CURRICULUM VITAE
MIHAI O. MARASTEANU

Education

Degree	Institution	Degree Granted
Engineer Diploma Civil Engineering	Technical University Bucharest, Romania	1985
M.S. Civil Engineering	Pennsylvania State University, University Park	1995
Ph.D. Civil Engineering	Pennsylvania State University, University Park	1999

Positions/Employment

University of Minnesota, Twin Cities	
MSES/Miles Kersten Professor, Department of Civil, Env., and Geo – Eng.	07/2020 –
Professor, Department of Civil, Env., and Geo - Engineering	08/2013 – 06/2020
Associate Professor, Department of Civil Engineering	08/2006 – 08/2013
Assistant Professor, Department of Civil Engineering	08/2000 – 08/2006
Pennsylvania State University, University Park	
Research Associate, Pennsylvania Transportation Institute	04/1999 – 08/2000
Research Assistant, Pennsylvania Transportation Institute	06/1997 – 04/1999
Graduate Research Assistant, Civil and Environmental Engineering Department	08/1993 – 06/1997
Research Engineer, Pennsylvania Transportation Institute	06/1992 – 08/1993
Visiting Fellow, Pennsylvania Transportation Institute	08/1991 – 06/1992
Technical University Bucharest, Romania	
Assistant Professor, Faculty or Roads, Bridges and Railways	09/1989 – 06/1992
National Institute for Railway Bridges Design, Bucharest, Romania	
Structural Design Engineer	09/1987 – 09/1989
CCCF (largest construction contractor in Romania), Bucharest, Romania	
Resident Engineer	08/1985 – 09/1987

Current Membership in Professional Organizations

Association of Asphalt Paving Technologists
International Society of Asphalt Pavements

US patent #10155866: Asphalt-graphite mix, with Jia-Liang Le and Mugurel Turos.

Selected publications, past 7 years

Refereed Journal Articles

1. Yan, T., Marasteanu, M., Bennett, C., Garrity, J., Field Density Investigation of Asphalt Mixtures in Minnesota, **Transportation Research Record,** 2021.
2. Yan, T., Marasteanu, M., Le, J., Mechanism-Based Evaluation of Compactability of Asphalt Mixtures, **Road Material and Pavement Design,** EATA 2021.
3. Yan, T, Marasteanu, M., Turos, M., Obtaining asphalt binders rheological properties from BBR strength test: the effect of loading rate, **Mechanics of Time Dependent Material, September 2020**, https://doi.org/10.1007/s11043-020-09464-y
4. Yan, T., Ingrassia, L. Kumar, R., Turos, M., Canestrari, F., Lu, X. Marasteanu, M., Evaluation of Graphite Nano-Particles Influence on the Compaction Properties of Asphalt Mixtures, **Materials,13(3), 2020.** ttps://doi.org/10.3390/ma13030772
5. Le, J.L., Marasteanu, M., Turos, M., "Mechanical and compaction properties of graphite nanoplatelet-modified asphalt binders and mixtures," **Road Materials and Pavement Design, 21:7, 1799-1814, DOI: 10.1080/14680629.2019.1567376**.
6. Matias J., Yan T., Turos, Ghosh, D., Van Deusen, D., Marasteanu, M., "Simple Method to Evaluate Strength and Relaxation Properties of Asphalt Binders at Low Temperature," **Transportation Research Record 2019, Vol. 2673(6) 492–500**, National Academy of Sciences: Transportation Research Board 2019.
7. Marasteanu, M. & Cannone Falchetto A., (2018) Review of experimental characterization and modelling of asphalt binders at low temperature, **International Journal of Pavement Engineering**, 19:3, 279-291, DOI: 10.1080/10298436.2017.1347436
8. Marasteanu, M., Cannone Falchetto, A., Balamurugan, S. and Negulescu, I., "Influence of cooling medium on low temperature strength of asphalt binders", **Construction and Building Materials**, 162 (2018) 80–87.
9. Ghosh, D., Turos, M., Johnson, E., and Marasteanu, M., "Laboratory and Field Investigation of the Effects of Bio Sealants Applications to the Surface of Asphalt Pavements", **J. Mater. Civ. Eng.**, 2018, 30(8): 04018187
10. Le, J.L., Hendrickson, R., Marasteanu, M., Turos, M., "Use of fine aggregate matrix for computational modeling of low temperature fracture of asphalt concrete," **Materials and Structures** (2018) 51:152.
11. Cannone Falchetto A., Wistuba M. and Marasteanu M., "Size effect in asphalt mixture at low temperature: Type I and Type II", **Road Materials and Pavement Design**, Taylor and Francis, vol. 18, suppl. 1, pp. 235-257, 2017. DOI: 10.1080/14680629.2016.1266764
12. Marasteanu M., Cannone Falchetto A., Velasquez R. and Le J-L., "On the representative volume element of asphalt concrete at low temperature", **Mechanics of Time-Dependent Materials**, Springer, vol. 20(3), pp. 343-366, 2016. DOI: 10.1007/s11043-016-9302-3.
13. K.H. Moon, Cannone Falchetto A., Marasteanu M., and Wistuba M., Low temperature rheological properties of asphalt mixtures containing different recycled asphalt materials, **Int. J. Pavement Res. Technol.** (2016), http://dx.doi.org/10.1016/j.ijprt.2016.11.007. (open access journal Elsevier)
14. DeDene, C.D., Gorman, J.M., Marasteanu M. O., Sparrow, E.M., "Thermal conductivity of reclaimed asphalt pavement (RAP) and its constituents", **International Journal of Pavement Engineering**.
15. Carret J-C., Cannone Falchetto, A., Marasteanu, M.O., Di Benedetto, H., Wistuba M.P., Sauzeat, C., "Comparison of Rheological Parameters of Asphalt Binders Obtained from BBR and DSR at Low Temperatures", **Road Materials and Pavement Design**, DOI: 10.1080/14680629.2015.1029696.
16. DeDene, C.D., Voller, V., Marasteanu M. O., Dave, E., "Calculation of Particle Heating Times of Reclaimed Asphalt Pavement Material", **Road Materials and Pavement Design**, vol. 15, No. 3, pp. 721-723, 2014.

Summary of research activities

- Led the asphalt materials research program at University of Minnesota for the past 20 years.
- Published 91 papers in peer reviewed journals and 45 papers in peer reviewed conference proceedings, and over 45 research reports.
- Principal investigator in research projects, funded by Minnesota Department of Transportation, Minnesota Local Road Research Board, FHWA, NCHRP and NCHRP IDEA program, exceeding 4.5 million dollars.
- Research group has developed two provisional AASHTO standards to evaluate the low temperature rheological and fracture properties of asphalt materials.

Editorships/Journal Reviewer Experience

- International Journal of Road Materials and Pavement Design, Associate editor, since 2007.
- Transportation Research Record (since 1998)
- Journal of the Association of Asphalt Paving Technology (since 1999)
- ASCE Journal of Transportation Engineering (since 2002)
- ASCE Journal of Materials in Civil Engineering (since 2001)
- International Journal of Pavement Engineering (since 2003)
- Energy and Fuels
- Construction and Building Materials
- Engineering Fracture Mechanics

Committee memberships [indicate if the candidate served as chair]

- Transportation Research Board AFK10 Committee on General Issues in Asphalt Technology (since 2011)
- Transportation Research Board AFK20 Committee on Characteristics of Bituminous Materials (2002 – 2011, 2017- present)
- Transportation Research Board Asphalt Binder Expert Task Group (2003 - 2015)

Review panels for external funding agencies, foundations, etc.

- Proposal reviewer for the National Science Foundation
- Proposal reviewer for the Canadian National Research Council
- Platform Grant proposal reviewer for the Engineering and Physical Sciences Research Council, UK
- Proposal reviewer for National Priority Research Program, Qatar National Research Fund
- Proposal reviewer for the Swiss National Science Foundation
- Proposal reviewer the Chilean National Research Funding FONDECYT