

b. LIST of PAPERS

Prof. univ. dr. Vișa Maria

b.1. LIST WITH A SELECTION OF 10 PAPERS PUBLISHED IN ISI WEB of SCIENCES JOURNALS *:

1. **Vișa M.**, Andreea-Maria Chelaru, Hydrothermally Modified Fly Ash for Heavy Metals and Dyes Removal in Advanced Wastewater Treatment, *Journal Applied Surface Science*, vol. 303, (2014), 14-22, Impact Factor **2.112**
2. **Vișa, M.**, Duță, A., TiO₂/fly ash novel substrate for simultaneous removal of heavy metals and surfactants, *Chemical Engineering Journal*, vol. 223 (2013), 860-868., Impact Factor **3.473**
3. **Vișa M.**, Duta A., Methyl-orange and cadmium simultaneous removal using fly ash and photo-Fenton systems, *Journal of Hazardous Materials*, vol. 244 (2013), 773-779, Impact Factor **3.925**
4. **Vișa M.**, Tailoring fly ash activated with bentonite as adsorbent for complex wastewater treatment, *Journal Applied Surface Science*, vol. 263 (2012), 753-762, Impact Factor **2.112**
5. **Vișa, M.**, Isac, L., Duță, A., Fly ash adsorbents for multi-cation wastewater treatment, *Journal Applied Surface Science*, vol. 258 (2012), 6345-6352, Impact Factor **2.112**
6. **Vișa, M.**, Pricop, F., Duță, A., Sustainable Treatment of Wastewaters Resulted in the Textile Finishing Industry, *Journal Clean Technologies and Environmental Policy*, vol.13 (2011), 855-861, Impact Factor **1.753**
7. **Vișa, M.**, Andronic, L., Lucaci, D., Duță, A., Concurrent Dyes Adsorption and Photo-degradation on Fly Ash Based Substrates, *Adsorption Journal of the international adsorption Society*, vol. 17 (2011), 101-108, Impact Factor **2.000**
8. **Vișa M.**, Bogatu, C., Duta, A., Simultaneous Adsorption of Dyes and Heavy Metals from Multicomponent Solutions Using Fly Ash, *Journal Applied Surface Science*, 256 (2010) pag. 5486-5491, Impact Factor **2.112**
9. **Vișa, M.**, Carcel, R. A., Andronic, L., Duta, A., Advanced treatment of wastewater with methyl orange and heavy metals on TiO₂, fly ash and their mixtures, *Journal Catalysis Today*, vol.144 (2009) 137-142, Impact Factor **3.407**
10. **Vișa, M.**, Nacu Mihaela, Comparative heavy metals and dyes removal efficiency on fly ash and wood ash, *Environmental Engineering and Management Journal*, vol. 10 (9) (2011) 1407-1414 Impact Factor **1.004**

* the 10 selected papers were developed after receiving the Ph.D. title in Materials Science and Engineering.

b.2. Ph.D. THESIS

Title: *Adsorbent Materials with Controlled Surface Properties, Based on Solid Wastes, for Advanced Wastewater Treatment*;

Scientific Domain: *Materials Science and Engineering*;

Year: 2008.

b.3. PATENT PROPOSAL

Device for simultaneous evaluation of the adsorption and photodegradation parameters of thin layers, drd. eng. CARCEL Radu-Adrian, prof. dr. eng. DUȚĂ Anca, prof. dr. eng. VIȘA Ion, prof. dr. chim. VIȘA Maria, and dr. chim. ANDRONIC Luminița Camelia, under examination. No. A 01061 25.10.11

b.4. BOOKS AND CHAPTER IN BOOKS

1. **Vișa Maria**, *Water Treatment – Laboratory Guide (Romanian Language)*, Transilvania University Publishing House, Brasov, ISBN:978-606-19-0353-5, (2014).

2. **Vișa Maria**, C. Drăghici, L. Dumitrescu, I. Nicolae, S. Pațachia, D. Perniu, *Environmental Technologies and Protection (Romanian Language)*, Brasov, ISBN 978-606-5115-210-6, (2012).

3. Ion Vișa, Anca Duță, *Sustainable Energy, Cap. 4.2. (Waste)Water Treatment, (Vișa Maria)*, Transilvania University Publishing House, Brasov, ISBN: 978 – 073 – 598 – 454 - 0 (2008).

4. **Vișa Maria**, Vittorio Zanetti, Angela Pereira, Emine Eşturk, Miquel A. Sancho, *Clean Water An Invaluable Asset*, Transilvania University Publishing House, Brasov, ISBN: 978-973-598-031-3, (2007).

5. **Vișa Maria**, Vittorio Zanetti, Angela Pereira, Miquel A. Sancho, Emine Eşturk, *Glossary on Water Properties and Pollution*, Transilvania University Publishing House, Brasov ISBN:978-973-635-989-7 (2007).

6. Vassiliki Spiliotopoulou-Papantoniou, Aurelia Moraru, **Vișa, Maria**, *Integration of Software Into Chemistry Courses (Learning and Teaching Chemistry in Secondary Schools in the Society of Information)*, Transilvania University Publishing House, Brasov, ISBN: 973-635-047-9, (2002).

7. **Vișa Maria**, Suport de curs, *Water Treatment Processes* (Romanian Language) for the students enrolled in the study program Environment Protection and Engineering, 2013-2014, available on the e-Learning Platform, Transilvania University of Braşov

8. **Vișa Maria**, Teaching aid, *Special Materials – Recyclable Materials* (Romanian Language) for the students in the study program Wastes Engineering, 2013-2014, available on the e-Learning Platform, Transilvania University of Braşov

9. **Vișa Maria**, Teaching aid, *General Chemistry* (Romanian Language) for the students in the study programs Optometry, Medical Engineering, Mecatronics, 2013-2014, available on the e-Learning Platform, Transilvania University of Braşov.

10. **Vișa Maria**, Teaching aid, *Organic Chemistry* for the students in the Faculty of Food and Tourism, 2013-2014, available on the e-Learning Platform, Transilvania University of Braşov.

b.5. PAPERS PUBLISHED *IN EXTENSO* IN INTERNATIONAL MAIN STREAM JOURNALS (other than those mentioned at point b.1.)

1. **Vișa M.**, Duță Anca, Tungsten oxide and fly ash mixtures for single wastewater treatment process, *Journal of Optoelectronics and Advanced Materials*, vol. 12 (2010), 2, 406-410

2. **Vișa Maria**, Duță Anca, Adsorption Behavior of cadmium and copper compounds on a mixture fly ash:TiO₂, *Revue Roumane de Chime*, vol. 55, (2010), 167-173.

3. Lucaci Dora, **Vișa Maria**, Duță Anca, Wood waste for Cu²⁺ removal from wastewater a comparative study, Conference: International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES) Brasov, Romania 2010 *Environmental Engineering and Management Journal*, vol. 10 (2) (2011) 169-174.

4. Lucaci Dora, **Vișa Maria**, Duță Anca, Cooper removal on wood - fly ash substrates - thermodynamic study, *Revue Roumane de Chime*, vol. 56, (2011), 1067-1074

5. Coșniță Mihaela, Cazan Cristina, **Vișa Maria**, Duță Anca, Product development using composites from recycled wood plastics and rubber, 1st International Conference on Quality and Innovation in Engineering and Management (QIEM), Cluj Napoca, ROMANIA, 2011, *Quality and Innovation in Engineering and Management*, (2011), 253-256

6. Andronic L., Andrasi D., Enesca A., **Vișa Maria**, Duta A., The influence of titanium dioxide phase composition on dyes photocatalysis, *Journal of Sol-Gel Science and Technology*, vol. 58, (2011), 201-208.

7. **Vișa Maria**, Isac Luminița, Duță Anca, Fly ash – activated carbon powder composites for dyes and heavy metals removal, 2nd International Conference on Multi-Functional Materials and Structures, Qingdao, 2009, *Multi-Functionnal Materials and Structures II, PTS 1 and 2 book series: Advanced Materials Research*, vol.79-82, (2009), 243-246

8. **Vișa Maria**, Andronic Luminița, Duță Anca, Photocatalytic properties of titania - fly ash thin films, *Environmental Engineering and Management Journal*, vol. 8(4) (2009) 633-638

9. Andronic Luminița, Hristache Bianca, EnescaAlexandru, **Vișa Maria**, Duță Anca, Studies on titanium oxide catalyst doped with heavy metals (cadmium, copper and nickel), *Environmental Engineering and Management Journal*, vol. 8 (4) (2009) 747-751

10. **Vișa Maria**, Enesca Alexandru, Duță Anca, Simultaneous adsorption of Methyl Orange and heavy metals from solution using fly-ash, 2nd International Conference on Multi-Functional Materials and Structures, Qingdao, 2009, *Multi-Functionnal Materials and Structures II, PTS 1 and 2 book series:Advanced Materials Research*, vol.79-82, (2009), 247-250.

11. **Vișa Maria**, Duță Anca, Enhanced heavy metals adsorption on dye – modified fly ash, *Environmental Engineering and Management Journal*, vol. 8 (4) (2009) 803-808

12. Vladuță Cristina, Andronic Luminiță, **Vișa Maria**, Duță Anca, Ceramic interface properties evaluation based on contact angle measurement, *Surface & Coatings Technology Journal*, vol. 202 (**2008**), 2448

13. **Vișa Maria**, Duță Anca, Advanced Cd²⁺ removal on dispersed TiO₂ -fly ash, *Environmental Engineering and Management Journal*, vol. 7 (4) (**2008**), 373-378.

14. Duță Anca, **Vișa Maria**, Manolache Simona Anca, Nacu Marius, *Anatase (TiO₂) thin layers for solar energy conversion*, Proceedings of the 11th International Conference On Optimization of Electrical and Electronic Equipment, vol. A (**2008**), 461-466

b.6. PAPERS PUBLISHED IN EXTENSO IN PROCEEDINGS VOLUMES OF INTERNATIONAL SPECIFIC CONFERENCES

1. **Vișa M.**, Nacu, M., Carcel R.A., *Fly ash substrates for complex wastewater treatment*, World of Coal Ash Conference (**2011**)-Denver, CO, USA . on -line, <http://www.flyash.info/>.

2. **Vișa, M.**, *Heavy metals removal on dye – modified fly ash substrates*, World of Coal Ash Conference, (**2011**)-Denver, CO, USA, on-line, <http://www.flyash.info/>.

3. **Vișa M.**, Enesca A., Duță A, *Simultaneous adsorption of Methyl Orange and heavy metals from solution using fly-ash*, 2nd International Conference on Multi-Functional Materials and Structures, Qingdao, **2009**, *Multi-Functionnal Materials and Structures II, PTS 1 and 2 book series:Advanced Materials Research*, vol.79-82, (**2009**), 247-250., **oral presentation**

4. **Vișa M.**, Isac L., Duță A., Fly ash – activated carbon powder composites for dyes and heavy metals removal, 2nd International Conference on Multi-Functional Materials and Structures, Qingdao, **2009**, *Multi-Functionnal Materials and Structures II, PTS 1 and 2 book series: Advanced Materials Research*, vol.79-82, (**2009**), 243-246, **poster presentation**

5. Duță, A., **Vișa, M.**, Manolache, S. A., Nanu, M., *Anatase (TiO₂) Thin Layers For Solar Energy Conversion*, Poceedings of the 11th. International Conference on Optimization of Electrical and Electronic Equipment, vol. II, pag. 461-466 (**2008**).

6. Duță,A., Vișa, I., Jaliu, C., **Vișa, M.**, Perniu, D., *Promoting Renewable Energy Systems at High-School Level*, Eurosun, Conference Proceedings (CD Based), Lisabona, Portugalia, Octombrie (**2008**).

7. Vișa Ion, Perniu Dana, Jaliu Codruța, **Vișa Maria**, Duta Anca, *European Training In-Service Tool On Sustainable Energy*, European Conference on Photovoltaics, 23 EUPVSEC Proceedings (CD based), Valencia, Spania, Septembrie (**2008**).

8. **Vișa, M.**, Duță, A., *Fly Ash - A Waste Used For Reducing Environmental Pollution*, The 31st Annual Congress of the American Romanian Academy of Arts and Sciences, Pro-Active Partnership in Creativity for the Next Generation, Presses Internationales Polytechnique, ISBN: 978-2-553- 01412-3, pag. 698-701, (**2007**).

9. **Vișa, M.**, *Heavy metals removal on dye – modified fly ash substrates*, World of Coal Ash Conference, (**2011**)-Denver, CO, USA, on-line, <http://www.flyash.info/> **oral presentation**.

10. **Vișa M.**, Enesca A., Duță A, *Simultaneous adsorption of Methyl Orange and heavy metals from solution using fly-ash*, 2nd International Conference on Multi-Functional Materials and Structures, Qingdao, **2009**, *Multi-Functionnal Materials and Structures II, PTS 1 and 2 book series:Advanced Materials Research*, vol.79-82, **(2009)**, 247-250., **oral presentation**

11. **Vișa M.**, Isac L., Duță A., Fly ash – activated carbon powder composites for dyes and heavy metals removal, 2nd International Conference on Multi-Functional Materials and Structures, Qingdao, **2009**, *Multi-Functionnal Materials and Structures II, PTS 1 and 2 book series: Advanced Materials Research*, vol.79-82, **(2009)**, 243-246, **poster presentation**

b.7. OTHER PAPERS PUBLISHED IN JOURNALS INDEXED IN INTERNATIONAL DATABASES AND IN CNCISIS JOURNALS

1. **Vișa M.**, Duță A., *Cadmium and Nickel Removal from Waste Water Using Modified Fly Ash: Thermodynamic and Kinetic Study*, Scientific Study & Research, vol. IX (1), pag. 73-82 **(2008)**, ISSN 1582- 540X

2. **Vișa M.**, Duță A., *Removal Cadmium and Cooper from Aqueous Solution by Adsorption onto Treated Fly As Collected from CET-Brașov*, Bulletin of the Transilvania University of Brasov, pag. 293-298, ISSN (vol.)2065-2119, ISSN,(CD) 2065-2127, **2008**

3. Vișa, I., Perniu¹, D., Alimisis, D., **Vișa, M.**, Cardon, L., Bakay, E., *Integrated Approach of Sustainable Energy Education and Research for Pre-University Curricula*, Bulletin of the Transilvania University of Brașov, pag. 287-292, ISSN (vol.) 2065-2119, ISSN (CD) 2065-2127, **(2008)**

4. **Vișa M.**, Duță A., *Adsorption Mechanisms Of Heavy Metals On Fly Ash With Modified Surface Charge*, Aiche Annual meeting, Salt Lake City - Utah -USA, CD format, **(2007)**, indexed in the **Scopus database**

5. **Vișa, M.**, Duță A., *Heavy Metals from Multicomponents Cation Solution Using Alkaline Activated Fly Ash*, Bulletin of the Transilvania Univ. of Brasov, vol. 14(49), Series A, pag. 205-210, ISSN 1223-9631, **(2007)**.

6. **Vișa, M.**, Duță, A., *Removal Pollutants From Aqueous Solutions Using Fly Ash*, Bulletin of the Transilvania Univ. of Brasov, vol. 13(48), Series A, pag. 173-180, ISSN 1223-9631, **(2006)**.

7. **Vișa M.**, Duță A., *A Comparative Study Of Cd²⁺ Removal Using Different Types of Fly Ashes*, International Conference on Materials Science and Engineering Brașov, Romania, BRAMAT, Bulletin of the Transilvania Univ. of Brasov, CD format, **(2007)**

8. **Vișa, M.**, Duță, A., *Eco-Materials For Advanced Water Treatment*, Bulletin of the Transilvania Univ. of Brasov, vol. 12(47), Series A, pag. 313-318, ISSN 1223-9631, **(2005)**.

b.8. PAPERS PUBLISHED IN THE PROCEEDINGS VOLUMES OF NATIONAL SCIENTIFIC CONFERENCES

1. **Vișa, M.**, *Developing Comenius Projects At High School Level A Way Of Educating on Sustainable Development*, Prasic'06, Brașov vol. III, Product Design, ISBN (10) 973-635-826-7; pag. 263-266, **(2006)**.

2. Duță A., **Vișa M.**, Perniu D., *Education On Sustainable Development Extend School Level*, Prasic'06, vol. III, Product design, ISBN (13) 978-973-635-826-5, pag. 293-298, **(2006)**.

b.9. OTHER PAPERS PRESENTED IN INTERNAIONAL CONFERENCES

1. **Vișa, M.** Duta, A., *New Composites Obtained by freundlich conditions for Advanced Wastewaters Process*, The Photocatalytic and Superhydrophilic Surfaces Workshop, PSS2013, **(2013)**, Manchester University, **poster presentation**

2. **Vișa,M.**, Bogatu, C., Duta, A., *Influence of pH and H₂O₂ on Tungsten Oxide and Fly Ash Mixtures for Dyes Removal from Wastewater*, The Photocatalytic and Superhydrophilic Surfaces Workshop, PSS2013, **(2013)**, Manchester University, **poster presentation**.

3. **Vișa M., Andronic L., Dută A.**, *Fly ash-TiO₂ nanocomposite material for multi-pollutants wastewater treatment*, 8th International Conference on Surfaces, Coatings and Nanostructured Materials, **(2013)** Granada Spania **oral presentation**.

4. **Vișa M.**, *Sustainable Treatment of Industrial Wastewaters with Complex Composition using fly ash*", 2nd International Congress on Advanced Materials AM **(2013)**, Jiangsu University CHINA, secțiunea 6 Green Materials, **oral presentation**.

5. **Vișa, M., Isac L.**, *Adsorption and Photocatalytic Degradation Mechanisms of Heavy Metals and Surfactants Using TiO₂/Fly Ash with Modified Surface Change*, International Conference ROCAM (2012) Brașov, **poster presentation**.

6. **Vișa Maria**, Duță Anca, *Modified Fly Ash Used for Simultaneous Removal of Dyes and Heavy Metals From Wastewater*, International Symposium on Structural Property Relationships in SolidState Material, Nantes, France, Book of Abstracts, pag. 103, **(2008)**, **poster presentation**

7. Andronic, L., Carcel, R.,A., **Vișa, M.**, Duță, A., *Photocatalytic Activity Of Doped (Cd, Cu, Ni)Titanium Oxide*, 5th European Conference on Solar Chemistry & Photocatalysis: Environmental Applications, Palermo, (Sicilia) Italia Book of Abstracts, PP.3.6., **poster presentation**

8. **Vișa, M.**, Duță A., *Optimized Adsorption Process of Heavy Metals Nano-Particles of Anatase And Fly Ash*, 2nd International Meeting on Developments in Materials, Processes & Applications of Nanotechnology, University of Cambridge-UK, Technical Programme, pag.8, poziția 108, **(2008)** – **oral presentation**

9. **Vișa, M.**, Duță, A., *Advanced Wastewater Treatment for Heavy Metals Immobilisation Using Modified Fly Ash*, European Material Research Science Conference, EMRS Fall Meeting, Warsaw University of Technology, Book of abstracts, ISBN: 83-89585-16-2, secțiunea F, pag 168 **(2007)** – **poster presentation**

10. **Vișa, M.**, Duță, A., Manolache Simona, *Tailoring Fly Ash As Adsorbent For Cadmium Removal Form Industrial Waste Water*, EnvEdu- Brașov Romania, Conference Book of Abstracts, PC8., **(2006)** **poster presentation**.

11. **Vișa M.**, *Studies With the Students on the Quality of the Environment*, EnvEdu – Brașov Romania, Conference, **(2004)** **oral presentation**.

06.06.2014

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