

*Dedicated to Professor Alexandru T. Balaban
on the occasion of his 85th anniversary*

PROFESSOR ALEXANDRU T. BALABAN'S 85th ANNIVERSARY

LIST OF PUBLICATIONS

The following list of publications continues Professor Alexandru T. Balaban's bibliography from the following issues of *Revue Roumaine de Chimie (Romanian Journal of Chemistry)*: **1991**, 36, 289-311; **2001**, 46, 265-275; **2006**, 51, 240-244; **2011**, 56, 279-288.

B. Book Chapters

70. A. T. Balaban and M. Randić, "Structural Approach to Aromaticity and Local Aromaticity in Conjugated Polycyclic Systems", in: "Carbon Bonding and Structures: Advances in Physics and Chemistry. Carbon Materials: Chemistry and Physics 5", M. V. Putz (Ed.), Springer Science+Business Media B. V., 2011, p. 159-204.
71. A. T. Balaban, "Balaban-Nenitzescu-Prail Reaction", in: "Name Reactions in Heterocyclic Chemistry II" J. J. Li (Ed.) with a foreword by E. J. Corey, Wiley, Hoboken, NJ, 2011, p. 402-419.
72. A. T. Balaban, "Diamond hydrocarbons and related structures", in: "Diamond and Related Nanostructures", M. V. Diudea and C. L. Nagy(Eds.), Springer, Berlin, 2013, p. 1-27.
73. A. T. Balaban and T. S. Balaban, in: "Science of Synthesis, Knowledge Updates 2013/3: Pyrylium Salts", (Update 2013)m Thieme Verlag, Stuttgart, 2013, p. 145-216.
74. A. T. Balaban, "A chemical journey: experiment and theory. Is chemistry (or mathematics) science or art?" (Budapest, March 26, 2002). in "Szekfoglalok 2001: Matematikai es termesztudomanyok. II. Kotet. Inaugural lecture as Honorary Member of the Hungarian Academy of Science, Magyar Tudomanyos Akademia, Budapest, 2013, p. 9-46.
75. A. T. Balaban, A. Greer and J. F. Liebman, "Aromaticity and conjugation in 1,2-benzoquinone valence isomers and congeners", *Adv. Heterocyclic Chem.*, **2014**, 133, 112-142.
76. A. T. Balaban, A. Greer and J. F. Liebman, "Consequences of Spin and Strength in the Chemistry of Oxygen and its Compounds", in "S. Patai's Chemistry of Functional Groups: The Chemistry of Peroxides", Vol. 3, A. Greer and J. F. Liebman (Eds.), Wiley, Chichester, 2014, p. 1-20.
77. A. T. Balaban, "What is Mathematical Chemistry?", in: *Proceedings of the 38th Annual Congress of the American-Rumanian Academy of Arts and Sciences (ARA)*, (ed. V. Staicu), Caltech, Pasadena, California. ARA Publisher, 2014, p. 7-14.
78. A. T. Balaban, "Ode to the chemical element carbon", in: "Exotic Properties of Carbon Nanomatter: Advances in Physics and Chemistry", M. V. Putz and O. Ori (Eds.), Springer, Dordrecht, 2015, p. 1-18.
79. A. T. Balaban, "Chemistry as science and art. How one creates a research school in science: the example of Costin D. Nenitzescu" (Bucharest, December 11, 2015, in Roumanian). Inaugural lecture as titular member of the Roumanian Academy.

C. Articles in peer-reviewed scientific periodicals

740. A. Ciesielski, T. M. Krygowski, M. K. Cyranski and A. T. Balaban, Defining rules of aromaticity: A unified approach to the Hückel, Clar and Randić concepts, *Phys. Chem. Chem. Phys.*, **2011**, 13, 3737-3747.

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742. A. T. Balaban, I. Gutman, S. Jeremić and J. Đurđević, Effect of benzo-annulation on cyclic conjugation, *Monatsh. Chem.*, **2011**, *142*, 53-57.
743. M. Randi, J. Zupan, A. T. Balaban D. Vikić-Topić and D. Plavšić, On graphical representation of proteins, *Chem. Rev.*, **2011**, *111*, 790-862.
744. A. T. Balaban, On protochirons and known or predicted helical structures, *MATCH, Commun. Math. Comput. Chem.*, **2011**, *66*, 139-162.
745. A. T. Balaban, Autobiographical notes: 80 years of age, 68 years of chemistry *MATCH, Commun. Math. Comput. Chem.*, **2011**, *66*, 7-32, Roumanian translation, *Bul. Soc. Chim. Roumania*, **2011**, *18*, 21-46.
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749. A. T. Balaban, I. Gutman, S. Jeremić and D. Simijonović, Effect of benzo-annulation on cyclic conjugation, *Monatsh. Chem.*, **2011**, *142*, 53-57.
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751. A. T. Balaban, Editorial – Aromaticity, *The Open Org. Chem. J.*, **2011**, *5* (Suppl. 1-M1), 9-10.
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753. A. T. Balaban and K. P. C. Vollhardt, Heliphenes and related structures, *The Open Org. Chem. J.*, **2011**, *5* (Suppl. 1-M1), 117-126.
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755. M. Randić, A. T. Balaban and D. Plavšić, Applying the conjugated circuits method to Clar structures of [*n*]phenylenes for determining resonance energies, *Phys. Chem. Chem. Phys.*, **2011**, *13*, 20644-20648
756. M. Tudose, M. T. Caproiu, F. D. Badea, G. Nedelcu, P. Ionita, T. Constantinescu and A. T. Balaban, New mono- and di-branched derivatives of *Kryptofix K22* with N-4-methoxyamino-3,5-dinitrobenzoyl substituents. Synthesis and properties, *Arkivoc*, **2011**, *ii*, 343-354.
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