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Presidency of the
*Società Chimica
Italiana* for the
three-year period
2026-2028



***SCI: an
increasingly
strong bond***



Società
Chimica
Italiana

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Presentation

In the beginning there was the Big Bang, and physics reigned supreme. Then, when the temperature became milder, chemistry appeared: particles formed atoms, these joined together to form increasingly complex molecules, which in turn formed aggregates and membranes, defining primordial cells from which life emerged: chemistry is the science of matter and its transformations, and life is the highest expression of it. These words, which I recently heard during a lecture by the Nobel Prize for Chemistry Jean Marie Lehn, at the ceremony for the conferral of the Doctorate Honoris Causa at my University, in my opinion well define the soul of our Society.

In fact, the *Società Chimica Italiana*, whose members are animated by common scientific and professional interests, is an active community, growing rapidly, and faces the new challenges and the rapid cultural, economic, social, environmental changes, in step with which chemistry evolves. Being a SCI Member means sharing a passion and at the same time committing oneself, each according to their role, so that chemical culture spreads through teaching, research, professional activities and industry, and has a central role not only in science, but in society as a whole.

It is from a strong sense of belonging to our Society that my candidacy for the presidency was born, animated by the desire to make myself available to continue the work of those who preceded me, with a spirit of continuity and, at the same time, to welcome the changes and new challenges that await us, to bring the voice of Italian chemistry on classic and emerging issues: the defense of environmental and cultural heritage, health and food safety, sustainable development, the industry of the future.

I therefore consider it essential to present to you the contents of the program that I have outlined, in continuity with the current programmatic guidelines, and which I plan to develop if I am given the opportunity.

The Society and the Members

The Society and the Members

The extraordinary work carried out in previous years, in particular by our current President, has marked a path of development that has led the *Società Chimica Italiana* in the direction of the largest European Chemical Companies.

Today the SCI has about 5400 members, with an increase of about 12% compared to last year, divided into 17 Sections, 15 Divisions and 13 Interdivisional Groups.

In line with the extremely positive trend of recent years, I believe it is essential to support the expansion effort of our Company, not only in terms of numerical consistency, but also and especially in expanding and diversifying the areas of origin of the Members. To date, in fact, our community is mostly represented by academics (about 85%), while the representation of public research institutions (about 4%), industry (about 2.5%), the public and private sectors (each about 2%), schools (<3%), the freelance profession and health (both <1%) is limited.

To support the growth and expansion of the Chemical Society even outside the purely academic sphere, it will be necessary to attract the participation of chemists working in the world of schools, in the several professions, in research institutions and in industries. This objective can be achieved by strengthening the dialogue with the school bodies, the National Federation of the Orders of Chemists and Physicists, the research bodies that carry out government support activities such as the National Research Council (CNR), the Council for Agricultural Research and Analysis of Agricultural Economics (CREA), the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), the National Institute of Health, the Higher Institute for Protection and Research (ISPRA), the various research foundations. Not to be overlooked is the dialogue with the industrial federations of the sector (*CONFINDUSTRIA*) and the various consumer and user associations recognized by the Ministry of Enterprise and Made in Italy.

With a view to a targeted expansionist policy, which has the result of strengthening the centrality of the *Società Chimica Italiana* in the current reality, and enhancing the effectiveness of intervention of our community, actions will contribute for the continuation of those already in place, together with new possible intervention tools: **design of a targeted** Higher Education offer which may contribute to attracting the participation of institutions and companies with adjacent interests (Professional training courses); **organization of exhibitions** that, through the power of the

exhibition, can tell the story of the great scientists and scientific ideas that have had an impact on society ("The science of Rome. Past, present and future of a city" organized in 2021 with the participation of ISPRA); **interactive multimedia events** that, through the conjugation of scientific language and effective communication methods, can involve participants in a perspective of interdisciplinary and popular in-depth study, addressing questions and issues of collective interest (cycle "Ri-Nutri – Rethinking nutrition" 21-23, dedicated to the theme of nutrition in the future); **sponsorship of scientific events and strengthening of collaborations with associations** close to our Company, in order to improve the exchange of knowledge and experience, aimed at promoting research. An example of this is the collaboration agreement signed in 2017 with the Italian Association of Chemical Engineering (AIDIC), which provides, among other things, for the possibility of joint registration for members of both associations; **strengthening relations with industry**: in this direction, **the Commission** in charge will play a key role, for example, through the organization of satellite events of industrial interest, already held on the sidelines of our National SCI Congress.

The Chemistry Games and Olympiad

The Chemistry Games and Olympiad

Founded in 1984, the **Chemistry Games and Olympiads** are organized with the operational support of the *Società Chimica Italiana* (on behalf of the Directorate General for School Systems, Evaluation and Internationalization of the National Education System of the Ministry of Education and Merit). They are included among the initiatives to enhance excellence concerning students of Italian state and private upper secondary schools, and aim to stimulate interest in this discipline in young people. Following the national selections, the international phase of the competition starts, culminating with the participation of the Italian delegation at the International Chemistry Olympiad (IChO).

In 2023-24, the event saw the participation of 800 schools and 35,000 students engaged in over 1400 competitions, which ended at the Riyadh 2024 International Olympics with 2 medals and a honorable mention for Italy, receiving the applause of the Minister of Education and Merit Valditara who, addressing his personal thanks to the current SCI President and the Organizing Committee of the Games. He emphasized that chemistry, which deals with the transformations of matter, has a central role both in defining the level of technology, and therefore of modernity of a country, and in guiding the great processes of society. The Ministry's attention to these issues is confirmed by the recent adoption of the Decree approving the Guidelines for the enhancement of STEM disciplines, of which Chemistry is included, and which provide for innovative ways of teaching and learning.

A constant and ever-increasing commitment is therefore needed to ensure that these initiatives attract a growing number of students, through the awareness of schools and teachers. To this end, greater synergy between university guidance students in chemistry courses, also through the actions envisaged with the POT and PLS Plans, will be a useful tool to convey, in collaboration with the regional SCI Sections, an effective promotion of chemistry games and other actions aimed at promoting chemical culture in schools, for students and teachers. Furthermore, in order not to disperse the energy and efforts sustained for carrying out these activities, it will be appropriate to identify useful tools to monitor the activities of young competitors who have distinguished themselves during the various phases of the selection tests of chemistry games, establishing a

statistical observatory and using appropriately designed questionnaires to be administered to young talents, in order to build databases useful for evaluation over time.



Organization and Governance

Organization and Governance

Since 1955, the year in which *the Società Chimica Italiana* was so named after the Italian Chemical Association (founded in 1909 and erected as a Moral Body by Royal Decree of 1926), the statutory purposes of the SCI have remained unchanged. Over the years, the Governing Bodies that have alternated, with the contribution of all the Members, have pursued ambitious objectives of growth and strengthening that have ensured the *Società Chimica Italiana* a central role of intervention in the current reality and an authoritative voice within the European Chemical Societies.

To achieve these goals, the **President** and the **Executive Committee** avail themselves of the activity of the **Central Council** and the collaboration of the **Peripheral Bodies**, supported by the work of **Commissions, Delegates and Tables**.

The effectiveness and plurality of intervention of our Society are ensured by the presence of **the thematic Divisions**, which decline our disciplinary wealth, and by the **Sections** distributed throughout our country, which intercept territorial peculiarities. In this logic of corporate organization, the **Interdivisional Groups** are transversely placed, which act as a catalyst and coagulation of the active components in the various fields of chemical sciences.

The ability to respond promptly to the new questions and challenges of contemporary society requires a set of tools and strategies to administer and guide our scientific community towards its vision and objectives, relating effectively with all the realities that involve us: that is, a flexible and articulated governance. In this regard, the extraordinary wealth of experience and foresight that is the heritage of the **SCI Senior Group** will be a guarantee of continuity with the development of recent years, and a valuable resource and guide for the growth of our Company.

The current historical period has been characterized by a significant growth of the "non-profit", in Italy and beyond, both in numerical and economic terms, accompanied by great trust and expectations towards the **Third Sector**, of which our Company is part as an organization committed to the protection of the common good and in support of the community. The great reorganization of the legislation affecting the Third Sector stems from the need for precise rules and the overcoming of the legislative fragmentation that has characterized the many organizations involved in social work for decades. Adherence to the Third Sector Reform which, with over 40 implementing decrees, regulates in a single text all types of organizations called "Third Sector Entities" (ETS) will

require a considerable effort in the short term to reorganize the management of our Company, starting with the registration in the single national register (RUNTS) which will be based at the Ministry of Social Policies and will replace the territorial registers. Becoming a Third Sector entity will entail new obligations and responsibilities, in the face of exemptions and economic and tax advantages, also in the form of incentives and concessions. Becoming an ETS implies compliance with a series of obligations on internal democracy, transparency, employment relations, insurance of volunteers, allocation of any profits and, last but not least, the obligation for Third Sector organizations to make their activities and budgets public.

With this in mind, it will therefore be necessary to redistribute the financial assets of the SCI and adapt the methods of social reporting, given the mandatory nature of the preparation of the social report for ETS with revenues, annuities, income or income exceeding 1 million euros (however denominated). The social report must be drawn up according to guidelines adopted by decree of the Minister of Labour, taking into account, among other elements, the nature of the activity carried out and the size of the entity, also for the purpose of assessing the social impact of the activities carried out, and must be published in the RUNTS as well as on its website. The opportunity provided by the reform will be exploited by reasoning not exclusively from a fiscal perspective, but rather from a perspective of belonging, rethinking our Company to assume a conformation consistent with our organizational model, our governance and the nature of the activities carried out. The financial reorganization could, for example, provide for the establishment of Schools for doctoral students within each Division or itinerant Schools of Higher Education, in addition to those already officially organized by the SCI or by the individual Divisions, Sections and Interdivisional Groups, and will primarily see the **Permanent Budget Operational Structure** as the protagonist, whose efforts will be adequately supported.

The role played by the **Commissions** operating in our Company with their specific skills is of fundamental importance in providing information and control of the various activities; therefore, their respective functions may be modified to allow us to respond effectively and dynamically to the challenges that await us.

The need to consolidate and strengthen our presence at national and international level makes use of the skills of the **Permanent Scientific Operational Structure**, which should, in my opinion, expand the tasks delegated to it, as a steering body in defining the strategic lines of the Society for the support of scientific activities of high-quality standards of researchers in the chemical sector, to increase their ability to compete internationally, with particular reference to access to European

funding. The same Commission, as the Scientific Committee of the Avogadro Colloquia, will have the task of consolidating this excellent scientific tradition which, in addition to constituting a moment of aggregation for the community of Italian and foreign chemists, will continue to represent an important place of dialogue at an international level, in guiding and promoting the most significant advances in research in the fields of chemistry, in all issues of recognized strategic importance and with an immediate implication also on socio-economic activities.

The Magazines

I believe it is essential to encourage, support and incentivize publications in the journals of our Society, which represent a crucial tool for the dissemination of both the cognitive aspects of chemistry and the productive ones, capable of reaching all the components of our Society, stimulating them to a debate on the most current and important issues concerning our discipline and pushing them to an open discussion on the limits and potential of new achievements of chemistry.

The first mention naturally goes to *La Chimica e l'Industria*, the first official journal of the SCI, founded in 1919 under the name of "Journal of Industrial Chemistry". The Presidents of the *Società Chimica Italiana* who have succeeded one another in recent years have continuously demonstrated, albeit with different accents, a special attention that has contributed to the evolution of the journal, in line with the changing needs of the chemical community in the socio-economic context. The words of Lamberto Malatesta are significant, in addressing a greeting to the Members by writing an editorial in the magazine: "It is through this journal that the confluence of the industrial chemical world with the academic one is achieved in the *Società Chimica Italiana*, a confluence that I consider essential for the very survival of our society and of the scientific and professional progress of Italian chemistry". *La Chimica e l'Industria* has a multi-year history that is closely intertwined with that of the *Società Chimica Italiana*, and which has as its qualifying final objective to represent the reference journal, in terms of information and scientific dissemination, for all those in Italy who are interested in Chemistry at various levels. It is necessary to strengthen the role of this important tool of work and identity, of documenting our history, of providing information on the progress of scientific and technological research.

More recently founded, "**CnS-Chemistry in the School**" offers members of the Didactic Division and beyond the opportunity to relive and revisit contributions to the history of Chemistry Teaching through the works of teachers who have contributed with their professionalism and teaching experience to enrich the contents of the journal over the years.

At the same time, the participation of our members in the European journals of which the SCI is co-owner and which also represent an important item of funding for our community, such as the journals included in **Chemistry Europe**, whose royalties represent a significant part of our corporate budget, should be encouraged. Founded in 1995, Chemistry Europe, with contributions from sixteen Chemical Societies from fifteen European countries, publishing authoritative research on all aspects of chemistry and adjacent scientific areas, highlights the role of chemistry as a central science to today's society and serves the entire community by providing an *open access* platform for original and innovative work from all chemical disciplines.





Young people

With over 2600 members, distributed in the 15 Divisions, the **SCI Youth Group** today constitutes just under half of our community. The Young Members of each Division elect a representative, with a three-year mandate, who becomes part of the Board of Directors of the Youth Group, the body responsible for planning and organizing the Group's activities. Although recently established, *SCI giovani* has represented and still represents a strong axis of growth of the *Società Chimica Italiana*, thanks to the numerous initiatives that include congresses, seminars and awards. All these activities, pursued with great success, testify to the intellectual liveliness and operational concreteness of our young people, as well as being characterized by a strong vocation towards internationalization, great communication skills and a remarkable sensitivity towards gender and environmental policies.

What do young people do?

A very important initiative of the SCI Youth Group is the series of *Y-RICH Workshops*, seminars that since 2013 have focused every year on issues of burning interest and current affairs for young people and beyond. The topics range from Artificial Intelligence techniques in chemical research to the issue of safety in the workplace in the world of research, and other areas such as that of the National Scientific Qualification. Other editions were instead focused on *Start-ups* and *Spin-offs*, *Elevator Pitches* and interviews, with a series of interventions aimed at training young people in the presentation of their research projects and themselves, by professionals from the world of TED talks, ERC winners and recruiters' companies. This demonstrates the ability of our young people to self-train and self-sponsor, with a careful look at the world of work and openness to dialogue with companies, bodies and local federations. Initiatives and strategies that must be encouraged and supported by the Chemical Society with every means, moral and financial, taking as an example the *Design Your Future* workshop, which saw the participation of representatives of *Federchimica* and the National Federation of the Orders of Chemists and Physicists. The aim is to illustrate to young chemists training a wide range of possibilities and perspectives in the world of work, starting from academic careers and the practice of the profession, passing through popularization and scientific publishing, up to teaching in schools and innovative entrepreneurship. The Youth Group has

has already been able to start a fruitful dialogue with industry, for example through participation in the CIS 2019 - *Chemistry meets Industry and Society congress*, organized by SCI in collaboration with EuChemS, *Federchimica*, *Farindustria* and with the support of INSTM and AIM.

The SCI Youth Group has also been able to understand the importance of the international projection of the SCI, as a strategic element for the future of our community. Cooperation and collaboration, at a global level, are in fact the only way to effectively face common challenges, and in this sense our young people are very active. By virtue of the active role of the SCI in the European framework, as a member society of the **European Chemical Society (EuChemS)**, the SCI Youth Group organizes the annual *Merck Young Chemists Symposium* (MYCS, formerly called SAYCS), in collaboration with the National Interuniversity Consortium for Materials Science and Technology, with the financial support of Merck and other sponsors. The congress, which has an international character, being open to researchers from all over the world, covers all disciplines of the chemical field and is entirely dedicated to young researchers, such as PhD students, post-docs, scholarship holders, but also researchers engaged in the non-academic field, at research institutes and companies. I recall that the SCI Youth Group had, for two consecutive terms, two Members on the **Board of Directors of the European Young Chemists' Network (EYCN)**, a team made up of young scientists from 22 Chemical Societies of as many European countries, in order to connect young chemists working throughout Europe, and provide them with a platform to exchange knowledge and experiences. Like its parent company EuChemS, EYCN aims to improve the visibility of chemistry, bringing it closer and making it accessible to a wider audience, in Europe and beyond.

The SCI Youth Group annually announces the Primo Levi Prize, awarded to a young SCI Member who is the author of original research of broad interest in Chemical Sciences, and the *Reaxys SCI Early Career Researcher Award*, in collaboration with Elsevier, dedicated to all SCI Members who are PhD students and new PhDs, dedicated to the use of a search engine that is very popular, especially in the field of organic synthesis and pharmaceutical and biological chemistry.

Across all these initiatives, young people devote priority attention to communication activities, using effective and modern tools, such as the YouTube channel and social media, contributing significantly to expanding the dissemination of knowledge and improving the vision of chemistry in Italy and beyond. The SCI Youth Group has promoted the first Italian initiative aimed at rewarding the communication and dissemination skills of science by young researchers, through the establishment of the **ChiMiCapisce contest**, launched for the first time in 2018 during the presentation of the

newly-established Interdivisional Group for the Dissemination of Chemical Culture. The Youth Group and the Group for the Diffusion of Chemical Culture also organized the Italian version of the **Global Women's Breakfast 2022 – Empowering Diversity in Science**, held simultaneously worldwide, demonstrating great attention to gender equality policies. In the recent pandemic period, characterized by *smart working*, forced isolation and exclusively telematic sociality, our young people have shown great resilience, organizing a series of **Spritz&Science** virtual aperitifs with the aim of keeping the community of young chemists compact, with in-depth discussions on hot topics in the world of contemporary chemistry. The SCI Youth Group also organized the virtual session *The emotional roller coaster of building a Career in Science* during ESOF 2020 (*European Science Open Forum*), with medical experts and journalists who dealt with the difficult topic of psychological problems faced by researchers, in order to explore the tools available to maintain one's physical and mental well-being.

What else can SCI do for young people?

I am firmly convinced that the role of young people in our community will have to be increasingly strongly valued and strengthened, pursuing two main strategies.

The first is aimed at consolidating the autonomy and decision-making role of the SCI Youth group, guaranteeing its **participation in the Commissions and Tables** (Regulations Commission, International Relations Commission, Industry Relations Commission, Gender Equality & Inclusion Plan Commission, SCI-CUN Table).

At the same time, the strategy for the enhancement of young people must include a series of initiatives aimed at strengthening their planning, encouraging exchanges also at international level, promoting their training and encouraging their productivity. This last objective, also in line with ANVUR indications, provides for the establishment of a **reward for young people** in the field of research, through the creation of internal research awards, equally distributed among all the Divisions, which will contribute to enriching the professional curricula of young SCI members.

In line with the *Reaxys-SCI Small Research Grants*, which SCI and Elsevier finance for research activities, of young PhDs, it will be possible to establish "**starting grants**", which consist of an entry endowment that allows newly enrolled students to actively enter the scientific scene, starting their own research activities, and **scholarships** intended to cover the costs of participation in

congresses in their sector, in which they can disseminate the results of their research, in greater numbers than is currently the case. A further idea could be to facilitate the birth of new innovative companies through an integrated program of guidance, training, coaching, tutoring and incentives aimed at supporting research spin-offs.

The incentives and rewards put in place will help to improve the image of our Company in the territory, also representing an effective means of combating the sad phenomenon of the "brain drain", a responsibility that involves the academic world even before the business world. Unfortunately, the latest data show an increasingly copious haemorrhage of young talents, increasing by more than 40% in the last decade. It so happens that Italian researchers are in second place among the most awarded by the European Research Council (ERC), but they carry out their projects mainly abroad, where they migrate in search of greater remuneration and greater meritocracy. In particular, Italy is the only one among the large countries to have a net negative balance (-25 in 2023) between grants obtained by country and grants obtained by nationality of the project manager: a figure that underlines the difficulty in retaining the best talents within national borders. The result is a burden for all Italian science, impoverished of tools and its "human capital". It therefore seems essential and urgent to introduce a series of initiatives aimed at improving the planning capacity of young people. On the occasion of an IUPAC event, two councilors of the SCI Youth Group presented two talks in the session focused on soft-skills for young chemists, on high-impact article writing techniques and drafting Marie Skłodowska-Curie Actions (MSCA) projects. The MSCA actions represent the European Union's reference program for doctoral education and postdoctoral training, investing in the long-term careers of excellent researchers, offering opportunities for the exchange of knowledge through the mobility of researchers across national borders, ranging between different sectors and disciplines. In this regard, the action already undertaken by the current Governance of our Company will have to support projects with increasing determination, on the model of those funded by the European Commission in all disciplines and fields of research under the EU Framework Programme for Research and Innovation, Horizon Europe. In particular, ERC funding represents a unique opportunity for talented researchers to access, together with their research groups, flexible funding

that enables them to pursue the most promising path in frontier research, through scientific excellence.

A further, effective means of supporting the growth of researchers and professionals is represented by **PhD programs**, able to equip our young people with the most appropriate tools to successfully face the complex challenges that characterize today's reality. To this end, the SCI could finance, or co-finance, PhD scholarships and post-doctoral contracts, in order to enhance the educational offer and stimulate the planning of innovative research lines. Such strategies are also advocated by ANVUR, which recommends guaranteeing and stimulating the growth of doctoral students as members of the scientific community, both within the course through the comparison between doctoral students, and through their participation in national and international congresses, workshops and training schools.

Finally, I would like to emphasize that young people represent our natural and most direct interlocutors with the world of school first and with the academic world later: it is therefore essential to promote their role as **ambassadors** of our community and as "**recruiters**" of new members and talents. This objective can be pursued, first of all, by encouraging and supporting, also **financially**, some of the **initiatives** already introduced by the SCI Youth Group, such as the workshop "**Climate of Change: Us & Chemistry for a more sustainable future**", held online on the occasion of **All4Climate-Italy 2021**. The event was dedicated to secondary school students and university students of all backgrounds, aiming to address emerging issues related to climate change and how chemistry aims to address and solve them; on that occasion, the "**COP26operiamo Insieme**" Award was announced. These initiatives contribute to pursuing one of the founding objectives of our Company, which consists in "promoting and encouraging the study of Chemistry in Universities and in all Schools of all levels". In this regard, the SCI could be inspired by the German Chemical Society (GDCh), which dedicates a section of its portal to services for university students and PhDs, to whom are offered subscriptions with reduced fees to scientific journals, information brochures on career opportunities and training courses, prizes and recognitions dedicated to young people, funding measures designed to support research activities and mobility.

International Relations

The time we are living in, marked by great changes in the geo-political order and the emergence of new challenges on a global scale, makes it more necessary than ever for all scientists to cooperate in a dimension that is no longer territorial but global, so that concrete solutions for the well-being of the planet and humanity can emerge from the synergy of skills and efforts.

The international dimension of the *Società Chimica Italiana*, which is achieved first of all through its participation in EuChemS, ensures that our community participates in a scientific discussion platform for the convergence and exchange of ideas, initiatives, workshops, which offers opportunities for cooperation on a vast number of topics, ranging from scientific advances to career advancements, education and training, as well as fostering international collaborations among young people through the EYCN. Representing more than 160,000 chemists from 51 member societies and other chemical-related organizations, EuChemS has a unique network of active researchers involved in all fields of chemistry, through which it organizes the biennial EuChemS Congress, the European Congress of Chemical Sciences and several specialized academic conferences. In addition, and above all, EuChemS promotes the role and image of chemical sciences among EU citizens and government bodies, through social media, newsletters and the organization of conferences and seminars open to society.

By virtue of the positive collaboration established and perpetrated over the years, the SCI today occupies a very important role in the process of consolidating the identity of the community of European chemists represented by EuChemS, and contributes to providing a single and impartial European voice on key policy issues in chemistry and related fields. Especially the next few years will see the SCI rise to a leading role in European Society, with the presidency of our Society, Prof. Angela Agostiano.

This motivates us even more to consolidate and promote an increasingly broad international dimension of our Company, supporting the work already carried out by the **International Relations Commission** in the promotion of connections, in the planning of joint activities, in providing support to global research, but also with initiatives that invest in the educational and professional aspects (Joint Doctorates, Exchange Programs).

Other initiatives may be focused on promoting frontier research, disseminating best practices to support the promotion of research tools and initiatives also through a virtuous use of research infrastructure facilities for access to tools, technologies and services and, ultimately, forging the next generation of ERC awardees in Italy. Frontier research, also defined as "curiosity-driven" or "knowledge-driven" is a new concept of scientific investigation considered fundamental for the future of many sectors by the European Union, which funds excellent scientists through the ERC, whose total budget for 2021-2027 amounts to 16 billion euros.

The identification of areas of common interest will be able to constitute a solid basis on which to strengthen the exchange and cooperation agreements between SCIs and scientific societies of other countries, in addition to the bilateral protocols already in place with France, Germany and Spain, in addition to the agreement recently signed by our Delegate Prof. Maurizio Quinto with the Chinese Chemical Society. With a *Memorandum of Understanding* (MOU), the two companies commit themselves to increasing scientific cooperation, communication and exchanges in the field of chemistry and related sciences, for the benefit of the Chinese and Italian chemical communities.



Chemistry Teaching in Schools and Universities

Chemistry Teaching in Schools and Universities

Starting from the 2024-2025 academic year and by the 2025-2026 academic year, all courses of study will see the transition to the **new degree classes** according to Ministerial Decrees no. 133 of 03-02-2021, no. 96 of 06-06-2023, no. 1648 of 19-12-2023 and no. 1649 of 19-12-2023. All universities are committed to this reform which aims to promote flexibility through a reduction in the constraints relating to the training credits assigned to the various disciplinary areas. The aim is to create interdisciplinary degree courses that respond, with their own training path, both to the different territorial needs and to the ever-changing challenges.

Related and supplementary training activities can be organized in the form of teaching courses, workshops, exercises, seminars or other activities as long as they are aimed at acquiring knowledge and skills functionally related to the cultural and professional profile identified by the course of study. The regulations may provide, for each degree course, in the areas relating to basic or characterizing activities, courses or other training activities relating to scientific-disciplinary sectors other than those provided for in the tables attached to the ministerial decrees defining the classes, in compliance with the educational objectives of the relevant class.

This flexibility opens up numerous possibilities for chemistry which, being made up of different souls, can not only be enhanced in the degree classes where it is most present, but also in others where its knowledge can constitute an added value of the training and therefore professional path. Crucial sectors are agriculture, fashion, life sciences, architecture, engineering and nutrition in all its aspects.

The new degree classes are linked to the competition classes for teaching in schools. In fact, in the revision of the degree classes, attention must be paid to the possibilities that the course offers to teaching in schools. The Ministry of Education and Merit is revising the competition classes for teaching in schools by inserting specific constraints for the teaching of the various disciplines. With respect to chemistry, graduates must have appropriate skills gained only in courses that provide at least a solid basic education. In this regard, I believe that the role of our Society is fundamental, which I hope will be able to make a significant contribution, in identifying the skills considered indispensable for the effective teaching of chemistry in schools.

A further challenge to which the chemical world is called at the moment also concerns its position with respect to qualifying degrees. If, on the one hand, the creation of a network between the academic world and the world of professions is essential to create training courses that are also aligned with work needs, on the other hand, it cannot be forgotten that society is constantly evolving and, with it, so are the professions that are opening. It therefore seems risky to link a training course to a profession, as all professional outlets must be protected as a whole without neglecting the high educational value of the disciplines that apparently do not have a work impact, but which contribute to training.

The role of the President of the SCI in this phase is crucial to create virtuous networks with other associations so that the added value of the reform of the degree classes can create more job opportunities for young people and enhance the professional opportunities of the different territories.

All this provides for a real cooperative and non-competitive vision, the result of experience and management balance.



Other actions

The SCI, through its members, includes scientific, didactic and professional skills suitable for supporting universities in *public engagement* activities and for the development of *Citizen Sciences projects*, which involve citizens in scientific research, with the aim of acquiring information to enhance scientific knowledge. An increasingly significant action by our Company will be able to create a virtuous circle between research and *public engagement* in support of the sustainable development goals of the European agenda for 2030, by virtue of an inclusive and gender policy.

In the certainty that a knowledge of our history contributes to enriching an active and conscious participation on the part of the members, special sections will be created on the SCI website in which salient historical notes regarding the birth and evolution of our Society will be published, accompanied by photos and digitized period documents. A particular focus will be dedicated to the history of congresses, with the publication of all digitized proceedings, constituting an open and freely consultable archival fund, which will be valuable for the study of the development of chemical sciences in Italy.