

# LISTĂ DE LUCRĂRI

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**Teză de doctorat:** “Kinetics and Mechanism of Thermal Decomposition of Polymers”, conducători științifici: Dr. Cornelia Vasile, Institutul de Chimie Macromoleculară “Petru Poni”, Iași, și Prof. Yussaku. Sakata, Universitatea Okayama, Okayama, Japonia. Teză susținută în data de 10 octombrie 2001, Diploma de doctor A/000247 fiind eliberată la data de 19 aprilie 2002.

## Capitole în cărți:

1. C. Vasile, **M. Brebu**, “Recycling of Waste of Electric and Electronic Equipment (WEEE)”, in “Recycling: Processes, Costs and Benefits”, Ed. Charlene J. Nielsen, Nova Press, 2011, ISBN: 978-1-62257-018-8, 91-140.
2. **M. Brebu**, “Products of degradation or interactions packaging/food”, in “New polymeric packaging for food” (in romanian - “Produsi de degradare sau interacțiuni ambalaje/alimente”, in “Noi ambalaje polimerice pentru alimente”), Eds. C. Vasile, C. N. Cheaburu, Pim – Iasi, 2010, 245-263.
3. C. Vasile, **M. Brebu**, C. M. Popescu, “Thermal modification of lignocellulosic materials and of lignin (pyrolysis)”, in “Lignin, source of feedstock and energy” (in romanian - “Modificarea termica a materialelor lignocelulozice si a ligninei (piroliza)”, in “Lignina, sursa de materii prime si energie”), Eds. G. Cazacu, M. I. Totolin, Pim – Iasi, 2010, 174-274.
4. C. Vasile, B. S. Munteanu, M. C. Pascu, A. Stoleriu, **M. Brebu**, L. Nita, A. Tomescu, A. Cojocariu, E. Nemes, T. Zaharescu: “Radiation Processing of Polyolefin-Containing Blends. IV Polyethylene/Polystyrene Blends Containing Compatibiliser”, in “Focus on Natural and Synthetic Polymer Science”, Eds. C. Vasile and G. E. Zaikov, Nova Science Publishers, 2006, 1 – 30.
5. **M. A. Brebu**, Y. Sakata, M. A. Uddin: “Degradation Behaviour of Polymer Blends and Thermal Treatment of Polymer Waste”, in “Handbook of Polymer Blends and Composites”, Eds. C. Vasile and A.K. Kulshreshtha, RAPRA Technology Ltd., 2003, Volume 3A, 561 – 614.
6. B. S. Munteanu, **M. Brebu**, C. Vasile: “Polystyrene and Styrene Copolymers – Based Blends”, in “Handbook of Polymer Blends and Composites”, Eds. C. Vasile and A.K. Kulshreshtha, RAPRA Technology Ltd., 2003, Volume 4A, 121 –184.

## Brevete

1. E. Butnaru, E. Stoleru, **M. Brebu**, M. Râpă, C. Vasile: “Procedeu și compoziție pentru obținerea de noi materiale polimerice prin încorporarea de uleiuri vegetale în matricea de chitosan, cu aplicații în industria ambalajelor pentru alimente”, OSIM A/00576/11.08.2016.

## Lucrări științifice publicate în reviste indexate Web of Knowledge:

1. **M. Brebu**, “Environmental Degradation of Plastic Composites with Natural Fillers - A Review”, *Polymers*, **12**, 166, 2020.
2. A. C. Aprotosoiaie, A. Miron, N. Ciocârlan, **M. Brebu**, C. M. Roșu, A. Trifan, G. Vochița, D. Gherghel, S. V. Luca, A. Niță, I. I. Costache, C. T. Mihai, “Essential oils of Moldavian Thymus species: Chemical composition, antioxidant, anti-Aspergillus and antigenotoxic activities”, *Flavour. Fragr. J.*, **34**, 175-186, 2019.
3. P. Aelenei, C. M. Rimbu, E. Guguianu, G. Dimitriu, A. C. Aprotosoiaie, **M. Brebu**, C. E. Horhogeia, A. Miron, “Coriander essential oil and linalool – interactions with antibiotics against Gram-positive and Gram-negative bacteria”, *Lett. Appl. Microbiol.*, **68**, 156-164, 2019.
4. Butnaru, E., Stoleru, E., Brebu, M.A., Darie-Nita, R.N., Bargan, A., Vasile, C., “Chitosan-based bionanocomposite films prepared by emulsion technique for food preservation”, *Materials*, **12**, 373, 2019.
5. Sandu, I., Iurcovschi, C.T., Sandu, I.G., Vasilache, V., Negru, I.C., Brebu, M., Ursu, P.S., Pelin, V., “Multianalytical study for establishing the historical contexts of the Church of the Holy Archangels from Cicau, Alba County, Romania, for its promotion as a world heritage good I. Assessing the preservation-restoration works from the 18th century”, *Revista de Chimie*, **70**, 2538-2544, 2019.



6. R. N. Darie-Niță, C. Vasile, E. Stoleru, D. Pamfil, T. Zaharescu, L. Tarțau, Niță Tudorachi, **M. A. Brebu**, G. M. Pricope, R. P. Dumitriu, K. Leluk, "Evaluation of the rosemary extract effect on the properties of polylactic acid-based materials", *Materials*, **11**, 1825, 2018.
7. A. C. Grădinaru, A. Trifan, A. Șpac, **M. Brebu**, A. Miron, A. C. Aprotosoae, Antibacterial activity of traditional spices against lower respiratory tract pathogens: combinatorial effects of *Trachyspermum ammi* essential oil with conventional antibiotics, *Lett. Appl. Microbiol.*, **67**, 449-457, 2018.
8. A. C. Aprotosoae, N. Ciocârlan, **M. Brebu**, A. Trifan, A. C. Grădinaru, A. Miron, "Chemical composition, antioxidant and antimicrobial activities of *Mentha Gattefossei* maire essential oil", *Farmacia*, **66**, 778-782, 2018.
9. C. Vasile, M. Râpă, M. Ștefan, M. Stan, S. Macavei, R. N. Darie-Niță, L. Barbu-Tudoran, D. C. Vodnar, E. E. Popa, R. Ștefan, G. Borodi, **M. Brebu**, "New PLA/ZnO:Cu/Ag bionanocomposites for food packaging", *Express Polym. Lett.*, **11**, 531-544, 2017.
10. C. Vasile, M. Sivertsvik, A. C. Mitelut, **M. A. Brebu**, E. Stoleru, J. T. Rosnes, E. E. Tanase, W. Khan, D. Pamfil, C. P. Cornea, A. I., M. E. Popa, "Comparative analysis of the composition and active property evaluation of certain essential oils to assess their potential applications in active food packaging", *Materials*, **10**, 45, 2017.
11. I. Rosca, A. R. Petrovici, M. Brebu, I. Stoica, B. Minea, N. Marangoci, "An original method for producing acetaldehyde and diacetyl by yeast fermentation", *Braz. J. Microbiol.* **47**, 949-954, 2016.
12. M. I. Guignard, C. Campagne, S. Giraud, **M. Brebu**, N. Vranceanu, L. I. Cioca, "Functionalization of a bamboo knitted fabric using air plasma treatment for the improvement of microcapsules embedding", *J. Text. I.*, **106**, 119-132, 2015.
13. A. Trifan, A. C. Aprotosoae, **M. Brebu**, O. Cioancă, E. Gille, M. Hăncianu, A. Miron, "Chemical composition and antioxidant activity of essential oil from romanian *Satureja Montana* L.", *Farmacia*, **63**, 413-416, 2015.
14. A. C. Grădinaru, A. C. Aprotosoae, A. Trifan, A. Șpac, **M. Brebu**, A. Miron, "Interactions between cardamom essential oil and conventional antibiotics against *Staphylococcus Aureus* clinical isolates", *Farmacia*, **62**, 1214-1222, 2014.
15. A. C. Grădinaru, A. Miron, A. Trifan, A. Spac, **M. Brebu**, A. C. Aprotosoae, "Screening of antibacterial effects of anise essential oil alone and in combination with conventional antibiotics against *Streptococcus pneumoniae* clinical isolates", *Rev. Med. Chir. Soc. Med. Nat. Iasi*, **118**, 537-543, 2014.
16. L. Profire, M. Apotrosoaei, A. Oprea, **M. Brebu**, F. Lupascu, C. E. Lupusoru, C. Vasile, "The synthesis, characterization and biological evaluation of a new nitric oxide donor agent", *J. Serb. Chem. Soc.*, **79**, 389-400, 2014.
17. **M. Brebu**, T. Tamminen, L. Hannevold, M. Stöcker, I. Spiridon, "Catalytic upgrading of co-pyrolysis oils from bisphenol A polycarbonate and lignins", *Polym. Degrad. Stabil.*, **102**, 88-94, 2014.
18. E. Părpăriță, **M. Brebu**, Md. A. Uddin, J. Yanik, C. Vasile, "Pyrolysis behaviors of various biomasses", *Polym. Degrad. Stabil.*, **100**, 1-9, 2014.
19. **M. Brebu**, I. Bunia, M. Sillion, "On the Molecular Mass of Pyrolysis Oils from Polyolefins", *Rev. Chim. (Bucharest)*, **63**, 1197-1200, 2013.
20. **M. Brebu**, T. Tamminen, I. Spiridon, "Thermal degradation of various lignins by TG-MS/FTIR and Py-GC-MS" *J. Anal. Appl. Pyrol.*, **104**, 531-539, 2013.
21. B. S. Munteanu, **M. Brebu**, C. Vasile, "Thermal behaviour of binary and ternary copolymers containing acrylonitrile", *Polym. Degrad. Stabil.*, **98**, 1889-1897, 2013.
22. C. L. Apetrei, A. Spac, **M. Brebu**, C. Tuchilus, A. Miron, "Composition, and antioxidant and antimicrobial activities of the essential oils of a full-grown *Pinus cembra* L. tree from the Calimani Mountains (Romania)", *J. Serb. Chem. Soc.*, **78**, 27-37, 2013.
23. **M. Brebu**, I. Spiridon: "Co-pyrolysis of LignoBoost® lignin with synthetic polymers", *Polym. Degrad. Stabil.*, **97**, 2104-2109, 2012.
24. S. Önenç, **M. Brebu**, C. Vasile, J. Yanik: "Copyrolysis of scrap tires with oily wastes", *J. Anal. Appl. Pyrol.*, **94**, 184-189, 2012.
25. A. M. Saviuc-Paval, I. Sandu, I. M. Popa, A. V. Sandu, **M. Brebu**, I. G Sandu, "Obtaining and Characterization of New Ceramic Pigments for Polychrome Artistic Elements. III. Thermogravimetric analysis", *Rev. Chim. (Bucharest)*, **63**, 273-282, 2012.



26. D. Rosu, L. Rosu, **M. Brebu**, “Thermal stability of silver sulfathiazole–epoxy resin network”, *J. Anal. Appl. Pyrol.*, **92**, 10-18, 2011.
27. **M. Brebu**, I. Spiridon, “Thermal degradation of keratin waste”, *J. Anal. Appl. Pyrol.*, **91**, 288-295, 2011.
28. K. Murata, **M. Brebu**, Y. Sakata, “The effect of silica–alumina catalysts on degradation of polyolefins by a continuous flow reactor”, *J. Anal. Appl. Pyrol.*, **89**, 30-38, 2010.
29. **M. Brebu**, S. Ucar, C. Vasile, J. Yanik, “Co-pyrolysis of pine cone with synthetic polymers”, *Fuel*, **89**, 1911–1918, 2010.
30. C. Vasile, **M. Brebu**, H. Darie, G. Cazacu, “Effect of some environmentally degradable materials on the pyrolysis of plastics II: influence of cellulose and lignin on the pyrolysis of complex mixtures”, *J. Mater. Cycles Waste Manag.*, **12**, 147–153, 2010.
31. K. Murata, **M. Brebu**, Y. Sakata, “Thermal degradation of polyethylene into fuel oil over silica–alumina by a continuous flow reactor”, *J. Anal. Appl. Pyrol.*, **86**, 354-359, 2009.
32. K. Murata, **M. Brebu**, Y. Sakata, “The effect of PVC on thermal and catalytic degradation of polyethylene, polypropylene and polystyrene by a continuous flow reactor”, *J. Anal. Appl. Pyrol.*, **86**, 33-38, 2009.
33. A. Korkmaz, J. Yanik, **M. Brebu**, C. Vasile, “Pyrolysis of the tetra pak”, *Waste Management*, **29**, 2836-2841, 2009.
34. V. Popescu. C. Vasile, M. Brebu, G. L. Popescu, M. Moldovan, C. Prejmerean, L. Stănuț, C. Trișcă-Rusu, I. Cojocar, “The characterization of recycled PMMA”, *J. Alloys Compd.*, **483**, 432-436, 2009.
35. C. Vasile, **M. A. Brebu**, M. Totolin, J. Yanik, T. Karayildirim, H. Darie, “Feedstock recycling from the printed circuit boards of used computers”, *Energy and Fuels*, **22**, 1658-1665, 2008.
36. **M. Brebu**, E. Jakab, Y. Sakata: “Effect of flame retardants and Sb<sub>2</sub>O<sub>3</sub> synergist on the thermal decomposition of high-impact polystyrene and on its debromination by ammonia treatment”, *J. Anal. Appl. Pyrol.*, **79**, 346-352, 2007.
37. N. M. M. Mitan, **M. Brebu**, T. Bhaskar, A. Muto, Y. Sakata, Individual and simultaneous degradation of brominated high impact polystyrene and brominated acrylonitrile-butadiene-styrene and removal of heteroelements (Br, N, and O) from degradation oil by multiphase catalytic systems, *J. Mater. Cycles Waste Manag.*, **9**, 56-61, 2007.
38. N. M. M. Mitan, **M. Brebu**, T. Bhaskar, A. Muto, Y. Sakata, M. Kaji, Co-processing of DVDs and CDs with vegetable cooking oil by thermal degradation, *J. Mater. Cycles Waste Manag.*, **9**, 62-68, 2007.
39. C. Vasile, **M.A. Brebu**, T. Karayildirim, J. Yanik, H. Darie, “Feedstock Recycling from Plastics and Thermosets Fractions of Used Computers II) Pyrolysis Oil Upgrading”, *Fuel*, **86**, 477-485, 2007.
40. **M. Brebu**, Y. Sakata: “Novel debromination method for flame-retardant high impact polystyrene (HIPS-Br) by ammonia treatment”, *Green Chemistry*, **8**(11), 984-987, 2006.
41. **M. Brebu**, T. Bhaskar, A. Muto, Y. Sakata: “Alkaline hydrothermal treatment of brominated high impact polystyrene (HIPS-Br) for bromine and bromine-free plastic recovery”, *Chemosphere*, **64**(6), 1021-1025, 2006.
42. C. Vasile, **M.A. Brebu**, T. Karayildirim, J. Yanik, H. Darie, “Feedstock Recycling from Plastics and Thermosets Fractions of Used Computers I) Pyrolysis”, *J. Mater. Cycles Waste Manag.*, **8**, 99-108, 2006.
43. S. B. Munteanu, **M. Brebu**, C. Vasile: “Thermal and thermo-oxidative behaviour of butadiene-styrene copolymers with different architectures”, *Polym. Degrad. Stabil.*, **89**(3), 501-512, 2005.
44. **M. Brebu**, T. Bhaskar, K. Murai, A. Muto, Y. Sakata, Md. A. Uddin: “Removal of nitrogen, bromine, and chlorine from PP/PE/PS/PVC/ABS-Br pyrolysis liquid products using Fe- and Ca-based catalysts”, *Polym. Degrad. Stabil.*, **87**(2), 225-230, 2005.
45. I. G. Sandu, S. Stoleru, I. Sandu, **M. Brebu**, A.V. Sandu: “Authentication of ancient bronze coins by archeological patina study. I. Composition and Structure”, *Revista de Chimie*, **56**(10), 981-994, 2005 (Romanian).
46. **M. Brebu**, T. Bhaskar, K. Murai, A. Muto, Y. Sakata, Md. A. Uddin: “The effect of PVC and/or PET on thermal degradation of polymer mixtures containing brominated ABS”, *Fuel*, **83**, 2021-2028, 2004.



47. **M. Brebu**, T. Bhaskar, K. Murai, A. Muto, Y. Sakata, Md. A. Uddin: "The individual and cumulative effect of brominated flame retardant and polyvinylchloride (PVC) thermal degradation of acrylonitrile-butadiene-styrene (ABS) copolymer", *Chemosphere*, **56**, 433-440, 2004.
48. **M. Brebu**, T. Bhaskar, K. Murai, A. Muto, Y. Sakata, Md. A. Uddin: "Thermal degradation of PE and PS mixed with ABS-Br and debromination of pyrolysis oil by Fe- and Ca- based catalysts", *Polym. Degrad. Stabil.*, **84**(3), 459-467, 2004.
49. T. Bhaskar, K. Murai, T. Matsui, **M. Brebu**, M. A. Uddin, A. Muto, Y. Sakata, K. Murata: "Studies on thermal degradation of Acrylonitrile-Butadiene-Styrene copolymer (ABS-Br) containing brominated flame retardant", *J. Anal. Appl. Pyrol.*, **70**(2), 369-381, 2003.
50. R. N. Darie, **M. Brebu**, C. Vasile, M. Kozłowski: "On the compatibility of the IPP/PA6/EPDM blends with and without functionalized IPP. I. Thermo-oxidative behaviour", *Polym. Degrad. Stabil.*, **80**, 551-566, 2003.
51. I. C. A. Sandu, **M. Brebu**, C. Luca, I. Sandu, C. Vasile: "Thermogravimetric Study on the Ageing of Lime Tree Made Supports of Old Paintings", *Polym. Degrad. Stabil.*, **80**, 83-91, 2003.
52. T. Bhaskar, K. Murai, **M. Brebu**, T. Matsui, M. A. Uddin, A. Muto, Y. Sakata: "Thermal degradation of ABS-Br mixed with PP and catalytic debromination by iron oxide carbon composite catalyst (Fe-C)", *Green Chemistry*, **4**, 603-606, 2002.
53. **M. Brebu**, M. A. Uddin, A. Muto, Y. Sakata, C. Vasile: "The Role of Temperature Program and Catalytic System on the Quality of Acrylonitrile-Butadiene-Styrene Degradation Oil", *J. Anal. Appl. Pyrol.*, **63**(1), 43-57, 2002.
54. C. Vasile, **M. Brebu**, R. Darie, H. Darie, Md. A. Uddin, Y. Sakata: "Thermal and Catalytic Decomposition of Mixed Plastics. III. PVC-containing Mixed Plastics", *Revue Roumaine de Chimie*, **47**(10-11), 1185-1191, 2002.
55. C. Vasile, **M. Brebu**, Y. Sakata, H. Pakdel, Ch. Roy, R. Miranda, "Solid Waste Treatment by Pyrolysis Methods", *Journal of Environmental Protection and Ecology*, **3**(1), 230-235, 2002.
56. **M. Brebu**, M. A. Uddin, A. Muto, Y. Sakata, C. Vasile: "Catalytic Degradation of Acrylonitrile-Butadiene-Styrene Into Fuel Oil. 1. The Effect of Iron Oxides on the Distribution of Nitrogen-containing Compounds", *Energy and Fuels*, **15**(3), 559-564, 2001.
57. **M. Brebu**, M. A. Uddin, A. Muto, Y. Sakata, C. Vasile: "Catalytic Degradation of Acrylonitrile-Butadiene-Styrene Into Fuel Oil. 2. Changes in the Structure and Catalytic Activity of Iron Oxides", *Energy and Fuels*, **15**(3), 565-570, 2001.
58. C. Vasile, H. Pakdel, **M. Brebu**, P. Onu, H. Darie, S. Ciocăleu: "Thermal and catalytic decomposition of mixed plastics", *J. Anal. Appl. Pyrol.*, **57**, 287-303, 2001.
59. **M. Brebu**, M. A. Uddin, A. Muto, Y. Sakata, C. Vasile: "Composition of Nitrogen-Containing Compounds in Oil Obtained from Acrylonitrile-Butadiene-Styrene Thermal Degradation", *Energy and Fuels*, **14**(4), 920-928, 2000.
60. E. Avram, **M. Brebu**, A. Warszawsky, C. Vasile: "Polymers with pendent functional groups. V. Thermooxidative and thermal behavior of the chloromethylated polysulfones", *Polym. Degrad. Stab.*, **69**(2), 175-181, 2000.
61. **M. Brebu**, C. Vasile, S. R. Antonie, M. Chiriac, M. Precup, J. Yang, C. Roy: "Study of the natural ageing of PVC insulation for electrical cables", *Polym. Degrad. Stab.*, **67**, 209-221, 2000.
62. C. Vasile, **M. Brebu**, H. Darie, R. D. Deanin, V. Dorneanu, D. M. Pantea, O. G. Ciochina: "Chemicals and Energy from Medical Polymer Waste I. Pyrolysis of Disposable Syringes", *Int. J. Polym. Mater.*, **38**, 219-247, 1997.

#### **Lucrări științifice publicate în reviste indexate Web of Knowledge:**

1. **M. Brebu**, J. Yanik, T. Uysal, C. Vasile, "Thermal and catalytic degradation of grape seeds/polyethylene waste mixture", *Cellulose Chem. Technol.*, **48**, 665-674, 2014.
2. **M. Brebu**, M. Nistor, "Co-pyrolysis of various lignins with polycarbonate", *Cellulose Chem. Technol.*, **48**, 69-74, 2014.
3. **M. Brebu**, G. Cazacu, O. Chirila, "Pyrolysis of lignin – a potential method for obtaining chemicals and/or fuels", *Cellulose Chem. Technol.*, **45**, 43-50, 2011.



4. C. Vasile, C. M. Popescu, M. C. Popescu, **M. Brebu**, S. Willfor, "Thermal behaviour/treatment of some vegetable residues. IV. Thermal decomposition of eucalyptus wood", *Cellulose Chem. Technol.*, **45**, 29-42, 2011.
5. **M. Brebu**, C. Vasile, "Thermal degradation of lignin – A review", *Cellulose Chem. Technol.*, **44**, 353-363, 2010.
6. C. Vasile, M. Brebu, M. C. Popescu, "Thermal behaviour/treatment of agricultural biomass I. Thermal behaviour of oilseed rape (*Brassica Napus L.*)", *Cell. Chem. Technol.*, **42**, 159-169, 2008.
7. C. Vasile, **M. A. Brebu**: "Thermal Valorisation of Biomass and of Synthetic Polymer Waste. Upgrading of Pyrolysis Oils", *Cell. Chem. Technol.*, **40**(7), 489-512, 2006.
8. C. Vasile, **M. A. Brebu**, H. Darie, T. Karayildirim, J. Yanik: "Feedstock recycling from thermosets fraction of the PCB from used computers", *Scientific Papers of the Institute of Materials Science and Applied Mechanics of the Wrocław University of Technology (Prace Naukowe Instytutu Materialoznawstwa i Mechaniki Technicznej Politechniki Wrocławskiej)*, **81**(Series Conferences No. 12 – Plastic Recycling and Recovery"), 41-47, 2006.
9. C. Vasile, L. Nita, M. Pascu, **M. Brebu**: "Biocompatibility and biocompatibilization of IPP/EPDM blends", *Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi* (included in Index Medicus, Medline), **107**(3), 404-410, 2003 (Romanian).
10. C. Vasile, **M. Brebu**: "Pyrolysis – Method for Commingled Polymer Waste Treatment", *Scientific Papers of the Institute of Materials Science and Applied Mechanics of the Wrocław University of Technology (Prace Naukowe Instytutu Materialoznawstwa i Mechaniki Technicznej Politechniki Wrocławskiej)*, **63**(Series Conferences No. 10 – III International Conference "Recycling of Synthetic Plastics 2002"), 17-26, 2002.
11. R. N. Darie, **M. Brebu**, C. Vasile, M. Kozłowski, A. Kozłowska: "Some Aspects of Reprocessing of Polypropylene/Polyamide 6 Blends", *Scientific Papers of the Institute of Materials Science and Applied Mechanics of the Wrocław University of Technology (Prace Naukowe Instytutu Materialoznawstwa i Mechaniki Technicznej Politechniki Wrocławskiej)*, **63**(Series Conferences No. 10 – III International Conference "Recycling of Synthetic Plastics 2002"), 39 – 46, 2002.
12. **M. Brebu**, H. Darie, A. Spac, C. Vasile: "Chemicals and Energy from Medical Polymer Wastes. III. Catalytic Pyrolysis of Disposable Syringes", *Analele Stiintifice ale Universitatii "Al. I. Cuza" Iasi*, sectia Chimie, **tom V**, 25-38, 1997.

#### **Lucrări științifice publicate în extenso în volumele unor manifestări științifice:**

1. **M. Brebu**: "TG-FTIR/MS as a Valuable Coupled Technique to Study Thermal Degradation and Stability of Bio-Based Materials", Proceedings of 4<sup>th</sup> International Leather Engineering Congress "Innovative Aspects for Leather Industry" (IAFLI 2017), Izmir, Turkey, October 19-20, 2017, P 143-148.
2. Guignard, M.I., Campagne, C., Giraud, S., **Brebu, M.**, Vrinceanu, N., Sucheai, M.P., Coman, D., "Research onto improvement of microcapsules embedding by air-plasma treatment", 2<sup>nd</sup> International Conference on Radiation and Dosimetry in Various Fields of Research, Nis, Serbia, May 27-30, 2014, RAD Conference Proceedings, Vol. 2014, 239-242.
3. A. Korkmaz, J. Yanik, **M. Brebu**, C. Vasile: "Pyrolysis of Tetra Pack packaging", Proceedings of 11<sup>th</sup> Symposium of Feedstock Recycling Japan (FSRJ 11), Kumamoto, Japan, September 16-17, 2008, P-25, 93-95.
4. C. Vasile, **M.A. Brebu**, M. Totolin, J. Yanik, T. Karayildirim, H. Darie, "Feedstock Recycling from the PCB of Used Computers", Proceedings of The 4<sup>th</sup> International Symposium on Feedstock recycling of Plastics & Other Polymeric Materials", Jeju, Korea, September 16-20 2007, 65-74.
5. **M. Brebu**, Y. Sakata, "Novel Debromination Method for Flame-Retardant High Impact Polystyrene (HIPS-Br) by Ammonia Treatment", Proceedings of The 4<sup>th</sup> International Symposium on Feedstock recycling of Plastics & Other Polymeric Materials", Jeju, Korea, September 16-20 2007, 97-104.
6. N. M. M. Mitan, **M. Brebu**, T. Bhaskar, A. Muto, Y. Sakata, M. Kaji, "Thermal Degradation of DVD and CD Disks with Vegetable Cooking Oil", Environmental Technology and Management Conference 2006, Bandung, West Jawa, Indonesia, September 7-8 2006, Proceedings SW-O-01.
7. **M. Brebu**, C. Vasile, Y. Sakata, Md. A. Uddin, T. Bhaskar, "Joint research on polymer degradation between "P. Poni" Institute of Macromolecular Chemistry Iasi, Romania, and Okayama University,



- Okayama, Japan”, The 5<sup>th</sup> International Conference on Global Research and Education “Inter-Academia 2006”, Iasi, Romania, September 25-28, Proceedings Vol. I, 249-261.
8. **M. Brebu**, T. Bhaskar, K. Murai, A. Muto, Y. Sakata, “Hydrothermal Treatment of Brominated Flame Retardant Plastic for Bromine and Plastic Recovery”, 16<sup>th</sup> Annual Conference of The Japan Society of Waste Management Experts, Sendai, Japan, October 31 – November 2 2005, 52-54.
  9. C. Vasile, **M. A. Brebu**, T. Karayidirim, J. Yanik, H. Darie: “Pyrolysis of the Plastic and Thermosets Fractions of Used Computers and Liquid Fraction Upgrading”, “The 3<sup>rd</sup> International Symposium on Feedstock Recycling of Plastics”, ISFR’2005, Karlsruhe, Germany, September 25 – 29, 2005, Eds. M. Müller-Hagedorn and H. Bockhorn, Universitat Verlag Karlsruhe, 2005, 153-161.
  10. **M. Brebu**, B. S. Munteanu, C. Vasile: “Removal of Toxic Products from Pyrolysis Oil of ABS and ABS-containing Polymer Mixtures”, The First European Summer School on Green Chemistry of Polymers, EUROGREENPOL, Iasi, Romania, August 21 – 27, 2005, 15-17.
  11. R. N. Darie, C. Vasile, **M. Brebu**: “Reactive Processing of Some Polyethylene/Polyamide 6 Blends”, The XVII International Conference “Innovative and Performant Researches and Technologies”, ECOINVENT 2005, Iasi, Romania, May 26 – 29, 2005, 155-162.
  12. C. Vasile, A. Paun, **M. Brebu**, H. Darie, R. N. Darie: “Pyrolysis of Complex Polymer Mixtures (Biomass and Plastics). Optimisation of conditions to obtain minimum amount of toxic compounds”, The “Environment and Industry” Symposium, INCD ECOIND, Bucuresti, Romania, October 29-31, 2003, Vol. II, 107-118.
  13. C. Vasile, R. Darie, **M. Brebu**, M. Cazană: “Some Aspects Concerning Plastic Waste Management in Romania, Central and Eastern European Countries”, ISFR’2002, Ostend, Belgium, September 8-11 2002, paper in program A78.
  14. **M. Brebu**, H. Darie, G. Cazacu, C. Vasile: “Pyrolysis Behaviour of the Complex Mixtures Containing Components of Biomass”, ISFR’2002, Ostend, Belgium, September 8-11 2002, paper in program A79.
  15. C. Vasile, **M. Brebu**, Y. Sakata, Ch. Roy, M. Miranda: “Pyrolysis – Method for Solid Waste Treatment”, “3<sup>rd</sup> International Conference of Balkan Environmental Association (B.En.A.), Transboundary Pollution”, Bucharest, Romania, November 23-26, 2000, Book of abstracts, 192-194.
  16. C. Vasile, H. Pakdel, **M. Brebu**, J. N. Murwanashyaka, P. Onu, H. Darie, S. M. Ciocâlțeu: “Thermal and Catalytic Decomposition of Mixed Plastics”, Proceedings of “The 1<sup>st</sup> International Symposium on Feedstock Recycling of Plastics”, Sendai, Japan, October 31-November 3, 1999, PE-4, 107-110.
  17. **M. Brebu**, Y. Sakata, M. A. Uddin, A. Muto, K. Murata, C. Vasile: “Composition of Nitrogen Containing Compounds in ABS Degradation Oils”, Proceedings of “The 1<sup>st</sup> International Symposium on Feedstock Recycling of Plastics”, Sendai, Japan, October 31-November 3, 1999, PE-8, 123-126.
  18. M. Chiriac, R. Antonie, M. Precup, **M. Brebu**, G. Georgescu, D. Dragusin, T. Malaieru: “Polymeric Materials Obtained from Recycled Vinylic Polymers”, Symposium book of “BRAMAT’99” International Conference, Brasov, Romania, February 3-5, 1999, Volume IV, 190-193.
  19. C. Vasile, **M. Brebu**, H. Darie: “Chemicals and Energy from Pyrolysis of Medical Waste”, Symposium book of “The XXII Scientific Session of Communications, Research Center OLTCHIM S.A.” Rm. Valcea, Romania, October 23-25, 1996, Volume 3, 1362-1367.

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