

# PAWEL POLACZYK

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Google Scholar: <https://scholar.google.com/citations?user=sxsWxV0AAAAAJ&hl>

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## EDUCATION

**2017 - 2020**

**DOCTOR OF PHILOSOPHY, THE UNIVERSITY OF TENNESSEE**

Major: Civil Engineering

Concentration: Geotechnology and Materials Engineering

Advisor: Dr. Baoshan Huang

Dissertation: Investigating the Compactability of Hot Mix Asphalt Utilizing the Concept of the Locking Point

**2015 - 2017**

**MASTER OF SCIENCE, THE UNIVERSITY OF TENNESSEE**

Major: Civil Engineering

Concentration: Geotechnology and Materials Engineering

Advisor: Dr. Baoshan Huang

Thesis: Evaluation of the Hot Mix Asphalt Compactability Utilizing the Impact Compaction Method

**1998 - 2004**

**BACHELOR OF SCIENCE, WARSAW UNIVERSITY OF TECHNOLOGY, POLAND**

Major: Civil Engineering

Concentration: Transportation Engineering

Advisor: Dr. Andrzej Cielecki

Thesis: Analysis of the Traffic Conditions Around Large Commercial Facility

## EXPERIENCE

**SEPTEMBER 2023 – PRESENT**

**ASSISTANT PROFESSOR, TEXAS TECH UNIVERSITY**

Department of Civil, Environmental, and Construction Engineering

Area: Transportation (Pavement Engineering)

**FEBRUARY 2023 – AUGUST 2023**

**RESEARCH OFFICE SUPERVISOR, TENNESSEE DEPARTMENT OF TRANSPORTATION**

- Manage TDOT Research Office and research program.

- Lead and track implementation efforts of research findings within the agency, coordinating with subject matter experts across TDOT and quantifying the effectiveness of research sponsored by TDOT.
- Monitor progress and the fulfillment of research project scopes, including receipt of high-quality deliverables.
- Develop, administer, communicate, and promote the use of products of research, development, and technology transfer programs under 23 USC Section 420 and 23 USC Section 505.

## **JANUARY 2022 – FEBRUARY 2023**

### **RESEARCH ASSISTANT PROFESSOR, THE UNIVERSITY OF TENNESSEE**

Projects funded by the Department of Energy (DOE):

- “Utilizing coal-derived solid carbon materials towards next-generation smart and multifunction pavements” PI: Hongyu Zhou

Projects funded by the Tennessee Department of Transportation (TDOT):

- “Mitigating Stripping in Asphalt Mixtures.” PI: Baoshan Huang
- “100% Recycled Mixtures Using Cold In-place Recycling (CIR), Hot In-place Recycling (HIR) and Cold Central Plant Recycling (CCPR)” PI: Baoshan Huang
- “Utilization of Accelerated Pavement Tester (APT) for New Materials and Pavement Structure Research” PI: Baoshan Huang
- “Evaluating the Performance of Inverted Pavements in Tennessee” PI: Baoshan Huang
- “Evaluation of traffic speed deflectometer for collecting network-level pavement structural data in Tennessee” PI: Baoshan Huang
- “Enhancing Freeze-Thaw Resistance of Tennessee Concrete Mixes through Improved Air Void Testing” PI: Baoshan Huang

Project funded by the Proton Power Inc. (PPI):

- “Laboratory Evaluation of Efficacy of Graphene Modified Asphalt to Pavement Performance” PI: Baoshan Huang

## **DECEMBER 2020 – DECEMBER 2021**

### **POSTDOCTORAL RESEARCH ASSOCIATE, THE UNIVERSITY OF TENNESSEE**

I provide support and research in areas of pavement engineering. My responsibilities include design and implementation of field sampling and analysis; data analytics; preparing and presenting project reports; publishing research results in academic journals; and participating in writing research proposals. I provide assistance and guidance to undergraduate and graduate students working on the same projects.

Projects funded by the Tennessee Department of Transportation (TDOT):

- “Mitigating Stripping in Asphalt Mixtures.” PI: Baoshan Huang
- “100% Recycled Mixtures Using Cold In-place Recycling (CIR), Hot In-place Recycling (HIR) and Cold Central Plant Recycling (CCPR)” PI: Baoshan Huang
- “Utilization of Accelerated Pavement Tester (APT) for New Materials and Pavement Structure Research” PI: Baoshan Huang

- “Evaluating the Performance of Inverted Pavements in Tennessee” PI: Baoshan Huang
- “Evaluation of traffic speed deflectometer for collecting network-level pavement structural data in Tennessee” PI: Baoshan Huang
- “Enhancing Freeze-Thaw Resistance of Tennessee Concrete Mixes through Improved Air Void Testing” PI: Baoshan Huang

Projects funded by the Department of Energy (DOE):

- “Utilizing coal-derived solid carbon materials towards next-generation smart and multifunction pavements” PI: Hongyu Zhou

#### **JANUARY 2019 – DECEMBER 2020**

##### **GRADUATE TEACHING ASSISTANT, THE UNIVERSITY OF TENNESSEE**

I was a Teaching Assistant for **CE521** Pavement Design Course and **CE522** Advanced Mix Design for Asphaltic and Portland-Cement Concrete Course.

#### **JANUARY 2016 – DECEMBER 2020**

##### **GRADUATE RESEARCH ASSISTANT, THE UNIVERSITY OF TENNESSEE**

Projects funded by the Tennessee Department of Transportation (TDOT):

- “Asphalt Mixture Design and Performance by Using a Gyratory Compactor” PI: Baoshan Huang
- “Mitigating Stripping in Asphalt Mixtures.” PI: Baoshan Huang
- “100% Recycled Mixtures Using Cols In-place Recycling (CIR), Hot In-place Recycling (HIR) and Cold Central Plant Recycling (CCPR)” PI: Baoshan Huang

Project funded by Proton Power INC.:

- “Laboratory Evaluation of Efficacy of Graphene Modified Asphalt to Pavement Performance” PI: Baoshan Huang

#### **FEBRUARY 2012 – DECEMBER 2014**

##### **SUPERINTENDENT, SIGMA CONSTRUCTORES, S.A. (GUATEMALA)**

**Project:** Reconstruction of the route from Taxisco to La Avellana (11 miles)

#### **JULY 2006 – JANUARY 2012**

##### **QA/QC RESIDENT ENGINEER, SIGMA CONSTRUCTORES, S.A. (GUATEMALA)**

##### **Projects:**

- Construction of the route Barberena – Valle Nuevo
- Construction of the route Barberena - Jalapa
- Reconstruction of route CA01 OTE Escuintla – Taxisco
- Reconstruction of route Palencia – Sanyuyo
- Reconstruction of route Ipala – CA10.
- Reconstruction of routes RN-18 and RN-19.
- Reconstruction of route Quetzaltenango – San Juan

The total length of routes: **300 miles**

#### **MARCH 2006 – JUNE 2006**

##### **RESIDENT ENGINEER OF ASPHALT PLANT AND PAVING, SIGMA CONSTRUCTORES, S.A. (GUATEMALA)**

**Project:** Capital City Paving, Guatemala City (Guatemala)

**APRIL 2004 – JUNE 2005**

**DESIGN ASSISTANT ENGINEER, JACOBS ENGINEERING GROUP INC.**  
(POLAND)

**Projects:**

- Freeway A-2
- Highway no. 50

## **PROFESSIONAL REGISTRATION**

Professional Civil Engineer in Guatemala – No. 8096

## **PEER-REVIEWED JOURNAL PUBLICATIONS**

- **Polaczyk, P.**, Han, B., Huang, B., Jia, X. and Shu, X. (2018). “Evaluation of the Hot Mix Asphalt Compactability Utilizing the Impact Compaction Method” *Construction and Building Materials*
- Han, B., Ling, J., Shu, X., Gong, H., Sun, Y., **Polaczyk, P.A.**, and Huang, B. (2018). “Resilient Interface Shear Modulus for Characterizing Shear Properties of Pavement Base Materials” *Journal of Materials in Civil Engineering*
- Gong, H., Sun, Y., Hu, W., **Polaczyk, P.A.** And Huang, B. (2019). “Investigating impacts of asphalt mixture properties on pavement performance using LTPP data through random forests” *Construction and Building Materials*
- **Polaczyk, P.**, Huang, B., Shu, X. and Gong, H. (2019). “Investigation into Locking Point of Asphalt Mixtures Utilizing Superpave and Marshall Compactors.” *Journal of Materials in Civil Engineering*
- **Polaczyk, P.**, Shu, X., Gong, H. and Huang, B., and (2019). “Influence of Aggregates Angularity on the Locking Point of Asphalt Mixtures” *Road Materials and Pavement Design*
- Jia, X., Hu, W., **Polaczyk, P.**, Gong, H., and Huang, B. (2019). “Comparative Evaluation of Compacting Process for Base Materials Using Lab Compaction Methods” *Transportation Research Record*
- Xiao, R., **Polaczyk, P.**, Zhang, M., Jiang, X., Zhang, Y., Huang, B., and Hu, W. (2020). “Evaluation of Glass Powder-Based Geopolymer Stabilized Road Bases Containing Recycled Waste Glass Aggregate” *Transportation Research Record*
- Ma, Y., Nie, Q., Xiao, R., Hu, W., Han, B., **Polaczyk, P.A.**, and Huang, B. (2020). „Experimental investigation of utilizing waste flue gas desulfurized gypsum as backfill materials” *Construction and Building Materials*
- Ma, Y., Hu, W., **Polaczyk, P.A.**, Han, B., Xiao, R., Zhang, M., and Huang, B. (2020). „Rheological and aging characteristics of the recycled asphalt binders with different rejuvenator incorporation methods” *Journal of Cleaner Production*
- Hu, W., **Polaczyk, P.**, Jia, X., Gong, H., and Huang, B. (2020) „Visualization and quantification of lab vibratory compacting process for aggregate base materials using accelerometer” *Transportation Geotechnics*

- Gong, H., Sun, Y., Han, B., **Polaczyk, P.**, Hu, W., and Huang, B. (2020) “Improved estimation of dynamic modulus for hot mix asphalt using deep learning” *Construction and Building Materials*
- Xiao, R., Jiang, X., Zhang, M., **Polaczyk, P.**, and Huang, B. (2020) „Analytical investigation of phase assemblages of alkali-activated materials in CaO-SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> systems: The management of reaction products and designing of precursors” *Materials and Design*
- Han, B., **Polaczyk, P.**, Ma, Y., Zhang, M., Lu, X., Wei, F., and Huang, B. (2020) „Laboratory investigation of critical factors affecting geogrid reinforcement on aggregate base using loaded wheel tester” *Journal of Transportation Engineering, Part B: Pavements*
- Jiang, X., Zhang, Y., Xiao, R., **Polaczyk, P.**, Zhang, M., Hu, W., Bai, Y., and Huang, B. (2020) “A Comparative Study on Geopolymers Synthesized by Different Classes of Fly Ash after Exposure to Elevated Temperatures” *Journal of Cleaner Production*
- Han, B., **Polaczyk, P.**, Gong, H., Ma, R., Ma, Y., Wei, F., and Huang, B. (2020). „Accelerated Pavement Testing to Evaluate the Reinforcement Effect of Geogrids in Flexible Pavements” *Transportation Research Records*
- Ma, Y., **Polaczyk, P.**, Park, H., Jiang, X., Hu, W., and Huang, B. (2020) „Performance Evaluation of Temperature Effect on Hot In-Place Recycling Asphalt Mixtures” *Journal of Cleaner Production*
- **Polaczyk, P.**, Hu, W., Han, B., Gong, H., Ma, Y., and Huang, B. (2021). “Influence of Asphalt Binder on the Compactability of Asphalt Mixtures Using Locking Point” will be publish in Volume 89 of Asphalt Paving Technology, *Journal of the Association of Asphalt Paving Technologists*
- Xiao, R., **Polaczyk, P.**, Jiang, X., Zhang, M., Wang, Y., and Huang, B. (2021) “Cementless controlled low-strength material based on waste glass powder and hydrated lime: Synthesis, characterization and thermodynamic simulation” *Construction and Building Materials*
- Xiao, R., Zhang, Y., Jiang, X., **Polaczyk, P.**, Ma, Y., and Huang, B. (2021) „Alkali-activated slag supplemented with waste glass powder: Laboratory characterization, thermodynamic modelling and sustainability analysis” published in *Journal of Cleaner Production*
- **Polaczyk, P.**, Han, B., Gong, H., Ma, Y., Xiao, R., Hu, W., and Huang, B. (2021) “Influence of Aggregate Gradation on the Compactability of Asphalt Mixtures Utilizing Locking Point” *Journal of Materials in Civil Engineering*
- Jiang, X., Zhang, M., Xiao, R., **Polaczyk, P.**, Bai, Y., and Huang, B. (2021) „An investigation of structural responses of inverted pavements by numerical approaches considering nonlinear stress-dependent properties of unbound aggregate layer” *Construction and Building Materials*
- Hu, W., **Polaczyk, P.**, Gong, H., Ma, Y., and Huang, B. (2021) „Visualization and Quantification of Lab Impact Compaction for Soil Materials” *Journal of Rock Mechanics and Geotechnical Engineering*
- **Polaczyk, P.**, and Huang, B. (2021) „Discussion of Design Process of Asphalt Mixture Incorporating Compaction-Effort Variable by Yining Zhang, Lijun Sun, and Dong Luo” *Journal of Materials in Civil Engineering*
- Gong, H., Dong, Y., Sun, Y., **Polaczyk, P.**, Hu, W., and Huang, B. (2021) “An efficient and robust method for predicting asphalt concrete dynamic modulus” *International Journal of Pavement Engineering*

- Ma, Y., Wang, S., Zhou, H., Hu, W., **Polaczyk, P.**, Zhang, M., and Huang, B. (2021) „Compatibility and rheological characterization of asphalt modified with recycled rubber-plastic blends” *Construction and Building Materials*
- **Polaczyk, P.**, Ma, Y., Xiao, R., Hu, W., Jiang, X., and Huang, B. (2021) „Characterization of aggregate interlocking in hot mix asphalt by mechanistic performance tests” *Road Materials and Pavement Design*
- Ma, Y., Wang, S., Zhou, H., Hu, W., **Polaczyk, P.**, and Huang, B. (2021) „A Potential Alternative to Styrene-Butadiene-Styrene for Asphalt Modification Using Recycled Rubber-plastic Blends” *Journal of Materials in Civil Engineering*
- Ma, Y., **Polaczyk, P.**, Hu, W., Zhang, M., and Huang, B. (2021) „Quantifying the Effective Mobilized RAP Content during Hot In-place Recycling Techniques” *Journal of Cleaner Production*
- **Polaczyk, P.**, Hu, W., Gong, H., Jia, X., and Huang, B. (2021) „Improving Asphalt Pavement Intelligent Compaction Based on Differentiated Compaction Curves” *Construction and Building Materials*
- Cheng, Z., **Polaczyk, P.**, Zhang, D., Hu, W., and and Huang, B. (2021) “A method for determining impact locking point of asphalt mixtures based on dynamic response” *Journal of Central South University (Science and Technology)*
- Jiang, X., Zhang, M., Xiao, R., **Polaczyk, P.**, Bai, Y., and Huang, B. (2021) “An investigation of structural responses of inverted pavements by numerical approaches considering nonlinear stress-dependent properties of unbound aggregate layer” *Construction and Building Materials*
- Ma, Y., Zhou, H., Jiang, X., **Polaczyk, P.**, Xiao, M., Zhang, M., and Huang, B. (2021) “The utilization of waste plastics in asphalt pavements: A review” *Cleaner Materials*
- **Polaczyk, P.**, Hu, W., Ma, Y., Xiao, R., Jiang, X., Jia, X., and Huang, B. (2021) „Aggregate and Mixture Types to Over-compaction in the Hot Mix Asphalt in Tennessee” *Transportation Research Record*
- Xiao, R., **Polaczyk, P.**, and Huang, B. (2022) “Measuring Moisture Damage of Asphalt Mixtures: The Development of a New Modified Boiling Test Based on Color Image Processing” *Measurement*
- Ma, Y., Wang, S., Zhou, H., Hu, W., **Polaczyk, P.**, and Huang, B. (2022) “Recycled polyethylene and crumb rubber composites modified asphalt with improved aging resistance and thermal stability” *Journal of Cleaner Production*
- Cheng, Z., Zhang, D., Xie, S., **Polaczyk, P.A.**, and Wang, T. (2022) “SmartRock-Based Research on Gyratory Locking Point for Stone Mastic Asphalt Mixture” *Buildings*
- Jiang, X., Gabrielson, J., Huang, B., Bai, Y., **Polaczyk, P.**, Zhang, M., Hu, W., and Xiao, R. (2022) “Evaluation of inverted pavement by structural condition indicators from falling weight deflectometer” *Construction and Building Materials*
- He, J., Hu, W., Xiao, R., Wang, Y., **Polaczyk, P.**, and Huang, B. (2022) “A review on Graphene/GNPs/GO modified asphalt” *Construction and Building Materials*
- Jiang, X., Gabrielson, J., Titi, H., Huang, B., Bai, Y., **Polaczyk, P.**, Hu, W., Zhang, M., and Xiao, R. (2022) “Field investigation and numerical analysis of an inverted pavement system in Tennessee, USA” *Transportation Geotechnics*
- Ma, Y., **Polaczyk, P.**, Xiao, R., Jiang, X., Zhang, M., Liu, Y., and Huang, B. (2022) „Influence of mobilized RAP content on the effective binder quality and performance of 100% hot in-place recycled asphalt mixtures” *Construction and Building Materials*

- Xiao, R., Ding, Y., **Polaczyk, P.**, Ma, Y., Jiang, X., and Huang, B. (2022) „Moisture damage mechanism and material selection of HMA with amine antistripping agent” *Materials & Design*
- Jiang, X., Titi, H., Ma, Y., **Polaczyk, P.**, Zhang, M., Gabrielson, J., Bai, Y., and Huang, B. (2022) „Evaluating the performance of inverted pavement structure using the accelerated pavement test (APT)” *Construction and Building Materials*
- Xiao, R., Shen, Z., Si, R., **Polaczyk, P.**, Li, Y., Zhou, H., and Huang, B. (2022) „Alkali-activated slag (AAS) and OPC-based composites containing crumb rubber aggregate: Physico-mechanical properties, durability and oxidation of rubber upon NaOH treatment” *Journal of Cleaner Production*
- Xiao, R., **Polaczyk, P.**, Wang, Y., Ma, Y., Lu, H., and Huang, B. (2022) „Measuring moisture damage of hot-mix asphalt (HMA) by digital imaging-assisted modified boiling test (ASTM D3625): Recent advancements and further investigation” *Construction and Building Materials*
- Wang, Y., **Polaczyk, P.**, He, J., Lu, H., Xiao, R., and Huang, B. (2022) “Dispersion, compatibility, and rheological properties of graphene-modified asphalt binders” *Construction and Building Materials*
- Xiao, R., Guo, J., Ding, Y., **Polaczyk, P.**, Ma, Y., Jiang, X., and Huang, B. (2022) “Evaluating asphalt mix ingredients by moisture susceptibility: The development of a new modified boiling test procedure based on digital imaging” *Journal of Materials in Civil Engineering*
- Ma, Y., Zheng, K., Ding, Y., **Polaczyk, P.**, Jiang, X., and Huang, B. (2022) “Binder availability and blending efficiency of reclaimed asphalt: A state-of-the-art review” *Construction and Building Materials*
- Ma, Y., **Polaczyk, P.**, Zhang, M., Xiao, R., Jiang, X., and Huang, B. (2023) „Comparative study of pavement rehabilitation using hot in-place recycling and hot-mix asphalt: Performance evaluation, pavement life prediction, and life cycle cost analysis” *Transportation Research Record*
- **Polaczyk, P.**, Ma, Y., Jarrar, Z., Jiang, X., Xiao, R., and Huang, B. (2023) „Quantification of Asphalt Mixture Interlocking Utilizing 2D and 3D Image Processing” *Journal of Materials in Civil Engineering*
- Xiao, R., **Polaczyk, P.**, and Huang, B. (2023) “Mitigating Stripping in Asphalt Mixtures: Pretreatment of Aggregate by Thermoplastic Polyethylene Powder Coating” *Transportation Research Record*
- Zhang, M., Jia, X., Fu, G., **Polaczyk, P.**, and Huang, B., (2023) „Evaluating structural characteristics of asphalt pavements by using deflection slopes from traffic speed deflectometer” *Construction and Building Materials*
- Dong, Q., Yan, S., Chen, X., Dong, S., Zhao, X., and **Polaczyk, P.** (2023) “Review on the mesoscale characterization of cement-stabilized macadam materials” *Journal of Road Engineering*
- Ma, Y., Wang, S., Zhang, M., Jiang, X., **Polaczyk, P.**, and Huang, B. (2023) „Weather aging effects on modified asphalt with rubber-polyethylene composites” *Science of The Total Environment*
- Ma, Y., Ding, Y., Zheng, K., **Polaczyk, P.**, Zhang, M., Xiao, R., and Huang, B. (2023) „Effects of Immobilized RAP Binder on Asphalt-Aggregate Interaction and Performance of 100% Recycled Asphalt Mixtures” *Journal of Materials in Civil Engineering*
- **Polaczyk, P.**, Weaver, SC., Ma, Y., Zhang, M., Jiang, X., and Huang, B. (2023) “Laboratory investigation of graphene modified asphalt efficacy to pavement performance” *Road Materials and Pavement Design*

- Zhang, M., Fu, G., Jia, X., Ma, Y., **Polaczyk, P.A.**, and Huang, B. (2023) „Relationship between Fatigue Condition of Asphalt Pavements and Deflection Lag from Traffic Speed Deflectometer” *Journal of Materials in Civil Engineering*
- Xiao, R., Shen, Z., **Polaczyk, P.**, and Huang, B. (2023) “Thermodynamic Properties of Aggregate Coated by Different Types of Waste Plastic: Adhesion and Moisture Resistance of Asphalt-Aggregate Systems” *Journal of Materials in Civil Engineering*
- Wang, Y., **Polaczyk, P.**, and Huang, B. (2023) „Discussion of “Enhanced Pavement Performance and Improved Stability of Asphalt and Recycled Plastic Blends Modified by Exfoliated Clay Nanoplatelets” *Journal of Materials in Civil Engineering*
- Cheng, Z., Zhang, D., Xie, S., **Polaczyk, P.**, Jia, X., Wang, T., Huang, B., and Cai, M. (2023) “Laboratory investigation of gyratory-vibratory compaction method for better simulating asphalt mixture field compaction” *Construction and Building Materials*
- Ma, Y., Demchuk, Z., **Polaczyk, P.**, Zhou, H., He, Q., Baumgardner, G.L., Huang, B. (2023) „Reactive Extrusion of Waste Plastics with Compatibilizer and Lightly Pyrolyzed Crumb Rubber for Asphalt Modification” *Transportation Research Record*

Up to date record can be found at: [Pawel Polaczyk - Google Scholar](#)

## PROJECT REPORTS

- Huang, B., **Polaczyk, P.A.**, Hu, W. (2020) “Asphalt Mixture Design and Performance Properties by Using a Gyratory Compactor” *Tennessee Department of Transportation Research Project: RES2016-02*
- Huang, B., Jiang, X., **Polaczyk, P.** (2022) “Utilization of Accelerated Pavement Tester (APT) for New Materials and Pavement Structure Research” *Tennessee Department of Transportation Research Project: RES2019-12*
- Jiang, X., Huang, B., Titi, H., **Polaczyk, P.** (2022) “Evaluating the Performance of Inverted Pavements in Tennessee” *Tennessee Department of Transportation Research Project: RES2020-12*
- Huang, B., Ma, Y., **Polaczyk, P.** (2022) “100% Recycled Mixtures Using Hot In-Place Recycling (HIR) and Cold In-Place Recycling (CIR)” *Tennessee Department of Transportation Research Project: RES2019-03*
- Huang, B., Xiao, R., **Polaczyk, P.** (2022) “Mitigating Stripping in Asphalt Mixtures” *Tennessee Department of Transportation Research Project: RES2020-07*
- Huang, B., Zhang, M., Gong, H., **Polaczyk, P.** (2022) “Evaluation of Traffic Speed Deflectometer for Collecting Network Level Pavement Structural Data in Tennessee” *Tennessee Department of Transportation Research Project: RES2020-08*
- Huang, B., Ma, Z.J., Wang, Y., Lu, H., **Polaczyk, P.** (2022) “Enhancing Freeze-Thaw Resistance of Tennessee Concrete Mixes Through Improved Air Void Testing” *Tennessee Department of Transportation Research Project: RES2020-09*
- Huang, B., He, Q., Wilson, C., Lu, H., **Polaczyk, P.** (2022) “Evaluating Roadway Subsurface Drainage Practices” *Tennessee Department of Transportation Research Project: RES2019-18*

## CONFERENCES



- The Transportation Research Board (TRB) 97<sup>th</sup> Annual Meeting, **Washington, DC** (2018): “Investigation into Locking Point of Asphalt Mixtures Utilizing Superpave and Marshall Compactors.”
- The Transportation Research Board (TRB) 98<sup>th</sup> Annual Meeting, **Washington, DC** (2019): “Comparative Evaluation of Compacting Process for Base Materials Using Lab Compaction Methods”
- 8<sup>th</sup> European Asphalt Technology Association Conference. **Granada, Spain** (2019) “Influence of Aggregates Angularity on the Locking Point of Asphalt Mixtures”
- The Transportation Research Board (TRB) 99<sup>th</sup> Annual Meeting, **Washington, DC** (2020): “Influence of Different Rejuvenator Incorporation Methods on the Rheological and Aging Properties of the Recycled Asphalt Binders”, “An Efficient and Robust Method for Predicting Asphalt Concrete Dynamic Modulus”, “Evaluation of Glass Powder-based Geopolymer Stabilized Road Bases Containing Recycled Waste Glass Aggregate”, “Accelerated Pavement Testing to Evaluate the Geogrid Reinforcement in Flexible Pavement Structures”
- 95<sup>th</sup> Association of Asphalt Paving Technologists (AAPT) Annual Meeting. **San Diego, California** (2020). “Influence of Asphalt Binder on the Compactability of Asphalt Mixtures Using Locking Point”
- The Transportation Research Board (TRB) 100<sup>th</sup> Annual Meeting (online), **Washington, DC** (2021): “Cementless controlled low-strength material based on waste glass powder and hydrated lime: Synthesis, characterization and thermodynamic simulation.”
- 9<sup>th</sup> European Asphalt Technology Association Conference. **Vienna, Austria** (2021) “Influence of Aggregates Angularity on the Locking Point of Asphalt Mixtures”
- The Transportation Research Board (TRB) 101<sup>st</sup> Annual Meeting (online), **Washington, DC** (2022)
- 10<sup>th</sup> European Asphalt Technology Association Conference. **Gdansk, Poland** (2023) “Laboratory investigation of graphene modified asphalt efficacy to pavement performance”
- 99<sup>th</sup> Association of Asphalt Paving Technologists (AAPT) Annual Meeting. **San Diego, California** (2023). “Reactive Extrusion of Waste Plastics with Compatibilizer and Lightly Pyrolyzed Crumb Rubber for Asphalt Modification”

## SERVICE AS REVIEWER

Total of 355 reviews

- Journal of Cleaner Production (Elsevier) – Impact Factor: 9.297
- Transportation Research Records (SAGE) – Impact Factor: 1.560
- Journal of Materials in Civil Engineering (ASCE) – Impact Factor: 3.266
- Journal of Construction Engineering and Management (ASCE) – Impact Factor: 3.951
- Road Materials and Pavement Design (Taylor & Francis Group) – Impact Factor: 3.792
- International Journal of Pavement Engineering (Taylor & Francis Group) – Impact Factor: 4.139
- Construction and Building Materials (Elsevier) – Impact Factor: 6.141
- Surface and Coatings Technology (Elsevier) – Impact Factor: 3.784
- Advances in Civil Engineering Materials (ASTM) – Impact Factor: 1.000
- Energy, Ecology and Environment (Springer) – Impact Factor: N/A
- Achievements in Materials and Manufacturing Engineering – Impact Factor: 0.310
- Applied Sciences (MDPI) – Impact Factor: 2.474

- Buildings (MDPI) – Impact Factor: N/A
- Coatings (MDPI) – Impact Factor: 2.436
- Infrastructures (MDPI) – Impact Factor: N/A
- Materials (MDPI) – Impact Factor: 3.057
- Minerals (MDPI) – Impact Factor: 2.380
- Polymers (MDPI) – Impact Factor: 3.426
- Symmetry (MDPI) – Impact Factor: 2.645
- Sustainability (MDPI) – Impact Factor: 2.576
- Modelling (MDPI) – Impact Factor: N/A
- Proceedings of the Institution of Civil Engineers: Civil Engineering (ice) – Impact Factor: 0.825
- Cleaner Materials (Elsevier) – Impact Factor: N/A
- International Conference on Managing Pavement Assets
- Transportation Research Board Annual Meeting

Up to date record can be found at: <https://publons.com/researcher/1822677/pawel-polaczyk/peer-review/>

## **TRAINING**

- 2019 NCAT Professor Training Course  
<https://www.eng.auburn.edu/research/centers/ncat/education/academic-programs/professor-training-course.html>

## **MEMBERSHIPS**

- American Society of Civil Engineers (ASCE) – Member
- Association of Asphalt Paving Technologist (AAPT) – Member
- International Society for Asphalt Pavements (ISAP) – Member
- Academy of Pavement Science and Engineering - Member
- World Road Association – Member
- ASTM International – Member
- Transportation Research Board – Member
- Polonia Technica – Board Member

## **LANGUAGES**

- English
- Polish
- Spanish