CHIMICĂ, BIOTEHNOLOGII, INDUSTRIE ALIMENTARĂ** (Scientific Study and Research – Chemistry and Chemical Engineering, Biotechnology, Food Industry) – *Figure 1*. It was the first attempt in introducing in the academic community of a regular journal which aim was to worldwide spread the scientific achievements of the school of chemistry and chemical engineering from the “Vasile Alecsandri” University of Bacău. The year 2000 is one of the milestones in the development of chemical education in Bacău. The “Vasile Alecsandri” University of Bacău has its roots in the Pedagogical Institute of Bacău, founded in 1961 as a response to the increasing demand in teaching personnel of the area. Thirty years later, the Pedagogical Institute was just a pale shadow of the strong academic center of the nineteen seventies. In 1984 we found it rebaptized (first as Superior Teaching Institute, than as Engineering Institute) and absorbed by the more famous Polytechnic Institute “Gheorghe Asachi” located 120 km north from Bacău, in the greatest town and former capital city of the Principality of Moldova, Iași.



Figure 1. *The first issue of Studii și Cercetări Științifice*

Twenty-five years ago, in 1985, a curriculum in *Mineral Chemical Technology* has been transferred from Iași to Bacău. The program consisted in four year night classes, in order to prepare process engineers for the recently build fertilizers chemical plant producing ammonia, urea, ammonium phosphate (also phosphoric and sulfuric acid) for the agricultural area consisting of several counties located in the southern part of Moldova: Bacău, Vaslui, Vrancea, Galați. Most of that time students (according to the Communist Party – all of them) were full time working in the industrial facilities of the times: Fertilizers Chemical Plant, “Letea” Pulp and Paper Mill, and many others. The academic staff, with few exceptions, was pending the “Gheorghe Asachi” Polytechnic Institute of Iași and was commuting twice a month in order to give lectures in Bacău. It was the pioneering era, when several chemistry and chemical engineering laboratories have been established.

It can be stated that 1985 was the year when the school of chemistry and chemical engineering from Bacău has been born.

In 1990, the Engineering Institute gain it's autonomy under the name of University of Bacău. Ten years later, chemistry, chemical engineering and process engineering were well represented in the Engineering Faculty of the *University of Bacău*: although the *Mineral Chemical Technology* program was stopped in 1992, two new programs, more closed to the markets demand, were started, namely *Technology and Quality Control of Foods* (1992) – actually *Food Engineering* and *Biochemical Engineering* (2000). Also there were several programs connected with chemistry and process engineering: *Equipment for the Pulp and Paper Industry*, *Equipment for the Food Industry*, and *Environmental Engineering*. All up mentioned programs offered an engineering degree after ten semesters.

As I mentioned before, 2000 was an important year for chemistry in Bacău, three major events happening that year: the establishing of the first research center in the field – *Chemistry and Engineering of Natural and Synthesis Products and Environmental Protection*, organizing of the first international scientific event – *Colloque Franco-Roumain de Chimie Appliquée* (mostly known as COFrRoCA), and last but not least, the foundation of the journal you are just reading: *Studii și Cercetări Științifice – Chimie și Inginerie Chimică, Biotehnologii, Industrie Alimentară*.

There are two awaiting questions that I want to answer at:

1. Why a journal?
2. Why that title?

It is a well known fact that universities in Western Europe and North America seldom have their own scientific journals. Most of the academics from those universities publish in journals with international coverage, edited by well known publishing houses, as possible in journals from the main stream of publications (the so-called "ISI quoted/indexed journals"). With a few notable exceptions (i.e. *Science* or *Nature*), they are focused on specialized, sometimes very narrow topics. In Romania, there is a historical tradition that the universities and the research establishments to have their own annals, in order to promote their scientific research. It's hard for me to name even a small Romanian university that does not have its own "Annals". When we founded this journal, our aim was to offer a unique platform for the dissemination of the scientific results coming from our university. Ten years ago I was writing in the opening editorial of the journal: *"This publication will promote mainly the scientifically work of the school of chemistry and chemical engineering from Bacău. This doesn't mean that it will be exclusivist..."*. And neither it was.

With regard to the second question, the former Pedagogical Institute used to name its annals "**Studii și Comunicări Științifice**" (Scientific Studies and Communications) or "**Studii și Cercetări Științifice**" (Scientific Studies and Researches). The latter was the model for our publication, in order to preserve the tradition. Regarding the subtitle, the option was more difficult. If we've named it **Chemistry**, would upset the chemical engineers; **Chemistry & Chemical Engineering** could have been discriminating for food engineers. Trying to be balanced we decided to be comprehensive, and here it was: **Chemistry and Chemical Engineering, Biotechnology, Food Industry**.

After a decade of existence of the journal, it's the time for analysis. At the beginning, our intention was to publish one volume per year, two issues per volume. This policy was in use until 2005. In 2006, when we decided to publish in the journal full papers presented at COFrRoCA, the necessity of a quarterly frequency was required. So, until now, we have published ten volumes (one per year) with a total of 28 issues: two per year between 2000 and 2005, and four per year since 2006. A number of 379 papers were published during 2000 – 2009. A few papers were written in Romanian – the papers that appeared in Volume I – the rest being prepared in English or French (Figure 2). Currently we accept for publication only articles written in English or French with

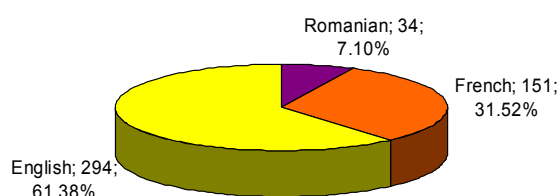


Figure 2. The distribution of published papers (2000 – 2009) by language

Abstract and *Keywords* compulsory in English. Thus, the papers appearing in the journal are easy to be indexed and abstracted by international data bases, being accessible to the international scientific community. On the other hand, the contribution of scientists from the francophone area is encouraged.

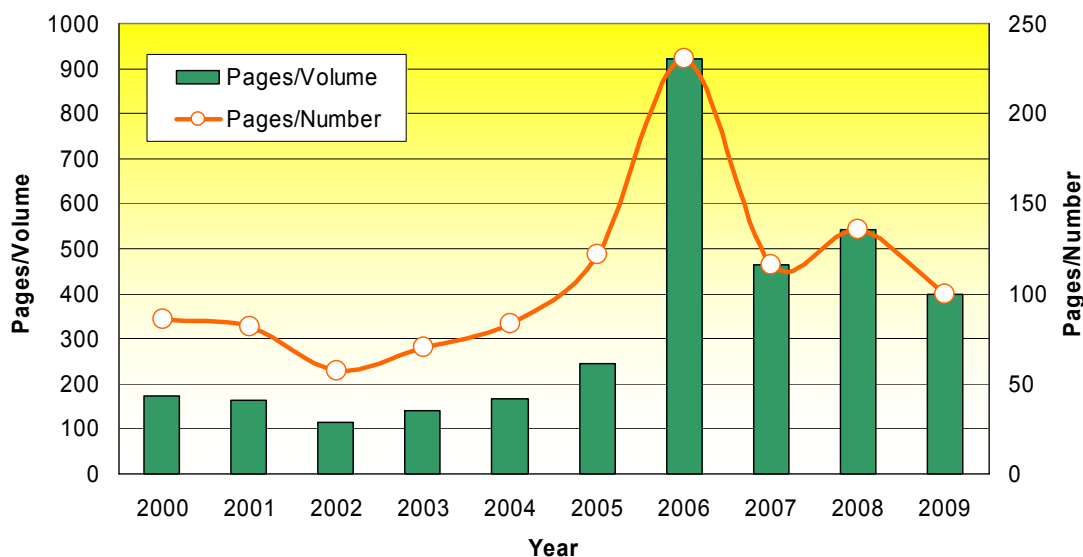


Figure 3. Time evolution of the number of pages per volume and per issue

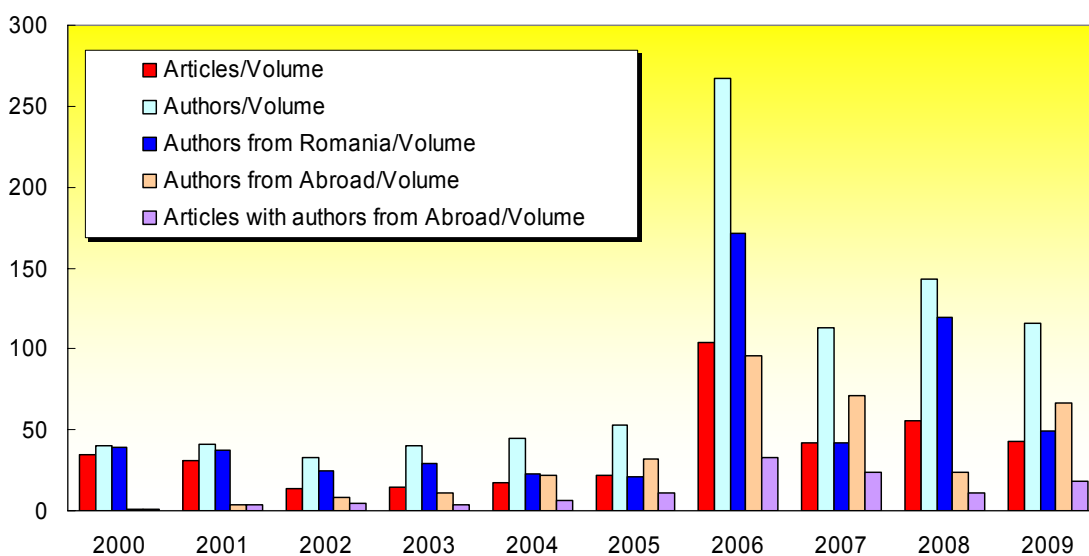


Figure 4. The quantitative evolution of "Studii și Cercetări Științifice" between 2000 and 2009

The 379 published papers were extended on 3333 pages, giving an average length of 8.8 pages/article. Figure 3 shows the evolution of the number of pages, per volume and per issue. The volume with most papers was Volume VII (2006) – 104 papers, and the one with fewest papers (14) was Volume III (2002). As can be seen from Figure 4, the quantitative peak of the journal was in 2006, the year

when full papers from CoFrRoCA 2006, held at Clermont-Ferrand, France, were published in the journal and not in separate proceedings volume as happened in 2000, 2002 and 2004.

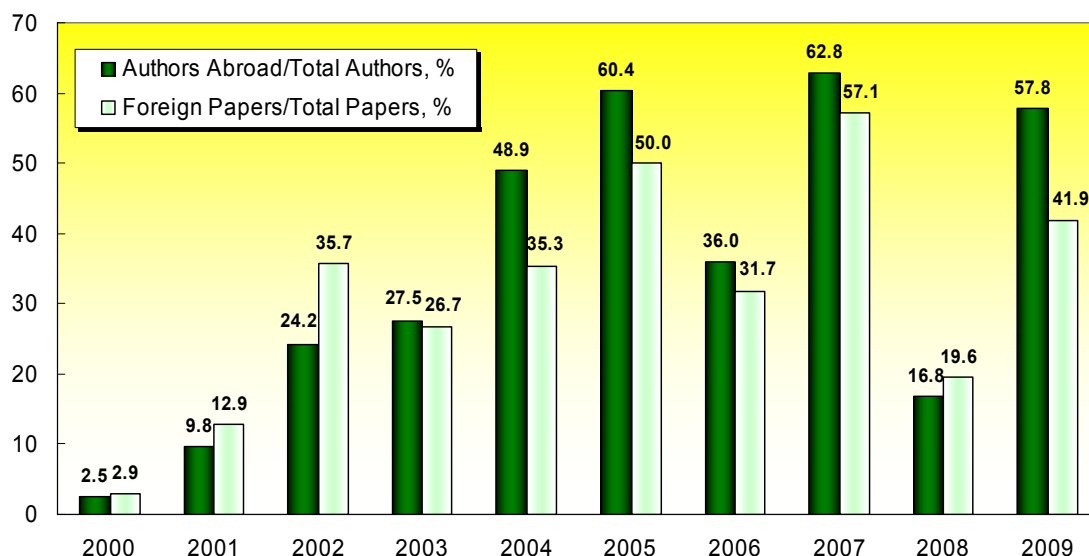


Figure 5. Evolution in time of the proportion of foreign contributions to the journal
(Foreign papers have been considered those papers having at least one author from abroad)

At the 379 articles contributed 878 authors (an average of 2.32 authors/article), 555 of them being from Romania (63.2%), and 323 being from abroad (36.8%). The time evolution of the Romanian – foreign contribution to the journal, in terms of authors and number of papers is depicted in *Figure 5*. It is interesting to know the origin country of the authors; this might be an indicator of distribution and perception of the journal in the respective area. *Table 1* shows the number of authors by country; meanwhile *Figure 6* is showing the distribution of authors on continents. As we expected, most of authors are coming from the European area (82.57%) and fewest authors came from Asia and North America (0.23% each). The other authors are coming from Africa (16.97%), most of them from Morocco (9.68%) and Algeria (5.12%). By analyzing data from *Table 1*, an interesting conclusion comes out: the overwhelming majority of contributors (98.29%) are coming from the francophone area, very few authors (only 15) coming from non

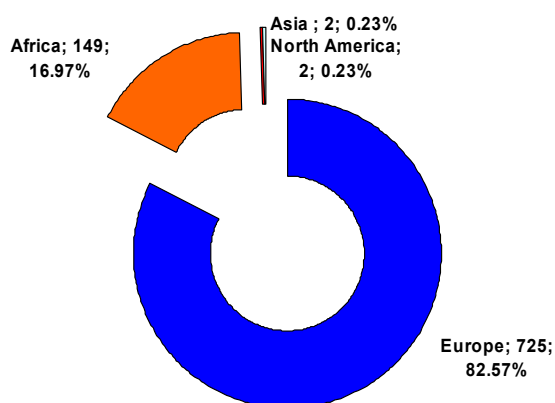


Figure 6. The distribution of authors by continents

francophone countries: Spain (5), Germany (3), United Kingdom (3), Italy (1), Iran (1), Japan (1), and Egypt (1). This is probably due to the fact that scientists involved in CoFrRoCA – which is a francophone event – are most familiar with this journal.

Table 1. *Distribution of authors by country*

Country	Number of authors	Country	Number of authors
Romania	555	United Kingdom	3
France	129	Tunisia	2
Morocco	85	Canada	2
Algeria	45	Switzerland	1
Moldova	16	Italy	1
Bulgaria	9	Egypt	1
Senegal	7	Togo	1
Benin	6	Burkina Faso	1
Spain	5	Cote d'Ivoire	1
Germany	3	Iran	1
Belgium	3	Japan	1

□ - Francophone countries; ■ - Non Francophone countries

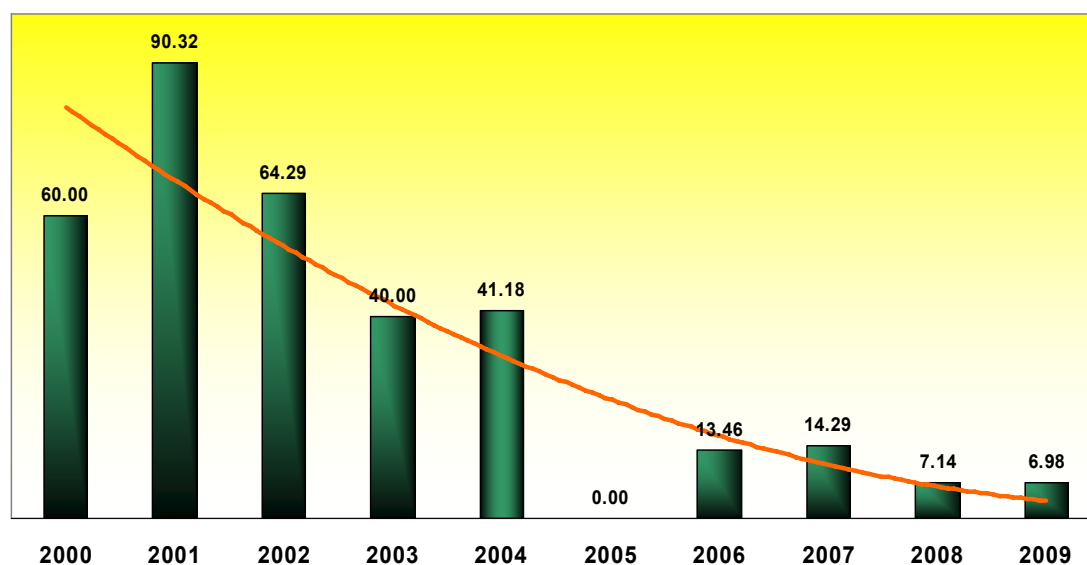


Figure 7. *Percentage of papers having at least one author from "Vasile Alecsandri" University of Bacău*

With respect to the contributions given in the journal by scientists from "Vasile Alecsandri" University of Bacău, *Figure 7* presents bad news and good news. The bad news is that there is a decreasing tendency of the number of papers with at least one author from our university. Some stabilization around 7% has been observed for the last two analyzed years. From another point of view, this is also good news: our academics are publishing more elsewhere (since, according to internal statistics, the total number of publications has not

decreased but rather increased) and also more and more authors – from Romania and from abroad – are interested to publish in our journal.

As stated by the editorial policy, the journal is oriented to *"fundamental or applicative researches in all the fields of chemistry, chemical engineering, industrial biotechnologies, food biotechnologies, environmental biotechnologies and from all the fields of food science, technology and engineering."* Figure 8 presents the distribution of papers by main area: chemistry, engineering or chemistry and engineering. Out of the total of 379 papers published between 2000 and 2009, almost half (171 papers) were treating various aspects of chemistry and engineering, the other half being shared by chemistry and engineering papers (150) and engineering papers (45). Only 13 papers (3.43%) could not be included in one of the up mentioned categories.

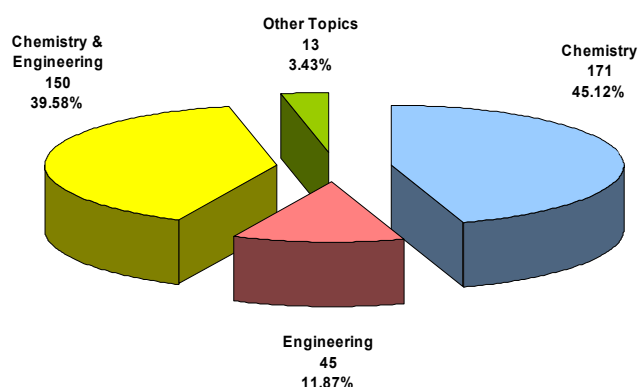


Figure 8. Distribution of papers by main topics (2000 – 2009)

Most of the chemistry papers belong to organic chemistry (48) and biochemistry (27). The fewest are in mineral chemistry (10) and physical chemistry (16) – Figure 9. The rest of the papers (excluding those 13 that do not fit any category) belong to Food Science and Engineering (89), Environmental Chemistry & Engineering (61), Biotechnologies & Biochemical Engineering (25), and Chemical Engineering (20) – Figure 10.

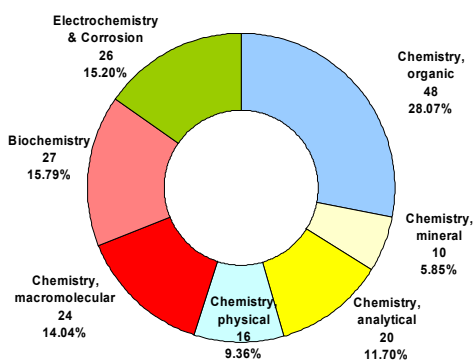


Figure 9. Distribution of chemistry papers

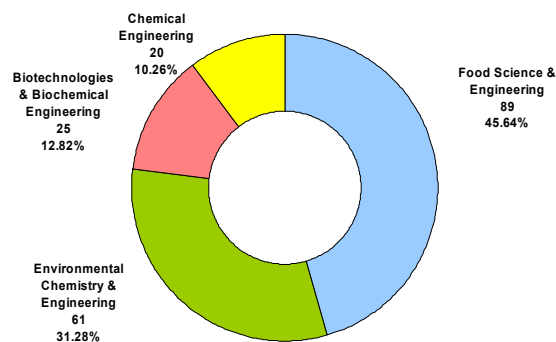


Figure 10. Distribution of engineering papers

The papers published in *Studii și Cercetări Științifice – Chimie și Inginerie Chimică, Biotehnologii, Industrie Alimentară* are available to a large audience: starting with Volume II (2001), all the papers are indexed by *Chemical Abstracts*, the most important worldwide chemistry database. Also, we are indexed by the database of the Russian Science Academy, *Viniti* (since 2002) and from 2004 by *CSA* (formerly *Cambridge Scientific Abstracts*). Besides that, copies of the journal are freely distributed to the Central University Libraries from Romania (located in Bucharest, Iași and Cluj-Napoca) and to all major universities from Romania. Regular submissions are made to the *European Office Patent* (Munich, Germany), *Technische Informationsbibliothek und Universitätsbibliothek* (Hanover, Germany), the *Science Academy of Moldova* (Chișinău, Moldova), and to numerous university libraries from France, Germany, Belgium, Italy, Poland, Bulgaria, Serbia, Croatia, Macedonia, Moldova, Algeria, Morocco, Turkey. Bilateral agreements for exchange of publications are established with publications like: *Journal of the Serbian Chemical Society*, *Journal de la Société Algérienne de Chimie*, *Journal de la Société Chimique de Tunisie*, *Journal de la Société Ouest Africaine de Chimie*, *Croatian Journal of Food Science and Engineering*, *Environmental Engineering and Management Journal* (Iași, Romania), *Agriculturae Conspectus Scientificus* (Zagreb, Croatia) and many others. Abstracts of all published papers since 2000 are freely available through the webpage hosted by the site of “Vasile Alecsandri” University of Bacău (<http://pubs.ub.ro/?pg=revues&rev=csc6>). As a result, we have frequent request of full articles from students, university libraries, but also from companies, mainly from United States.

I cannot close this brief presentation without appreciating the work of the members of the *Editorial Advisory Board*, which made possible the appearance of the volumes during all these years. I am also grateful to all the authors for their valuable contributions. Last, but not least, I would like to show my gratitude to my colleagues, Professor Pierre Grandclaude from *l'École Nationale Supérieure de Chimie du Lille*, and Professor Adriana Finaru from “Vasile Alecsandri” University of Bacău, who - as executive editors - have done an excellent job.



**“Studii și Cercetări Științifice –
Chimie și Inginerie Chimică,
Biotehnologii, Industrie
Alimentară”,**

**LA MULȚI ANI!
HAPPY ANNIVERSARY!
BONNE ANNIVERSAIRE!**