



SEVENTY YEARS OF THE BRAZILIAN FEDERAL COUNCIL OF CHEMISTRY (1956–2026): INSTITUTIONAL TRAJECTORY, PRESIDENCIES, AND PERSPECTIVES FOR THE CHEMISTRY PROFESSION - EN

SETENTA ANOS DO CONSELHO FEDERAL DE QUÍMICA (1956–2026): TRAJETÓRIA INSTITUCIONAL, PRESIDÊNCIAS E PERSPECTIVAS PARA A PROFISSÃO QUÍMICA - EN

Luis Alcides Brandini De Boni *

Periódico Tchê Química. Brazil. ORCID: <https://orcid.org/0009-0000-8102-6197>

Paulo Roberto Barros Gomes

Federal Institute of Technical Education of Pará, Department of Teaching, Extension, Graduate Studies, and Innovation, Paragominas Campus, Brazil. ORCID: <https://orcid.org/0000-0002-4221-6577>

* Corresponding author

e-mail: labdeboni@gmail.com

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RESUMO

Introdução: Em 2026, o Sistema CFQ/CRQs completa 70 anos (Lei nº 2.800/1956), fiscalizando um setor responsável por cerca de 11% do PIB industrial, mas carecia de reconstrução cronológica baseada em seus registros primários oficiais. **Objetivo:** Reconstruir a gênese jurídica do Sistema, estabelecer a cronologia oficial documentada das presidências e discutir os desafios regulatórios atuais. **Métodos:** Pesquisa documental historiográfico-descritiva apoiada em fontes normativas e no acesso inédito ao registro interno "Galeria de Presidentes", fornecido pelo Gabinete da Presidência do CFQ em 2026. **Resultados:** Detalhou-se oito presidências efetivas e interinatos (1957–2026), fundamentando o exercício interino de Oscar Bergstron Lourenço (1963–1964) e a posse de Juvenal Dória em 1964. O Sistema hoje reúne 21 CRQs e mais de 230 mil registrados. Identificou-se subdocumentação da trajetória de Hebe Martelli (única mulher na presidência) e divergência em aberto sobre o número de CRQs criados em 1957. **Discussão:** A Resolução Normativa nº 36/1974 permanece como marco das atribuições. As normativas recentes retomam desafios históricos, como a atribuição a currículos híbridos e a segurança química como bem público, exigindo antecipação frente às transições energética, de materiais e digital. **Limitações:** A cronologia depende de registros institucionais não auditados independentemente em arquivo primário pelos autores. **Conclusões:** O acesso aos registros primários consolidou a memória documental dos setenta anos do Sistema, cujo legado reside na adaptação do arcabouço regulatório às transformações tecnológicas.

Palavras-chave: *Regulamentação profissional; Pesquisa documental; Resoluções Normativas; Governança de conselhos profissionais; Lei 2.800/1956.*

ABSTRACT

Background: In 2026, the CFQ/CRQ System turns 70 (Law No. 2,800/1956), overseeing a sector responsible for ~11% of industrial GDP, but it lacked a chronological reconstruction based on its own official primary records. **Aim:** To reconstruct the System's legal genesis, establish a documented official chronology of its presidencies, and discuss current regulatory challenges. **Methods:** Historiographical-descriptive documentary research based on normative sources and unprecedented access to the internal record "Galeria de Presidentes," provided by the CFQ Presidency Office in 2026. **Results:** Eight substantive presidencies and interim periods (1957–2026) were detailed, substantiating the interim exercise by Oscar Bergstron Lourenço (1963–1964) and Juvenal Dória's inauguration in 1964. The System now comprises 21 regional councils and over 230,000 registrants. The study identified under-documentation of Hebe Martelli's trajectory (the only female president) and an open divergence regarding the number of regional councils created in 1957. **Discussion:** Normative Resolution No. 36/1974 remains the milestone for professional attributions. Recent regulations revisit historical challenges, such as

attributing competencies to hybrid curricula and establishing chemical safety as a public good, requiring anticipation of energy, materials, and digital transitions. **Limitations:** The chronology relies on institutional records that the authors did not independently audit against primary archives. **Conclusions:** Access to primary records consolidated the documentary memory of the System's seventy years, whose legacy lies in adapting the regulatory framework to technological transformations.

Keywords: *Professional regulation; Documentary research; Normative resolutions; Council governance; Law 2,800/1956.*

1. INTRODUCTION

Professions are not born regulated: they become regulated. The Brazilian case of Chemistry exemplifies this distinction. Between the creation of the first higher education courses in industrial chemistry in the 1910s and 1920s and the effective establishment of a dedicated registration and oversight body, about four decades of institutional dispute elapsed (Santos, Pinto, & Alencastro, 2006; Silva, Santos, & Afonso, 2006). The dispute ended on 18 June 1956, when Law No. 2,800 created the Federal Council of Chemistry (CFQ) and the Regional Councils of Chemistry (CRQs) (Brasil, 1956). That date is now celebrated as the National Day of the Chemistry Professional.

In 2026, the CFQ/CRQ System completes seventy years. The anniversary was marked by a special session of the Federal Senate, by a solemn session in the Chamber of Deputies, by the release of a commemorative stamp and postmark by the Brazilian Post Office (Correios), and by the minting of a medal by the Brazilian Mint (Casa da Moeda do Brasil), in addition to institutional actions regulated by the autarchy itself (Correios, 2026; CFQ, 2026b; Senado Federal, 2026).

Until this update, reconstructing the chronology of CFQ presidencies depended entirely on searches across several secondary sources (RQI, 2020, 2023), which hindered historical research by requiring consultation of multiple scattered records. The CFQ Presidency Office, in response to a formal request by the authors, provided the official list of presidents and an internal record of the minutes of Ordinary Meetings ("Galeria de Presidentes"), making it possible to complete the timeline of the Council of Chemistry (CFQ, Gabinete da Presidência, 2026).

1.1. Objectives

This communication aims to reconstruct, from verifiable primary sources:

- (i) the legal genesis of the System;
- (ii) a documented chronology of the CFQ presidencies, based on the signatures affixed to the Normative Resolutions and on the records of Ordinary Meetings provided by the CFQ itself;
- (iii) the evolution of the framework that defines professional attributions; and
- (iv) a frank discussion of the challenges the System faces in its eighth decade. Where evidence is still lacking, this is stated. Where sources diverge, the divergence is recorded.

2. SOURCES AND METHOD

2.1. Documentary sources

This is documentary research of a historiographical-descriptive nature, supported by four classes of sources:

- Normative primary sources: Law No. 2,800/1956; Decree-Law No. 5,452/1943 (CLT, the Brazilian Consolidation of Labor Laws); Decree No. 24,693/1934; Decrees No. 85,877/1981 and 86,593/1981; and the Normative Resolutions of the CFQ, with particular attention to the signatures of president and secretary affixed to them, which function as dated testimony of the officeholder.
- Biographical primary sources: the "Pioneiros da Química" (Pioneers of Chemistry) series of the Revista de Química Industrial (RQI), published by the Brazilian Chemistry Association, and the obituaries and institutional profiles published by the CFQ itself.
- Contemporary sources: releases from Agência Senado, Correios, and the CFQ concerning the seventieth anniversary (2026), in addition to sector data on the chemical industry.
- Official institutional source (new in this update): the official list of presidents and the internal record "Galeria de

Presidentes”, provided by the CFQ Presidency Office to the authors on 25 June 2026, in response to the request filed on 22 June 2026. The record compiles the dates of Ordinary Meetings (O.M.) of the CFQ Plenary, identifying who held the Presidency at each session—incumbent, vice-president, or acting secretary—since 08 July 1957 (CFQ, Gabinete da Presidência, 2026).

2.2. Evidence criteria and limitations

The evidence criterion adopted was conservative: the date of an Ordinary Meeting (O.M.) or a dated signature on a normative act was preferred over any secondary mention. Where the internal record of the “Galeria de Presidentes” showed probable internal inconsistencies — for example, numerical jumps between sessions incompatible with the reported date interval, or a date whose year visibly diverges from the chronological sequence of neighboring sessions — this is flagged in a footnote to Table 1, for transparency of the reconstruction.

One limitation remains: the documentation obtained does not resolve the divergence between RQI (2023), according to which the second Normative Resolution of the CFQ, of 1957, created five Regional Councils, and the institutional history of CRQ-X (n.d.), according to which that same Resolution divided the national territory into seven regions. The point remains an open research question.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Background: from activity without a profession to a profession without a council

Decree No. 24,693, of 12 July 1934, regulated by Decree No. 57/1935, constitutes the first regulation of the chemist's profession in Brazil. It recognized activities but did not effectively regulate professional practice: the status of chemist was tied to the exercise of the activity and not to the training of whoever performed it (RQI, 2023). The first legal instrument to delimit the exclusive activities of the class more clearly was the Consolidation of Labor Laws (Decree-Law No. 5,452, of 1 May 1943), whose Section XIII of Chapter I of Title III addressed the practice of the chemist's profession.

The problem, however, was structural: the CLT assigned oversight to officials of the Ministry of Labor, and not to chemistry professionals. In the

absence of a dedicated technical council, the activity ended up being performed by professionals from other backgrounds and even by unqualified practitioners without a degree (RQI, 2023). It was from this insufficiency — and not from an abstract corporatist impulse — that the campaign for the creation of a dedicated body was born, led from 1945 onward by entities such as the Chemists' Union of Rio de Janeiro and the Brazilian Chemical Society, with decisive participation from Geraldo Mendes de Oliveira Castro (RQI, 2023).

3.1.2. Law No. 2,800/1956 and the architecture of the System

Sanctioned by Juscelino Kubitschek on 18 June 1956, Law No. 2,800 transferred to the Councils the powers of registration, oversight, and imposition of penalties until then established in the CLT (Brasil, 1956, art. 1). It granted the CFQ and the CRQs legal personality under public law, together with administrative and patrimonial autonomy (art. 2), established the seat of the federal council in the Federal District (art. 3), and defined its composition (art. 4). Three elements deserve analytical emphasis:

- Binding technical composition. Article 5 required that, among the nine substantive federal counselors, at least one third be chemical engineers and one third industrial chemists, agricultural industrial chemists, or chemists, in addition to one chemistry technician.
- Honorary three-year term. Article 7 established that the term of the president and the counselors would be honorary and three years, with annual renewal of one third of the board—a provision whose reading, in light of the longevity observed in some administrations, deserves the attention discussed in Section 3.2.1.
- Choice of the president. Originally, the President of the Republic appointed the president from a three-name list drawn up by the Council itself (art. 4, item “a”). Decree No. 86,593/1981 transferred that choice to the Minister of Labor. Currently, the Council's Plenary makes the choice.

Decree No. 85,877, of 7 April 1981, established rules for the execution of Law No. 2,800/1956, specifying the activities comprised in the practice of the profession, those exclusive to it, and those shared with other professions. This

decree, not the 1956 law, underpins most concrete oversight action.

The effective installation took place in 1957, in Rio de Janeiro, in a room made available by the National Institute of Technology. Professional chemist's card No. 1 in Brazil was issued to Geraldo Mendes de Oliveira Castro (RQI, 2023). A divergence between sources is recorded here, unresolved by the official documentation obtained in this update: according to RQI (2023), the second Normative Resolution of the CFQ, of 1957, created five Regional Councils; according to the institutional history of CRQ-X (n.d.), Normative Resolution No. 2 divided the national territory into seven regions. The two statements may be reconcilable—five councils installed within a design of seven regions—but the documentation consulted does not allow a decision.

Table 1 summarizes the chronological reconstruction, now grounded in the official list and in the internal record “Galeria de Presidentes” provided by the CFQ Presidency Office (2026), which document, session by session, the exercise of the Presidency since 1957.

3.1.3. Profiles of the presidents

3.1.3.1. Geraldo Mendes de Oliveira Castro: the founder



Photo: *Geraldo Mendes de Oliveira Castro* (1957 – 1963).

Adapted from: <https://www.abq.org.br/rqi/2014/775/RQI-775->

[pagina22-Pioneiros-da-Quimica.pdf](#). Image restored with AI.

An industrial chemist who graduated in 1935 from the National School of Chemistry and a rubber specialist, Geraldo Mendes de Oliveira Castro was a leading figure in the campaign to regulate the profession. President of the Federal Council of Chemistry (CFQ) for two consecutive terms (1957–1963), he made the valorization of the Chemistry professional as an agent of scientific and technological development the hallmark of his administration. Among the Council's first normative acts, two stand out: the first Normative Resolution, of 1957, which established the CFQ Internal Regulations, and the second Normative Resolution, which created the first Regional Councils of Chemistry (RQI, 2023). The official record of Ordinary Meetings shows a transitory vacancy in the office in 1960, covered by Secretary Ralpho Rezende Decourt and, subsequently, by Vice-President Paschoal Senide, until Geraldo Mendes returned to the Presidency, as documented through July 1963 (CFQ, Gabinete da Presidência, 2026).

3.1.3.2. Oscar Bergstron Lourenço*: the 1963–1964 transition.

The official record of Ordinary Meetings partly clarifies the period between 1963 and 1967: between August 1963 and April 1964, Vice-President Oscar Bergstron Lourenço held the CFQ Presidency on an interim basis (49th to 54th O.M.), in the transition between the administration of Geraldo Mendes de Oliveira Castro and that of Juvenal Osório de Araújo Dória. Available sources contain no published biography of Oscar Bergstron Lourenço; his record is currently limited to the session minutes provided by the Presidency Office. Oscar was a chemical engineer, Livre-Docente (habilitated lecturer) in Organic Chemistry, and Professor of physics and chemistry at the Polytechnic School of USP; Head of the Department of Chemical Engineering of the Polytechnic School of USP, 1966–1969.

* No image located.

3.1.3.3. Juvenal Osório de Araújo Dória: consolidation



Photo: Juvenal Osório Araújo Dória (1963 – 1970). Courtesy of CFQ – 2026.

The initial phase of structuring the System was followed by a period of institutional consolidation under the presidency of Juvenal Osório de Araújo Dória. The second substantive president of the CFQ, Dória was already chairing Plenary sessions from the 55th Ordinary Meeting onward, around 1964 — revising the date of 1967 previously attributed to his appointment by a secondary source (RQI, 2020), which probably recorded a formal act subsequent to the actual start of his exercise of the office. Dória had previously held the presidency of the Regional Council of Chemistry of the 3rd Region, created in 1957. His administration is remembered above all for the understanding reached with the Federal Council of Pharmacy to define the boundaries of practice between pharmacists and chemists, a subject that, from different perspectives, remains current (RQI, 2020). It was also during his presidency that Normative Resolution No. 23/1969 was issued, still today considered a reference for characterizing chemical departments in industries and commercial companies subject to technical responsibility. Occasional impediments of Dória in 1966 and 1967 were covered by Secretary/Vice-President Jorge da Cunha, acting in the Presidency.



Photo: Peter Löwenberg (1970 – 1976). Courtesy of CFQ – 2026.

The process of consolidating professional attributions reached a decisive milestone with the publication of Normative Resolution No. 36, of 25 April 1974, signed by Peter Löwenberg, who held the Presidency in two periods (c. 1970–1972 and 1973–1976), with Vice-President Paulo Ribeiro acting on an interim basis in the transition between them. Probably the most influential normative act in the history of the CFQ/CRQ System, this resolution replaced NR No. 26, revoked NRs No. 5, 6, 7, 20, and 26, and reorganized professional practice around a set of sixteen activities, correlated with three curricular natures: “Chemistry” (activities 1 to 7), “Technological Chemistry” (activities 1 to 13), and “Chemical Engineering” (activities 1 to 16), in addition to the competencies attributed to the Chemistry Technician (CFQ, 1974). It was also in this resolution, specifically in activity No. 3, that inspection, expert examination (perícia), appraisal, arbitration, and the preparation of opinions, expert reports, and certificates came to be listed as attributions of the Chemistry professional, establishing the normative basis of the judicial and extrajudicial chemical expert practice exercised in Brazil to this day.

3.1.3.5. *Werner Gustav Krauledat and the opening to new modalities*



Photo: Werner Gustav Krauledat (1977 – 1978). Courtesy of CFQ – 2026.

The normative evolution of the System continued as the CFQ broadened the professional categories it recognized. In this context, Normative Resolution No. 46, of 27 January 1978, signed during the administration of Werner Gustav Krauledat — begun in July 1977, after a period of interim exercise by Vice-President Clóvis Martins Ferreira — exemplifies a movement that would repeat itself in the following decades: the recognition of new academic backgrounds arising from the process of industrial diversification. In determining the registration of Food Chemists, Food Technologists, and Food Engineers, the CFQ applied art. 9 of NR No. 36, which authorizes the attribution of competencies to graduates of courses with a similar curricular organization, to a profession then considered to be in “full development” (CFQ, 1978).

3.1.3.6. *Olavo Romanus*



Photo: Olavo Romanus (1978 – 1979).
Courtesy of CFQ – 2026.

Prof. Olavo Romanus (1927–2011) was born in Curitiba and was a chemist whose training was marked by excellence and innovation. A graduate in Industrial Chemistry and Chemical Engineering from the University of Paraná, he complemented his education with postgraduate studies at the Oils Institute of the Ministry of Agriculture, in Rio de Janeiro, and studies in the USA, where he deepened his knowledge of Organic Chemistry and Radioisotopes. He returned to Brazil with a commitment to teaching; he served as an instructor, full professor, and director of the School of Chemistry at the Federal University of Paraná, where he modernized laboratories and transferred the school to the Polytechnic Center. His pioneering work in chromatography, including organizing specialized courses, strengthened the institution's analytical foundations. (CRQ-IX, 2011)

In addition to his academic work, Romanus was a researcher at the Biology Institute of Paraná, a collaborator in the creation of Marine Biology laboratories at UFPR, a member of the Boards of Trustees and of Specialists in Chemistry Teaching, and a federal counselor. He chaired the organization of the 1st Brazilian Symposium on Chromatography (1964) and tirelessly advocated for the defense of the chemistry profession. His

concern with the environment led him to organize studies on atmospheric pollutants.

3.1.3.7. Hebe Helena Labarthe Martelli: the first woman



Photo: Hebe Helena Labarthe Martelli (1979 – 1985). Courtesy of CFQ – 2026.

The institutional expansion promoted by the System coincided, next, with a historic milestone in the composition of its leadership. Admitted in first place to the Industrial Chemistry program of the School of Chemistry of UFRJ — becoming the first woman to achieve that rank — and top student of the class that graduated in 1942, Hebe Helena Labarthe Martelli assumed the presidency of the CFQ on 10 January 1979, after a period of interim exercise by Vice-President Olavo Romanus. As of 2026, she remains the only woman to have held the office. Her first Normative Resolution, NR No. 49, issued on 21 September 1979, aimed to standardize accountability reporting processes to the Federal Court of Accounts. During her administration, NR No. 66 was also issued, exempting professionals in situations of vulnerability from paying the annual fee, along with the expansion of the Regional Councils to Sergipe, Paraná, and Ceará/Piauí, in addition to the signing, in 1982, of the agreement with Novacap for the construction of the CFQ headquarters in Brasília (CFQ, 2026a).

From a historiographical standpoint, however, an asymmetry remains worth noting. Documentation on Hebe Martelli is substantially

scarcer than that on her male peers, and the CFQ published her institutional biography only in July 2026, thirteen years after her death in 2013. This under-documentation of women's trajectories in Brazilian Chemistry constitutes, in itself, an important object of investigation still pending.

3.1.3.8. Jesus Miguel Tajra Adad: thirty-three years



Photo: Jesus Miguel Tajra Adad (1985 – 2018). Courtesy of CFQ – 2026.

Subsequently, Jesus Miguel Tajra Adad, a chemical engineer and industrial chemist trained at UFPR, took the presidency of the CFQ, with a master's degree in Sanitary Engineering and specializations in Occupational Safety Engineering and Radioisotopes Applied to Biochemistry. Leading the Council between 6 March 1985 and 2018 — taking office one day after the record of interim exercise by Vice-President Roberto Hissa — he presided over the longest administration in the history of the CFQ/CRQ System. During this period, the institutional structure that exists today was consolidated, the number of Regional Councils reached the current 21, and the CFQ headquarters was transferred from Rio de Janeiro to Brasília. In February 2020, he received the unprecedented title of Counselor Emeritus and passed away in June of the same year (CFQ, 2020).

The duration of his administration constitutes an objective historical fact, not a value judgment. Nevertheless, that period is inseparable from the governance discussions developed in Section 3.2.1.

3.1.3.9. José de Ribamar Oliveira Filho: the modernization phase

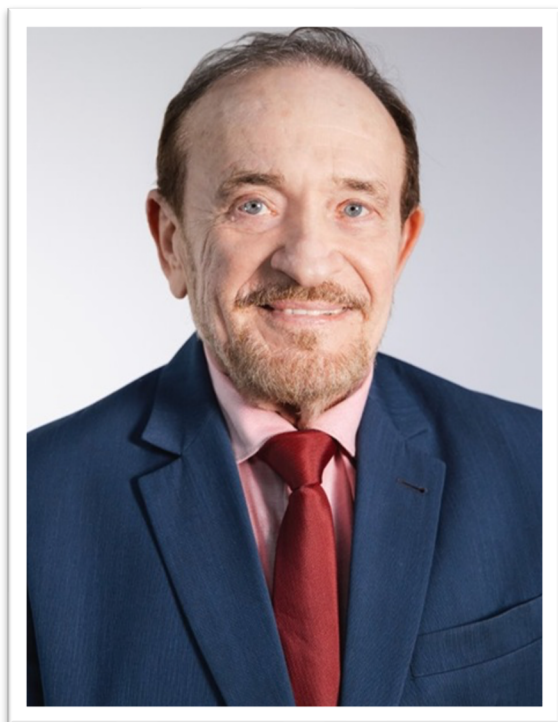


Photo: José de Ribamar Oliveira Filho (2018–present (2026+)).

Courtesy of CFQ – 2026.

Holding a doctorate in Analytical Chemistry from the University of São Paulo (USP) and a professor at the Federal University of Maranhão (UFMA), Professor Dr. José de Ribamar Oliveira Filho was elected president of the Federal Council of Chemistry (CFQ) on 18 April 2018 (O.M. No. 26,777, 607th Meeting) and reappointed, by acclamation, for the 2024–2027 term. At the head of the autarchy, he led a broad process of institutional modernization, marked by the implementation of the 2018–2028 Strategic Plan, the institutionalization of the College of Presidents (Copresi), the creation of the Committee on Institutional and Governmental Relations, and firm action in defense of the CFQ/CRQ System in the face of Constitutional Amendment Proposal No. 108/2019. During the COVID-19 pandemic, he coordinated the Química Solidária initiative, which donated more than 100,000 liters of alcohol and 70% alcohol gel, and created the Chemistry Information Center (CIQ). His administration also strengthened the System's international presence by participating in events such as COP28 (CFQ, 2024).

This commitment to valorizing Chemistry and training ethical, socially responsible professionals

was evident long before his tenure as CFQ president. One of the authors (Gomes), a former student of the Federal University of Maranhão, had the privilege of being his student in the courses Experimental General Chemistry (2004.2) and Environmental Chemistry (2009.2). He taught his classes with high scientific rigor, clarity, and dedication, always accompanied by a genuine concern for the integral education of future chemists. In academic interactions, Professor Ribamar often spoke with students about the importance of the Regional Council of Chemistry for professional practice. These conversations, conducted with enthusiasm and a formative spirit, exerted a lasting influence on the academic and professional trajectory of one of the authors, constituting a testimony to the legacy of a professor who always understood that training chemists meant, above all, training professionals aware of their responsibility to society.

The professional identity of the Brazilian chemist does not lie in Law No. 2,800: it lies in the sedimentation of the Normative Resolutions. Table 2 presents the milestones that, in the authors' understanding, best explain the current design.

3.1.4. The CFQ at seventy: figures and honors

The CFQ/CRQ System comprises 21 Regional Councils, covering the 27 federative units, and more than 230,000 registered chemistry professionals (CFQ, 2026c; Senado Federal, 2026). Its stated mission is to “*promote the full activity of Chemistry, with a view to contributing to the sustainable development of the country*” (CFQ, 2026c). The sector it oversees carries macroeconomic weight: according to Abiquim data released in 2026, the Brazilian chemical industry recorded net revenue of approximately US\$ 158.6 billion in 2024 and accounts for around 11% of industrial GDP (Assembleia Legislativa de Goiás, 2026). This is a statistic from a sector source and should be read with the usual caution applicable to figures released by industry associations.

The seventieth anniversary was marked by a special session in the Federal Senate on 18 June 2026, arising from Request No. 52/2026 (Senator Sérgio Petecão); by a solemn session in the Chamber of Deputies; by the release of a personalized stamp and commemorative postmark by Correios; and by the minting, by the Brazilian Mint, of a medal alluding to the date (Correios, 2026; CFQ, 2026b; Senado Federal, 2026).

3.2. Discussion

3.2.1. Professional education and the attribution problem

NRs No. 342 and 343/2025 have restated, in new language, the question that NR No. 36 had attempted to resolve in 1974: how to attribute legal competencies to graduates of increasingly heterogeneous curricula. The problem has been aggravated by two vectors. The first is the accelerated expansion of distance-learning courses in a field whose formative core is laboratory-based and experimental. The second is the emergence of hybrid programs (computational chemistry, data science applied to chemistry, bioprocess engineering) that do not fit naturally into the three curricular natures designed in 1974.

3.2.2. Chemical safety, controlled products, and technical responsibility

NR No. 335/2025, by regulating the Safety Data Sheet for Chemical Products (FDS) and the Safety Data Sheet for Hazardous Chemical Waste (FDSR), signals one of the System's most promising axes of action: chemical safety as a public good. Here, technical responsibility ceases to be a registry formality and becomes an instrument for protecting life—including the life of the exposed worker. A professional council that takes this axis seriously finds its most robust social justification here.

3.2.3. Green chemistry, bioeconomy, and the next decade

The CFQ's eighth decade coincides with three simultaneous transitions: the energy transition (advanced biofuels, low-carbon hydrogen, sustainable aviation fuels), the materials transition (chemical recycling, recovery of rare earths and critical metals, circular economy), and the digital transition (machine learning applied to materials discovery and process control, autonomous laboratories). A professional council that arrives late at these frontiers does not merely lose relevance: it creates a vacuum of technical responsibility precisely where the risk is greatest.

4. CONCLUSIONS

Seventy years after the founding Law, the balance is favorable and needs no retouching. The CFQ/CRQ System gave the Brazilian chemistry profession what it lacked in 1956: a legal boundary, a dedicated adjudicating body, and a mechanism for recognizing new modalities capable of keeping pace — albeit with delay —

with the field's diversification. The trajectories gathered in this text (Geraldo Mendes, Oscar Bergstron Lourenço, Juvenal Dória, Löwenberg, Krauledat, Hebe Martelli, Jesus Miguel, and Ribamar Oliveira) are, each in its own way, chapters of that construction.

The direct collaboration of the CFQ Presidency Office made it possible, in this update, to fill the previously recorded chronological gap of 1963–1967: the period is today documented by dated Ordinary Meetings, with the interim exercise of Oscar Bergstron Lourenço (1963–1964) and the rise of Juvenal Dória to the full Presidency already around 1964.

Two tasks remain proposed to the community. The first is historiographical: to resolve the remaining divergence regarding the number of Regional Councils created in 1957 (five or seven) and to recover under-recorded trajectories, beginning with that of Hebe Martelli. The second is political and technical: to face, calmly, the debate on the model for selecting leaders, and to anticipate the energy, materials, and digital transitions, so that technical responsibility in chemistry continues to mean, in the eighth decade, what it meant in the first.

That, and not the medal, is the heritage being celebrated.

5. DECLARATIONS

5.1. Study Limitations

- Methodological limitations: the chronology in Table 1 depends on institutional records provided by the CFQ Presidency Office, which the authors did not audit against an independent primary archive; two probable typographical inconsistencies in the source document were identified and flagged but not resolved.
- Documentary sampling limitation: the divergence between RQI (2023) and CRQ-X (n.d.) regarding the number of Regional Councils created in 1957 remains unresolved.
- Generalization limitation: the biographies of the presidents have uneven documentary depth, reflecting historical asymmetries of record-keeping (notably in the cases of Hebe Martelli and Oscar Bergstron Lourenço), and not an editorial choice by the authors.
- Scope limitation: the discussion of the System's contemporary challenges (Section 3.2) is necessarily selective and reflects the authors' perspective as

professionals registered in the CFQ/CRQ System.

5.2. Acknowledgments

The authors thank the Presidency Office of the Federal Council of Chemistry for providing the official list of presidents and the internal record “Galeria de Presidentes”, essential to the chronological reconstruction presented in this communication; the Associação Científica Araucaria for editorial support; and the Revista de Química Industrial (ABQ), whose “Pioneiros da Química” series preserves a substantial part of the memory reconstructed here.

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5.4. Conflicts of Interest

De Boni, L. A. B. is a chemistry professional registered with CRQ-V and Managing Editor of the journal Tché Química. He received no funding from the Federal Council of Chemistry or from any Regional Council of Chemistry for the preparation of this text and holds no elective office in the CFQ/CRQ System.

Gomes, P. R. B. is a tenured professor at the Federal Institute of Pará, Paragominas Campus. He received no funding from the Federal Council of Chemistry or from any Regional Council of Chemistry for the preparation of this text and holds no elective office in the CFQ/CRQ System.

5.5. Data Availability

All primary normative and biographical sources cited in this study are publicly accessible and are referenced in Section 7. The internal record “Galeria de Presidentes”, provided by the CFQ Presidency Office, is available upon request to the corresponding author, subject to CFQ authorization for redistribution.

5.6. Author Contributions

De Boni, L. A. B.: Conception and Design (CD), Data Collection (DC), Data Analysis and Interpretation (DAI), Manuscript Writing (MW), Final Approval (FA).
Gomes, P. R. B.: Data Analysis and Interpretation (DAI), Manuscript Writing (MW), Final Approval (FA).

Code	English	Português
CD	Conception and Design	Concepção e Design
DC	Data Collection	Coleta de Dados
DAI	Data Analysis and Interpretation	Análise e Interpretação de Dados
MW	Manuscript Writing	Escrita do Manuscrito
CR	Critical Review	Revisão Crítica
FA	Final Approval	Aprovação Final

5.7. AI Tools Declaration

Tool: Claude (Anthropic). Purpose: support for cross-checking dates among documentary sources provided by the authors, drafting revisions of the manuscript, and reformatting according to the journal template. It was not used for data fabrication, statistical analysis, or interpretation of historical results, which remain the exclusive responsibility of the authors. All generated content was reviewed and substantially verified by the corresponding author before submission.

5.8. Research Integrity Statement

No data fabrication; no falsification of results; no selective reporting; original work; not previously published; methods conducted ethically.

5.9. Originality and Plagiarism Statement

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6. STUDIES INVOLVING HUMANS AND

ANIMALS

Not applicable. This is historical-institutional documentary research, based exclusively on legal, normative, and institutional sources that are publicly accessible or formally provided by the CFQ, without collecting data from humans or animals and without using sensitive personal information about living individuals beyond already published biographical facts. There was, therefore, no need for approval by a Research Ethics Committee.

6.1. Ethics Committee Approval

Not applicable.

6.2. Informed Consent

Not applicable.

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Table 1. Documented chronology of the presidencies of the Federal Council of Chemistry (1957–2026), based on the official list and on the internal record “Galeria de Presidentes” (CFQ, Gabinete da Presidência, 2026).

Period	President / Acting officer	Documentary evidence (O.M. = Ordinary Meeting / Reunião Ordinária)
08.07.1957 – c. 08.1963	Geraldo Mendes de Oliveira Castro (founder; two consecutive terms)	President at the 1st O.M. (08.07.1957), still present at the 25th O.M. (29.05.1963) and at the 48th O.M. (03.07.1963). Vacancy of the office on 27.04.1960 (22nd O.M.), with Secretary Ralpho Rezende Decourt acting, followed by Vice-President Paschoal Senide acting (23rd and 24th O.M., 27.04–08.06.1960).
14.08.1963 – 22.04.1964	Oscar Bergstron Lourenço (Vice-President, acting in the Presidency)	49th O.M. (14.08.1963) and 54th O.M. (22.04.1964).
c. 1964 – 12.11.1969	Juvenal Osório de Araújo Dória	President at the 55th O.M. (shortly after the 54th O.M., c. 1964), with documented presence until at least the 95th O.M. (12.11.1969). Occasional impediments were covered by Secretary Jorge da Cunha acting (65th O.M., 09.03.1966; 74th O.M., c. 1967; 77th O.M., 25.10.1967) and, in 1969, by Vice-President Peter Löwenberg acting (92nd O.M., c. 13.06.1969; 93rd O.M., 17.06.1969), with Dória's return to the Presidency recorded at the 94th O.M. (15.10.1969) and at the 95th O.M. (12.11.1969).
23.04.1970 – 02.07.1972	Peter Löwenberg (Vice-President; later President)	Vice-President acting in the Presidency at the 99th and 100th O.M. (23.04 and 20.05.1970); assumes the office as full President at the 101st O.M. (24.06.1970). The term ends around 02.07.1972 (134th O.M.), when Vice-President Paulo Ribeiro begins to exercise the Presidency due to the end of the term.
02.07.1972 – 12.09.1973	Paulo Ribeiro (Vice-President, acting; end of Löwenberg's term)	134th O.M. (02.07.1972) and 135th O.M. (15.08.1973).
12.09.1973 – c. 1976	Peter Löwenberg (second term)	President at the 136th O.M. (12.09.1973); signs NR No. 36, of 25.04.1974 (CFQ, 1974).
c. 1976 – 15.07.1977	Clóvis Martins Ferreira (Vice-President, acting) / Werner Gustav Krauledat	Clóvis Martins Ferreira acting at the 171st O.M. (08.10.1976); Krauledat assumes the office as President at the 181st O.M. (15.07.1977) and signs NR No. 46, of 27.01.1978 (CFQ, 1978).
1978 – 10.01.1979	Olavo Romanus (Vice-President, acting)	189th O.M. (28.04.1978) and 197th O.M. (15.12.1978).
10.01.1979 – 05.03.1985	Hebe Helena Labarthe Martelli (first and, as of 2026, only woman to preside over the CFQ)	President at the 198th O.M. (10.01.1979) until at least the 236th O.M. (19.03.1982); brief exercise by Samuel Klein at the 235th O.M. (05.02.1982). Installs CRQ-X on 23.11.1983 (CRQ-X, n.d.).
05.03.1985	Roberto Hissa (Vice-President, acting)	Record dated 05.03.1985, the eve of Jesus Miguel Tajra Adad's inauguration.
06.03.1985 – 2018	Jesus Miguel Tajra Adad	President at the 269th O.M. (06.03.1985); presence documented in successive O.M. up to the 22,767th O.M. (03.12.2014, 2015–2018 term). 33 years at the head of the autarchy; first Counselor Emeritus of the CFQ (CFQ, 2020).
18.04.2018 – present	José de Ribamar Oliveira Filho	Elected at O.M. No. 26,777 (607th Meeting, 18.04.2018), 2018–2021 term; reappointed by acclamation for the 2024–2027 term (CFQ, 2024).

Notes: intervals marked with “c.” are inferred from the sequence of neighboring Ordinary Meetings. The internal record “Galeria de Presidentes” presents three probable transcription inconsistencies, flagged here for transparency of the chronological reconstruction: (a) the 25th O.M. is dated 29.05.1963 and the 48th O.M. 03.07.1963 — an interval of five weeks for 23 sessions is incompatible with the pace observed in the rest of the series, suggesting a typing error in one of the two session numbers or dates; (b) the 74th O.M. is dated “14.06.1997” in the original document, which is chronologically incompatible with the sequence (65th O.M. in 1966; 77th O.M. on 25.10.1967) — most probable reading: 14.06.1967; (c) the 92nd O.M. is dated 13.08.1969 in the original document, later than the date of the 93rd O.M. (17.06.1969) — a chronologically incompatible sequence, suggesting a typing error in the month (most probable reading: 13.06.1969). The three points were communicated to the CFQ Presidency Office for confirmation against the primary archive.

Table 2. Selected normative milestones in the regulation of the chemistry profession in Brazil.

Year	Milestone
1934	Decree No. 24,693, regulated by Decree No. 57/1935: first regulation of the chemist's profession; establishes the figure of the "licensed chemist".
1943	Decree-Law No. 5,452 (CLT), Title III, Chap. I, Section XIII: first clear delimitation of exclusive activities; oversight assigned to the Ministry of Labor.
1956	Law No. 2,800: creates the CFQ and the CRQs and transfers oversight to them; 18 June becomes the National Day of the Chemistry Professional.
1957	Installation of the CFQ; NR No. 1 (internal regulations) and NR No. 2 (creation of the first regional councils). See the divergence between sources discussed in Section 3.1.2.
1969	NR No. 23: characterizes, for the purposes of arts. 334-b and 341 of the CLT, the chemical departments of industries and commercial companies subject to technical direction and responsibility.
1974	NR No. 36: list of 16 professional activities; curricular natures Chemistry, Technological Chemistry, and Chemical Engineering; attributions of the Chemistry Technician; enshrines expert examination (perícia) as an attribution (item 03).
1977–1984	NR No. 44/1977 (biological agents in water and effluent control); NR No. 46/1978 (food); NR No. 76/1984 (revokes the sole paragraph of art. 2 of NR No. 36).
1981	Decree No. 85,877: regulates Law No. 2,800, specifying exclusive and shared activities. Decree No. 86,593: transfers the choice of the CFQ president to the Minister of Labor.
1987–1992	NR No. 105/1987 and NR No. 122/1990 (legal entities subject to registration); NR No. 133/1992 (technical responsibility).
2004	NR No. 194 (updates arts. 8 and 9 of NR No. 36) and NR No. 198 (defines the professional modalities in the field of Chemistry).
2019	NR No. 287: regulates oversight, penalties, and administrative proceedings throughout the System.
2025	NR No. 334 (technical responsibility); NR No. 335 (FDS and Safety Data Sheet for Hazardous Chemical Waste); NRs No. 342 and 343 (granting of attributions to graduates of higher education and technical courses).
2026	NR No. 344 (new Identity Card of the Chemistry Professional); NR No. 346 (institutional actions for the System's 70 years).

Source: prepared by the authors from Brasil (1934, 1943, 1956, 1981a, 1981b) and the Normative Resolutions of the CFQ (CRQ-IV, 2026).