

Applied Chemistry or Applied Everything? Reflections on Scope, Citation, and Evaluative Coherence

Alexandru Mihai Grumezescu^{1,*} 

¹ Department of Science and Engineering of Oxide Materials and Nanomaterials, Faculty of Chemical Engineering and Biotechnologies, National University of Science and Technology POLITEHNICA Bucharest, 1-7 Gheorghe Polizu Street, 011061 Bucharest, Romania; agrumezescu@upb.ro (A.M.G.);

² Research Institute of the University of Bucharest, University of Bucharest, 90 Panduri Street, 050663 Bucharest, Romania

* Correspondence: agrumezescu@upb.ro (A.M.G.);

Received: 30.04.2026; Accepted: 2.05.2026; Published: 15.06.2026

Preamble

This reflection belongs to a broader sequence of editorials addressing the evolving architecture of scholarly evaluation, the asymmetries that may emerge when standards are applied across different temporal and procedural contexts, and the relationship between rigor, proportionality, and consistency.

Table 1. Previous editorials form the conceptual background of the present reflection.

Previous editorial	DOI
Thirteen Years of Free Publication: From the Optimistic Horizons to Failure and Discreditation	https://doi.org/10.33263/BRIAC141.001
Rigor or Symmetry? Reflections on Fifteen Years of Diamond Open Access	https://doi.org/10.33263/BRIAC161.001
Consistency or Contingency? Reflections on Uncertainty in Editorial Triage	https://doi.org/10.33263/LIANBS151.001
Consistency or Context? Reflections on Indexing, Evaluation, and Temporal Validity	https://doi.org/10.33263/BRIAC162.070
Broken Links, Broken Symmetry? Reflections on Technical Formalism and Evaluative Reciprocity	https://doi.org/10.33263/BRIAC163.071

The present reflection continues this sequence by returning to an earlier and more fundamental issue: scope.

This reflection is written from the position of an editor who has experienced not only an evaluative decision, but also its reputational consequences. It is therefore not a detached exercise in classification theory. It is an attempt to understand whether the criteria applied to a journal were consistent with the actual map of the category in which that journal had been placed.

More precisely, it revisits the question of content relevance within the category *Chemistry, Applied*.

This question is not new. It was central to the 2023 evaluation experience discussed in *Thirteen Years of Free Publication: From the Optimistic Horizons to Failure and Discreditation* (<https://doi.org/10.33263/BRIAC141.001>), when *Biointerface Research in Applied Chemistry* was informed that it did not meet, among other criteria, expectations related to content relevance and peer review. Notably, while the decision referred to both content relevance and peer review, the subsequent explanation addressed the former in concrete terms, referring specifically to articles considered unrelated to the title and stated scope of the journal, but did not provide comparable examples or specific evidence regarding the peer-review concern.

At that time, the issue appeared to be whether articles positioned at the interface of chemistry, biology, materials science, food science, medicine, and applied biosciences could legitimately belong within a journal assigned to *Chemistry, Applied*. The response then was necessarily defensive: the journal emphasized that it had been assigned to the category *Chemistry, Applied* without editorial involvement in that decision, while its title and scope explicitly included biointerface-oriented and interdisciplinary research.

That question remains relevant.

However, the available analytical landscape now allows it to be approached from a different angle.

Not from the perspective of a single journal defending its editorial scope.

But from the perspective of the category itself.

Because the present reflection focuses on content relevance rather than peer review, it is useful to recall the specific articles that were cited as examples in the 2023 explanation. These articles are not discussed here in order to reassess their individual scientific value, nor to suggest that any single article determined the evaluation outcome (Table 1). Rather, they serve to clarify the scope-related basis of the discussion: whether topics positioned at the interface of chemistry, biology, medicine, food science, materials science, public health, environmental change, and applied biosciences can reasonably be considered external to *Chemistry, Applied* when the category itself is operationally mapped as a broad interdisciplinary domain.

Table 2. Articles identified by Clarivate as not aligned with the journal's title and stated scope*.

Nr.	Articol	DOI
1	Morphological Changes in Dental Surfaces Suggest Health Status and Alimentary Habits in the Subjects Belonging to the Copper Age in Sardinia Island (III Millennium BC)	https://doi.org/10.33263/BRIAC115.1278412795
2	Digital Panoramic Radiography in Dental Age Estimation	https://doi.org/10.33263/BRIAC113.1058510594
3	Music Alleviates Learning and Memory Impairments in an Animal Model of Post-Traumatic Stress Disorder	https://doi.org/10.33263/BRIAC111.77757784
4	Analysis of the Effect of Nd:YAG Laser Irradiation on Soft Tissues of the Oral Cavity in Different Modes in an In Vivo Experiment	https://doi.org/10.33263/BRIAC123.28812888
5	Delta Variant of Covid-19 Study, and Why it is a Concern: An Overview	https://doi.org/10.33263/BRIAC125.57975810
6	Real-Time Measurement of Alcohol Vapours Released from Alcohol-based Hand Disinfectants and User Habits Study of Hong Kong Residents in the Pandemic of COVID-19	https://doi.org/10.33263/BRIAC133.272
7	An Overview on Nature Function in Relation with Spread of Omicron-Covid-19: Where Will the Next Pandemic Begin and Why the Amazon Forest Offers Troubling Clues	https://doi.org/10.33263/BRIAC133.225

*The articles are listed to clarify the scope-related basis of the present discussion, without implying that any single article alone determined the overall evaluation outcome.

A further issue concerns proportionality. Even if some articles may be considered peripheral, the evaluative meaning of such examples depends on their number, context, frequency, and relationship to the journal's broader corpus. Peripheral articles do not necessarily define a journal's identity, especially when the journal's declared scope is interdisciplinary and interface-oriented.

Search Strategy and Analytical Framing

To avoid conflating *Applied Chemistry* with the broader chemical sciences, the Web of Science Core Collection search was deliberately restricted to records classified as *Chemistry, Applied*, while excluding several major adjacent chemistry categories: *Chemistry*,

Multidisciplinary, Chemistry, Physical, Chemistry, Analytical, Chemistry, Inorganic & Nuclear, Chemistry, Medicinal, and Chemistry, Organic.

This methodological step is important.

It means that the subsequent analysis does not describe “chemistry” in general. It describes the operationally indexed landscape of *Chemistry, Applied* after excluding several classical chemistry domains.

Category overlap is not treated here as a license for unlimited topical expansion. Rather, it is treated as evidence of the field’s operational boundaries as they are actually implemented in indexing practice.

Therefore, when overlaps with food science, nutrition, polymer science, biochemistry, molecular biology, pharmacology, toxicology, biotechnology, biomaterials, optics, sustainability, and environmental engineering appear, they do not result from an excessively broad chemical search. They appear within the restricted *Chemistry, Applied* space itself.

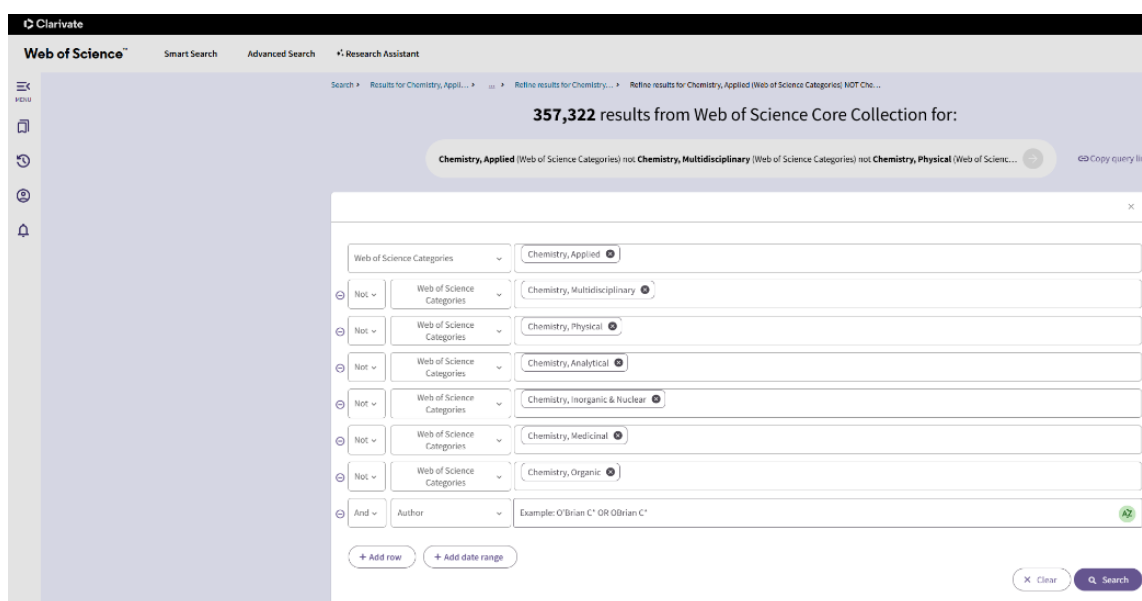


Figure 1. Web of Science Core Collection search strategy used to isolate records assigned to *Chemistry, Applied*, while excluding major chemistry categories including *Chemistry, Multidisciplinary, Chemistry, Physical, Chemistry, Analytical, Chemistry, Inorganic & Nuclear, Chemistry, Medicinal, and Chemistry, Organic*. The search returned 357,322 records, providing the basis for the subsequent chronological and categorical mapping of the operational scope of *Chemistry, Applied*.

As shown in Figure 1, the search strategy was restrictive rather than expansive. This distinction is essential for the argument developed below. If interdisciplinarity remains visible after excluding major chemistry categories, then interdisciplinarity is not an artifact of imprecise searching. It is a property of the mapped category.

Before and After 2023: A Category in Expansion

The year 2023 represents a meaningful reference point for the present reflection because it corresponds to the delisting decision discussed in the earlier editorial. A chronological comparison can therefore ask a simple question: did the operational landscape of *Chemistry, Applied* become narrower after 2023, or did it continue to expand?

Using the same restricted search logic, the 2021–2022 corpus contained 32,435 documents. The corresponding 2024–2025 corpus contained 46,932 documents. The post-2023

dataset therefore increased by 14,497 documents, corresponding to an approximate growth of 44.7%.

The year 2023, however, should not disappear between these two windows. It represents not only a chronological midpoint, but the very year in which the content relevance concern was applied to the journal. For this reason, the 2023 category map deserves separate consideration as a transitional snapshot of the field at the moment of evaluation.

The Web of Science filters reinforce this picture. In the 2021–2022 subset, the corpus included 451 Highly Cited Papers, 1,860 Review Articles, 6,473 Open Access records, 13 Early Access records, 557 Associated Data records, and 6,631 records with Enriched Cited References. In the 2024–2025 subset, the corpus included 776 Highly Cited Papers, 3,153 Review Articles, 11,204 Open Access records, 341 Early Access records, 381 Associated Data records, and 18,261 records with Enriched Cited References.

As shown in Figure 2, the category did not contract after 2023. It expanded. The expansion was not only numerical. It was also visible in forms of scholarly consolidation and visibility: Highly Cited Papers increased from 451 to 776, Review Articles from 1,860 to 3,153, and Open Access records from 6,473 to 11,204. The increase in review literature is particularly relevant because review articles generally indicate that a field has developed sufficient density, maturity, and internal complexity to warrant synthesis.

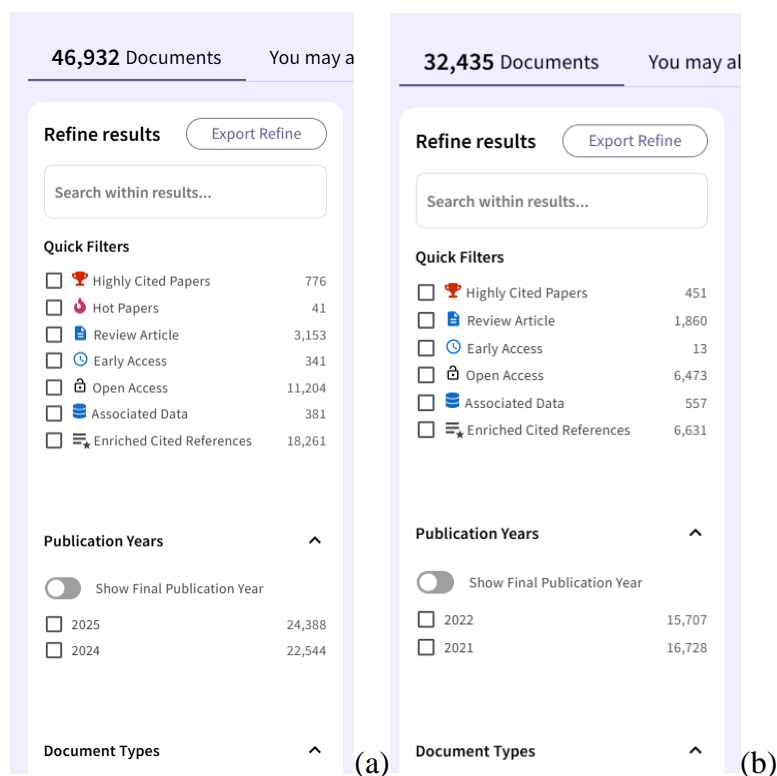


Figure 2. Chronological filtering of the restricted *Chemistry, Applied* Web of Science Core Collection corpus. Panel A shows the 2024–2025 subset, comprising 46,932 documents, including 776 Highly Cited Papers and 3,153 Review Articles. Panel B shows the 2021–2022 subset, comprising 32,435 documents, including 451 Highly Cited Papers and 1,860 Review Articles. The comparison documents a substantial post-2023 expansion of the category.

This matters for the question of content relevance.

A category that expands substantially after 2023, while increasing its review literature and highly cited output, cannot easily be interpreted as moving toward disciplinary contraction.

If anything, the chronological evidence suggests that *Chemistry, Applied* became larger, more visible, and more strongly consolidated as a broad applied domain.

The Map Before Delisting

The 2021–2022 map is already revealing. Before the 2023 delisting decision, *Chemistry, Applied* was not a narrow disciplinary container.

Among 32,435 records, the largest overlapping categories were *Food Science & Technology*, with 14,791 records, or 45.602%; *Nutrition & Dietetics*, with 7,150 records, or 22.044%; *Polymer Science*, with 6,927 records, or 21.357%; *Biochemistry & Molecular Biology*, with 6,465 records, or 19.932%; and *Engineering, Chemical*, with 5,171 records, or 15.943%.

The category also overlapped with *Materials Science, Textiles, Materials Science, Coatings & Films, Energy & Fuels, Biotechnology & Applied Microbiology, Toxicology, Pharmacology & Pharmacy, Biochemical Research Methods, Optics, Dermatology, Materials Science, Biomaterials, Imaging Science & Photographic Technology, Cell Biology, Medical Laboratory Technology, Plant Sciences, Immunology, Spectroscopy, Soil Science*, several engineering fields, *Remote Sensing*, and *Electrochemistry*.

Thus, before 2023, the field was already strongly connected to food systems, nutrition, polymers, molecular biology, biotechnology, toxicology, pharmacology, biomaterials, optics, plant sciences, cell biology, and engineering-related domains.

This is not a trivial observation.

If content relevance was questioned in 2023 on the basis of interdisciplinarity, the pre-2023 map creates a difficulty. The category was already interdisciplinary at the time. Interdisciplinarity was not a later deviation. It was already part of the operational structure of *Chemistry, Applied*.

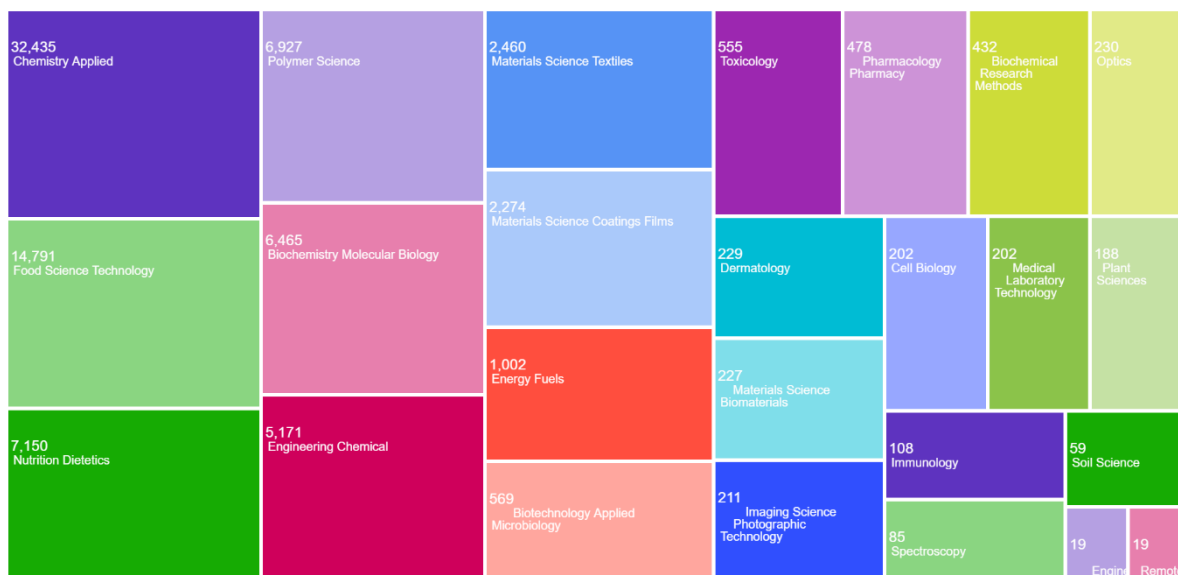


Figure 3. Web of Science category distribution for the restricted *Chemistry, Applied* corpus in 2021–2022. The 32,435-record dataset shows that, before the 2023 delisting decision, the category already overlapped substantially with *Food Science & Technology*, *Nutrition & Dietetics*, *Polymer Science*, *Biochemistry & Molecular Biology*, and *Engineering, Chemical*, together with additional links to materials science, energy, biotechnology, toxicology, pharmacology, optics, biomaterials, plant sciences, cell biology, and engineering-related fields.

The Transitional Year: 2023

The year 2023 deserves separate attention because it corresponds to the evaluation and delisting context discussed above. The restricted *Chemistry, Applied* corpus for 2023 contained 16,538 records. Its largest overlaps were again far from narrow: *Food Science & Technology* accounted for 6,138 records, or 37.115%; *Polymer Science* for 6,055 records, or 36.613%; *Biochemistry & Molecular Biology* for 5,773 records, or 34.907%; *Nutrition & Dietetics* for 2,744 records, or 16.592%; and *Engineering, Chemical* for 1,998 records, or 12.081%.



Figure 4. Web of Science category distribution for the restricted *Chemistry, Applied* corpus in 2023. The 16,538-record dataset shows major overlaps with *Food Science & Technology*, *Polymer Science*, *Biochemistry & Molecular Biology*, *Nutrition & Dietetics*, and *Engineering, Chemical*, while also including smaller but conceptually significant overlaps with *Computer Science*, *Interdisciplinary Applications*, *Hospitality, Leisure, Sport & Tourism*, *Regional & Urban Planning*, *Mathematical & Computational Biology*, and *Mathematics, Applied*. The figure captures the transitional year of the delisting decision and shows that the category already extended well beyond a narrow interpretation of applied chemistry.

As shown in Figure 4, the 2023 map was already highly interdisciplinary. Alongside the expected applied chemistry neighbors - polymers, food science, nutrition, chemical engineering, coatings, textiles, energy, pharmacology, toxicology, and biotechnology - the map also included categories that would be difficult to reconcile with a restrictive understanding of *Chemistry, Applied*: *Computer Science*, *Interdisciplinary Applications*, *Hospitality, Leisure, Sport & Tourism*, *Regional & Urban Planning*, *Mathematical & Computational Biology*, and *Mathematics, Applied*. These categories were numerically small, but conceptually important.

Their presence indicates that, in the very year when content relevance became a decisive issue for the journal, the operational category itself already admitted peripheral, cross-sectoral, and unexpectedly distant applications. This does not mean that all such topics are equally central to *Chemistry, Applied*. It does mean, however, that the category was already functioning as a broad applied and interdisciplinary space, rather than as a narrow disciplinary container.

The Map After 2023

The 2024–2025 map does not show a return to disciplinary narrowness. On the contrary, it shows a significant reconfiguration toward polymer science and biological/molecular domains.

Among 46,932 records, the largest overlapping category became *Polymer Science*, with 20,811 records, or 44.343%. This was followed by *Biochemistry & Molecular Biology*, with 19,687 records, or 41.948%; *Food Science & Technology*, with 18,421 records, or 39.250%; and *Nutrition & Dietetics*, with 9,073 records, or 19.332%.

Additional overlaps included *Engineering, Chemical, Materials Science, Coatings & Films, Materials Science, Textiles, Pharmacology & Pharmacy, Biochemical Research Methods, Energy & Fuels, Toxicology, Biotechnology & Applied Microbiology, Plant Sciences, Dermatology, Cell Biology, Medical Laboratory Technology, Electrochemistry, Imaging Science & Photographic Technology, Optics, Green & Sustainable Science & Technology, Immunology, Materials Science, Biomaterials, Spectroscopy, Mathematics, Applied, and Engineering, Environmental*.

The change is striking.

Between 2021–2022 and 2024–2025, *Polymer Science* increased from 21.357% to 44.343%. *Biochemistry & Molecular Biology* increased from 19.932% to 41.948%. These are not marginal shifts. They are major changes in the internal geography of the category.

At the same time, *Food Science & Technology* remained one of the dominant overlaps, decreasing proportionally from 45.602% to 39.250%, but increasing in absolute count from 14,791 to 18,421 records. *Nutrition & Dietetics* also remained substantial, with 9,073 records in 2024–2025.



Figure 5. Web of Science category distribution for the restricted *Chemistry, Applied* corpus in 2024–2025. The 46,932-record dataset shows a post-2023 reconfiguration toward *Polymer Science* and *Biochemistry & Molecular Biology*, while retaining substantial overlaps with *Food Science & Technology, Nutrition & Dietetics, Engineering, Chemical, materials science, pharmacology, toxicology, biotechnology, electrochemistry, optics, sustainability, biomaterials, applied mathematics, and environmental engineering*.

As shown in Figure 5, the category did not move toward disciplinary contraction after 2023. Rather, it shifted toward an even more pronounced polymeric, biomolecular, and biointerface-compatible profile, while retaining substantial connections to food science and nutrition.

The same reconfiguration can be summarized numerically.

Table 3. Main changes in Web of Science category overlaps for the restricted Chemistry, Applied corpus before and after 2023.

Web of Science Category	2021–2022 %	2024–2025 %	Main Change
Food Science & Technology	45.602	39.250	Absolute increase, proportional decrease
Nutrition & Dietetics	22.044	19.332	Absolute increase, proportional decrease
Polymer Science	21.357	44.343	Strong increase
Biochemistry & Molecular Biology	19.932	41.948	Strong increase
Engineering, Chemical	15.943	7.937	Decrease
Materials Science, Textiles	7.584	3.912	Decrease
Materials Science, Coatings & Films	7.011	4.911	Stable count, lower proportion
Energy & Fuels	3.089	0.974	Decrease
Biotechnology & Applied Microbiology	1.754	0.884	Decrease
Toxicology	1.711	0.914	Decrease
Pharmacology & Pharmacy	1.474	1.511	Stable/slight increase
Biochemical Research Methods	1.332	1.289	Stable/slight increase
Plant Sciences	0.580	0.680	Increase
Cell Biology	0.623	0.347	Decrease
Electrochemistry	0.034	0.262	Increase
Green & Sustainable Science & Technology	-	0.115	Newly visible
Mathematics, Applied	-	0.030	Newly visible
Engineering, Environmental	0.031	0.019	Stable marginal overlap

Table 3 does not merely show variation. It shows reorientation. The most important change is the strong intensification of *Polymer Science* and *Biochemistry & Molecular Biology*, both of which more than doubled in proportional presence between 2021–2022 and 2024–2025. These shifts are particularly relevant for a journal positioned at the interface of chemistry, materials, biological systems, and applied biosciences.

What Disappeared, What Appeared, and What Intensified

A chronological comparison also allows a more precise question: what disappeared after 2023, what appeared, and what intensified?

Some categories visible in the 2021–2022 map no longer appear in the 2024–2025 list. These include *Soil Science*, *Engineering, Electrical & Electronic*, *Remote Sensing*, *Engineering, Biomedical*, and *Engineering, Petroleum*. Their counts in 2021–2022 were small: 59, 19, 19, 10, and 8 records, respectively.

Their disappearance does not indicate a collapse of interdisciplinarity. They were marginal overlaps.

By contrast, the post-2023 list includes categories not visible in the 2021–2022 list, such as *Green & Sustainable Science & Technology* and *Mathematics, Applied*, alongside the continued presence of *Engineering, Environmental*. These are small in numerical terms, but meaningful in conceptual terms. They suggest that *Chemistry, Applied* also interacts with sustainability-oriented and computational or mathematical modes of applied research.

More important than disappearance or appearance, however, is intensification.

The 2023 transitional map helps explain this movement. It already contained the major post-2023 directions - food science, polymer science, biochemistry and molecular biology,

nutrition, chemical engineering, coatings, textiles, pharmacology, toxicology, biotechnology, biomaterials, optics, and computational categories - while also displaying peripheral overlaps that complicate any narrow interpretation of the field. In this sense, 2023 was not an exception between two stable periods, but a visible hinge between the pre-delisting and post-delisting configurations of *Chemistry, Applied*.

What intensified after 2023 were precisely the domains closest to biointerface research: polymers, biochemistry, molecular biology, food systems, nutrition, biomaterials, biotechnology, pharmacology, toxicology, cell biology, and biomedical-adjacent applications.

This is the central chronological point.

Before 2023, *Chemistry, Applied* was already interdisciplinary.

After 2023, it became even more visibly bio-polymeric and molecular.

Applied Chemistry as Practice, Not as Slogan

There is an important distinction between the nominal definition of a category and its operational reality.

A category may appear stable in name while evolving substantially in practice. Scientific fields rarely remain confined to their original disciplinary borders. They expand through applications, technologies, methods, materials, problems, and social needs. Chemistry, perhaps more than many other disciplines, has always done this. It enters food, medicine, energy, agriculture, environment, materials, cosmetics, diagnostics, cultural heritage, biotechnology, and computation.

Applied Chemistry is therefore not merely a branch of chemistry.

It is a mode of translation.

It translates chemical knowledge into materials, devices, formulations, processes, diagnostic tools, therapeutic platforms, packaging systems, coatings, sensors, energy technologies, biomaterials, biological interfaces, and sustainable technologies. It is not surprising that the category overlaps with polymer science. It is not surprising that it overlaps with food science. It is not surprising that it overlaps with biochemistry, pharmacology, toxicology, biotechnology, biomaterials, or environmental engineering.

What is surprising is when such interdisciplinarity becomes questionable only under certain evaluative conditions.

If a field is mapped as interdisciplinary at the aggregate level, interdisciplinarity cannot reasonably be treated as anomalous at the journal level.

Unless the problem is not interdisciplinarity itself, but where it appears.

Content Relevance Revisited

The original concern regarding content relevance was framed around the presence of articles considered insufficiently aligned with the journal title and scope. In response, it was argued that the journal's title explicitly includes the term *Biointerface* and that its scope was designed around interdisciplinary research involving applied chemistry, bioscience, materials, and related fields.

At that time, the argument had to be made by comparison.

The journal had to explain why biological, biomedical, food-related, dental, materials-oriented, or spectroscopic topics could belong to Applied Chemistry. It had to demonstrate that similar topics appeared in journals already indexed under the same category. The earlier

editorial explicitly provided such examples, comparing articles considered “unrelated” with similar articles published in other SCIE journals classified under *Chemistry, Applied*.

The present analysis changes the position of the argument.

The question is no longer whether such interdisciplinarity can be justified by selected analogies. The question is whether it is already embedded in the category’s documented structure.

When 44.343% of the 2024–2025 restricted *Chemistry, Applied* corpus overlaps with *Polymer Science*, and 41.948% overlaps with *Biochemistry & Molecular Biology*, it becomes difficult to treat biointerface-related research as external to the field. When 39.250% overlaps with *Food Science & Technology*, food-related applications cannot be considered peripheral. When 19.332% overlaps with *Nutrition & Dietetics*, the boundary between applied chemistry and health-related applications is evidently porous.

The 2023 map makes this question sharper. In the very year when content relevance was invoked, the restricted *Chemistry, Applied* corpus already overlapped not only with food science, polymers, biochemistry, nutrition, pharmacology, toxicology, biotechnology, biomaterials, and optics, but also with less expected categories such as *Computer Science, Interdisciplinary Applications, Hospitality, Leisure, Sport & Tourism, Regional & Urban Planning, Mathematical & Computational Biology*, and *Mathematics, Applied*. If such peripheral categories appear within the operational map of *Chemistry, Applied*, then the exclusion of biointerface, dental, biomedical, public-health, or environmental interface topics becomes increasingly difficult to justify through a narrow reading of scope alone.

This does not mean that every article belongs everywhere.

Scope still matters. Editorial coherence still matters. A journal cannot simply declare all topics relevant by invoking interdisciplinarity.

For an interface-oriented applied chemistry journal, relevance may reasonably arise through several routes: the presence of chemical, physicochemical, biochemical, materials-based, formulation, surface, analytical, toxicological, environmental, or biofunctional mechanisms; the use of chemically meaningful methods; or the translation of chemical and material principles into biological, biomedical, food, environmental, or technological applications. Under such a framework, relevance is not determined only by the final application area, but by the scientific pathway through which that application is reached.

Categories must retain meaning. Scientific publishing depends on intelligible boundaries.

But boundaries are not the same as walls.

And when the map itself shows bridges, it becomes difficult to penalize a journal for walking across them.

Applied Chemistry or Applied Everything?

The title of this reflection is intentionally uncomfortable: *Applied Chemistry or Applied Everything?*

It is not meant to trivialize the field. On the contrary, it points to its extraordinary reach. Applied Chemistry has become one of the major zones through which chemistry participates in contemporary scientific problem-solving. Its strength lies precisely in its ability to connect chemical principles to practical, biological, technological, industrial, environmental, and societal contexts.

The question, therefore, is not whether Applied Chemistry has become too broad.

The question is how breadth is evaluated.

Breadth can be evaluated rigorously only if the evaluator distinguishes between incoherence and interdisciplinarity. Without that distinction, the same feature may be interpreted as innovation in one context and as deviation in another.

If breadth appears in a highly cited article, it may be celebrated as interdisciplinarity. If it appears in a review article, it may be understood as evidence of field integration. If it appears in a major journal, it may be interpreted as innovation. If it appears in an analytical map, it may be accepted as the natural architecture of the category.

But if the same breadth appears in a journal under scrutiny, it may become a signal of content drift.

This is where the problem begins.

Not with scope.

With symmetry.

Citation, Review Literature, and Legitimacy

Citation patterns complicate the issue further.

Highly cited research often emerges precisely at interfaces. Fields develop not only through disciplinary purity, but through transfer, combination, and application. A polymer becomes a drug delivery system. A polysaccharide becomes a wound dressing. A hydrogel becomes a sensor. A natural compound becomes a therapeutic candidate. A food packaging material becomes an antimicrobial platform. A coating becomes an environmental technology. A spectroscopic method becomes a diagnostic tool. A biomacromolecule becomes an interface between chemistry and biology.

These are not deviations from Applied Chemistry.

They are among its most productive forms.

The increase in Highly Cited Papers from 451 in 2021–2022 to 776 in 2024–2025 is therefore not merely a quantitative detail. It suggests that the expanded category also generated greater citation visibility. Similarly, the increase in Review Articles from 1,860 to 3,153 indicates a higher level of synthesis and consolidation within the field.

Review articles tend to consolidate areas that have already acquired sufficient density, visibility, and conceptual maturity. When review literature in Applied Chemistry repeatedly addresses biomacromolecules, hydrogels, food systems, functional polymers, natural products, drug delivery, coatings, catalysis, toxicology, energy materials, and biomedical applications, this does not indicate category confusion. It indicates field evolution.

A field may begin with chemistry and end in medicine.

It may begin with a polymer and end in tissue engineering.

It may begin with a food matrix and end in human health.

It may begin with a surface and end in antimicrobial protection.

It may begin with a material and end in energy conversion.

That is what “applied” means.

The Elasticity of Evaluation

Evaluation systems necessarily rely on categories. Without categories, indexing becomes unmanageable. Journals must be placed somewhere. Articles must be searchable.

Metrics must be organized. Comparative contexts must be constructed. Categories make the scholarly world legible.

But categories also create risks.

They may appear more precise than the fields they describe. They may be used as rigid filters even when the underlying research landscape is fluid. They may be interpreted narrowly during evaluation and broadly during aggregation. They may expand in practice while remaining restrictive in judgment.

This elasticity is not inherently problematic.

Indeed, some elasticity is necessary. Interdisciplinary science cannot be evaluated through immobile taxonomies. The difficulty appears when elasticity is unevenly distributed.

A category may be broad when counting records, assigning citations, mapping research areas, and demonstrating database coverage. Yet it may become narrow when assessing whether a journal's content is relevant. It may include biochemistry, food science, nutrition, pharmacology, toxicology, biotechnology, cell biology, biomaterials, optics, sustainability, applied mathematics, and environmental engineering in analytical practice, but treat comparable content as potentially questionable in evaluative practice.

Such a system is not necessarily inconsistent by intention.

But it may become asymmetric in effect.

The Problem Is Not Rigor

It is important to state clearly what this reflection does not argue.

It does not argue that Applied Chemistry should include everything without distinction.

It does not argue that journals should be exempt from scope evaluation.

It does not argue that indexing systems should abandon criteria.

It does not argue that interdisciplinary titles should receive automatic protection from scrutiny.

Rigor is necessary.

However, rigor depends on coherence. A criterion applied narrowly in one context and broadly in another ceases to function as a stable criterion. Content relevance cannot be interpreted as disciplinary narrowness when evaluating a journal, while the same category is operationally mapped as a wide interdisciplinary network when describing the field.

If Applied Chemistry includes substantial overlaps with molecular biology, food science, nutrition, pharmacology, toxicology, biotechnology, biomaterials, optics, electrochemistry, sustainability, applied mathematics, and environmental engineering, then an evaluation of content relevance must begin from that reality.

Not from an imagined narrower version of the field.

The issue is not whether a journal should remain coherent.

It should.

The issue is whether the field against which coherence is assessed is the real field or a simplified abstraction.

For editors, the difference is not theoretical. A simplified abstraction can become a reputational sentence when it is used as the basis for judgment.

From Gatekeeping to Cartography

There is a difference between gatekeeping and cartography.

Gatekeeping asks whether something may enter.

Cartography asks what the territory actually looks like.

Both functions are necessary. A database must evaluate journals, and it must also map scholarship. But when the map shows a broad, interconnected territory, the gate cannot be designed as though the territory were narrow and linear.

Applied Chemistry, according to the map, is not a single road.

It is a network.

It crosses polymer science, molecular biology, food technology, nutrition, engineering, coatings, textiles, pharmacology, toxicology, biotechnology, plant science, dermatology, cell biology, electrochemistry, optics, sustainability, biomaterials, spectroscopy, applied mathematics, and environmental engineering.

This does not dissolve the category.

It defines it.

A modern category may be coherent precisely because it connects multiple applied domains through chemical principles, materials, processes, and technologies. Its coherence is not necessarily disciplinary purity. Its coherence may be translational function.

If so, journals operating at chemical-biological-material interfaces are not automatically outside the field.

They may be exactly where the field is moving.

Anomaly or Evolution?

We are therefore left with a choice of interpretation.

Either the current Applied Chemistry landscape contains many anomalies, or Applied Chemistry has evolved into a broad interdisciplinary domain.

If these overlaps are anomalies, then they are not isolated. They are structural. They appear across tens of thousands of records and multiple adjacent categories. The anomaly would not be a journal publishing interdisciplinary work, but a category whose contents no longer match a narrow understanding of its name.

If, however, these overlaps reflect field evolution, then the evaluative interpretation of scope must evolve accordingly.

The chronological comparison makes the issue clearer.

Before 2023, *Chemistry, Applied* was already strongly interdisciplinary. In 2023, the transitional map confirmed that this breadth was not incidental, extending even toward peripheral and cross-sectoral categories. After 2023, the category did not become narrower. It expanded numerically and shifted more visibly toward polymer science, biochemistry, molecular biology, and related biointerface-compatible domains.

Applied Chemistry may now be less a bounded discipline than a problem-oriented domain. It may be defined by application rather than by disciplinary origin. It may include chemistry of biological systems, chemistry of food systems, chemistry of materials, chemistry of interfaces, chemistry of health-related technologies, chemistry of coatings, chemistry of energy, chemistry of detection, chemistry of sustainability, and chemistry of living or functional matter.

In that case, the presence of biointerface-related content is not evidence of departure from Applied Chemistry.

It is evidence of participation in one of its active directions.

Conclusion

The question posed in the title - *Applied Chemistry or Applied Everything?* - does not require a cynical answer.

Applied Chemistry is not Applied Everything.

But it is certainly not Applied Chemistry in a narrow, isolated, traditional sense.

Its documented structure shows a field deeply connected to polymers, biochemistry, molecular biology, food science, nutrition, engineering, materials science, pharmacology, toxicology, biotechnology, cell biology, biomaterials, electrochemistry, optics, sustainability, applied mathematics, and environmental technologies.

This breadth was already visible before 2023.

In 2023 itself, the map already contained both the major applied interfaces and several peripheral categories that challenge any restrictive interpretation of *Chemistry, Applied*.

After 2023, it became even more visible.

The category expanded from 32,435 documents in 2021–2022 to 46,932 documents in 2024–2025. Highly Cited Papers increased. Review Articles increased. Open Access records increased. The dominant overlaps shifted toward polymer science and biochemistry/molecular biology, while food science and nutrition remained major components of the category.

Importantly, the chronological comparison is not limited to differences in volume. As Figure 2, Figure 5 and Table 3 jointly indicate, the restricted *Chemistry, Applied* corpus not only expanded after 2023, but also reconfigured its dominant overlaps, moving more strongly toward Polymer Science and Biochemistry & Molecular Biology, while retaining substantial connections to Food Science & Technology and Nutrition & Dietetics. This makes a narrow interpretation of content relevance increasingly difficult to sustain.

This breadth is not incidental.

It is visible on the map.

And if it is visible on the map, it should also be visible in the evaluation.

The issue, once again, is not rigor. Rigor remains necessary. Scope remains necessary. Standards remain necessary.

The issue is whether the same understanding of a field is used when measuring it, mapping it, citing it, indexing it, and evaluating those who contribute to it.

If interdisciplinarity is recognized as the architecture of Applied Chemistry in aggregated analysis, it should not become evidence of irrelevance in journal assessment.

If the field has evolved, evaluation must recognize that evolution symmetrically.

Otherwise, the problem is not Applied Chemistry.

The problem is the gate that no longer matches the map.

The Unavoidable Question

This reflection does not seek reversal through rhetoric. It seeks recognition of a discrepancy that should matter to any system committed to fair evaluation.

The question, then, becomes unavoidable.

Was the evaluation correct?

Formally, only the evaluator can answer this within its own procedural framework. Yet the evidence presented here makes the question difficult to dismiss.

If *Chemistry, Applied* was already interdisciplinary before 2023, if the 2023 transitional map already contained both central and peripheral applied categories, if the field expanded

after 2023, and if its dominant overlaps now include precisely the polymeric, biological, food-related, biomedical, and applied interfaces that were treated as problematic in the journal's case, then the issue is no longer whether a single journal defended its scope convincingly enough.

The issue is whether the scope against which it was judged corresponded to the actual map of the field.

The 2023 map raises its own uncomfortable question. *If the category could already stretch toward tourism, regional planning, interdisciplinary computer science, and mathematical biology in the very year of evaluation, why did the boundary become rigid precisely at biointerface, dental, biomedical, public-health, and environmental applications?*

And there is a third question.

If the journal had been asked, at the time of classification, where its scope was best situated, rather than being assigned to a category without editorial input, would another category have offered a more accurate home? Perhaps *Chemistry, Multidisciplinary* - or another equivalent cross-disciplinary classification - would have reflected the journal's declared identity more precisely than a category later interpreted through a restrictive lens.

This is not a minor administrative detail.

Classification shapes evaluation. Evaluation shapes visibility. Visibility shapes reputation.

And if classification decisions shape citation contexts, perceived relevance, indexing outcomes, and reputational consequences, then one final question remains.

Who is responsible when the map is drawn incorrectly, the gate is placed accordingly, and the journal is then judged for not standing where it was never asked to be placed?

In practice, the cost was borne not by the system that produced the classification, the evaluation, or the interpretive framework, but by the journal, by its Editor-in-Chief, and by the community built around it.

In this sense, the present reflection owes an unexpected acknowledgment to Clarivate Analytics: by mapping *Chemistry, Applied* as a broad interdisciplinary field, its own analytical tools made visible the very question that the evaluation process left unresolved.

For making that map visible, one may only say: thank you, Clarivate Analytics.