

LIST OF PUBLICATIONS, JANUARY 2018

Mihail-Dumitru BARBOIU

Senior Research Scientist CNRS -Directeur de Recherche- DR1, Institut de Chimie - Section 12

Peer review publications – 255

Peer review papers 202

Peer review proceedings –28

Books and Chapters – 20

Patents-5

Invited lectures and communications -357

Invited Lectures-139

Invited Seminars – 61

Communications -94

Posters-63

The top 10 publications, as senior author

1. Y. M. Legrand, A. van der Lee, **M. Barboiu**, Single-crystal X-ray structure of 1,3-dimethylcyclobutadiene by confinement in a crystalline matrix, *Science*, **2010**, 329, 299-302.
2. **M. Barboiu**, Y. Le Duc, A. Gilles, P.-A. Cazade, M. Michau, Y.-M. Legrand, A. van der Lee, B. Coasne, P. Parvizi, J. Post, T. Fyles. An artificial primitive mimic of Gramicidin-A channel, *Nature Comm.* **2014**, 5, 4142. DOI: 10.1038/ncomms5142.
3. E. Licsandru, I. Kocsis, Y.-x. Shen, S. Murail, Y.-M. Legrand, A. van der Lee, D. Tsai, M. Baaden, M. Kumar, **M. Barboiu**, Salt-excluding artificial water channels exhibiting enhanced dipolar water and proton translocation, *J. Am. Chem. Soc.*, **2016**, 138, 5403-5409.
4. **M. Barboiu**, Artificial water channels, *Angew. Chem. Int. Ed.* **2012**, 51, 11674-11676.
5. Y. Le Duc, M. Michau, A. Gilles, V. Gence, Y.-M. Legrand, A. van der Lee, S. Tingry, **M. Barboiu**, Imidazole I-quartet water and proton dipolar channels, *Hot paper. Angew. Chem. Int. Ed.* **2011**, 50(48), 11366-11372.
6. A. Gilles, **M. Barboiu**, Highly Selective Artificial K⁺ Channels: An Example of Selectivity-Induced Transmembrane Potential. *J. Am. Chem. Soc.*, 2016, 138(1), 426-432.
7. A. Cazacu, Y.M. Legrand, A. Pasc, G. Nasr, A. van der Lee, **M. Barboiu**, Dynamic hybrid materials for constitutional selective membranes, *Proc. Natl. Acad. Sci.*, **2009**, 106, 8117-8122.
8. C. Arnal-Herault, A. Pasc-Banu, M. Michau, D.Cot, E. Petit, **M. Barboiu**, Functional G-Quartet Macroscopic Membrane Films, Cover Article, *Angew. Chem. Int. Ed.* **2007**, 46, 8409-8413.
9. C. Arnal-Herault, A. Pasc-Banu, M. Barboiu M. Michau, A. van der Lee, Amplification and Transcription of the Dynamic Supramolecular Chirality of the G-quadruplex, *Angew. Chem. Int. Ed.* **2007**, 46, 4268-4272.
10. A. Cazacu, C. Tong, A. van der Lee, T.M. Fyles, **M. Barboiu**, Columnar Self-Assembled Ureidocrown-ethers – an Example of Ion-channel Organization in Lipid Bilayers, *J. Am. Chem. Soc.*, **2006**, 128, 9541-9548.

The top 10 review publications

1. Y. Zhang, **M. Barboiu**, Constitutional Dynamic Materials. Toward Natural Selection of Function, *Chem. Rev.* **2016**, 116, 809-834.
2. **M. Barboiu**, Artificial Water Channels –incipient innovative developments. *Chem. Commun.*, **2016**, 52, 5657- 5665.
3. **M. Barboiu** and A. Gilles, From natural to bio-assisted and biomimetic artificial water channel systems. *Acc. Chem. Res.* **2013**, 46, 2814–2823.
4. **M. Barboiu**, M. Stadler, J.M. Lehn, Controlled folding, motional and constitutional dynamic processes of polyheterocyclic molecular strands, *Angew. Chem.* 2016, 128, 4200 – 4225; *Angew. Chem. Int. Ed.* **2016**, 55, 4130 – 4154.
5. **M. Barboiu**, The future of membranes - toward the natural selection of functions. *Actualité Chimique*, **2015**, 399, 37-43.
6. E. Mahon, **M. Barboiu**, Synthetic multivalency for biological applications, *Org. Biomol. Chem.*, **2015**, 13, 10590-10599.
7. **M. Barboiu**, Constitutional hybrid materials-toward selection of functions. *Eur J. Inorg. Chem.* **2015**, 1112-1125.
8. Y.M. Legrand, **M. Barboiu**, Self-Assembled Supramolecular Channels: Toward Biomimetic Materials for Directional Translocation, *Chem. Rec.* **2013**, 13(6), 524-538.
9. **M. Barboiu**, Dynamic Interactive Systems - Dynamic selection in hybrid organic-inorganic constitutional networks, Feature Article, *Chem. Commun.* **2010**, 46, 7466-7476.
10. **M. Barboiu**, Multistate and phase change selection in constitutional multivalent systems, *Topics Curr. Chem.*, **2012**, 322, 33-54.

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Peer review papers 202

1. Y. Zhang, **M. Barboiu**, Mechanism Insight into the Constitutional Phase Change Selection of Dynamic Frameworks Libraries, *ACS Omega*, **2018**, 3, 329-333. DOI 10.1021/acsomega.7b01645
2. D. G. Dumitrescu, W.-X. Feng, Y.-M. Legrand, A van der Lee, E Petit, **M. Barboiu**, Pyrene-box capsules for adaptive encapsulation and structure determination of unstable or non-crystalline guest molecules, Highlight paper *CrystEngComm* **2018**, 20, 261-270. DOI: 10.1039/c7ce01741c
3. J. J. Keating IV, M. Sorci, I. Kocsis, A. Setaro, **M. Barboiu**, P. Underhill, G. Belfort, Atmospheric Pressure Plasma - ARGET ATRP Modification of Poly(ether sulfone) Membranes: A Combination Attack", *J. Membrane Sci.*, **2018**, 546, 151-157.
4. Y. Zhang, C.T. Supuran, **M. Barboiu**, Exponential activation of Carbonic Anhydrase by encapsulation in dynamic host-matrices with chiral discrimination, *Chem. Eur. J.* **2018**, 24, 715-720. DOI: 10.1002/chem.201704605.
5. R. Ardeleanu, A. I. Dascalu, A. Neamtu, D. Peptanariu, C. M. Uritu, S. S. Maier, A. Nicolescu, B. C. Simionescu, **M. Barboiu**, M. Pinteala, Multivalent polyrotaxane vectors as adaptive cargo complexes for gene therapy, *Polymer Chem.* **2018**, DOI: 10.1039/C7PY01256J
6. A. Rotaru, G. Pricope, T. N. Plank, L. Clima, E. L. Ursu, M. Pinteala, J. T. Davis and **M. Barboiu**, G-Quartet Hydrogels for Effective Cell Growth Applications, *Chem. Commun.*, **2017**, 53, 12668 – 12671. DOI: 10.1039/C7CC07806D.
7. W. Drożdż, C. Bouillon, C. Kotras, S. Richeter, **M. Barboiu**, S. Clément, A. R. Stefankiewicz, S. Ulrich, Generation of Molecular Cages using Orthogonal Dynamic Covalent Reactions. *Chem Eur. J.* **2017**, 23, 18010-18018. DOI: 10.1002/chem.201703868.
8. Y.-H. Li, Y. Zhang, Y.-M. Legrand, A. van der Lee, J.-J. Jiang, C.-X. Chen, C.-Y. Su, **M. Barboiu**, Hydrophobic metallo-supramolecular Pd₂L₄ Cages for zwitterionic guest encapsulation in organic solvents, *Dalton. Trans.*, **2017**, 46, 15204 – 15207. DOI: 10.1039/C7DT03517A
9. D. Dumitrescu, W.-X. Feng, Y.-M. Legrand, E. Petit, A. van der Lee, **M. Barboiu** Compression of 1,ω-diammonium-(oligo)ethyleneglycol chains within the "Pyrene box" *Eur. J. Org. Chem.* **2017**, 3282–3287. DOI: 10.1002/ejoc.201700397.
10. M. Di Vincenzo, **M. Barboiu**, A. Tiraferri, Y.M. Legrand, Polyol-functionalized thin-film composite membranes with improved transport properties and boron removal in reverse osmosis, *J. Membr. Sci.* **2017**, 540, 71–77. <http://dx.doi.org/10.1016/j.memsci.2017.06.034>.
11. **M. Barboiu**, Canale Artificiale de Apa, (in romanian), *CHIMIA – Revista pentru elevi*, **2017**, 1, 17-23.
12. W.-X. Feng, Z. Sun, Y. Zhang, Y.-M. Legrand, E. Petit, C.-Y. Su, **M. Barboiu**, Bis-15-Crown-5-Ether-Pillar[5]arene K⁺-Responsive Channels. *Org. Lett.*, **2017**, 19(6), 1438-1441. DOI: 10.1021/acs.orglett.7b00352
13. S. Schneider, E.-D. Licsandru, I. Kocsis, A. Gilles, F. Dumitru, E. Moulin, J. J. Tan, J.-M. Lehn, N. Giuseppone, **M. Barboiu**, Columnar Self-Assemblies of Triarylaminas as Scaffolds for Artificial Biomimetic Channels for Ion and for Water Transport. *J. Am. Chem. Soc.*, **2017**, 139, 3721-3727. <http://dx.doi.org/10.1021/jacs.6b12094>
14. W.-X. Feng, A. van der Lee, Y.-M. Legrand, E Petit, C.-Y Su, M. Barboiu, "Pyrene box" cages for the confinement of biogenic amines. *Chem Eur J.* **2017**, 23, 4037-4041. DOI: 10.1002/chem.201700266

15. M. Y. M. Abdelrahim, C. F. Martins, L. A. Neves, C. Capasso, C. T. Supuran, I. M. Coelho, J. G. Crespo, **M. Barboiu**, Supported ionic liquid membranes immobilized with Carbonic Anhydrases for CO₂ transport at high Temperatures, *J. Membr. Sci.*, **2017**, 528, 225-230.
16. Y. Le Duc, E. Licsandru, D. Vullo, **M. Barboiu**, C. T. Supuran, Carbonic anhydrases activation with 3-amino-1H-1,2,4-triazole-1-carboxamides: Discovery of subnanomolar isoform II activators, *Bioorg. Med. Chem.* **2017**, 25 (5), 1681-1686.
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19. Y. Zhang, W.-X. Feng, Y.-M. Legrand, C. T. Supuran, C.-Y. Su, **M. Barboiu**, Dynameric host frameworks for the activation of lipase through H-bond and interfacial encapsulation. *Chem. Commun.*, **2016**, 52, 13768-13770. DOI: 10.1039/C6CC08399D
20. W.-X. Feng, A. van der Lee, Y.-M. Legrand, E. Petit, D. Dumitrescu, C.-Y. Su and **M. Barboiu** Adaptive encapsulation of ω -amino-acids and of their guanidinium-amide congeners, *Org. Lett.*, **2016**, 18, 5556-5559. DOI:10.1021/acs.orglett.6b02802
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25. **M. Barboiu**, Artificial Water Channels –incipient innovative developments. *Chem. Commun.*, **2016**, 52, 5657- 5665. DOI: 10.1039/C6CC01724j.
26. C. R. Tanardi, R. Catana, **M. Barboiu**, A. Ayrat, I. F.J. Vankelecom, A. Nijmeijer, L. Winnubst, Polyethyleneglycol grafting of γ -alumina membranes for solvent resistant nanofiltration, *Microp. Mesop. Mat.* **2016**, 229, 106-116. <http://dx.doi.org/10.1016/j.micromeso.2016.04.024>
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silica and biocompatible electrodes thereof. *Nanoscale*, **2016**, *8*, 5605-5611. DOI: 10.1039/C5NR06977G,

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33. Y. Zhang, **M. Barboiu**, Constitutional Dynamic Materials. Toward Natural Selection of Function, *Chem. Rev.* **2016**, *116*, 809-834. DOI:10.1021/acs.chemrev.5b00168.

34. A. Gilles, **M. Barboiu**, Highly Selective Artificial K⁺ Channels: An Example of Selectivity-Induced Transmembrane Potential. *J. Am. Chem. Soc.*, **2016**, *138*(1), 426-432. DOI: 10.1021/jacs.5b11743

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39. I. Kocsis, A. Rotaru, Y.M. Legrand, I. Grosu, **M. Barboiu**, Supramolecular rulers enabling selective detection of pure short ssDNA via chiral self-assembly. *Chem. Commun.*, **2016**, *52*, 386-389. DOI: 10.1039/C5CC08283H

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54. D. Dumitrescu, F. Dumitru, Y.-M. Legrand, E. Petit, A. van der Lee, **M. Barboiu**, New “Pyrene box” Cages for Adaptive Guest Conformations, *Org. Lett.*, **2015**, 17, 2178-2181. DOI: 10.1021/acs.orglett.5b00779.
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23. **M. Barboiu, Keynote Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, China-Europe Conference on Research and Application of Membrane, **2015**. 19-21 October **2015**, Weihai, China.
24. **M. Barboiu, Invited Lecture**, Self-assembled supramolecular channels - toward hybrid materials for directional translocation, 2nd Korea France Joint Workshop, 2015, NanoBioMaterials Laboratory, Yonsei University, WonJu, Korea. 16-18 October **2015**.
25. **M. Barboiu, Keynote Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Euromembrane **2015**, 06-10 September **2015**, Aachen, Germany.
26. **M. Barboiu, Invited Lecture**, Rubbery Organic Frameworks-ROFs-Tuning the gaz-diffusion through dynameric membranes. Constitutional Dynamic Systems Symposium, 27-28/07/**2015**, Montpellier, France
27. **M. Barboiu, Invited Lecture**, Artificial water Channels, Assises Franco Polonaises de Chimie, Academie Polonaise des sciences à Paris, 23-24/07/**2015**, Paris France.
28. **M. Barboiu, Keynote Lecture**, Molecular encapsulation of dynamic systems inside the crystalline cages. 10th International Symposium on Macrocyclic & Supramolecular Chemistry (ISMSC-10). 28 June-2 July 2015, Strasbourg, France.
29. **M. Barboiu, Keynote Lecture**, Rubbery Organic Frameworks-ROFs-Tuning the gaz-diffusion through dynameric membranes. , North American Membrane Society NAMS-2015 meeting 30 May -3 June, **2015**, Boston, USA.
30. **M. Barboiu, Plenary lecture**, Water a Molecule for life, Academy Lectures, Romanian Academy-Iasi Section, 13 Mars **2015**.
31. **M. Barboiu, Plenary lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Academy Lectures, Romanian Academy, Magna Aula, 10 Mars **2015**.
32. **M. Barboiu, Invited lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, ECI conferences on Advanced Membranes Technology VI: Water Energy and New Frontiers, Siracusa, Sicily, Italy, 8-13 February, **2015**.
33. **M. Barboiu, Plenary Lecture**, Molecular encapsulation of dynamic systems inside the crystalline cages, Journées Bibliographiques de l'Ecole Doctorale Chimie Moléculaire 2015, University Paris VI Sorbonne, 03 February **2015**.

34. **M. Barboiu, Invited Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, 3rd IDA R&D Workshop – Emerging Technologies for Desalination: Advances in New Materials and Systems, Singapore, 8-9 December 2014.
35. **M. Barboiu, Invited Lecture**, Self-assembled supramolecular channels - toward hybrid materials for directional translocation. 3rd International Symposium on Hybrid Materials and Processes, HYMAP 2014, Busan, Korea, 10-13 November **2014**.
36. **M. Barboiu, Invited Lecture**, Constitutional G-quadruplex self-assembly toward functional supramolecular materials, Korea France Joint Workshop, 2014, NanoBioMaterials Laboratory, Yonsei University, WonJu, Korea. 17-18 October **2014**.
37. **M. Barboiu, Keynote Lecture**, Selection and recognition with constitutional multivalent systems, Zhijiang Science Forum-International Forum of Biomedical Materials: Nanobiomaterials and Biomaterials Interfaces (IFBM2014)", October 28-31, **2014**, at Zhejiang University, Hangzhou, China.
38. **M. Barboiu, Keynote Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, **2014 EMS Summer School**, 27 September-03 October **2014**, Cetraro, Italy.
39. **M. Barboiu, Invited Lecture**, Artificial Water Channel Systems, Colloque Franco-Roumain de Chimie Appliquée-COFRROCA **2014**, Montpellier, France, 15-17 September, **2014**.
40. **M. Barboiu, Keynote Lecture**, Rubbery Organic Frameworks-ROFs-Tuning the gas-diffusion through dynamic membranes, 10th International Congress on Membranes and Membrane Processes, ICOM2014, 20-25 July, **2014**, Shouzhou, China.
41. **M. Barboiu, Keynote Lecture**, Self-assembled supramolecular channels - toward hybrid materials for directional translocation, 13th International Conference on Inorganic Membranes ICIM2014, 6-9 July, **2014**, Brisbane, Australia.
42. **M. Barboiu, Keynote Lecture**, Dynamic behaviours and stabilization under confinement within supramolecular cages. 9th International Symposium on Macrocyclic & Supramolecular Chemistry (ISMSC-9). 7-11 June 2014, Shanghai, China.
43. **M. Barboiu, Keynote Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, 2014 Biomimetics & Biomimicry Workshop: Applications for Desalination, 31 May **2014**, Singapore.
44. **M. Barboiu, Keynote Lecture**, Dynamic lectin-recognition of multivalent glyconanoplatfoms "DYNAMIC NANO- AND GLYCO-SCIENCES" SPRING TRAINING SCHOOL - COST/DYNANO, 7-9- April **2014**, Namur, Belgium.
45. **M. Barboiu, Invited Lecture**, Dynamic Constitutional Chemistry of Carbonic Anhydrase Inhibitors. 2nd Carbonic Anhydrase Satellite meeting, October 23-25, **2013**, Napoli, Italy.
46. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions, International Graduate School GRK532 Symposium, Physical Methods for the Structural Investigation of the New Materials CDFa-03-05, Nancy, 10-11-October **2013**.
47. **M. Barboiu**, A.Gilles, Y.M. Legrand, B. Coasne T. Fyles, **Invited Lecture**, Biomimetic Artificial Water and Ion Channel Systems, MEMBRANES FOR LIQUID SEPARATION AND WATER TREATMENT: ENVIRONMENTAL APPLICATIONS AND FUTURE PERSPECTIVES SYMPOSIUM, Torino, 10-11 October **2013**.
48. **M. Barboiu, Invited Lecture**, DYNANO network, DYNANO-GLYCOPHARM Summer School, September30-October 2 **2013**, Biological Research Centre, CSIC, Madrid, Spain.

49. **M. Barboiu, Invited Lecture**, Artificial Water Channels, Future Membranes and membrane Processes Symposium, Sponsored by WCU Program Department of Energy Engineering, Hanyang University, 19 August **2013**, Seoul, Korea.
50. **M. Barboiu**, Rubbery Organic Frameworks-ROFs-Tuning the gaz-diffusion through dynameric membranes, **Invited Lecture**, World Congress on Chemical Engineering WCCE-2013 18-22 August, **2013**, Seoul, Korea.
51. **M. Barboiu, Invited Lecture**, Water in confined media, water channels, 1^{ere} ECOLE PRATIQUE D'ETE LABEX CHEMISYST – POLE CHIMIE BALARD, 1-6 juillet **2013**, Ales, France
52. **M. Barboiu**, Y. Le Duc, A. Gilles, P. A. Cazade, M. Michau, Y. M. Legrand, A. van der Lee, B. Coasne, J. Post, T. Fyles, Artificial water channels: a primitive mimic of Gramicidin-A channel, **Invited Lecture**, North American Membrane Society NAMS-2013 meeting 10-13 June, **2013**, Boise, USA.
53. G. Nasr, T. Macron, **M. Barboiu**, Rubbery Organic Frameworks-ROFs-Tuning the gaz-diffusion through dynameric membranes, **Invited Lecture**, North American Membrane Society NAMS-2013 meeting 10-13 June, **2013**, Boise, USA.
54. **M. Barboiu**, Dynamic Constitutional Chemistry of Carbonic Anhydrase Inhibitors. Carbonic Anhydrase Frontiers Symposium, April 18-20, **2013**, Montecatini Terme, Italy.
55. **M. Barboiu, Invited Lecture**, Dynamic Interactive Systems-toward natural selection of functions, Membrane Material Platforms and Concepts for Energy, Environment, and Medical Applications, 2012 MRS Fall meeting, November 25-30, **2012**, Hynes Convention Center - Boston, Massachusetts
56. **M. Barboiu, Invited Lecture**, Dynamic Interactive Systems-toward natural selection of functions, "French American Innovation Day seminar (FAID 2012), MIT, Bartos Theater, 29-30 November **2012** in Cambridge, Massachusetts
57. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions, "*Supramolecular Symposium: Dynamics and Adaptation*", 4-6 November **2012**, Hangzhou, China.
58. **M. Barboiu, Invited Lecture**, G4-interactive systems and materials, "Conformational diversity and applications of G-quadruplexes" Hotel Antemare SPA, Sitges (Barcelona, Spain) from 6-8 th October **2012**.
59. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions 32nd *Romanian Chemistry Conference, Calimanesti-Caciulata, Roumanie, 3-2 octobre 2012*.
60. **M. Barboiu, Invited Lecture**, Imidazole Quartet - I4 -Water and Proton Dipolar Channels, Joint EMS-NAMS session, Euromembrane-2012 23-27 September, **2012**, London, UK.
61. **M. Barboiu, Invited Lecture**, Dynamique de structuration de l'eau en milieu confiné, 1^{ere} ECOLE PRATIQUE D'ETE LABEX CHEMISYST – POLE CHIMIE BALARD, 10-15 septembre **2012**, Montpellier/Saint-Martin de Londres, France.
62. **M. Barboiu** on behalf of Prof. Cot, **Invited Lecture** Inorganic Membranes 20 years after, Honorary session: Founding fathers of inorganic membranes, International Conference on Inorganic membranes- ICIM2012, 9-13 July, 2012, Enschede , the Netherlands.
63. **M. Barboiu, Plenary Lecture** Dynamic Interactive Systems-toward natural selection of functions, Colloque Franco-Roumain de Chimie appliquée-COFROCA 2012, Bacau, Romania, 27-29 June, **2012**.

64. **M. Barboiu, Invited Lecture**, Adaptive Responsive Membranes, Concepts and applications of stimuli responsive membranes, Summer Workshop, 20-22 June **2012**, San Sebastian, Spain.
65. **M. Barboiu**, T. Macron and G. Nasr, **Invited Lecture**, Dynameric Membranes for Gas Separation: Achieving the Molecular Limit of Constitutional Gaz-Dynamer Interactions, North American Membrane Society NAMS-2012 meeting 10-13 June, **2012**, New Orleans, USA.
66. Y.-M. Legrand, Y. Le Duc, M. Michau, A. Gilles, A. van der Lee, S. Tingry, **M. Barboiu, Invited Lecture**, Imidazole Quartet - I4 - Forming Water and Proton Dipolar Channels, North American Membrane Society NAMS-2012 meeting 10-13 June, **2012**, New Orleans, USA.
- 67. M. Barboiu, Invited Lecture**, Constitutional dynamic multivalent biomimetic systems, Rencontres en Chimie Organique Biologique, RECOB14, Aussois, 18-22 March **2012**.
68. **M. Barboiu, Invited Lecture**, Water and Chemistry toward life, Olympiades Regionales des Chimie 2012, 14 Mars 2012, Lycee Mermoz Montpellier.
69. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions, Symposium "Open Problems in Systems Chemistry", Montpellier, 23-25 January **2012**.
70. P. Tyagi, A. Deratani, D. Bouyer, D. Cot, **M. Barboiu**, T.N.T. Phan, D. Bertin, D. Gigue, D. Quémener, **Invited Lecture**, Dynamic interactive materials - toward self-instructed membranes with pressure-driven tunable porosity and self-healing ability, Symposium "Open Problems in Systems Chemistry", Montpellier, 23-25 January **2012**.
71. **M. Barboiu, Invited lecture**, Dynamic Interactive Systems-toward natural selection of functions, RSC Macrocyclic and Supramolecular Chemistry Meeting-MASC11 **2011**, University of Bath, Great Britain, 19-20 December **2011**.
72. **M. Barboiu, Invited lecture**, Dynamic Interactive Systems-toward natural selection of functions, Cost Conference on Systems Chemistry, Strasbourg, France, 15-17 December **2011**.
73. **M. Barboiu, Invited Lecture**, Dynamic Interactive Systems-toward natural selection of functions, Minisymposium on Mass Transport through Nanocomposite Membranes, FTC (Fusion Technology Center) Hanyang University, Seoul, Korea, 31 October **2011**.
74. **M. Barboiu, Invited lecture**, Biomimetic Constitutional Membranes –toward self-selection of functions 2nd International Symposium on Hybrid Materials and Processes, HYMAP 2011, Busan, Korea, 27-29 October **2011**.
75. **M. Barboiu, Invited Lecture**, Dynamic Interactive Systems-toward natural selection of functions, Action Nationale du CNRS: De la nécessité d'une recherche exploratoire des nouvelles phases et d'edifices nouveaux, Bordeaux, 5,6 October **2011**.
76. **M. Barboiu, Keynote lecture**, Constitutional amplification in lectin/carbohydrate and inhibitor/carbonic anhydrase multivalent platforms, 22nd French-Japanese Symposium, of Medicinal and Fine Chemistry, Rouen, France, 11-14 September **2011**.
77. **M. Barboiu Keynote Lecture**, Systems membranes - dynamic selection in hybrid membrane systems, International Conference on Membranes, ICOM2011, Amsterdam, Netherlands, 24-29 July **2011**.
78. **M. Barboiu, Invited Lecture**, *Adaptive systems: underlying mechanisms and examples*, SIXTH European Practical Summer School of separation and analytical chemistry of Marcoule, France, 17-22 July, **2011**.
79. **M. Barboiu, Invited Lecture**, *Long range interactions as basis for systems with an emerging function*. SIXTH European Practical Summer School of separation and analytical chemistry of Marcoule, France, 17-22 July, **2011**.

80. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions, Joint French-Japan Forum, Chemistry of Functional Organic Chemicals, Strasbourg, France 23-25 June **2011**.
81. **M. Barboiu, Invited Lecture**, Dynamic Interactive Systems-toward natural selection of functions, 11eme Journées scientifiques de Marcoule, ICSM Marcoule, 14-17 June **2011**
82. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems - Dynamic selection in hybrid organic-inorganic constitutional networks, Les Journées Scientifiques 2011 de la Société Chimique de France Section Bretagne – Pays de la Loire, Noirmoutier, France, 6-8 June **2011**.
83. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions, Fourth C. I. Simionescu Symposium- Frontiers in Macromolecular and Supramolecular Science, Romanian Academy, Bucharest, Romania 30 May **2011**.
84. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions, Fourth C. I. Simionescu Symposium- Frontiers in Macromolecular and Supramolecular Science, Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania 31 May- 1 June **2011**.
85. **M. Barboiu, Invited Lecture**, Case studies of successful Korean-European Applications, KORRIDOR, Stimulating and Facilitating the Participation of European Researchers in Korean R&D Programs, Paris, 3 March **2011**.
86. **M. Barboiu, Plenary Lecture**, Self-assembled membranes for technical applications, Indian Membrane Society-European Membrane Society Meeting 2011, Anna University, Chennai, India, 10-11 February, **2011**.
87. **M. Barboiu, Plenary Lecture**, Dynamic Interactive Systems-toward natural selection of functions, International Conference of the Chemical Societies of the South-Eastern European Countries, 15-17 september **2010**, Bucharest Romania.
88. **M. Barboiu, Invited Lecture**, Cycobutadiene- enigma or reality? Romanian Academy, 21 September **2010**, Bucharest, Romania.
89. **M. Barboiu, Keynote Lecture**, Self-organized supramolecular ionic-channels in bilayer and polymeric membranes, North American Membrane Society NAMS-2010 meeting 17-22 July, **2010**, Washington, USA.
90. **M. Barboiu, Invited Lecture**, Dynamic Interactive Systems - toward an adaptive molecular control of transport performances, Gordon Research Conferences: Membranes: Materials and Processes, 25-30 July, **2010**, Colby Sawyer College, New London, USA.
91. Y.M. Legrand, A van der Lee, **M. Barboiu**, Invited Lecture, Confinement de 1,3 diméthylcyclobutadiene dans une matrice cristalline, Colloque de l'Association Française de Cristallographie, Strasbourg, France, 7-10 Juillet **2010**.
92. **M. Barboiu, Plenary Lecture** Systems Membranes, vers le transport constitutionnel adaptatif, Colloque Franco-Roumain de Chimie appliquée-COFROCA 2010, Orleans, France, 7-10 July, **2010**.
93. **M. Barboiu, Invited Lecture**, Systems Membranes, Dynamic selection in hybrid membrane systems, Invited Lecture, European Membrane Summer School, Bucharest, Romania, 14-19 June **2010**.
94. **M. Barboiu, Invited lecture**, Dynamic selection in hybrid membrane systems, E-MRS Meeting, 2010, Symposium T: Advanced hybrid materials: stakes and concepts, Strasbourg, France, 7-11 June **2010**.

95. E. Mahon, **M. Barboiu, Invited Lecture**, Multivalent Biomimetic Glyconanoparticles Platforms as QCM Amplifiers for Lectin-Carbohydrate Interactions, European Science Foundation Workshop , Manipulation of Biomaterials Surface by plasma processing, Iasi, Romania, 26-30 May, **2010**.
96. **M. Barboiu, Invited lecture**, Dynamic Interactive Nanoplatforms, KORANET, Korean Scientific cooperation Network with the European Research Area, 1-2 February, Seoul, **2010**.
97. **M. Barboiu, Invited Lecture**, Systems membranes – Toward Functional Constitutional Devices, International Symposium on Dynamic Chemical Biology, Nalen Conference Center, Stockholm, Sweden, 12-13 October, **2009**
98. **M. Barboiu, Invited Lecture**, Dynameric Membranes, Constitutional materials for CO₂ separation, XXVI EMS Summer School, Membrane Technology for CO₂ Separation, GKSS, 29 September- 2 October 2009, Hamburg/Ratzebourg, Germany, **2009**.
99. **M. Barboiu, Plenary lecture**, Dynamic constitutional materials, crystallization and sol-gel driven self-selection of functional supramolecular architectures. RICCCE XVI, Sinaia Romania, 9-12 September **2009**.
100. **M. Barboiu, Invited Lecture**, Dynamic constitutional membranes, toward an adaptive facilitated transport, "Systems membranes, complex roadmaps toward functional devices, SYMEM 2009, Montpellier, France, 5 September **2009**.
101. **M. Barboiu, Invited Lecture**, Constitutional G-quadruplex self-assembly toward functional supramolecular materials, ESF-FWF Conference, Self assembly of Guanosine derivatives: from biological systems to nanotechnological applications, Universitätszentrum Obergurgl, Innsbruck, Austria, 20-25 June **2009**.
102. **M. Barboiu, Invited Lecture**, Dynamic mesoporous hybrids for self-instructed constitutional membranes, Nanoporous Materials in Energy and Environment NAPEN 2008, Chania, Grece, 12-15 Octobre **2008**.
103. **M. Barboiu, Invited Lecture**, Hybrid Biomimetic Membranes...Past, present and below... HYMAP 2008, Busan, Korea, 26-30 October **2008**.
104. **M. Barboiu, Invited Lecture**, Constitutional Dynamic systems, Conferinta Diaspora in Cercetarea Stiintifica romaneasca, Bucharest, Romania, 26-30 september **2008**.
105. **M. Barboiu, Invited Lecture**, Hybrid Biomimetic Membranes...Past, present and below... E-MRS 2008, Symposium P: Advanced organic and/or inorganic functional materials, Strasbourg, France, 26-30 May **2008**.
106. **M. Barboiu, Invited Lecture**, Hybrid Biomimetic Membranes...Past, present and below... GDR MHOM 2008 on hybrid materials, Biarritz, France 7-9 May, **2008**.
107. **M. Barboiu, Invited Lecture**, Hybrid Biomimetic Membranes...Past, present and below...The IInd EURYIAS 2008, Self organization and selection in evolution of matter molecules and life, International center of Biodynamics, Bucharest, Romania, 29/04-03/05 **2008**.
108. **M. Barboiu, Scientific review**, Biomimetic intelligence, toward lift reconstructed-Nano level: Artificial biomimetic membranes, In Cosmetics, In-Focus conference, Amsterdam, Netherlands, 15-17 April **2008**.
109. **M. Barboiu, Invited Lecture**, Hybrid self-organized membranes : new strategies for promising fuel cell energy applications, Frontier technology for Energy and Environment, Seoul, Korea, 28 Mars **2008**
110. **M. Barboiu, Invited Lecture**, « Beyond a water molecule....».FRENCH-SERBIAN SUMMER SCHOOL, Vrnjanka Banja, *Serbie*, 7-13 October **2007**.

111. **M. Barboiu, Invited Lecture**, « Supramolecular and Dynamic Adaptative Hybrid Membranes». IIIrd EURYI Awardees' Network meeting, *Helsinki*, 26-28 September **2007**.
112. **M. Barboiu, Invited Lecture**, « From superstructures to functions: dynamic constitutional chemistry». RICCE XV, Honorary Symposium-Constantin LUCA, *Sinaia, Romania*, 19-22 September **2007**.
113. **M. Barboiu, Invited Lecture**, « Supramolecular and Dynamic Adaptative Hybrid Membranes». MEDILS-Summer School, *Split, Croatia*, 12-18 august **2007**.
114. **M. Barboiu, Invited Lecture**, « Supramolecular and Dynamic Adaptative Hybrid Membranes». *Congres SFC07 Chimie du Futur, Futur de la Chimie*, Paris, France 16-18 juillet **2007**.
115. **M. Barboiu, Invited Lecture**, « Dynamic Constitutional Supramolecular Membranes». *Marie Curie Wrokshop New Materials for Membranes GKSS research Center Geesthacht*, Germany 4-6 June **2007**.
116. **M. Barboiu, Invited Lecture**, « Dynamic Supramolecular Hybrid Membranes». *MRS-2007 Spring Meeting*, San-Francisco, USA, 9-13 April **2007**.
117. **M. Barboiu, Invited Lecture**, « Dynamic supramolecular materials», the 1st European Young Investigator Awardees Symposium "Ist EURYIAS-2006", "Complexity and Diversity in Matter, Molecules, Life and Society", EURYIAS 2006, *European Science Foundation, Strasbourg*, 6-9 decembre 2006.
118. **M. Barboiu**, Dynamic supramolecular Devices, **Conférence plénaire**, *International Symposium of Analytical Chemistry and Environement Protection*, 20 octobre **2006**, Bucharest, Romania.
119. **M. Barboiu, Invited Lecture**, Hybrid Supramolecular Dynamic Membranes as selective Infomation transfer Devices, 12 reuniun Cientifica Plenaria de Quimica Inorganica de la Real Sociedad Espanola, QIES 06, Barcelona, Spain, 10-14 septembre **2006**.
120. **M. Barboiu, Invited Lecture**, Molecular and supramolecular dynamics- a versatile tool for self-organization of polymeric membranes systems, Proceeding of World Polymer Congress, MACRO 2006, IUPAC Rio de Janeiro, Brazil, 15-22 July **2006**
121. **M. Barboiu, Invited Lecture**, Hybrid Supramolecular Dynamic Membranes, *International Conference on Biosensing and Biodynamics, From Basics to Applications*, Bucharest, Romania, May 18-21 **2006**.
122. L. Cot, **M. Barboiu, Invited Lecture**, New horizons in Membrane science, *International Conference on Biosensing and Biodynamics, From Basics to Applications*, Bucharest, Romania, May 18-21 **2006**.
123. **M. Barboiu, Plenary Lecture**, « From Molecular Information to Hybrid Membranes, as Tools for Information Transfer Devices» *International Conference on Organic Membranes ICOM 2005*, Seoul, Korea, 21-27 August, **2005**.
124. **M. Barboiu, Invited Young Researcher by ESF and Nobel Foundation** *Alfred Nobel Symposium – «Energy in Cosmos and Life»*, Sanga Saby Conference Center and Stockholm University, Sweden, 18-22 June **2005**.
125. **M. Barboiu, Plenary Lecture** « From Molecular Information to Hybrid Membranes, as Tools for Information Transfer Devices». *E-MRS-2005 Spring Meeting Strasbourg, France*, 31 May-5 June **2005**.

126. **M. Barboiu, Invited Lecture**, « Constitutional Dynamic Self-Amplification in the Functional Imine Systems». *CERC3-Young Chemists Workshop, European Science Foundation, Baden-Baden, Germany*, 3-5 mai **2005**.
127. **M. Barboiu, Plenary Lecture** « Constitutional Dynamic Libraries» *14th Romanian International Conference on Chemistry and Chemical Engineering, 22-24 Septembre 2005, Bucharest, Romania*.
128. **M. Barboiu, Conférence sur invitation** « Membranes hybrides de l'information moléculaire aux dispositifs de transfert dirigé» *Colloque NanoHybrides 2 GDR-CNRS 2486 Autrans, France 6-10 juin 2005*.
129. **M. Barboiu, Plenary Lecture** « Dynamic Adaptive Materials for Separation and Biomimetic Nanosystems » *National Romanian Conference, 8-12 octobre 2004, Calimanesti, Romania*.
130. **M. Barboiu, A. Ayral, Conférence plénière sur invitation du Président de la Roumanie et Institut Culturel Roumain**, « Research in Romania in an European Context » *International Conference on Young Migration in Europe, Romanian Cultural Institute, Sinaia, Romania, 14-18 octobre 2004*.
131. **M. Barboiu, Invited Lecture**, « Modulation of coiling/uncoiling molecular motion» *The Third Younger European Chemists Conference" ESRF Grenoble, France 26-29 August 2003*.
132. **M. Barboiu, Invited Lecture**, «Membranes à transport facilité : reconnaissance moléculaire et auto-assemblage» *Colloque Franco-Roumaine Mai 2003, Montpellier, Septembre 2003 Bucarest - Programme Egide Brancusi*.
133. **M. Barboiu Invited Lecture**, « Membranes Hybrides dispositifs à transport facilité». *Colloque NanoHybrides 1 GDR-CNRS 2486 Bordeaux, France 14-15 juin 2004*.
134. **M. Barboiu, C. Guizard, Invited Lecture**, « Matériaux Hybrides : des propriétés aux applications » *Ecole d'été Galerie et Ecole Thématique" du CNRS- Carcans-Maubuisson, France 14-19 Septembre 2003*.
135. **M. Barboiu Invited Lecture**, « Membranes hybrides à transport facilité» *Colloque NanoHybrides 0 GDR-CNRS 2486 Carry le Rouet, France 2-6 juin 2003*.
136. **M. Barboiu, Invited Lecture**, « Nanomatériaux, applications aux technologies à membrane » *National Chemistry Conference, Calimanesti-Caciulata, Roumanie, 23-25 octobre 2002*.
137. N. Hovnanian, C. Barboiu, **M. Barboiu**, S. Cerneaux, C. Guizard, O. Villamo, M. Yan Chun Wan, "Facilitated transport membranes based on organic inorganic hybrid materials with specific solute transport properties", **Conférence plénière - 28th International Conference of the Slovak Society of Chemical Engineering 2&-25th May 2001 Tatranské Matliare Slovakia**.
138. C. Guizard, **M. Barboiu**, A. Bac, N. Hovnanian, «Hybrid organic-inorganic membranes with specific transport properties. Applications in separation and sensor technologies. », **Conférence plénière - International Conference on Inorganic Membranes, 26-30 Juin 2000 Montpellier, France**.
139. **M. Barboiu, Plenary Lecture**, « Molecular Recognition and Self assembling a new challenge in facilitated membrane transport », *XXVth National Scientific Conference, 6-8 oct. 1999, Calimanesti, Roumanie*.

Invited Seminars- 61

1. **M. Barboiu, Invited seminar**, Dynamic networks for biomolecular recognition, Beijing Normal University (Host: Prof. Qing-Zheng Yang, Beijing, 05 January, 2018).

2. **M. Barboiu, Invited seminar**, Dynameric networks for biomolecular recognition, Tsinghua University (Host: Prof. Huaping Xu), Beijing, 04 January, 2018.
3. **M. Barboiu, Invited seminar**, Artificial Water Channels, Institute of Chemistry, Chinese Academy of Sciences, Host : Prof. De-Xian Wang, Beijing, 03 January, 2018.
4. **M. Barboiu, Invited seminar**, Artificial Water Channels, Universite de Lorraine, Nancy, France, Prof. Andreea Pasc, 29 Novembre **2017**.
5. **M. Barboiu, Invited seminar**, Artificial Water Channels, European Institute for Chemistry and Biology, Bordeaux, France, Dr. Ivan Huc, 17 June **2017**.
6. **M. Barboiu, Invited Lecture**, Artificial Water Channel Systems, University of Barcelone, Prof. Eliseo Ruiz, 11 Mai **2017**, Barcelona, Spain.
7. **M. Barboiu, Invited Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Ressenlaer Polytechnic Institute, Prof. Steve Cramer, Troy, NY, USA 28 Mars **2017**.
8. **M. Barboiu, Invited seminar**, Molecular encapsulation of dynamic systems inside the crystalline cages, Shanghai University, Prof. Hegui Gong, 05 January **2017**.
9. **M. Barboiu, Invited Lecture, Dynamic Constitutional Frameworks**, Fudan University, Prof. Jun Li Hou. Shanghai, China. 04 January **2017**.
10. **M. Barboiu, Invited Lecture**, Artificial Water Channels, Sun Yat Sen University, Doctoral School, 10 November **2016**, Guangzhou, China.
11. **M. Barboiu, Invited Lecture**, Artificial Water Channel Systems, SUSTC University, Prof. Wei Jiang, 31 October **2016**, Shenzen, China.
12. **M. Barboiu, Invited seminar**, Molecular encapsulation of dynamic systems inside the crystalline cages, Institut des Sciences et Ingerie Suairespramoleculaires, Strasbourg, France Prof. Jean-Marie Lehn, 08 December **2015**.
13. **M. Barboiu, Invited Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Hong Kong University, Prof. Chuyang Y. Tang, 24 November **2015**, Hong Kong.
14. **M. Barboiu, Invited Lecture**, NSA Research Overview, Sun Yat Sen University, Prof. Chuyong Su, 18 November **2015**, Guangzhou, China.
15. **M. Barboiu, Invited Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Fudan University, Prof. Jun Li Hou. 12 November **2015**, Shanghai, China.
16. **M. Barboiu, Invited Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Ressenlaer Polytechnic Institute, Dr. George Belfort, Troy, NY, USA 05 June **2015**.
17. **M. Barboiu, Invited Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Penn State Universsity, State College, PA, Prof. Manish Kumar, USA 08 June **2015**.
18. **M. Barboiu, Invited Lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Temple Universsity, Philadelphia, PA, Prof. Marc Ilies, USA 10 June **2015**.
19. **M. Barboiu, Invited Lecture**, G-Quadruplex-what else..., Maryland University, Washington DC, DC, Prof. Jeff Davis, USA 12 June **2015**.

20. **M. Barboiu**, **Invited lecture**, From Natural to Bioassisted and Biomimetic Artificial Water Channel Systems, Lawrence Livermore National Laboratory, Bioscience and Biotechnology Division Livermore. Dr. F. Fornassiero, 3 April, **2015**.
21. **M. Barboiu**, **Invited seminar**, Molecular encapsulation of dynamic systems inside the crystalline cages, European Institute for Chemistry and Biology, Bordeaux, France, Dr. Ivan Huc, 20 January **2015**.
22. **M. Barboiu**, Invited seminar, Dynamic Interactive Systems-toward natural selection of functions, Prof. Kim Il, Busan University Korea, 9 November **2014**.
23. **M. Barboiu** Invited seminar, Artificial Water Channels, Prof. Yong Soo Kang, FTC (Fusion Technology Center) Hanyang University, Seoul, Korea, 16 october **2014**.
24. Y.M. Legrand, **M. Barboiu**, Invited seminar, Dynamic Interactive Systems-toward natural selection of functions, Prof. Ion Grosu, University Babes Bolyai, Cluj Napoca, Romania, 15 Mai **2014**.
25. **M. Barboiu** Invited seminar, Glyconanoparticules-sugar protein interaction at nano level, Prof. Ion Grosu, University Babes Bolyai, Cluj Napoca, Romania, 15 Mai **2014**.
26. **M. Barboiu**, Invited lecture, Self-assembled biomimetic channels and materials, Cours de chimie de recyclage, ICSM, Marcoule 16 Janvier **2014**.
27. **M. Barboiu**, Invited lecture, Dynamic Constitutional Systems, Department of Chemistry, Ecole Polytechnique Palaiseau, France, 29 Novembre **2013**.
28. **M. Barboiu**, Invited plenary lecture, Dynamic constitutional systems-toward biomimetic ion- and water channels, Lehn Institute for Advanced Materials, Sun Yat Sen University, Guangzhou, China, 31 Octobre **2013**.
29. **M. Barboiu**, Invited plenary lecture, Dynamic constitutional Materials, Lehn Institute for Advanced Materials, Sun Yat Sen University, Guangzhou, China, 29 Octobre **2013**.
30. **M. Barboiu**, Invited seminar, Dynamic Interactive Systems-toward natural selection of functions, Prof. Carole Arnal-Herault, ENSIC Nancy, France, 17 Mai **2013**.
31. Y.M. Legrand, A. Gilles, E. Petit, A.van der Lee, **M. Barboiu**, Invited seminar Cyclobutadiene : Eternellement éphémère?, Prof Carlo Adamo, ENSCP Paris, Lanoratoire d'Electrochimie, Chimie des Interfaces, 22 Novembre **2011**.
32. **M. Barboiu**, Invited seminar, Dynamic Interactive Systems-toward natural selection of functions, Prof. Bruno Andrioletti, ICBMS-UMR5246-Université Claude Bernard-Lyon 1, France, 17 november **2011**.
33. **M. Barboiu**, Invited seminar, Dynamic Interactive Systems-toward natural selection of functions, Samsung Advanced Institute of Technology- SAIT Suwon, Korea, 24 october **2011**.
34. **M. Barboiu**, Invited seminar, Dynamic Interactive Systems-toward natural selection of functions, Korean Institute for Energy Research, Daejon, Korea, 25 october **2011**.
35. **M. Barboiu**, Invited seminar, Dynamic Interactive Systems-toward natural selection of functions, Prof. Ion Grosu, University Babes Bolyai, Cluj Napoca, Romania, 6 september **2011**.
36. **M. Barboiu**, D. Quemener, Invited lecture, Project STREAM, *Institut of Macromolecular Chemistry, Petru Poni, Iasi, Roumanie, 24 janvier 2011*.
37. **M. Barboiu**, Invited lecture, **Prof. Marc Salle** and **Dr. Narcis Avarvari**, Dynamic constitutional materials, crystallization and sol-gel driven self-selection of functional supramolecular architectures, University of Angers, France 30, Avril 2010.

38. **M. Barboiu**, Invited lecture, **Prof. Nicolas Giuseppone**, Dynamic constitutional materials, crystallization and sol-gel driven self-selection of functional supramolecular architectures. Institut Charles Sadron, Strasbourg France, 16 december 2009.
39. **M. Barboiu**, E. Mahon, Invited Lecture, **Dr. Teodor Aastrup**, Dynamic materials for sensing applications, ATTANA AB, 14 october 2009
40. **M. Barboiu**, Invited lecture, **Prof. Gheorghe Nechifor**, From self-organized to constitutional membranes- toward self-adaptive facilitated transport, *University Politehnica of Bucharest, Romania, 4 Mai 2009.*
41. **M. Barboiu**, Invited lecture, **Prof. Gheorghe Nechifor**, *Dynamic and hybrid polymers for constitutional recognition, University Politehnica of Bucharest, Romania, 5 Mai 2009.*
42. **M. Barboiu**, Invited lecture, **Prof. Gheorghe Nechifor**, *Dynamic chemical devices, University Politehnica of Bucharest, Romania, 6 Mai 2009.*
43. **M. Barboiu** Invited lecture, **Prof Christine Mousty**, Dynamic hybrid materials for constitutional selective membranes, *Université Blaise Pascal, Clermont Ferrand, France 3 December 2008.*
44. **M. Barboiu**, Invited lecture, **Prof Yong Soo Kang**, From self-organized to constitutional membranes- toward self-adaptive facilitated transport, *Hanyang University, Seoul, Korea, 5 November 2008.*
45. **M. Barboiu** Invited lecture, **Prof Yong Soo Kang**, *Dynamic and hybrid polymers for constitutional recognition, Hanyang University, Seoul, Korea, 4 November 2008.*
46. **M. Barboiu**, Invited lecture, **Prof Olof Ramstrom**. Design, Synthesis and properties of adaptative supramolecular nanosystems, *Royal Institute of Technology, KTH-Stockholm, Sweden, 4 June 2008.*
47. **M. Barboiu**, Invited lecture, **Dr. Pierre Rabu**. Hybrid Biomimetic Membranes...Past, present and below..., *Institut de Physique et Chimie des Matériaux, IPCMS, Strasbourg, France, 18 janvier 2008.*
48. **M. Barboiu**, Invited lecture, **Prof. Robert Corriu**. « Hybrid supramolecular dynamic membranes as selective information transfer devices » *Séminaire de l'Ecole Doctorale 459 Sciences Chimiques et Physiques, Montpellier, France, 02 Novembre 2006.*
49. **M. Barboiu**, Invited lecture, **Prof. Jonathan Nitszche**. « SUPRACOMBIMAT » methodology toward functional materials *Université de Geneve, Geneve, Swiss, 30 mars 2006.*
50. **M. Barboiu**, Invited lecture, **Prof. Carles Miravittles**. Constitutional dynamic self-amplification in the dynamic constitutional libraries, *Institut de Ciencia de Materials de Barcelona , Barcelona, Spain, 5 mai 2006.*
51. **M. Barboiu**, Invited lecture, **Prof. Bogdan Simionescu**. « Membranes hybrides adaptatifs » *Institut Petru Poni, Iasi, Roumanie, 16 septembre 2005..*
52. **M. Barboiu**, Invited lecture, **Prof. Philippe Miele**. « Nanomatériaux hybrides adaptatifs » *Journée de l'Ecole Doctorale de Chimie de Lyon (ED206) Lyon, France, 25 May 2005.*
53. **M. Barboiu**, Invited lecture, **Prof. Armand Lattes**. « Matériaux hybrides et dispositifs dynamiques » *Université Paul Sabatier Toulouse, France, 1 Mars 2005.*
54. **M. Barboiu** , Invited lecture, **Prof. Stéphane Vincent**. « Matériaux hybrides dynamiques » *Facultés Universitaires Notre Dames de la Paix, Namur, Belgium, 30 Mai 2005.*

55. **M. Barboiu**, Invited lecture, **Dr. Pierre Aimar** « Membranes hybrides dispositifs à transport facilité » *Université Paul Sabatier Toulouse, France, 10 Juin 2004.*
56. **M. Barboiu**, Invited lecture, **Prof. Constantin Luca** « Nanomatériaux, applications aux technologies à membrane » *Université Politehnica de Bucarest, France, 25 Mai 2004.*
57. **M. Barboiu**, Invited lecture, **Prof. Claudiu Supuran.** « Modulation of coiling/uncoiling molecular motion » *Université de Florence, Italie, 18 Mai 2003.*
58. **M. Barboiu**, Invited lecture, **Prof. Luca Prodi** « Dispositifs dynamiques fonctionnels » *Université de Bologne, Italie, 18 Mai 2003.*
59. **M. Barboiu, T. Thami** Invited lecture, Matériaux à reconnaissance moléculaire et auto-assemblés » *CEA Marcoule, France, Mai 2003.*
60. **M. Barboiu**, Invited lecture, **Prof. Jean-Marie Lehn**, « Membranes à transport facilité : reconnaissance moléculaire et auto-assemblage » *Collège de France, Université Louis Pasteur, Strasbourg, 07 Mai 2001.*
61. **M. Barboiu**, Invited lecture, **Prof. Jean-Marie Lehn**, « Nano-mechanical devices ». *Collège de France, Université Louis Pasteur, Strasbourg, 06 juillet 2001.*

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1. Y. Shen, I. Kocsis, **M. Barboiu** and M. Kumar, Functional Reconstitution and Characterization of Artificial Proton Channels in Artificial Membranes, 2017 AIChE Annual Meeting, 29 October - 3 November **2017**, Minneapolis, MN, USA.
2. I. Kocsis, M. Sorci, H. Vanselous, S. Murail, S. Sanders, E. Licsandru, Y. M. Legrand, A. van der Lee, M. Baaden, P. Petersen, **M. Barboiu** and G. Belfort, Dipole Oriented Water Wires Confined in Artificial Chiral Membrane Channels. 2017 AIChE Annual Meeting, 29 October - 3 November **2017**, Minneapolis, MN, USA.
3. I. Kocsis, Y.-M. Legrand, **M. Barboiu**, Artificial water channels as simple tools for biomimetic membranes, 11th International Congress on Membranes and Membrane Processes, ICOM2017, 30 July- 5 August, **2017**, San Francisco, USA
4. Y.-M. Legrand, A. Gilles, Z. Sun, I. Kocsis, **M. Barboiu**, Highly Selective Artificial K⁺ Channels within bilayer membranes, 11th International Congress on Membranes and Membrane Processes, ICOM2017, 30 July- 5 August, **2017**, San Francisco, USA.
5. **M. Barboiu**, Highly Selective Biomimetic Artificial K⁺ Channels, Molecular Recognition & Self-Assembly Symposium, 253rd American Chemical Society National Meeting, 2-6 April, **2017**, San-Francisco, CA, USA.
6. **M. Barboiu**, Artificial water channels exhibiting enhanced dipolar water translocation, Novel Membrane Materials & Processes for Water Purification Symposium, 253rd American Chemical Society National Meeting, 2-6 April, **2017**, San-Francisco, CA, USA.
7. **M. Barboiu**, Rubbery Organic Frameworks-ROFs, ECI Conference Series, Separations Technology IX: New Frontiers in Media, Techniques, and Technologies, 5-10 March **2017** Albufeira, Portugal.
8. **M. Barboiu**, Artificial Water channels, Congres 2015 de la Société Chmique de France. Recent highlights in Chemistry, 7-9 July, **2015** Lille, France.
9. **M. Barboiu**, Stabilization of reactive/conformationally dynamic structures inside the rigid crystalline molecular cages, MRS Spring Meeting 2015, symposium MM: Crystal Engineering: Design, New Materials and Applications, 5-10 April **2015**, San-Francisco, USA.

10. **M. Barboiu**, From Natural to Bioassisted and Biomimetic Artificial Water Channels, MRS Spring Meeting 2015, symposium HH. Supramolecular Materials: Assembly and Dynamics, 5-10 April **2015**, San-Francisco, USA.
11. E. LICSandRU, S. TINGRY, **M.BARBOIU**, S. SCHNEIDER, E. MOULIN, N. GIUSEPPONE Supramolecular nanofibrils-toward nanoscaled electrode systems. MATERIAUX 2014, Montpellier, France, 24-28 November, **2014**.
12. M. Yahia, H. Osman, S.Cerneaux, **M. Barboiu**, Membrane separation and extraction of lanthanides with constitutional dynamic networks. 10e jour de l'Ecole Doctorale ED459, Montpellier, France, 19-20 Novembre **2014**.
13. Z.H. Sun, **M. Barboiu**, Design, Construction, Self-assembly of Cholesteryl-modified Ureido Crown Ethers and their Application in Ionic Transport, Self-Assembly of Biomolecules, Balard Chemistry Conferences, 12-15 October **2014**, La Grande Motte, France.
14. **M. Barboiu**, A. Mehdi, D. Dumitrescu Dynamic Nanoplatfoms for Multivalent Biorecognition, Journées Présentations et bilans des projets lauréats 2012, 2013 et 2014 du LabEx CheMISyst, Montpellier, France 6-8 october 2014
15. **M. Barboiu**, B. Coasne, J.-Y. Winum, A. van der Lee, Y.-M. Legrand, Zhanhu Sun Chiral water systems – CHIRAWATER, Journées Présentations et bilans des projets lauréats 2012, 2013 et 2014 du LabEx CheMISyst, Montpellier, France 6-8 october 2014
16. **M. Barboiu**, F. Bonnete, T. Zemb, Canaux à eau synthétiques polarisés en systèmes lipidiques : vers une diode à eau Journées Présentations et bilans des projets lauréats 2012, 2013 et 2014 du LabEx CheMISyst, Montpellier, France 6-8 october 2014.
17. D. AILINCĂI, L. MARIN, D. PEPTĂNARIU, D. STAN, C. A. CONSTANTINESCU, M. CĂLIN, M. PINTEALĂ, **M. BĂRBOIU** Synthèse et caractérisation d'un nouveau transporteur non-viral d'ADN, à base de benztrialdehyde, Jeffamine D et polyéthylèneimine (PEI) ramifié. Colloque Franco-Roumain de Chimie Appliquée-COFRROCA 2014, Montpellier, France, 15-17 September, **2014**.
18. E. LICSandRU, S. TINGRY, **M.BARBOIU**, S. SCHNEIDER, E. MOULIN, N. GIUSEPPONE Supramolecular nanofibrils-toward nanoscaled electrode systems. Colloque Franco-Roumain de Chimie Appliquée-COFRROCA 2014, Montpellier, France, 15-17 September, **2014**.
19. Cristina M. URITU, Rodinel ARDELEANU, Manuela CALIN, Narcisa Laura MARANGOCI, Bogdan MINEA, Stelian S. MAIER, **M.BARBOIU**, Mariana PINTEALA Des nanovecteurs à base de β -cyclodextrine, polyéthylène imine et polyéthylène glycol pour thérapie génique. Colloque Franco-Roumain de Chimie Appliquée-COFRROCA **2014**, Montpellier, France, 15-17 September, **2014**.
20. A. CRISTIAN, S. CERNEAUX, **M. BARBOIU** Membranes composites en couches minces pour le dessalement de l'eau Colloque Franco-Roumain de Chimie Appliquée-COFRROCA 2014, Montpellier, France, 15-17 September, **2014**.
21. **M. Barboiu**, Y. Le Duc, A. Gilles, P.-A. Cazade, M. Michau, Y. M. Legrand, A. van der Lee,¹ B. Coasne, J. Post, T. Fyles An artificial primitive mimic of Gramicidin-A channel. 10th International Congress on Membranes and Membrane processes, ICOM2014, 20-25 July, **2014**, Shouzhou, China.
22. M. Yahia, H. Osman, S.Cerneaux, **M. Barboiu**, Membrane separation and extraction of lanthanides with constitutional dynamic networks. 10th International Congress on Membranes and Membrane Processes, ICOM2014, 20-25 July, **2014**, Shouzhou, China.
23. E. Licsandru, Y.-X. Shen, **M. Barboiu**, M. Kumar. Functional reconstitution and characterization artificial water channels for desalination. 10th International Congress on Membranes and Membrane processes, ICOM2014, 20-25 July, **2014**, Shouzhou, China.

24. A. van der Lee, D. Dumitrescu, Y.M. Legrand, E. Petit, **M. Barboiu**, Pressing variable-sized diammonium alkane springs into fixed-size hydrogen-bonded molecular containers, 23rd Congress and General Assembly of the International Union of Crystallography, 5-12 August **2014**, Montreal, Canada.
25. **M. Barboiu**, The Color of Self-Assembly- Real-Time Optical Detection of Stabilized Artificial G-Quadruplexes Under Confined Conditions, MRS Spring meeting 2014, symposium YY Meeting the Challenges of Understanding and Visualizing Mesoscale Phenomena, 20-25 April **2014**, San-Francisco, USA.
26. **M. Barboiu**, Rubbery Organic Frameworks-ROFs-Tuning the Gaz-Diffusion through Dynameric Membranes, MRS Spring meeting 2014, symposium I Materials for Carbon Capture, 20-25 April **2014**, San-Francisco, USA.
27. Z. Mouline, D. Quemener, **M. Barboiu**, Design of block copolymer self-assemblies - Toward novel membrane architectures and properties, 3rd International Symposium on Ceramics Nanotune Technology, March 2-4, **2014**, Nagoya Institute of Technology, Nagoya, Japan.
28. **M. Barboiu**, A. Mehdi, D. Dumitrescu Dynamic Nanoplatfoms for Multivalent Biorecognition, Journées du LabEx CheMISyst "Rapports d'étape, Perspectives 2014 et Evolution" 3 mars **2014**, IEM – Montpellier, France
29. **M. Barboiu**, B Dynamic hybrid materials for constitutional self-instructed membranes, MRS Meeting, Symposium NN San Francisco, USA, 1-5 April, **2013**.
30. **M. Barboiu**, Biomimetic hybrid membrane systems-toward natural selection of functions, MRS Meeting, Symposium PP San Francisco, USA, 1-5 April, **2013**.
31. T. Macron, M. Drobek, S. Condom, A. Julbe, **M. Barboiu**, Gas separation trough ceramic supported dynameric membranes, EUROMAT2011, European Congress on Advanced Materials and Processes. Montpellier, France, 12-15 September **2011**.
32. **M. Barboiu**, Dynameric membranes: toward an adaptive constitutional transport, International Conference on Membranes, ICOM2011, Amsterdam, Netherlands, 24-29 July **2011**.
33. **M. Barboiu**, Dynamic interactive systems-dynamic selection in hybrid organic-inorganic constitutional networks, Hybrid Materials **2011**, Strasbourg, France, 6-10 March **2011**.
34. **M. Barboiu**, Membranes mésoporeuses nanostructures dynamiques, Matériaux 2010, Nantes, 18-22 octobre **2010**, France.
35. C. Arnal-Herault, M. Michau, A. Pasc, M. Barboiu, Membranes dynamiques adaptatives nanostructurées à base des G-quadruplexes, Matériaux 2010, Nantes, 18-22 octobre **2010**, France.
36. T. Macron, G. Nasr, **M. Barboiu**, Dynameric memnbranes for gas separation: structural and geometric behaviours, Proceeding of European Membrane Summer School, Bucharest, Romania, 14-19 June 2010
37. Y.M. Legrand, A. Cazacu, A. Pasc, G. Nasr, A. van der Lee, **M. Barboiu**, Constitutional self-instructed dynamic membranes toward adaptive ion-channel devices, Proceeding of European Membrane Summer School, Bucharest, Romania, 14-19 June 2010.
38. Y. Le Duc, E. Mahon, S. Mihai, Y.M. Legrand, S. Tingry, A. van der Lee, **M. Barboiu**, Self-organized supramolecular ionic-channels in bilayer and polymeric membranes, Proceeding of European Membrane Summer School, Bucharest, Romania, 14-19 June 2010.
39. M. Michau, **M. Barboiu**, Self-organized hybrid proton exchange membranes, exhibiting high ionic conductivity, MRS Spring Meeting 2010, San-Francisco, USA, 5-9 April, 2010.

40. **M. Barboiu**, Dynamic biomimetic membranes: toward an adaptive ion-channels systems, MRS 2010 Spring Meeting, San-Francisco, USA, 5-9 April, 2010.
41. E. Mahon, **M. Barboiu**, Multivalent Biomimetic Glyconanoparticle Platforms as QCM Amplifiers for Lectin-Carbohydrate Interactions, MRS 2010 Spring Meeting, San-Francisco, USA, 21-25 March, 2010.
42. M. Michau, **M. Barboiu**, Self-organized hybrid proton exchange membranes, exhibiting high ionic conductivity, ACS 2010 Spring Meeting, San-Francisco, USA, 21-25 March, 2010.
43. M. Barboiu, Dynamic biomimetic membranes: toward an adaptive ion-channels systems, ACS 2010 Spring Meeting, San-Francisco, USA, 21-25 March, 2010.
44. **M. Barboiu**, Dynameric Membranes: toward an adaptive constitutional transport, Euromembrane 2009, Montpellier, France 6-10 september, 2009.
45. Y. M. Legrand, A. Cazacu, A. Pasc, **M. Barboiu**, Constitutional self-instructed membranes-toward adaptive ion-channel devices, Euromembrane 2009, Montpellier, France 6-10 september, 2009.
46. Y. Leduc, **M. Barboiu**, Dynamic biomimetic membranes: toward an adaptive ion-channels systems, Euromembrane 2009, Montpellier, France 6-10 September, 2009.
47. S. Mihai, Y. Leduc, **M. Barboiu**, Dynamic biomimetic membranes: toward an adaptive neuroreceptors systems, Euromembrane 2009, Montpellier, France 6-10 September, 2009.
48. G. Nasr, C. Charmette, J. Sanchez, **M. Barboiu**, Dynameric Materials for CO₂ separation Membranes: toward an adaptive transport membranes, Euromembrane 2009, Montpellier, France 6-10 september, 2009.
49. **M. Barboiu**, Dynamic hybrid materials for constitutional selective membranes, Aseanian Membrane Society Conference AMS 5, Kobe, Japan, 12-14 July 2009
50. **M. Barboiu**, Dynamic hybrid materials for constitutional selective membranes, *Advanced Membrane Technology, ECI, Trondheim, Norway*, 7-12 Juin 2009
51. **M. Barboiu**, Dynamic hybrid materials for constitutional selective membranes, *MRS-2009 Spring Meeting, Symposium MM*, San-Francisco, USA , 12-17 April 2009
52. **M. Barboiu**, Hybrid Biomimetic Membranes...Past, present and below...1st International Conference on Multifunctional Hybrid and nanomaterials, Tours, France, 15-19 March **2009**.
53. L. Bosch, P. Rabu, **M. Barboiu**, Self-assembly of polyfunctional magnetic devices, 2nd EUCHEMS Chemistry Congress, September 16-20, 2008, Torino, Italy.
54. E. Mahon, R. Caraballo, O. Ramstrom, **M. Barboiu**, Dynamic Carbohydrate Systems and their lectin recognition, 2nd EUCHEMS Chemistry Congress, September 16-20, 2008, Torino, Italy.
55. **M. Barboiu**, Hybrid Biomimetic Membranes...Past, present and below...ICOM 2008, International Conference on Membranes 2008, Honolulu, USA, 12-18 July **2008**.
56. **M. Barboiu**, Hybrid self-organized membranes: new strategies for promising fuel cell energy applications, ICOM 2008, International Conference on Membranes 2008, Honolulu, USA, 12-18 July 2008.
57. **M. Barboiu**, Constitutional transcription of nucléobases self-assembly codes in functional hybrid materials, I-Sup 2008, Innovation for Sustainable Production 2008, Bruges Belgium, 22-25 April **2008**.

58. **M. Barboiu**, Hybrid Biomimetic Membranes...Past, present and below...I-Sup 2008, Innovation for Sustainable Production 2008, Bruges Belgium, 22-25 April **2008**.
59. C.J. Muvdi-Nova, D. Paolucci-Jeanjean, **M. Barboiu**, M.P. Belleville, M. Rivallin, G. Rios, Affinity chromatography with a hybrid chitosane/ceramic membrane, 7th European Congress of Chemical engineering, Copenhagen, Denmark, 16-20 september **2007**.
60. C. Arnal-Herault, **M. Barboiu**, Constitutional sol-gel transcription of nucleobase self-assembly codes, *International Symposium on Macrocyclic and Supramolecular Chemistry*, Salice Terme, Italy, June 24-29 **2007**.
61. **M. Barboiu**, Supramolecular dynamic membranes as information transfer devices, 1st *European Chemistry Congress*, Budapest, Hungary, 27-31 august **2006**.
62. A. Cazacu, M. Michau, C. Arnal-Herault, A. Pasc-Banu, A. Meffre R. caraballo, A. Pasc, and **M.Barboiu**, Hybrid supramolecular dynamic membranes as selective information transfer devices, *Euromembrane 2006*, Giardini Naxos, Taormina, Italy, 24-28 September 2006.
63. A. Cazacu, M. Michau, C. Arnal-Herault, A. Pasc-Banu, A. Meffre and **M.Barboiu**, Molecular-Channels in Hybrid Supramolecular Membranes, 9th *International Conference on Inorganic membranes (ICIM9)*, Lillehammer, Norway, 25-29 June **2006**, proceeding book, p 78.
64. A. Cazacu, A. Pasc-Banu, A. Meffre and **M.Barboiu**, Selective Na⁺/K⁺ transport in hierarchically nanostructured membranes 9th *International Conference on Inorganic membranes (ICIM9)*, Lillehammer, Norway, 25-29 June **2006**, proceeding book, p 80.
65. G. Nasr, **M. Barboiu**, T. Ono, J.-M. Lehn, Membranes Polymères Dynamiques pour Transport Facilité, 5^{ème} *Conference Internationale sur la Science des matériuax (CSM5)* Beyrouth, Liban, 17-19 mai **2006**.
66. A. Cazacu, A. Pasc-Banu, M. Barboiu, Membranes hiérarchiques nano-structurées : transport sélectif de Na⁺/K⁺ Colloque MHOM1, La Grande Motte, 9-11 mai **2006**.
67. C. Arnal-Herault, M. Michau, A. Pasc-Banu, M. Barboiu, Matériaux hybrides nano-structurés par auto-assemblage de nucléobases : transcription inorganique de l'information moléculaire, Colloque MHOM1, La Grande Motte, 9-11 mai **2006**.
68. M. Michau, C. Arnal-Herault, R. Caraballo, **M. Barboiu**, Membranes hybrides auto-organisées appliquées au transport sélectif d'espèces ioniques, Colloque MHOM1, La Grande Motte, 9-11 mai **2006**.
69. **M. Barboiu**, « Constitutional dynamic self-amplification in the dynamic terpyridine combinatorial libraries » 30th *International Symposium on Macrocyclic Chemistry*, Dresden, Germany 17-21 July 2005.
70. M. Michau, C. Arnal-Herault, R. Caraballo, **M. Barboiu** « Elaboration de membranes hybrides auto-organisées appliquées au transport sélectif d'espèces ioniques ». *Colloque NanoHybrides 2 GDR-CNRS 2486 Autrans, France 6-10 juin 2005*.
71. **M. Barboiu** « Evolution des systèmes organiques vers des nanomatériuax polyfonctionnels *Entretiens de Synthèse Organique et de prospective des 35, ESYOP 35, Nouan le Fouzelier, France, 20-23 mars 2005*
72. **M. Barboiu** « Mouvements moléculaires de contraction decontraction contrôlées par modulation ionique » *Journées de la Division de Chimie de coordination de la SFC, Versaille, France, 13-14 Janvier 2005*.
73. **M. Barboiu** « Hybrid Supramolecular membranes as selective biomimetic transport devices 8th *International Conference on Inorganic Membranes, Cincinnati, Ohio, USA, July 18-22 2004*.

74. **M. Barboiu** « Hybrid Supramolecular Membranes as Biomimetic Transport Devices » *XIIth International Symposium on Supramolecular Chemistry, Notre Dame University, South-Bend, Indiana USA, 25-30 July 2004.*
75. **M. Barboiu** «Self-organized hybrid macrocyclic membrane materials». *28th International Symposium on Macrocyclic Chemistry, Gdansk, Pologne 13-18 Juillet 2003.*
76. **M. Barboiu**, « Membranes à transport facilité : reconnaissance moléculaire et auto-assemblage »- Conférence IEM, *Colloque Franco-Roumaine Mai 2003, Montpellier, Septembre 2003 Bucarest - Programme Egide Brancusi.*
77. **M. Barboiu**, « Membranes hybrides à transport facilité » - *Colloque NanoHybrides 0 GDR-CNRS 2486 2-6 juin 2003 Carry le Rouet.*
78. **M. Barboiu**, « Self-organized hybrid macrocyclic membrane materials », *28th International Symposium on Macrocyclic Chemistry, Gdansk, 13-18 Juillet 2003*
79. **M. Barboiu**, « Modulation of coiling/uncoiling molecular motion » *27th International Symposium on Macrocyclic Chemistry, Park City, Utah, USA 23-27 Juin 2002*
80. **M. Barboiu**, « Modulation of coiling/uncoiling molecular motion » SFC Eurochem, Toulouse, 8-11 Juillet **2002**
81. **M. Barboiu** « Modulation of coiling/uncoiling molecular motion » *International Conference on Coordination Chemistry, Heidelberg, Allemagne, 21-26 Juillet 2002.*
82. E. Lachowicz, B. Rózańska, F. Teixidor, **M. Barboiu**, N. Hovnanian "Can S,O podand be better extractant for "soft" cations Ag(I), Pd(II) than all-S podand ? **Conférence plénière** -VIth International Symposium, Chemistry Forum **2000**, Faculty of Chemistry, University of Technology, 8-10 May **2000**, Warsaw, Poland.
83. **M. Barboiu**, C. Luca, N. Hovnanian, L. Cot, Fixed-site macrocyclic complexant materials- a new alternative for molecular recognition and facilitated transport of organics of biological interest, - **Conférence- International Conference on Inorganic Membranes, 26-30 Juin 2000 Montpellier, France.**
84. **M. Barboiu**, C. Luca, N. Hovnanian, L. Cot, Fixed-site macrocyclic complexant materials- a new alternative for molecular recognition and facilitated transport of organics of biological interest, - **poster- Workshop on the COST D11 Program, "Supramolecular Chemistry", 10-12 December 1999 Strasbourg, France**
85. **M. Barboiu**, N. Hovnanian, C. Guizard, L. Cot, Réconnaissance Moléculaire et Auto-assemblage- Applications dans les membranes à transport facilité, IX^{ème} Grand Journée Sud-Ouest, SFC, 26 nov **1999**, Montpellier, France- C4A03.
86. **M. Barboiu**, C. Luca, G. Popescu, F. Dumitru, *Facilitated transport of aminoacids*, Conférence de Chimie et Génie Chimique, 15-17 octobre **1997**, Bucarest, Roumanie.
87. **M. Barboiu**, C. Luca, G. Popescu, *Polytopic molecular receptors, derivatives of benzo-crown-ethers*, XXIIInd Conférence Scientifique, 8-10 oct.**1997**, Calimanesti, Roumanie.
88. **M. Barboiu**, C. Luca, Georgeta Popescu, C. Barboiu, *Facilitated transport membranes*, XXIInd Conférence Scientifique, Octobre **1996**, Olanesti, Roumanie
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