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Pierre Braunstein

Editorial January 2024 for *Comptes Rendus Chimie*

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Editorial

Editorial January 2024 for *Comptes Rendus Chimie*

Pierre Braunstein[®]

The decision made by the *Académie des sciences* to provide since January 1, 2020 a fully open access worldwide to its well-established publications *Comptes Rendus*, including of course *Comptes Rendus Chimie* (“diamond model”) was acclaimed by the entire scientific community, authors and readers alike.

Most of you are familiar with our editorial policy. Chemistry is a very rich and diverse science, and we aim to cover all its aspects, from fundamental concepts to applications, whether in the core of the discipline or at the frontiers with other disciplines. We publish original research articles and accounts (short reviews focused on the authors’ recent scientific contributions), preliminary communications that typically describe novel and important results, as well as historic chronicles. The work should be of high general interest or outstanding specialized interest. Furthermore, thematic issues coordinated by one or many guest editor(s) (upon invitation or spontaneous suggestions) are particularly attractive and welcome by our readers because they allow an easy and efficient assessment of rapidly expanding fields of research. We are most grateful to our authors and guest editors because they are responsible for the success of this journal and its increasing visibility.

The thematic issues published in 2023 covered the following topics:

- Louis Pasteur: to celebrate his 200th anniversary, various articles were published here in collaboration with *Comptes Rendus Biologie*, the *Notes Académiques de l’Académie d’agriculture de France*, and the *Bulletin de l’Académie vétérinaire*, which illustrated

his contributions to chemistry, biology, medicine, and agriculture

- Materials and Clean Processes for Sustainable Energy and Environmental Applications (Guest Editors: Mejdí Jeguirim, Patrick Du-tournié)
- Chemical Ecology – Chemical Mediation in the Environment (Guest Editors: Anne-Geneviève Bagnères, Olivier Thomas)
- Chemical Biology (Guest Editors: Marie Lopez, Elisabetta Mileo, Eric Defrancq, Agnes Delmas, Boris Vauzeilles, Dominique Guian-varch, Christophe Biot)

As practised by most major scientific journals and in order not to overload our referees unduly, only submissions considered by the Editorial office to potentially meet the criteria given above are sent out to referees. We are fully aware that this policy can generate frustrations, but this is the only way to proceed given the number of submissions received by the Editorial Office. To be able to rely on high-level scientific referees with an ethic that lives up to their task is essential for a scientific journal and we know that these colleagues are being increasingly solicited. We sincerely thank them for their contribution to the success of *Comptes Rendus Chimie* and we are particularly grateful to our 10 most active referees listed in Table 1.

The quality and diversity of the contributions published in *Comptes Rendus Chimie* explains the international awareness they have generated, with most views originating from the USA, France, China and India (source: Centre Mersenne). The 15 most viewed and downloaded articles in 2023 are listed in Tables 2 and 3, respectively.

Table 1. Our 10 most active referees in 2023

Janine Cossy (ESPCI Paris, France)
Pierre Grandclaude (ENSC Lille, France)
Salah Jellali (Sultan Qaboos University, Muscat, Oman)
Ralph Puchta (University of Erlangen–Nuremberg, Germany)
Olivier Thomas (National University of Ireland Galway, Ireland)
Abdeslam-Hassen Meniai (University of Constantine 3, Algeria)
Ryan Osterloh (University of Houston, USA)
Edouard Freund (former R&D director at Institut Français du Pétrole, Rueil-Malmaison, France)
Monika Jain (Banda University of Agriculture & Technology, Banda, India)
Besma Khiari (National School of Engineers of Carthage, Tunis, Tunisia)

Table 2. The 15 articles (published since 1 January 2020) most viewed in 2023 (source: Centre Mersenne)

Title	Authors
Huiles essentielles et chiralité moléculaire	Louisa Aribi-Zouiouèche, Françoise Couic-Marinier
Les noms des éléments nous racontent leur histoire	Pierre Avenas
Tableau périodique des éléments chimiques et actinides	Robert Guillaumont
The influence of particle(s) size, shape and distribution on cake filtration mechanics—a short review	S. S. Haramkar, G. N. Thombre, S. V. Jadhav, B. N. Thorat
Les scénarios énergétiques à l'épreuve du stockage des énergies intermittentes	Marc Fontecave, Dominique Grand
Théorie cinétique de l'équilibre chimique	Mathieu Lazerges, Sylvain Marque
Scanning electron microscopy—a powerful imaging technique for the clinician	D. Bazin, E. Boudierlique, M. Daudon, V. Frochot, J.-P. Haymann, E. Letavernier, F. Tielens, R. Weil
Louis Pasteur face à la maladie du ver à soie (1865–1870) : du chimiste au biologiste	Yves Carton
Louis Pasteur : de la physico-chimie à la biologie	Hervé This
Urinary tract infection inducing stones: some clinical and chemical data	M. Daudon, M. Petay, S. Vimont, A. Deniset, F. Tielens, J.-P. Haymann, E. Letavernier, V. Frochot, D. Bazin
Randall's plaque as the origin of idiopathic calcium oxalate stone formation: an update	E. Van de Perre, D. Bazin, V. Estrade, E. Boudierlique, K. M. Wissing, M. Daudon, E. Letavernier
Whitlockite structures in kidney stones indicate infectious origin: a scanning electron microscopy and Synchrotron Radiation investigation	D. Bazin, R. J. Papoular, E. Elkaim, R. Weil, D. Thiaudière, C. Pisapia, B. Ménez, N. S. Hwang, F. Tielens, M. Livrozet, E. Boudierlique, J.-P. Haymann, E. Letavernier, L. Hennet, V. Frochot, M. Daudon

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Table 2. (continued)

Title	Authors
The crucial contribution of X-ray fluorescence spectroscopy in medicine	D. Bazin, E. Foy, S. Reguer, S. Rouzière, B. Fayard, H. Colboc, J.-P. Haymann, M. Daudon, C. Mocuta
Cystinuria and cystinosis are usually related to L-cystine: is this really the case for cystinosis? A physicochemical investigation at micrometre and nanometre scale	D. Bazin, M. Rabant, J. Mathurin, M. Petay, A. Deniset-Besseau, A. Dazzi, Y. Su, E. P. Hessou, F. Tielens, F. Borondics, M. Livrozet, E. Boudierlique, J.-P. Haymann, E. Letavernier, V. Frochot, M. Daudon
Le foisonnement éolien : les limites d'un mix électrique à forte proportion d'énergies renouvelables intermittentes	Dominique Grand, Marc Fontecave

Table 3. The 15 articles (published since 1 January 2020) most downloaded in 2023 (source: Centre Mersenne)

Title	Authors
Huiles essentielles et chiralité moléculaire	Louisa Aribi-Zouiouèche, Françoise Couic-Marinier
Deciding which is the best ¹ H NMR predictor for organic compounds using statistical tools	W. H. Mah, N. H. A. Nazuan, W. S. Yeap, F. H. Fakharudin, I. Faye, C. D. Wilfred
Synthesis and characterization of original fluorinated bis-cyclic carbonates and xanthates from a fluorinated epoxide	A. Alaaeddine, V. Ladmiral, W. El Malti, L. Haydar, S. Caillol, B. Améduri
Editorial January 2023 for <i>Comptes Rendus Chimie</i>	Pierre Braunstein
Preparation of hyperbranched 4-dimethylaminopyridine catalyst for the efficient synthesis of vitamin E succinate	H. Li, T. Zhang, K. Tang, B. Li, X. Zhang, B. Zhao, J. Wang
Liquid–liquid extraction: thermodynamics–kinetics driven processes explored by microfluidics	F. Olivier, A. A. Maurice, D. Meyer, J.-C. P. Gabriel
Scanning electron microscopy—a powerful imaging technique for the clinician	D. Bazin, E. Boudierlique, M. Daudon, V. Frochot, J.-P. Haymann, E. Letavernier, F. Tielens, R. Weil
Zeolite-based catalysis for isobutene conversion into chemicals and fuel additives. A review	Vasile Hulea
The crucial contribution of X-ray fluorescence spectroscopy in medicine	D. Bazin, E. Foy, S. Reguer, S. Rouzière, B. Fayard, H. Colboc, J.-P. Haymann, M. Daudon, C. Mocuta
Nickel oxide-based catalysts for ethane oxidative dehydrogenation: a review	Ştefan-Bogdan Ivan, Adriana Urdă, Ioan-Cezar Marcu
Tableau périodique des éléments chimiques et actinides	Robert Guillaumont
Louis Pasteur bactériologiste : de l'atténuation de la virulence à la vaccination	Henri Monteil

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Table 3. (continued)

Title	Authors
Théorie cinétique de l'équilibre chimique	Mathieu Lazerges, Sylvain Marque
Different routes of MgAl-LDH synthesis for tailoring the adsorption of Pb(II) pollutant from water	M. Mureseanu, A. Eliescu, E.-C. Ignat, G. Carja, N. Cioatera
Using micro computed tomographic imaging for analyzing kidney stones	J. C. Williams, J. E. Lingeman, M. Daudon, D. Bazin

Table 4. The 15 most cited articles (all years) in 2023 (source: Web of Science as consulted on 22 December 2023)

Title	Authors
Sacrificial electron donor reagents for solar fuel production	Yann Pellegrin, Fabrice Odobel
Green solvents from ionic liquids and deep eutectic solvents to natural deep eutectic solvents	H. Vanda, Y. Dai, E. G. Wilson, R. Verpoorte, Y. H. Choi
Some aspects of green solvents	Katharina Haeckl, Werner Kunz
Hexavalent chromium quantification in solution: Comparing direct UV-visible spectrometry with 1,5-diphenylcarbazide colorimetry	Arnaud Sanchez-Hachair, Annette Hofmann
Removal of fluoride from groundwater using natural clay (kaolinite): Optimization of adsorption conditions	N. Nabbou, M. Belhachemi, M. Boumelik, T. Merzougui, D. Lahcene, Y. Harek, A. A. Zorpas, M. Jeguirim
Water as a green solvent combined with different techniques for extraction of essential oil from lavender flowers	A. Filly, A. S. Fabiano-Tixier, C. Louis, X. Fernandez, F. Chemat
Synthesis, chemistry, physicochemical properties and industrial applications of amino acid surfactants: A review	D. B. Tripathy, A. Mishra, J. Clark, T. Farmer
Light-induced spin crossover — Solution and solid-state processes	G. Chastanet, M. Lorenc, R. Bertoni, C. Desplanches
Comprehensive morpho-constitutional analysis of urinary stones improves etiological diagnosis and therapeutic strategy of nephrolithiasis	M. Daudon, A. Dessombz, V. Frochot, E. Letavernier, J.-P. Haymann, P. Jungers, D. Bazin
Occurrence, fate and removal efficiencies of pharmaceuticals in wastewater treatment plants (WWTPs) discharging in the coastal environment of Algiers	Amine Elmouatezz Bellah Kermia, Djamilia Fouial-Djebbar, Mohamed Trari
Thermodynamical aspects of the spin crossover phenomenon	William Nicolazzi, Azzedine Bousseksou
Limonene as an agro-chemical building block for the synthesis and extraction of bioactive compounds	M. Aissou, Z. Chemat-Djenni, E. Yara-Varon, A.-S. Fabiano-Tixier, F. Chemat

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The most cited articles in 2023 are listed in Table 4.

We wish to congratulate our authors for their scientific success and are proud to contribute

Table 4. (continued)

Title	Authors
Low-cost ceramic membranes: Synthesis, classifications, and applications	Mansour Issaoui, Lionel Limousy
Spin-crossover nanoparticles and nanocomposite materials	Lionel Salmon, Laure Catala
Nanosized zeolites: Quo Vadis?	Svetlana Mintova, Julien Grand, Valentin Valtchev

enhancing the visibility of their work through a fully Open Access worldwide journal!

Of course, our authors, guest editors and referees are responsible for the success of this journal and its increasing visibility and we are most grateful to them for their commitment and welcome their suggestions to ensure that this journal meets their needs and expectations.

Finally, I would like to warmly thank the members of the editorial board of *Comptes Rendus Chimie*, the editorial and production staff, in particular

Julien Desmarets (scientific secretary), for their support and cooperation.

I wish you all a fruitful and scientifically most rewarding and successful New Year and look forward to receiving your manuscripts!

Pierre Braunstein
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