

# LISTA COMPLETA DE LUCRARI

## Iustinian Gabriel BEJAN

### a) Lista celor maximum 10 lucrari, considerate relevante

1. Bejan, I., M. Duncianu, R. Olariu, I. Barnes, P. W. Seakins, P. Wiesen, Kinetic study of the gas-phase reactions of chlorine atoms with 2-chlorophenol, 2-nitrophenol, and four methyl-2-nitrophenol isomers, Journal of Physical Chemistry A, 119 (20), 4735–4745, 2015. **ISI 2.883**
2. Bejan, I., Barnes, I., Wiesen, P., Wenger, J.C., Temperature dependent rate coefficients for the reaction of OH radicals with dimethylbenzoquinones, Chemical Physics Letters, 639, 145-150, 2015, **ISI 1.860**
3. Winiberg F.A.F., S.C. Smith, I. Bejan, C.A. Brumby, T. Ingham, T.L. Malkin, S.C. Orr, D.E. Heard, P.W. Seakins, Pressure-dependent calibration of the OH and HO<sub>2</sub> channels of a FAGE HO<sub>x</sub> instrument using the Highly Instrumented Reactor for Atmospheric Chemistry (HIRAC), Atmospheric Measurement Techniques, 8, 2, 523-540, 2015. **ISI 2.989**
4. Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, Products and Mechanism of the Reactions of OH Radicals and Cl Atoms with Methyl Methacrylate (CH<sub>2</sub>=C(CH<sub>3</sub>)C(O)OCH<sub>3</sub>) in the Presence of NO<sub>x</sub>, Environmental Science and Technology, 48(3), 1692-1699, 2014. **ISI 5.393**
5. Olariu R.I., I. Barnes, I. Bejan, C. Arsene, D. Vione, B. Klotz, K.H. Becker, FT-IR product study of the reactions of NO<sub>3</sub> radicals with ortho -, meta -, and para-cresol, Environmental Science and Technology, 47(14), 7729-7738, 2013. **ISI 5.393**
6. Bejan I., Schurmann A., Barnes I., Benter T., Kinetics of the gas-phase reactions of OH radicals with a series of trimethylphenols, International Journal of Chemical Kinetics, 44(2), 117-124, 2012. **ISI 1.736**
7. Bejan, I., I. Barnes, R. Olariu, Sh. Zhou, P. Wiesen, Th. Benter, Investigations on the gas-phase photolysis and OH radical kinetics of methyl-2-nitrophenols, Physical Chemistry Chemical Physics, 9, 5686-5692, 2007. **ISI 4.449**
8. Bejan, I., Y. Abd El Aal, I. Barnes, Th. Benter, B. Bohn, P. Wiesen, J. Kleffmann, The Photolysis of ortho-nitrophenol: a new gas phase source of HONO, Physical Chemistry Chemical Physics, 8, 2028-2035, 2006. **ISI 4.449**
9. Spittler, M., I. Barnes, I. Bejan, K.J. Brockmann, Th. Benter, K. Wirtz, Reactions of NO<sub>3</sub> radicals with limonene and alpha-pinene: Product and SOA formation, Atmospheric Environment, 40, Supl. 1, 116-127, 2006. **ISI 3.459**
10. Geiger, H., I. Barnes, I. Bejan, T. Benter, M. Spittler, The tropospheric degradation of isoprene: an updated module for the regional atmospheric chemistry mechanism, Atmospheric Environment, 37, 11, 1503-1519, 2003. **ISI 3.459**

### b) Teza de doctorat

“Investigations on the Gas Phase Atmospheric Chemistry of Nitrophenols and Catechols”

### c) Carti si capitole de carti

1. I. Bejan, I. Barnes, R. Olariu, R. Mocanu, FT-IR study of the kinetic gas-phase reactions of the OH radical with a series of nitroaromatic compounds. NATO Science Series: IV: Earth and Environmental Sciences, Ed. by Ian Barnes and Krzysztof J. Rudzinski, ISBN 13 978-1-4020-4230-2, 62, 155-162, 2005. (book chapter)
2. Barnes, I., I. Bejan, Gas Phase Processes Relevant to the Mediterranean Some New and Important Topics, Proceedings of the NATO Advanced Research Workshop on Regional Climate Variability and its Impacts in the Mediterranean Area, Marrakech, Ed. by A. Mellouki and A.R. Ravishankara, IV. Earth and Environmental Sciences – Vol. 79, ISBN 978-1-4020-6428-9(PB), 2007, 235-251, (book chapter)
3. Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, Methyl methacrylate in the atmosphere: OH- and Cl- initiated oxidation in the gas phase, NATO Advanced Research Workshop, Simulation and Assessment of Chemical Processes in a Multiphase Environment, ISSN: 1874-6519, Edited by: Barnes, I; Kharytonov, MM, 2008, 485-494, (book chapter)

4. Zhou, Sh., I. Barnes, T. Zhu, I. Bejan, Th. Benter, Exploratory Studies on Secondary Organic Aerosol Formation in the Ozonolysis of Alkyl Vinyl Ethers, NATO Advanced Research Workshop, Simulation and Assessment of Chemical Processes in a Multiphase Environment, ISSN: 1874-6519, Edited by: Barnes, I; Kharytonov, MM, 2008, 523-531, (book chapter)
5. Derpmann, V., Bejan, I., Kersten, H., Brockmann, K.J., Barnes, I., Kleffmann, J., Benter, T., Sonderfeld, H., Koppmann, R., An Ionization Method Based on Photoelectron Induced Thermal Electron Generation: Capillary Atmospheric Pressure Electron Capture Ionization (cAPECI), NATO Science for Peace and Security Series C: Environmental Security, ISBN: 978-940075033-3, Ed. by Ian Barnes and Krzysztof J. Rudzinski, Volume 120, 2013, 239-248, (book chapter)
6. Kleffmann, J., Tapia, G.V., Bejan, I., Kurtenbach, R., Wiesen, P., NO<sub>2</sub> Measurement Techniques: Pitfalls and New Developments, NATO Science for Peace and Security Series C: Environmental Security, ISBN: 978-940075033-3, Ed. by Ian Barnes and Krzysztof J. Rudzinski, Volume 120, 2013, 15-28. (book chapter)

## d) Articole științifice publicate în extenso în reviste din circuitul internațional

### d.1. - reviste cotate Web of Science cu factor de impact

1. Winiberg, F.A.F., Dillon, T. J., Orr, S., Groß, C. B.M., **Bejan, I.**, Brumby, C. A., Evans, M. J., Smith, S. C., Heard, D.E., and Seakins P. W., Direct measurements of OH and other product yields from the HO<sub>2</sub> + CH<sub>3</sub>C(O)O<sub>2</sub> reaction, Atmospheric Chemistry and Physics, 16, 4023-4042, 2016. **ISI 5.114**
2. Farrugia, L.N., Bejan, I., Smith, S.C., Medeiros, D.J., Seakins, P.W. Revised structure activity parameters derived from new rate coefficient determinations for the reactions of chlorine atoms with a series of seven ketones at 290 K and 1 atm, Chemical Physics Letters, 640, 87-93, 2015. **ISI 1.860**
3. Bejan, I., Barnes, I., Wiesen, P., Wenger, J.C., Temperature dependent rate coefficients for the reaction of OH radicals with dimethylbenzoquinones, Chemical Physics Letters, 639, 145-150, 2015, **ISI 1.860**
4. Gibilisco R.G., Blanco M.B., Bejan I., Barnes I., Wiesen P., Teruel M.A. , Atmospheric Sink of (E)-3-Hexen-1-ol, (Z)-3-Hepten-1-ol, and (Z)-3-Octen-1-ol: Rate Coefficients and Mechanisms of the OH-Radical Initiated Degradation, Environmental Science and Technology, (13) 7717-7725, 2015, **ISI 5.393**
5. Lauraguais A., Bejan I., Barnes I., Wiesen P., Coeur C., Rate Coefficients for the Gas-Phase Reactions of Hydroxyl Radicals with a Series of Methoxylated Aromatic Compounds, Journal of Physical Chemistry A, (24) 6179-6187, 2015. **ISI 2.883**
6. Bejan, I., M. Duncianu, R. Olariu, I. Barnes, P. W. Seakins, P. Wiesen, Kinetic study of the gas-phase reactions of chlorine atoms with 2-chlorophenol, 2-nitrophenol, and four methyl-2-nitrophenol isomers, 119 (20), 4735–4745, 2015. **ISI 2.775**
7. Winiberg F.A.F., S.C. Smith, I. Bejan, C.A. Brumby, T. Ingham, T.L. Malkin, S.C. Orr, D.E. Heard, P.W. Seakins, Pressure-dependent calibration of the OH and HO<sub>2</sub> channels of a FAGE HO<sub>x</sub> instrument using the Highly Instrumented Reactor for Atmospheric Chemistry (HIRAC), Atmospheric Measurement Techniques, 8, 2, 523-540, 2015. **ISI 3.206**
8. Gibilisco, R.G., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, M. A., FTIR gas kinetic study of the reactions of ozone with a series of hexenols at atmospheric pressure and 298 K, Chemical Physics Letters, 618, 114-118, 2015. **ISI 1.991**
9. Blanco M.B., Bejan I., Barnes I., Wiesen P., Teruel M.A, Tropospheric chemical degradation of vinyl and allyl acetate initiated by Cl atoms under high and low NO<sub>x</sub> conditions, RSC Advances, (60) 48154-48163, 2015, **ISI 3.289**
10. Gibilisco, R.G., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, M. A., Rate coefficients at 298 K and 1 atm for the tropospheric degradation of a series of C-6, C-7 and C-8 biogenic unsaturated alcohols initiated by Cl atoms, Atmospheric Environment 94, 564-572, 2014. **ISI 3.062**
11. Lauraguais, A., I. Bejan, I. Barnes, P. Wiesen, C. Coeur-Tourneur, A. Cassez, Rate Coefficients for the Gas-Phase Reaction of Chlorine Atoms with a Series of Methoxylated Aromatic Compounds, Journal of Physical Chemistry A, 118(10), 1777-1784, 2014. **ISI 2.775**
12. Derpmann, V., D. Mueller, I. Bejan, H. Sonderfeld, S. Wilberscheid, R. Koppmann, K.J. Brockmann, T. Benter, Capillary Atmospheric Pressure Electron Capture Ionization (cAPECI): A Highly Efficient Ionization Method for Nitroaromatic Compounds, Journal of the American Society for Mass Spectrometry, 25(3), 329-342, 2014. **ISI 3.193**

13. Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, Products and Mechanism of the Reactions of OH Radicals and Cl Atoms with Methyl Methacrylate ( $\text{CH}_2=\text{C}(\text{CH}_3)\text{C}(\text{O})\text{OCH}_3$ ) in the Presence of Nox, *Environmental Science and Technology*, 48(3), 1692-1699, 2014. **ISI 5.481**
14. Olariu R.I., I. Barnes, I. Bejan, C. Arsene, D. Vione, B. Klotz, K.H. Becker, FT-IR product study of the reactions of  $\text{NO}_3$  radicals with ortho -, meta -, and para-cresol, *Environmental Science and Technology*, 47(14), 7729-7738, 2013. **ISI 5.481**
15. Kleffmann J., Tapia G.V., Bejan I., Kurtenbach R., Wiesen P., *NO2 Measurement Techniques: Pitfalls and New Developments*, , NATO Science for Peace and Security Series C: Environmental Security, 15-28, 2013.
16. Derpmann, V., Bejan, I., Kersten, H., Brockmann, K.J., Barnes, I., Kleffmann, J., Benter, T., Sonderfeld, H., Koppmann, R., *An Ionization Method Based on Photoelectron Induced Thermal Electron Generation: Capillary Atmospheric Pressure Electron Capture Ionization (cAPECI)*, NATO Science for Peace and Security Series C: Environmental Security, 120, 239-248, 2013.
17. Peters, S., I. Bejan, R. Kurtenbach, S. Liedtke, G. Villena, P. Wiesen, J. Kleffmann, Development of a new LOPAP instrument for the detection of O-3 in the atmosphere, *Atmospheric Environment* 67, 112-119, 2013. **ISI 3.062**
18. Nakashima, Y., Tsurumaru H., Imamura T., Bejan I., Wenger J.C., Kajii Y., Total OH reactivity measurements in laboratory studies of the photooxidation of isoprene, *Atmospheric Environment* 62, 243-247, 2012. **ISI 3.062**
19. Blanco, M.B., Bejan I., Barnes I., Wiesen P., Teruel M.A., Atmospheric Oxidation of Vinyl and Allyl Acetate: Product Distribution and Mechanisms of the OH-Initiated Degradation in the Presence and Absence of Nox, *Environmental Science and Technology*, 46(16), 8817-8825, 2012. **ISI 5.481**
20. Ceacero-Vega A.A., Ballesteros B., Bejan I., Barnes I., Jimenez E., Albaladejo J., Kinetics and Mechanisms of the Tropospheric Reactions of Menthol, Borneol, Fenchol, Camphor, and Fenchone with Hydroxyl Radicals (OH) and Chlorine Atoms (Cl), *Journal of Physical Chemistry A*, 116(16), 4097-4107, 2012. **ISI 2.775**
21. Bejan I., Schurmann A., Barnes I., Benter T., Kinetics of the gas-phase reactions of OH radicals with a series of trimethylphenols, *International Journal of Chemical Kinetics*, 44(2), 117-124, 2012. **ISI 1.566**
22. Villena G., Bejan I., Kurtenbach R., Wiesen P., Kleffmann J., Interferences of commercial NO2 instruments in the urban atmosphere and in a smog chamber, *Atmospheric Measurement Techniques*, 5(1), 149-159, 2012. **ISI 3.206**
23. Kourtchev I., Bejan I., Sodeau J.R., Wenger J.C., Gas phase reaction of OH radicals with (E)-beta-farnesene at 296 +/- 2 K: Rate coefficient and carbonyl products, *Atmospheric Environment* 46, 338-345, 2012. **ISI 3.062**
24. Ceacero-Vega A.A., Ballesteros B., Bejan I., Barnes I., Albaladejo J., Daytime Reactions of 1,8-Cineole in the Troposphere, *Chemphyschem*, 12(11) 2145-2154, 2011. **ISI 3.360**
25. Villena G., Bejan I., Kurtenbach R., Wiesen P., Kleffmann J., Development of a new Long Path Absorption Photometer (LOPAP) instrument for the sensitive detection of NO2 in the atmosphere, *Atmospheric Measurement Techniques*, 4(8), 1663-1676, 2011. **ISI 3.206**
26. Schütze, N., X. Zhong, S. Kirschbaum, I. Bejan, I. Barnes, T. Benter, Relative kinetic measurements of rate coefficients for the gas-phase reactions of Cl atoms and OH radicals with a series of methyl alkyl esters, *Atmospheric Environment*, 44 (40), 5407-5414, 2010. **ISI 3.062**
27. Blanco M., I. Bejan, I. Barnes, P. Wiesen, M. Teruel, FTIR Product Distribution Study of the Cl and OH Initiated Degradation of Methyl Acrylate under Atmospheric Pressure, *Environmental Science & Technology*, 44 (18) 7031-7037, 2010. **ISI 5.481**
28. Blanco M., I. Bejan, I. Barnes, P. Wiesen, M. Teruel, Atmospheric Photooxidation of Fluoroacetates as a Source of Fluorocarboxylic Acids, *Environmental Science & Technology*, 44, 2354-2359, 2010. **ISI 5.481**
29. Ceacero-Vega A.A., B. Ballesteros, J. Albaladejo, I. Bejan, I. Barnes, Temperature dependence of the gas-phase reactions of Cl atoms with propene and 1-butene between 285 < T < 313 K, *Chemical Physics Letters*, 484, 1-3, 10-13, 2009. **ISI 1.991**
30. Blanco, M., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, Temperature-dependent rate coefficients for the reactions of Cl atoms with methyl methacrylate, methyl acrylate and butyl methacrylate at atmospheric pressure, *Atmospheric Environment*, 43, 38, 5996-6002, 2009. **ISI 3.062**
31. Blanco, M., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, The Cl-initiated oxidation of  $\text{CH}_3\text{C}(\text{O})\text{OCH}=\text{CH}_2$ ,  $\text{CH}_3\text{C}(\text{O})\text{OCH}_2\text{CH}=\text{CH}_2$ , and  $\text{CH}_2=\text{CHC}(\text{O})\text{O}(\text{CH}_2)_3\text{CH}_3$  in the troposphere, *Environmental Science and Pollution Research*, 16, 6, 641-648, 2009. **ISI 2.757**

32. Villanueva F., B. Cabañas, E. Monedero, S. Salgado, I. Bejan, P. Martin, Degradation of Alkylfurans with Chlorine Atoms: Product and Mechanistic Study, *Atmospheric Environment*, 43(17), 2804-2813, 2009. **ISI 3.062**
33. Kourtchev I., I. Bejan, J.R. Sodeau, J.C. Wenger, Gas phase reaction of (E)- $\beta$ -farnesene with ozone: Rate coefficient and carbonyl products, *Atmospheric Environment*, 43(20), 3182-3190, 2009. **ISI 3.062**
34. Blanco, M., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel, OH-Initiated Degradation of Unsaturated Esters in the Atmosphere: Kinetics in the Temperature Range 287-313K, *Journal of Physical Chemistry*, 113, 20, 5958-5965, 2009. **ISI 2.775**
35. Zhou S., I. Barnes, T. Zhu, I. Bejan, M. Albu, Th. Benter, *Atmospheric Chemistry of Acetylacetone*, *Environmental Science & Technology*, 42(21), 7905-7910, 2008. **ISI 5.481**
36. Blanco M., I. Bejan, I. Barnes, P. Wiesen, M.A. Teruel, Kinetics of the Reactions of Chlorine Atoms with Selected Fluoroacetates under Atmospheric Pressure and 298 K, *Chemical Physics Letters*, 453, 18-23, 2008. **ISI 1.991**
37. Bejan, I., I. Barnes, R. Olariu, Sh. Zhou, P. Wiesen, Th. Benter, Investigations on the gas-phase photolysis and OH radical kinetics of methyl-2-nitrophenols, *Physical Chemistry Chemical Physics*, 9, 5686-5692, 2007. **ISI 4.198**
38. Zhou S., I. Barnes, T. Zhu, B. Klotz, I. Bejan, M. Albu, Th. Benter, Product study of the OH, NO<sub>3</sub>, and O<sub>3</sub> initiated atmospheric photooxidation of propyl vinyl ether, *Environmental Science & Technology*, 40, 17, 5415-5421, 2006. **ISI 5.481**
39. Zhou, Sh., I. Barnes, T. Zhu, I. Bejan, T. Benter, Kinetic study of the gas-phase reactions of OH and NO<sub>3</sub> radicals and O<sub>3</sub> with selected vinyl ethers, *Journal of Physical Chemistry A*, 110, 23, 7386 – 7392, 2006. **ISI 2.775**
40. Bejan, I., Y. Abd El Aal, I. Barnes, Th. Benter, B. Bohn, P. Wiesen, J. Kleffmann, The Photolysis of ortho-nitrophenol: a new gas phase source of HONO, *Physical Chemistry Chemical Physics*, 8, 2028-2035, 2006. **ISI 4.198**
41. Spittler, M., I. Barnes, I. Bejan, K.J. Brockmann, Th. Benter, K. Wirtz, Reactions of NO<sub>3</sub> radicals with limonene and alpha-pinene: Product and SOA formation, *Atmospheric Environment*, 40, Supl. 1, 116-127, 2006. **ISI 3.062**
42. Olariu R.I., I. Bejan, I. Barnes, B. Klotz, K.H. Becker, K. Wirtz, Rate coefficients for the gas-phase reaction of NO<sub>3</sub> radicals with selected dihydroxybenzenes, *International Journal of Chemical Kinetic*, 36, 11, 577-583, 2004. **ISI 1.566**
43. Geiger, H., I. Barnes, I. Bejan, T. Benter, M. Spittler, The tropospheric degradation of isoprene: an updated module for the regional atmospheric chemistry mechanism, *Atmospheric Environment*, 37, 11, 1503-1519, 2003. **ISI 3.062**

## **d.2. - reviste cotate Web of Science fara factor de impact**

1. Cucu-Man S., R. Mocanu, I. Bejan, C. Duncianu, M. Duncianu, E. Steinnes,, Autochthonous moss species used in atmospheric heavy metals survey (Romania), *Analele Universitatii "AL. I. Cuza" Iasi, Secția chimie, Seria XII*, 25-32, 2004.

## **d.3. - reviste indexate BDI**

1. Bejan, I. Barnes, R.I. Olariu, C. Arsene, K.H. Becker, K. Wirtz. Kinetic with NO<sub>3</sub> radicals in EUPHORE chamber, EUPHORE, 5H REPORT 2002, eds.: Ian Barnes Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany, 2005.
2. R.I. Olariu, Al. Tomas, I. Barnes, I. Bejan, K.H. Becker, K. Wirtz. Atmospheric Ozone Degradation Reaction of 1,2-Dihydroxybenzene: Aerosol Formation Study in The European Photoreactor EUPHORE, 4TH REPORT 2001, ISBN 84-921259-2-6, eds.: Ian Barnes and Klaus Wirtz, Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany & Fundacion Centro de Estudios del Mediterraneo Valencia, 54-71, 2004.
3. Barnes, I., I. Bejan, K.J. Brockmann, M. Spittler and K.Wirtz, Formation of secondary organic aerosol by oxidation of biogenic VOCs with NO<sub>3</sub> Radicals, in The European Photoreactor EUPHORE, 4TH REPORT 2001, ISBN 84-921259-2-6, eds.: Ian Barnes and Klaus Wirtz, Compiled and Produced by Institute of Physical Chemistry, Bergische Universitat Wuppertal, Germany & Fundacion Centro de Estudios del Mediterraneo Valencia, 144-150, 2004.

## **e) Articole științifice publicate în extenso in volumele conferințelor**

1. Olariu, R.I.; Barnes, I.; Bejan, I.; Becker, K.H. and Wirtz, K., Rate Constants for the Gas-Phase Reaction of the NO<sub>3</sub> Radicals with a Series of Bezendiol Compounds., Proceedings from 17th International Symposium on Gas Kinetics, 2002, AP04.
2. Bejan, I.; Olariu, R.I.; Barnes, I.; Benter, Th. and Wirtz, K., FT-IR Investigation of the Gas-Phase Reaction of the NO<sub>3</sub> Radical with a Series of Bezendiol Compounds in Proceedings from the EC/EUROTRAC-2 Joint Workshop, EC Cluster "Chemical Mechanism Development", Shaping the future of the Atmospheric Chemistry research in Europe, 2002, 37-42.
3. Geiger, H. I. Barnes, I. Bejan, Th. Benter, M. Spittler, A New Chemical Module for Tropospheric Isoprene Degradation Applied to the RACM Mechanism, in Proceedings from the EC/EUROTRAC-2 Joint Workshop, EC Cluster "Chemical Mechanism Development", Shaping the future of the Atmospheric Chemistry research in Europe, 2002, 259-265.
4. Tomas, A.; Olariu, R.I.; Barnes, I.; Bejan, I.; Geiger, H., Mocanu, R., Atmospheric Chemistry of Benzenediols. Reaction with O<sub>3</sub> in Proceedings from the EUROTRAC-2 Symposium 2002, Margraf Verlag, Weikersheim 2002.
5. Zhou, Sh., I. Barnes, T. Zhu, I. Bejan, Th. Benter, Rate Constants for the Gas Phase Reactions of OH and NO<sub>3</sub> radicals and O<sub>3</sub> with selected vinyl ethers, Proceedings of the "19th International Symposium on Gas Kinetics", 2006, Ed. by Philippe Dagaut and Abdelwahid Mellouki, pp65
6. Bejan, I., I. Barnes, R. Olariu, M. Duncianu, Sh. Zhou, K.H. Becker, Investigations on the Gas Phase Chlorine Atom Initiated Oxidation of 1,2-Dihydroxybenzenes, Proceedings of the "19th International Symposium on Gas Kinetics", 2006, Ed. by Philippe Dagaut and Abdelwahid Mellouki, pp109

## f) Alte lucrari si contributii stiintifice

### f.1. Contracte de cercetare stiintifică în instituții academice

#### contracte internaționale – director

1. Contract Marie Curie IntraEuropean Fellowship (IEF) LAMUNIO-Laboratory and Modelling studies to Understand Isoprene Oxidation. Grant 331806. Perioada: July 2013-July2015, Valoare totală: **247388.16 EUR**.
2. Contract IRCSET Fellowship Irish Research Council for Science, Engineering & Technology (IRCSET), Atmospheric Chemistry of Oxygenated Aromatic Compounds: Mechanisms & Aerosols, 1st Aug 2008-31st July 2010, Valoare totală: **83095.00 EUR**.

#### contacte nationale - director

1. Contract PN-II-RU-TE-2014-4-2461, nr. 305 din 01/10/2015, STUDII PRIVIND OXIDAREA COMPUȘILOR AROMATICI SUBSTITUIȚI ÎN CONDIȚII DE ATMOSFERĂ SIMULATĂ – SOS-AROMATIC, 01 Octombrie 2015- 30 Septembrie 2017, Valoare totală: **550000 LEI**
2. Contract PN-III-P2-2.1-PED-2016-1621 nr. 86PED din 03/01/2017, CAMERA DE SIMULARE ATMOSFERICĂ – NOU INSTRUMENT DE CERCETARE PENTRU ÎNȚELEGEREA OXIDĂRII SESQUITERPENELOR – CHARUSO, 03 Ianuarie 2017 – 02 Iulie 2018, Valoare totală: **600000 LEI**

#### contracte internaționale – membru

1. **European Union's Horizon 2020 research and innovation programme - EUROCHAMP-2020 grant agreement No 730997.**
2. **German Research Foundation (DFG) project POXSA (BE 2124/4-1)** for development of new ionization technique for nitroaromatic detection using mass spectrometry.
3. **DFG project** "Kinetic and mechanistic investigations of the gas phase photolysis of ortho-substituted nitroaromatics KL1392/2-1.
4. **TOXIC project** "Toluene Oxidation Investigations in a Chamber".
5. **DFG (German Research Foundation)** project for the development of Ozone-LOPAP instrument.
6. **DBU (German Environment Foundation)** project for the development of NO<sub>2</sub>-LOPAP instrument contract No. 24171.
7. **DAAD (German Academic Exchange Service)** project, Germany - Argentinien, **PROALAR 2007.**

8. **EU project: "Multiphase chemistry of oxygenated species in the troposphere" (Joint project MOST, (no° EVK2-CT-2001-00114).**
9. **BMBF project** of the German Atmospheric Research Programme AFO 2000 "Regional biogenic emissions of reactive volatile organic compounds (BVOC) from forests: Process studies, modelling and validation experiments (BEWA2000)" (no° FZK – 07ATF25) subproject 201 "Laboratory and Smog Chamber Experiments on the Atmospheric Degradation of Biogenic VOC: Investigation of the Aerosol Formation and Validation of Chemical Mechanisms" (BEWA).
10. **EU project:** "Origin and formation of secondary organic aerosol" (Joint project OSA, (no° EVK2-1999-00016).
11. **BMBF project of the German Atmospheric Research Programme AFO 2000:** "Validation of chemical mechanisms to describe the degradation of isoprene and  $\alpha$ -pinene within 3-dimensional chemistry transport models" (Joint project ValChem (no° FZK – 07ATF13).
12. **EU project** "Effects of the oxidation of Aromatic Compounds in the Troposphere (EXACT)" (no° EVK4 – CT1999 - 00053974064).

## f.2. Lucrări susținute în calitate de invitat la manifestări științifice

1. Iustinian Bejan, Investigations on the gas-phase chemistry of some selected nitroaromatic hydrocarbons. Invited Lecture at Faculty of Chemical Sciences, University National of Cordoba, 2007, 24 October, in cadrul programului PROALAR.
2. Iustinian Bejan, Phenoxy-Type Radical Formation from the Oxidation of Phenolic-Type Compounds - Investigations on Nitrophenols, Atmospheric Chemical Mechanisms, 2008, 10-12 December, Davis, USA
3. Iustinian Bejan, A new gas phase source of HONO: ortho-nitrosubstituted alkyl benzenes photolysis. Invited expert workshop. Nitrous acid: Tropospheric Chemistry, Measurement Methods and Future Directions, 2008, 3-5 March, Wuppertal, Germany
4. Iustinian Bejan, The Photolysis of Different Nitroaromatics: A daytime Source of HONO, Atmospheric Chemical Mechanisms, 2010, 10-12 December, Davis, USA
5. Iustinian Bejan, Gas Phase Nitrous acid Sources from Photolytic Processes: Nitroaromatics, 10<sup>th</sup> Workshop in the Series "Urban Air Quality and Traffic" Atmospheric Composition and Processes in Contrasting Environments, 2011, 19-21 September, Cork, Ireland
6. Iustinian Bejan, New investigations on the gas phase reactions important for atmosphere, Faculty of Chemistry Conference, 2014, October 31 – November 01, Iasi, Romania

## f.3 Invitatii in laboratoare de cercetare din strainatate

Cercetator invitat la University National of Cordoba, Faculty of Chemical Sciences, Cordoba, Argentina, in perioada 15.09.2007-30.10.2007.

Cercetator invitat la Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA) - UMR CNRS, Université Paris-Est Créteil, France.

## f.4. Lucrari sustinute la manifestări științifice

### Internaționale

1. EC/EUROTRAC-2 Symposium, "Transport and Chemical Transformation in the Troposphere" 2002, 11-15 March, Garmisch - Partenkirchen, Germany  
Tomas, A., R. Olariu, I. Barnes, I. Bejan, H. Geiger and R. Mocanu  
Atmospheric Chemistry of Benzenediols: Reaction with Ozone.
2. 17th International Symposium on Gas Kinetics, 2002, 25-28 August, Essen, Germany  
Olariu, R., I. Barnes, I. Bejan, K.H. Becker and K. Wirtz  
Rate Constants for the Gas-Phase Reaction of the NO<sub>3</sub> Radicals with a Series of Benzenediol Compounds.
3. EC/EUROTRAC-2 Joint Workshop, "Shaping the Future of Atmospheric Chemistry Research in Europe" 2002, 9-11 September, Paris, France  
Bejan, I., R.I. Olariu, I. Barnes, Th. Benter and K. Wirtz  
FT-IR Investigations on the Gas-Phase Reactions of the NO<sub>3</sub> and OH Radicals with a Series of Benzenediol Compounds (GPP1).
4. EC/EUROTRAC-2 Joint Workshop, "Shaping the Future of Atmospheric Chemistry Research in Europe" 2002, 9-11 September, Paris, France  
Geiger, H., I. Barnes, I. Bejan, Th. Benter and M. Spittler

- A New Chemical Module for Tropospheric Isoprene Degradation Applied to the RACM Mechanism (MPM2).
5. The German Atmospheric Research Programme 2000-2006, AFO-2000, 2002, 7-9 October, Schliersee, Germany  
Geiger, H., I. Barnes, I. Bejan, Th. Benter and M. Spittler  
A New Chemical Module for Tropospheric Isoprene Degradation Applied for the RACM Mechanism.
  6. The German Atmospheric Research Programme 2000-2006, AFO 2000, 2002, 7-9 October, Schliersee, Germany  
Spittler, M., I. Barnes, I. Bejan, K.J. Brockmann and K. Wirtz  
Smog Chamber Study on the Reaction of Biogenic VOCs with NO<sub>3</sub>: Investigations of Aerosol Formation and Chemical Mechanisms.
  7. Seventh US - German Workshop on Photochemical Ozone Problem and Its Control 2002, 9 – 11 October  
Rheinhotel 4 Jahreszeiten, Bad Breisig/Germany  
Geiger, H., I. Barnes, I. Bejan, T. Benter and M. Spittler  
Tropospheric Degradation of Isoprene: A New Module for Condensed Chemical Mechanisms
  8. Final Meeting of EXACT Project, 2003, January, Cork, Ireland,  
Bejan, I., I. Barnes, (oral presentation)  
Rate Coefficients for the Gas-Phase Reactions of NO<sub>3</sub> Radicals with (methyl)-1,2-Dihydroxybenzenes.
  9. EGS-AGU-EUG Joint Assembly, EUROPEAN GEOPHYSICAL SOCIETY, XXVIII, Geophysical Research Abstracts, 5, 11824, 2003, 6-11 April, Nice, France  
Bejan, I., R. Olariu, I. Barnes and R. Mocanu  
FT-IR Product Studies on the OH Radical and O<sub>3</sub> Initiated Oxidation in Gas-Phase of the (methyl)-1,2-Dihydroxybenzene.
  10. EGS-AGU-EUG Joint Assembly, EUROPEAN GEOPHYSICAL SOCIETY, XXVIII, Geophysical Research Abstracts, 5, 14634, 2003, 6-11 April, Nice, France  
Geiger, H., I. Barnes, I. Bejan, T. Benter, M. Spittler  
Modelling the Degradation of Isoprene in the EUPHORE Smog Chamber: an Updated RACM Scheme and Intercomparison of Other Condensed Mechanisms.
  11. EGS-AGU-EUG Joint Assembly, EUROPEAN GEOPHYSICAL SOCIETY, XXVIII, Geophysical Research Abstracts, 5, 11692, 2003, 6-11 April, Nice, France  
Olariu, R.I., I. Barnes, I. Bejan, C. Arsene, K.H. Becker, K. Wirtz  
Secondary Organic Aerosol Formation from the Atmospheric Oxidation of Phenols.
  12. 1st General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, 6, 07566 SRef-ID: 1607-7962/gra/EGU04-A-07566, ISSN:1029-7006, 2004, 25 - 30 April, Nice, France  
Bejan, I., I. Barnes, R. Olariu and R. Mocanu  
Secondary Organic Aerosol Formation from the Photolysis of Nitrophenols and Nitrocresols.
  13. 1st General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, 6, 07103, 2004, 25 - 30 April, Nice, France  
Olariu, R.I., A. Tomas, I. Barnes, I. Bejan, C. Arsene and K. Wirtz  
Organic Aerosol Formation during the Atmospheric Ozone Degradation of 1,2-Dihydroxybenzenes.
  14. 18th International Symposium on Gas Kinetics, 2004, 7-12 August, Bristol, UK  
Bejan, I., I. Barnes, R. Olariu and R. Mocanu  
Kinetic Investigations of the Gas-Phase Reactions of the OH Radical with a Series of Nitroaromatic Compounds.
  15. NATO Advanced Research Workshop, Environmental Simulation Chambers: Application to Atmospheric Chemical Processes, 2004, October 01-04, Zakopane, Poland  
Bejan, I., I. Barnes, R. Olariu, K.H. Becker and R. Mocanu  
FT-IR Study of the Kinetic Gas-Phase Reactions of the OH Radical with a Series of Nitroaromatic Compounds.
  16. AFO2000 Abschluss-Symposium, 2004, 22-24 March, Bad Tölz, [http://www.afo-2000.de/symposium04/afo\\_abstracts/poster\\_index.php](http://www.afo-2000.de/symposium04/afo_abstracts/poster_index.php)  
Geiger, H., I. Barnes, T. Benter, I. Bejan and M. Spittler  
Validation of Chemical Mechanisms for the Degradation of Isoprene and a-Pinene – A New Chemical Isoprene Degradation Module for the RACM Mechanism.
  17. AFO2000 Abschluss-Symposium, 2004, 22-24 March, Bad Tölz, [http://www.afo-2000.de/symposium04/afo\\_abstracts/poster\\_index.php](http://www.afo-2000.de/symposium04/afo_abstracts/poster_index.php)  
Barnes, I., I. Bejan, K.J. Brockmann and M. Spittler  
Laboratory and Smog Chamber Experiments on the Atmospheric Degradation of Biogenic VOC: Investigation of the Aerosol Formation and Validation of Chemical Mechanisms.
  18. General Assembly, 2005, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, 7, 06143, SRef-ID: 1607-7962/gra/EGU05-A-06143, ISSN:1029-7006, 2005, 24 - 29 April, Vienna, Austria  
Bejan, I., I. Barnes, R. Olariu, K. H. Becker and R. Mocanu  
New Results on the Atmospheric Chemistry of Oxygenated Aromatic Compounds.

19. INTROP/EUROCHAMP/ACCENT Joint Workshop on Organics; 2005, 8-11 January, Alpe d'Huez, France (oral presentation)  
Bejan, I., Y. El Shorbany, I. Barnes, Th. Benter, B. Bohn, P. Wiesen and J. Kleffmann  
 The photolysis of ortho-Nitrophenols: A New Gas Phase Source of HONO.
20. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol. 8, 07497, 2006, 2-7 April, Vienna, Austria  
Bejan, I., I. Barnes, R. Olariu, M. Duncianu, Sh. Zhou and K.H. Becker  
 Secondary Organic Aerosol Formation during the Gas Phase Photolysis of Nitrophenols
21. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol 8, 06096, 2006, 2-7 April, Vienna, Austria  
 Zhou, Sh., I. Barnes, T. Zhu, B. Klotz, M. Albu, I. Bejan and Th. Benter  
 Mechanism for the Atmospheric Photooxidations of Vinyl Ether
22. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol 8, 07012, 2006, 2-7 April, Vienna, Austria  
 Duncianu, M., I. Bejan and I. Barnes  
 Atmospheric Chemistry of Phenoxy-Type Radicals Formed in the Oxidation of Phenolic-Type Compounds
23. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol 8, 06160, 2006, 2-7 April, Vienna, Austria  
Bejan, I., I. Barnes, T. Benter, B. Bohn, Y. El Shorbany, P. Wiesen and J. Kleffmann  
 The Photolysis of ortho-Nitrophenols: A New Gas Phase Source of HONO.
24. Bunsentagung 2006 in Erlangen Deutschen Bunsen-Gesellschaft für Physikalische Chemie, 2006, 25-27 May, Germany  
 Kleffmann, J., I. Bejan, Y. Abd El Aal, I. Barnes, Th. Benter, P. Wiesen and B. Bohn  
 The Photolysis of ortho-Nitrophenols: A New Gas Phase Source of HONO
25. 19<sup>th</sup> International Symposium on Gas Kinetics, 2006, 22-27 July, Orleans, France  
Bejan, I., I. Barnes, R. Olariu, M. Duncianu, Sh. Zhou and K.H. Becker  
 Investigations on the Gas Phase Chlorine Atom Initiated Oxidation of 1,2-Dihydroxybenzenes.
26. 19<sup>th</sup> International Symposium on Gas Kinetics, 2006, 22-27 July, Orleans, France  
 Zhou, Sh., I. Barnes, T. Zhu, I. Bejan and Th. Benter  
 Rate Constants for the Gas Phase Reactions of OH and NO<sub>3</sub> Radicals and O<sub>3</sub> with Selected Vinyl Ethers,
27. International Conference on Atmospheric Chemical Mechanisms, 2006, 6-8 December, 2006, Davis, USA  
 Barnes I., I. Bejan, J. Kleffmann, P. Wiesen  
 Mechanism of the Photooxidation of Aromatic Hydrocarbon Ring Retaining Products
28. Spring Meeting of the German Physical Society - Environmental Physics Association, 2007, 26-30 March, Regensburg, Germany (oral presentation)  
Bejan, I., I. Barnes, Th. Benter, P. Wiesen and J. Kleffmann  
 The Photolysis of Methyl-Substituted Nitroaromatics: A New Gas Phase Source of HONO
29. Second ACCENT Symposium "Atmospheric Composition Change. Causes and Consequences - Local to Global", 2007, 23-27 July, Urbino, Italy  
Bejan, I., I. Barnes, Th. Benter, P. Wiesen and J. Kleffmann  
 The Photolysis of ortho-(Alkyl)-substituted Nitroaromatics: A New Gas Phase Source of HONO
30. RSC Gas Kinetics Discussion Group 2007, 2007, 10-12 September, Leeds, United Kingdom  
Bejan, I., I. Barnes, M. Duncianu, R. Olariu, Sh. Zhou, P. Wiesen and Th. Benter  
 Photolysis and OH Radical Kinetics of Methyl-2-nitrophenols
31. NATO Advanced Research Workshop, Simulation and Assessment of Chemical Processes in a Multiphase Environment, 2007, October 1-5, Alushta, Ukraine  
 Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
 Methyl methacrylate in the atmosphere: OH- and Cl- initiated oxidation in the gas phase
32. NATO Advanced Research Workshop, Simulation and Assessment of Chemical Processes in a Multiphase Environment, 2007, October 1-5, Alushta, Ukraine  
 Zhou, Sh., I. Barnes, T. Zhu, I. Bejan and Th. Benter  
 Exploratory Studies on Secondary Organic Aerosol Formation in the Ozonolysis of Alkyl Vinyl Ethers
33. First Interdisciplinary Meeting of Investigations on the Environmental Problems, 2007, September 27-29, Cordoba, Argentina  
 Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
 Fluoroesters Degradation in Marine Environment
34. 9th Latin American Conference on Physical Organic Chemistry, (CLAFQO-9) 2007, September 30 - October 5, Córdoba, Argentina (oral presentation)  
Bejan, I., I. Barnes, G. Villena Tapia, Th. Benter, P. Wiesen and J. Kleffmann  
 The photolysis of ortho-(hydroxylated or alkylated) nitroaromatics: A new gas phase source of HONO



35. 9th Latin American Conference on Physical Organic Chemistry, (CLAFQO-9) 2007, September 30 - October 5, Córdoba, Argentina (oral presentation)  
Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
Unsaturated esters in the atmosphere: kinetics and photooxidation mechanism with OH radicals
36. 9th Latin American Conference on Physical Organic Chemistry, (CLAFQO-9) 2007, September 30 - October 5, Córdoba, Argentina  
Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
The Cl-initiated oxidation of  $\text{CH}_2=\text{CHOC}(\text{O})\text{CH}_3$  and  $\text{CH}_2=\text{CHCH}_2\text{OC}(\text{O})\text{CH}_3$  in the troposphere: kinetics and product distribution
37. Invited Lecture at Faculty of Chemical Sciences, University National of Cordoba, 2007, 24 October, Bejan, I.  
Investigations on the gas-phase chemistry of some selected nitroaromatic hydrocarbons.
38. Invited expert workshop. Nitrous acid: Tropospheric Chemistry, Measurement Methods and Future Directions, 2008, 3-5 March, Wuppertal, Germany  
Bejan I., G. Villena Tapia, I. Barnes, T. Benter, P. Wiesen and J. Kleffmann  
A new gas phase source of HONO: ortho-nitrosubstituted alkyl benzenes photolysis.
39. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol 10, EGU2008-A-00000, 2008, 13-18 April, Vienna, Austria  
Villena Tapia, G., I. Bejan, P. Wiesen and J. Kleffmann  
Intercomparison of a new ultra-sensitive NO<sub>2</sub>-LOPAP against commercial NO<sub>2</sub> instruments and the FTIR technique
40. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol 10, EGU2008-A-09546, 2008, 13-18 April, Vienna, Austria (oral presentation)  
Bejan, I., G. Villena Tapia, I. Barnes, Th. Benter, P. Wiesen and J. Kleffmann  
The photolysis of alkyl nitroaromatics: A new gas phase source of HONO
41. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol 10, EGU2008-A-09060, 2008, 13-18 April, Vienna, Austria  
Blanco, M.B., I. Bejan, I. Barnes, P. Wiesen and M. Teruel  
Tropospheric chemical degradation of methyl acrylate and butyl methacrylate initiated by chlorine atoms
42. General Assembly, EUROPEAN GEOSCIENCES UNION, Geophysical Research Abstracts, Vol 10, EGU2008-A-09813, 2008, 13-18 April, Vienna, Austria  
Bejan, I., M. Duncianu, I. Barnes, R. Olariu, P. Wiesen and T. Benter  
Investigations on the atmospheric chemistry of nitrophenolic-type compounds.
43. The 20th International Symposium on Gas Kinetics, 2008, 20-25 July, Manchester, United Kingdom, (oral presentation)  
Bejan I., G. Villena Tapia, I. Barnes, T. Benter, P. Wiesen and J. Kleffmann  
Investigations on the Photolysis of ortho-Nitroalkylated aromatics: A new gas phase source of HONO.
44. The 20th International Symposium on Gas Kinetics, 2008, 20-25 July, Manchester, United Kingdom, Schürmann, A., I. Bejan, I. Barnes, M. Duncianu and T. Benter  
Kinetic investigations of the OH-initiated oxidation of trimethylphenols between 283 and 313 K.
45. The 20th International Symposium on Gas Kinetics, 2008, 20-25 July, Manchester, United Kingdom  
Blanco, B.M., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
Rate Constants for the Reaction of OH Radicals with Selected Unsaturated Esters between 283 and 313K.
46. The 20th International Symposium on Gas Kinetics, 2008, 20-25 July, Manchester, United Kingdom  
Blanco, B.M., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
Kinetic Study of the Gas Phase reactions of Chlorine Atoms with a Series of Fluoroesters under Atmospheric Conditions.
47. XXVII Congreso Argentino de Química, 2008, 17-19 September, Tucuman, Argentina  
Blanco, B.M., Bejan I., I. Barnes, P. Wiesen and M.A. Teruel  
 $\alpha,\beta$ -unsaturated esters in the atmosphere: photooxidation initiated by chlorine atoms between 283 and 313 K.
48. Atmospheric Chemical Mechanisms, 2008, 10-12 December, 2008, Davis, USA  
Bejan I., J.C. Wenger and I. Barnes  
Product and Kinetic Investigations on the Gas Phase Chemistry of Dimethylated p-benzoquinones.
49. Atmospheric Chemical Mechanisms, 2008, 10-12 December, 2008, Davis, USA  
Bejan I., G. Villena Tapia, I. Barnes, T. Benter, P. Wiesen and J. Kleffmann  
Mechanistic Investigations on the Photolysis of Alkyl Nitrophenolic Compounds.
50. Atmospheric Chemical Mechanisms, 2008, 10-12 December, 2008, Davis, USA  
Bejan I., M. Duncianu and I. Barnes  
Phenoxy-Type Radical Formation from the Oxidation of Phenolic-Type Compounds - Investigations on Nitrophenols.
51. Atmospheric Chemical Mechanisms, 2008, 10-12 December, Davis, USA

- Blanco, B.M., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
On the Cl-Initiated Oxidation of  $\alpha,\beta$ -Unsaturated Esters: A Temperature Dependence Study Under Atmospheric Conditions.
52. Final Meeting of the EUROCHAMP-1, 2009, May, Binz, Germany  
I. Barnes, I. Bejan, P. Wiesen, M.B. Blanco, M. A. Teruel  
Cl-atom and Oh radical initiated oxidation of the unsaturated esters: temperature dependent studies under atmospheric conditions
  53. 10th Latin American Conference on Physical Organic Chemistry (CLAFQO10) 2009, 11-16 October, Florianópolis, Brasil  
M. B .Blanco, I. Bejan, I. Barnes, P. Wiesen and M.A.Teruel  
Atmospheric Chemical Mechanism of the Photooxidation of Fluoroacetates: A Source of Fluoroacetic Acids.
  54. XVI Congreso Nacional de Fisico-Química y Química Inorgánica, 2009, 18-21 May, Salta, Argentina  
M. B .Blanco, I. Bejan, I. Barnes, P. Wiesen and M.A.Teruel  
Kinetic study of the atmospheric photooxidation of a series of fluoroacetates initiated by Cl atoms.
  55. XVI Congreso Nacional de Fisico-Química y Química Inorgánica, 2009, 18-21 May, Salta, Argentina  
M. B .Blanco, I. Bejan, I. Barnes, P. Wiesen and M.A.Teruel  
Degradation mechanism of  $\alpha,\beta$ -Unsaturated Esters in the atmosphere.
  56. Goldschmidt 2009 Conference- "Challenges to Our Volatile Planet", 2009, Davos, Switzerland, 21-26 June (oral presentation)  
Kourtchev, I., I. Bejan, J. Sodeau and J. Wenger  
Ozonolysis of (E)-beta-Farnesene: Carbonyl products and secondary organic aerosol yields.
  57. European Aerosol Conference, 2009, Karlsruhe, Germany, 6-11 September (oral presentation)  
Kourtchev, I., I. Bejan, J.R. Sodeau, and J.C. Wenger  
Gas/Particulate Phase Products and Secondary Organic Aerosol Yields from the Ozonolysis of (E)- $\beta$ -Farnesene.
  58. European Aerosol Conference, 2009, Karlsruhe, Germany, 6-11 September (oral presentation)  
Bejan, I., I. Kourtchev, J.C. Wenger, I. Barnes, and J.R. Sodeau  
Secondary Organic Aerosol Formation from the OH Initiated Oxidation of Tolualdehydes and Dimethylphenols.
  59. 1st Argentinean Workshop in Environmental Science, 2009, 23-25 November, Rosario, Argentina  
M.B.Blanco, I. Bejan, I. Barnes, P. Wiesen and M. Teruel  
Is the atmospheric degradation of fluoroesters a source of fluorocarboxylic acids in remote areas?
  60. 10th Latin American Conference on Physical Organic Chemistry (CLAFQO), 2009, 11-16 October, Florianópolis, Brasil  
M. B .Blanco, I. Bejan, I. Barnes, P. Wiesen and M.A.Teruel  
Atmospheric Chemical Mechanism of the Photooxidation of Fluoroacetates: A Source of Fluoroacetic Acids.
  61. The 21st International Symposium on Gas Kinetics, 2010, 18-22 July, Leuven, Belgium  
Kourtchev, I., I. Bejan, J.R. Sodeau and J.C. Wenger  
Gas Phase Reaction of OH radicals with (E)- $\beta$ -Farnesene: Rate Coefficient, gas/particle phase products and mechanisms.
  62. The 21st International Symposium on Gas Kinetics, 2010, 18-22 July, Leuven, Belgium  
Ceacero-Vega, AA., B. Ballesteros, I. Bejan, I. Barnes and J. Albaladejo  
Diurnal reaction of 1,8-cineole in the troposphere.
  63. The 21st International Symposium on Gas Kinetics, 2010, 18-22 July, Leuven, Belgium  
Ceacero-Vega, AA., B. Ballesteros, J. Albaladejo, I. Bejan and I. Barnes  
Temperature dependence of the gas-phase reactions of Cl atoms with propene and 1-butene between 285<T<313 K
  64. The 21st International Symposium on Gas Kinetics, 2010, 18-22 July, Leuven, Belgium  
Blanco, M., I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
Tropospheric photooxidation of fluoroesters: Product distribution at 298K.
  65. The 21st International Symposium on Gas Kinetics, 2010, 18-22 July, Leuven, Belgium  
Carey, T., A.B. Kenna, Sh. Zhou, I. Bejan and J.C. Wenger  
Effect of functional group on the reactivity of ozone with a series of oxygenated hexene derivatives.
  66. The 21st International Symposium on Gas Kinetics, 2010, 18-22 July, Leuven, Belgium  
Bejan, I., I. Barnes, R. Olariu and J.C. Wenger  
A kinetic study of the gas phase reactions of chlorine atoms with 1,2-benzenediols and benzoquinones.
  67. International Aerosol Conference (IAC) 2010, 29th August – 3rd September, Helsinki, Finland  
Bejan, I., I. Kourtchev, I. Barnes, and J.C. Wenger  
Influence of radical source, seed aerosol and relative humidity on secondary organic aerosol formation the OH initiated oxidation of 2,6-dimethylphenol
  68. 3rd EuCheMS Chemistry Congress, 2010, 29th August - 2nd September, Nürnberg, Germany  
M.B. Blanco, I. Bejan, I. Barnes, P. Wiesen and M.A.Teruel

- Tropospheric Photooxidation of Fluoroesters: product distribution at 298 K.
69. International Workshop on "Ozone - A Regional and Global Pollutant", 2010, September, Wengen, Switzerland,  
J. Wenger, I. Kourtchev, I. Bejan, J. R. Sodeau  
Simulation Chamber Studies of the Atmospheric Oxidation of Sesquiterpenes.
  70. Atmospheric Chemical Mechanisms, 2010, 10-12 December, Davis, USA  
I. Barnes, B. Blanco, I. Bejan, M.A. Teruel and P. Wiesen  
Mechanistic study of the Gas-Phase Reactions of OH Radicals and Cl Atoms with Unsaturated Esters.
  71. Atmospheric Chemical Mechanisms, 2010, 10-12 December, Davis, USA (oral presentation)  
Bejan, I., G. Villena, H. Sonderfeld, T. Benter, I. Barnes, R. Koppmann, P. Wiesen and J. Kleffmann  
The Photolysis of Different Nitroaromatics: A daytime Source of HONO.
  72. 5th International PTR-MS Conference on Proton Transfer Reaction Mass Spectrometry and its Applications, 2011, 26th January- 2nd February, Obergurgl, Austria  
Sonderfeld, H., R. Koppmann, I. Barnes, I. Bejan, Y. Elshorbany, R. Kurtenbach, S. Liedtke and P. Wiesen  
Characterization of a PTR-TOF-MS and its applications in laboratory experiments and fields measurements.
  73. European Geosciences Union General Assembly, 2011, 3th – 8th April, Vienna, Austria  
M.B. Blanco, I. Bejan, I. Barnes, P. Wiesen and M.A. Teruel  
Atmospheric chemical mechanisms of the photooxidation of vinyl and allyl acetate initiated by Cl reactions.
  74. Annual meeting of « Groupe Français de Cinétique et Photochimie en Phase Gazeuse », 2011, May, Lille, France  
A. Cassez, C. Coeur-Tourneur, A. Lauraguais, K. Kuprovskite, I. Bejan, I. Kourtchev, J. Wenger  
Characterization of the gas- and particle-phase products from the atmospheric oxidation of catechol
  75. 59th ASMS Conference on Mass Spectrometry and Allied Topics, 2011, 5-9 June, Denver, Colorado, USA  
I. Barnes, H. Kersten, I. Bejan and T. Benter  
In-situ MS monitoring of atmospheric degradation product studies of aromatic hydrocarbons with APPI and APLI.
  76. 59th ASMS Conference on Mass Spectrometry and Allied Topics, 2011, 5-9 June, Denver, Colorado, USA  
V. Derpmann, H. Sonderfeld, I. Bejan, H. Kersten, R. Koppmann, J. Kleffmann and T. Benter  
Highly efficient Ionization of Nitro-aromatic Compounds using Photoelectron induced Atmospheric Pressure Ionization (PAPI).
  77. The 7th International Conference on Chemical Kinetics, 2011, 10-14 July, MIT Cambridge, MA USA  
I. Bejan, A. Schürmann, I. Barnes, P. Wiesen and Th. Benter  
Temperature dependence of the rate coefficients of the OH-initiated oxidation of trimethylphenols between 283 and 313 K.
  78. 10th Workshop in the Series "Urban Air Quality and Traffic" Atmospheric Composition and Processes in Contrasting Environments, 2011, 19-21 September, Cork, Ireland  
I. Bejan, G. Villena, V. Derpmann, I. Barnes, T. Benter, , R. Koppmann, P. Wiesen and J. Kleffmann  
Gas Phase Nitrous acid Sources from Photolytic Processes: Nitroaromatics
  79. Annual meeting of « Groupe Français de Cinétique et Photochimie en Phase Gazeuse », 2013, June, Orleans, France  
A. Lauraguais, I. Bejan, I. Barnes, C. Coeur-Tourneur, A. Cassez,  
Kinetic study in smog chamber of Cl atom reaction with methoxyphenols.
  80. Journées Interdisciplinaires de la Qualité de l'Air", 2014, February, Lille, France  
A. Lauraguais, I. Bejan, I. Barnes, C. Coeur-Tourneur, A. Cassez,  
Kinetic study in smog chamber of Cl atom reaction with methoxyphenols.
  81. 23rd International Symposium on Gas Kinetics and Related Phenomena, 2014, July 20th-25th, Szeged, Hungary  
I. Bejan, F.A.F. Winiberg, S.C. Orr, C.A. Brumby, P.W. Seakins  
Temperature dependent product yields of isoprene ozonolysis: methacrolein, methyl vinyl ketone, OH and HO<sub>2</sub> radicals.
  82. 23rd International Symposium on Gas Kinetics and Related Phenomena, 2014, July 20th-25th, Szeged, Hungary  
M. B. Blanco, I. Bejan, I. Barnes, P. Wiesen, M. Teruel  
Products and Mechanism of the Reactions of OH Radicals and Cl Atoms with Methyl Methacrylate (CH<sub>2</sub>=C(CH<sub>3</sub>)C(O)OCH<sub>3</sub>) in the Presence of NO<sub>x</sub>
  83. 23rd International Symposium on Gas Kinetics and Related Phenomena, 2014, July 20th-25th, Szeged, Hungary  
S. Orr, T. Dillon, F. Winiberg, C. Brumby, I. Bejan, P. Seakins

Direct detection of OH yields from a temperature dependent study of the reaction of HOCH<sub>2</sub> O<sub>2</sub> + HO<sub>2</sub> in HIRAC

84. 23rd International Symposium on Gas Kinetics and Related Phenomena, 2014, July 20th-25th, Szeged, Hungary  
J. Kelly, I. Bejan, S.C. Orr, C.A. Brumby, F.A.F. Winiberg, P.W. Seakins  
Kinetic investigation of the gas-phase reactions of the Cl atom and OH radical with a series of alkylated cyclohexanes
85. Atmospheric Chemical Mechanisms "Simple Models-Real World Complexities", 2014, December 10-12, Davis, CA, USA  
I. Bejan, F.A.F. Winiberg, S.C. Orr, C.A. Brumby, P.W. Seakins  
Temperature Dependent Product Yields of Isoprene Ozonolysis: Methacrolein, Methyl Vinyl Ketone, Formaldehyde, OH and HO<sub>2</sub> Radicals
86. Atmospheric Chemical Mechanisms "Simple Models-Real World Complexities", 2014, December 10-12, Davis, CA, USA  
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