



Greek Chemical Society Annual Report to the EuCheMS Division of Chemical Education for 2018-2019¹

1. Abstract

The Association of Greek Chemists, as duly constituted consultant of the Greek State in Chemistry Education affairs, has intensified their efforts and insisted on the Association's positions towards the education reforms that the government has preceded. An important moment was the 13th Cyprus-Greece Chemistry Conference, under the auspices of the Association of Greek Chemists, the Pancyprian Union of Chemists (PUC), and the Department of Chemistry of the University of Cyprus, which was organized and dedicated to the Periodic Table of Chemical Elements, as 2019 has been officially proclaimed by UNESCO. Finally, during 2018-19, interesting articles dealing with Science and Chemistry Education were published and a number of events took place.

2. National educational policy

The Association of Greek Chemists intensified their efforts to strengthen Chemistry Education at Secondary Level of Education. The demand for participation of the Association to the National Dialogue for Education Reforms as duly constituted consultant of the Greek State in Science Education affairs remains strong and consistent, since the ministry of education has recently announced, without any consultation a new syllabus for the entrance examinations of students to tertiary education.

According to the President of the Association of Greek Chemists the main issue of the recently announced new syllabus is the existence of inconsistency between the previous decisions of the Ministry of Education to limit chemistry courses at secondary education and the complexity of the new syllabus.

3. Events in chemical education

- The 13th Cyprus-Greece Chemistry Conference was organized and took place in Cyprus, on 31 October - 3 November 2019 (<http://www.chemistry.org.cy/>). The conference was dedicated to the Periodic Table of Chemical Elements, as 2019 has been officially proclaimed by UNESCO as the International Year of the Periodic Table. The main aim was to promote the understanding of the Science of Chemistry through the Periodic Table and to emphasize the fundamental contribution of the Periodic Table to the Human Culture and Civilization. The scientific topics of the conference were covered either with oral presentations or posters and wherever were

¹July 2018- June 2019, all levels of chemistry education: primary, secondary schools, universities, LLL, general and vocational education.

possible, these included reference to the Periodic Table of the Chemical Elements. During the Chemistry Conference various events were also organized, such as chemistry shows, round table discussions and lectures on topical issues of concern to the chemists, the citizens and the society. Moreover, during the Chemistry Conference, a parallel session took place for Chemistry in Education in collaboration with Ministry of Education.

- The Athens Science Festival took place in Technopolis City of Athens from 3 to 7 April 2019 (<http://www.athens-science-festival.gr/en/festival-2019/>). The Festival were organized by the educational organization “Science Communication – SciCo”, the British Council, the Technopolis City of Athens, the Onassis Scholars’ Association, the Ministry of Energy and Environment and the General Secretariat for Research and Technology, in collaboration with more than 120 academic, research and educational institutions, and with the support of 250 volunteers. Strategic partner of the Athens Science Festival 2019 was the State Scholarships Foundation- IKY. The Athens Science Festival 2019 was focused on sustainability and “knowledge economy”.
- The 11th Greek Conference on Science Education and New Technologies in Education was organized and took place in Florina, on 19-21 April 2019. It was co-organized by the Association of Education in Science and Technology (EnEPHET) and the Faculty of Education of the University of Western Macedonia in Greece. The great majority of Greek scientists in Chemistry Education from all National Universities participated and presented their research through oral and poster presentations, round tables, and workshops.
- The 6th Panhellenic Conference Green Chemistry and Sustainable Development has been announced to be held in Athens on 18-20 October 2019. The conference will be on general subjects in Green Chemistry including its role in education, sustainability and society. Moreover, it will give the opportunity to senior and young researchers to present their research and to interact with outstanding experts in Green Chemistry. The Conference is guided by the Hellenic Green Chemistry Network and is organized by the Department of Chemistry of the National and Kapodistrian University of Athens.

4. Activities of the National Chemical Society

- The 33^d Pan-Hellenic Chemistry Competition for Secondary students was organized by the Association of Greek Chemists and was held on 16 March 2019. This year the number of participating students and accordingly the numbers of examination centers all over Greece were increased (from 59 in 2018 to 81 in 2019).
- The Chemistry Day was celebrated in 11th March 2019 throughout Greece, with a plethora of events and actions organized by the Association of Greek Chemists.
- The Association of Greek Chemists has continued to exert pressure on the Ministry of Education for Chemistry to be given its proper place in the Secondary school curriculum.

5. Publications

Below is a representative list of publications from July 2018 to June 2019:

Tsaparlis G. (2018). Challenges, Barriers, and Achievements in Chemistry Education: The Case of Greece. In C. Cox and W. E. Schatzberg (eds.), *International Perspectives on Chemistry Education Research and Practice*, Ch. 7, pp. 93-110. Washington, DC, American Chemical Society. eISBN: 9780841233430

Stamovlasis, D., Papageorgiou, G., Tsitsipis, G., Tsikalas, T. & Vaiopoulou, J. (2018). Illustration of Step-Wise Latent Class Modelling with Covariates and Taxometric Analysis in Research Probing Children's Mental Models in Learning Sciences. *Frontiers in Psychology*, 9: 532. doi: 10.3389/fpsyg.2018.00532

Antonoglou, L., Salta, K. & Koulougliotis, D. (2019) Integration of Web-based Tools in Science Teaching in Secondary Education in Greece, *AIP Conference Proceedings*, 2075 (1), 200002, DOI:10.1063/1.5091427

6. Other events and activities

○ The Department of Maritime Studies of the University of Piraeus, the Department of Chemistry of the University of Athens and the Association of Greek Chemists (AGC) participated at the celebrations for the 100th anniversary of IUPAC, organizing a Women's breakfast networking event, on February 12th, 2019. The main targets of the event were to assist women chemists to expand their colleagues network, to gather women chemists at various career stages to share experiences and learn from each other, to connect organizations from all over the world, and finally to celebrate IUPAC 100 and the achievements of women chemists throughout history. During the Greek event, four Greek women chemists were awarded for their significant contribution in different areas of Chemistry as well as the outstanding high school students. Moreover, a special speech on «Women in Chemistry Education» was given by M. Mavridi, M. Christakou, K. Pashalidou and K. Salta.

○ The Greek Olympic Group of students have been selected and prepared by educator from National and Kapodistrian University of Athens for the 51th IChO 2019 and have been supported by the Greek Chemistry Association. The Greek Olympic Group is going to participate in the 51th International Chemistry Olympiad (51th IChO 2019, <https://icho2019.paris/en/>), which is organized by France and will take place from 21 to 30 July in Paris.

7. Name of delegate

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9. CV of delegate.

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