POSTDOCTORAL SCHOLAR JOB ANNOUNCEMENT
OREGON STATE UNIVERSITY
School of Civil and Construction Engineering

PAVEMENTS AND SUSTAINABILITY

The School of Civil and Construction Engineering at Oregon State University (OSU), located in Corvallis, Oregon, is seeking a highly qualified candidate for a postdoctoral scholar position within the OSU Asphalt Materials and Pavements (OSU-AMaP) Research Group, with a strong emphasis on pavement sustainability, life-cycle assessment, and environmental impact analysis.

This is a full-time (1.0 FTE) position focused on the testing, modeling, and sustainability assessment of asphalt materials and pavement structures. The appointment is for 12 months, beginning in April 2026 (with flexibility in the start date), and may be extended based on satisfactory performance and mutual agreement. The position will remain open until filled.

The position is supported by externally funded research projects with state and national transportation agencies.

Applicants must hold a Ph.D. in civil engineering, environmental engineering, materials science/engineering, or a closely related field, with demonstrated experience in life-cycle assessment (LCA), environmental impact analysis, pavement sustainability, and general knowledge of pavement materials and structures, including hands-on experience in materials testing.

The successful candidate will work on the following research areas in collaboration with graduate and undergraduate students:

i) Life-cycle assessment (LCA) and life-cycle cost analysis (LCCA) of asphalt materials and pavement systems, including low-carbon and sustainable pavement strategies
ii) Integration of balanced mix design (BMD) concepts with sustainability and environmental performance metrics
iii) Sustainability evaluation of emulsified asphalt concrete mixtures and other pavement preservation technologies
iv) Environmental and performance impacts of high reclaimed asphalt pavement (RAP) contents and recycled materials in road construction

In addition to research activities, the postdoctoral scholar will have opportunities to lead or co-lead peer-reviewed journal publications, develop sustainability-focused research methodologies, contribute to proposal development, and engage with transportation agencies and industry partners on pavement sustainability initiatives.

Some recent publications of the research group are provided below for reference:

- Paper#1: Renewable Fuel for Asphalt Concrete Production to Reduce Carbon Emissions, https://doi.org/10.1007/978-3-031-61585-6_17
- Paper#2: The Impact of Declining Roadway Conditions on Road User Costs and Greenhouse Gas Emissions www.oregon.gov/odot/Programs/ResearchDocuments/Climate_Challenge_SmoothnessImpact.pdf
- Paper#3: A systematic review on the role of reclaimed asphalt pavement materials: Insights into performance and sustainability, https://doi.org/10.1016/j.clema.2025.100316
- Paper#4: Benchmarking the performance of asphalt mixtures for the implementation of Balanced Mix Design (BMD) in Oregon https://doi.org/10.1080/10298436.2025.2489760
- Paper#5: A review on the incorporation of reclaimed asphalt pavement material in asphalt pavements: management practices and strategic techniques https://doi.org/10.1080/14680629.2025.2470889

For additional information about the activities in our research group, please visit:
http://research.engr.oregonstate.edu/coleri/home

If you meet the aforementioned requirements, please email the following documents in a single PDF file (Word documents will not be opened) to the contact listed below.

The subject line of your email should contain the following text:
"OSU-AMaP – Pavement Sustainability – Postdoctoral Scholar Application (your last name)"

- A detailed CV
- A one-page statement describing your background and how you fit the advertised position
- A one-page statement reflecting your perspectives on key sustainability and environmental challenges in pavement engineering today
- Contact information for three references

Please note that only qualified candidates with the required expertise will be contacted.

Contact:
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