



PIYANUT MEETHUM

EDUCATION

2023: Doctor of Philosophy (Mechanical Engineering) Mahidol University, Nakhonpathom, Thailand.

- Thesis: Development of Motorcycle Tire Tread for Anti-Hydroplaning with Finite Element Method

2015: Master of Engineering (Mechanical Engineering) Mahidol University, Nakhonpathom, Thailand

- Thesis: Development of Auto-Part Design for High Pressure Die Casting Process

2013: Bachelor of Engineering (Mechanical Engineering) Mahidol University, Nakhonpathom, Thailand

- Senior project: Prototyping of the Wireless Device for Measuring Foot Plantar Pressure

PERSONAL INFORMATION

Birthday: 14 October 1990 **Gender:** Female
Height: 158 cm **Weight:** 50 kg
Nationality: Thai **Race:** Thai
Religion: Buddhist **Marital status:** Single

TOPICS OF INTEREST

- Finite Element Method (FEM)
- High pressure die casting process simulation
- Hydroplaning of motorcycle tire simulation

EXPERIENCE

2015 - 2021: Lecturer at Siam University which teaches about the mechanics of static and mechanics of fluid

2018 - present: Assistant Energy Conservation Inspector (ผู้ช่วยผู้ตรวจการอนุรักษ์พลังงาน)

COMPUTER SKILL

- Solidwork
- MSC.Patran, Dytran
- CAST - Designer software
- Microsoft office (Word, Excel, Power point)

CONTACT INFORMATION

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RESEARCH PROJECTS

- **2014-2015:** Development of Auto-Part Design for High Pressure Die Casting Process Funded by: Thailand Research Fund (TRF) and Mico Precision Co., Ltd.
- **2017-2023:** Development of Motorcycle Tire Tread for Anti-Hydroplaning with Finite Element Method : Thailand Research Fund (TRF) and ND Rubber Co., Ltd.

CONFERENCES AND PUBLICATIONS

2014

- Meethum, P., Suvanjumrat. C. 2014. High Pressure Die Casting Model and Effective Factors for Porosity in Parts. In Proceeding of The 28th Conference of Mechanical Engineering Network of Thailand. 15-17 October 2014. Khon Kaen, Thailand.

2015

- Meethum, P., Suvanjumrat. C. 2015. Porosities Comparison between Production and Simulation in Motorcycle Fuel Caps of Aluminum High Pressure Die Casting. In Proceeding of The ICMETA International Conference on Mechanical Engineering. 29-30 March 2015. Singapore.
- Meethum, P., Suvanjumrat. C. 2015. Investigation of Flow Marks on Surface of High Pressure Die Casting Product using Computer-Aided Engineering. In Proceeding of The 29th Conference of Mechanical Engineering Network of Thailand. 1-3 July 2015. Nakhon Ratchasima, Thailand.

2016

- Meethum, P., Suvanjumrat. C. 2016. Evaluate of Chill Vent Performance for High Pressure Die-Casting Production and Simulation of Motorcycle Fuel Caps. In Proceeding of The ICMAM International Conference on Mechatronics, Automation and Manufacturing. 29-31 October 2014. Tokyo, Japan.

2017

- Meethum, P., Suvanjumrat. C. 2017. Evaluate of Chill Vent Performance for High Pressure Die-Casting Production and Simulation of Motorcycle Fuel Caps. In MATEC Web of Conferences 95.

2023

- Meethum, P., Suvanjumrat. C. 2023. Numerical Study of Dynamic Hydroplaning Effects on Motorcycle Tires. International Journal of Automotive and Mechanical Engineering, VOL. 20, ISSUE 1, 10192 – 10210.
- กองเต็ม พิรยุทธ, อ่วมกัณ ชัชวาลย์, มีธรรม ปิยะนุช, โชคชัยวิวัฒน์ วิษรสมศรี, จิรชاکริต ชนม์ วิโรจน์, ไทยเจริญ อารท. Study of Front Stabilizer for Student Formula. (2567). การประชุมวิชาการเครือข่ายวิศวกรรมเครื่องกลแห่งประเทศไทย ครั้งที่ 38. 38. 212-216.

2024

- Piyanut Meethum, Chakrit Suvanjumrat. Hydroplaning Effects of Tread Patterns of Motorcycle Tires. Journal of Transportation Engineering, Part B: Pavements (American Society of Civil Engineers). (2024). 151(1). 04024052.
- W Jariyatontivait and P Meethum. Potential Assessment of Cooling Systems under the Enforcement of Laws in Thailand. (2024). The 14th TSME International Conference on Mechanical Engineering.