

# PROVAL

## ProVAL WORKSHOP

### *Pavement Profile Viewing and Analysis Software*

*October 30<sup>th</sup>, 2022*

*JRPUG - Hokkaido University of Science*

*7-Jo 15-4-1 Maeda, Teine, Sapporo, Hokkaido, Japan 006-8585*

### **OBJECTIVES**

- To familiarize attendees with the current version of ProVAL – the *Profile Viewing and Analysis* software ([www.RoadProfile.com](http://www.RoadProfile.com)).
- To refresh some of the critical fundamentals of pavement profiling and analysis methods.
- To inform attendees of the advantages, limitations, and pitfalls of analyzing and interpreting pavement profiles.
- To provide an interactive and hands-on approach throughout the workshop.

### **AGENDA**

#### **AM**

- 11:00 am      Session 1.1 – Profile data collection (45 min.)  
11:45 am      Session 1.2 – Ride quality Assessment (45 min.)  
12:30 pm      Break (60 min. lunch)

#### **PM**

- 01:30 pm      Session 2.1 – Power Spectral Density (PSD) (40 min.)  
02:10 pm      Session 2.2 – Smoothness Assurance Module (SAM) (60 min.)  
03:10 pm      Break (15 min.)  
03:25 pm      Session 2.3 – Grinding Simulation and Field Operation (40 min.)  
04:05 pm      Session 2.4 – Profile Comparison and Certification (40 min.)  
04:45 pm      Qs and As (15 min.)  
05:00 pm      Adjourn

### **Further Information**

[ProVAL 3.6 User's Guide \(English\)](#)

[ProVAL 3.5 User's Guide \(Japanese\)](#)

[www.RoadProfile.com](http://www.RoadProfile.com)

[www.SmoothPavements.com](http://www.SmoothPavements.com)



THE  
TRANSTEC GROUP

## Bio of ProVAL Trainer



Dr. George K. Chang, P.E.

Director of Research

The Transtec Group

Address: 6111 Balcones Drive, Austin, Texas 78731, USA

Phone: +1-512-451-6233

Email: GKChang@TheTranstecGroup.com

Dr. George Chang is the world's expert on pavement smoothness and intelligent compaction technologies. His research, teaching, specification development, and software tools have helped make significant technology advancements in the above fields. The websites he develops and maintains, Profile Viewing and Analysis - ProVAL ([www.RoadProfile.com](http://www.RoadProfile.com)), Intelligent Construction - IC ([www.IntelligentConstruction.com](http://www.IntelligentConstruction.com)), and International Society for Intelligent Construction - ISIC ([www.IS-IC.org](http://www.IS-IC.org)), have evolved into the one-stop shop for pavement smoothness and intelligent compaction/construction. He has been leading the US national deployment effort of the International Roughness Index (IRI) with ProVAL and intelligent compaction with Veta since 2001 and 2007, respectively.

Dr. Chang has been the Principal Investigator (PI) for numerous projects that enhance pavement materials/structure design and analysis, pavement surface characteristics (smoothness/texture/noise), intelligent compaction for soils and asphalt pavement construction, intelligent construction technologies, etc. Examples of these projects include FHWA ProVAL Support, HIPERPAV, Concrete Mixture Optimization (COMPASS), Pavement Surface Enhancements, TPF/EDC Intelligent Compaction, Veta software, and Intelligent Construction Systems and Technologies (ICST). Dr. Chang has also developed and edited many ASTM and AASHTO standards. The above software tools and standards have been used by industry worldwide. Recognized for his energetic, lively teaching style, Dr. Chang delivers pavement smoothness and intelligent compaction/construction-related workshops worldwide, including more than 150 ProVAL workshops. Dr. Chang has been the chairman of the International Society for Intelligent Construction (ISIC), Road Profile Users' Group (RPUG), TRB AFD90 Pavement Surface Properties and Vehicle Interaction committee (an Emeritus Member), and ASTM E17.31 Profile Measurement subcommittee. He is also a member of the TRB Pavement Rehabilitation committee, etc.

Dr. Chang received many industry awards, such as ASTM Kummer Lecture Award, ASTM Meyer-Horne Outstanding Achievement Award, the RAI Power List Award for rejuvenating the US infrastructure, the NOVA award from Construction Innovation Forum (CIF), the Founders' Award from RPUG, and ASTM Billiard-Stubstad Award. His research work has been featured in over 50 professional publications and 100+ reports. Dr. Chang has taught more than 150 ProVAL workshops in the US, Europe, and China since 2001.

## **ProVAL Software**

**Please download and install ProVAL on your computer before the workshop!**

**The version to be used at this workshop is [3.61.44](#)**

### **Download ProVAL**

The latest version of ProVAL can be freely downloaded from the ProVAL website.

<http://www.roadprofile.com/proval-software/current-version/>

### **Install ProVAL**

#### **System Requirements**

ProVAL 3.6x is supported on 32 or 64-bit versions of Windows 7 or later. Older operating systems are only supported through ProVAL 3.52.

ProVAL 3.6x requires Microsoft .NET 4.5.2. If you do not have the required version of .NET installed, the ProVAL installation will download and install it.

To uninstall the software, go to Programs and Features in the Windows Control Panel.

#### **Installation Guide**

Previous versions of the same family will be automatically uninstalled. For example, 3.6x will uninstall the previous 3.6x versions but will not uninstall 3.5. The two versions can co-exist side-by-side.

You must have sufficient privileges (i.e., administrative rights) to install applications on your computer. If you receive an error message during the installation, ask your administrator to install the software for you. If your administrator can also not install the software, please contact us (<http://www.roadprofile.com/proval-support/>).

#### **Workshop Sample Files**

All sample files used for the ProVAL workshops will be automatically installed with the ProVAL software installation. The default sample folder is:

C:\Users\Public\Public Documents\ProVAL 3.6 Samples