Mehmet Kopru

Physicist & Prototype Developer

Personal Info

Address
Ankara / Turkey

Phone
(+90) 541 413 9344

E-mail
mehmetkopru@gmail.com

www
www.mehmetkopru.com

Languages

Native in Turkish

Fluent in English(TOEFL IBT 93)

Skills

Vibration, SRS Shock Tests

LabVIEW Instrument Controlling

Embedded Control Board Design

Circuit & PCB Design

3D Modelling, 3D Printing

UV-VIS, FTIR Spectroscopy

Experienced physicist with interdisciplinary skills, who develops prototypes with multidisciplinary approaches

Work History

2013-01 - Current

Senior Researcher, Dynamic Test Expert

TUBITAK Space Technologies Research Institute / Ankara

(TUBITAK, THE SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TURKEY)

- Preparation & perform SRS shock tests with pneumatic and hammer based SRS Pyro Shock simulation system for satellite equipment
- Preparation & perform of mechanical vibration tests for observatory and telecommunication satellite equipment (ESA, NASA, MIL-STD standards)

2011-04 - 2012-10

Founder, R&D Engineer

TIG Engineering, Ankara

Management, Electronic circuit and PCB design

2009-08 - 2010-06

R&D Engineer

Milens Ltd., Ankara

Embedded software, Electrical and control board tests

Education

2011-09 - 2015-06

MSc in Advanced Technologies

Gazi University - Ankara / Turkey

2002-09 - 2009-02

BSc in Physics

METU - Ankara / Turkey

Accomplishments

- **Development of radiation detector with 3 different sensors for space systems (circuit, PCB, firmware, test)**
- **Set up hammer based SRS Pyro shock simulation system**
- **Set up pneumatic SRS Pyro shock simulation system**
- **Development of "Building Vibration Test Setup"**

Social

Internations Consul in Ankara

Software

LabVIEW

Excellent

DIAdem

Excellent

LMS Test.lab

Excellent

Proteus ISIS, ARES

Excellent

PIC C (embedded)

Very Good

C

Very Good

Solidworks

Good

Photoshop, Lightroom

Good

Interests

Fractals
Philosophy
Natural stones
Epoxy- Silicone craft
Watches
Jewelry
Cooking

- **Development of computer controlled thin film "Thermoelectric Power" measurement system at cryogenic temperatures**
- **Verification of SCADAS III based whole vibration system by another DAQ**
- **Experimental investigation of effects of ultrasonic waves on heat transfer in gaseous medium**

DIY Projects:

- **Acoustic levitation by ultrasound**
- **Vacuum jar**
- **Rotating laser line**
- **Flexible PCB**
- **Wireless LED**
- **Tactile transducer from Iphone taptic engine**
- **Shower filter**
- **Coil gun**

Patents

- **Coffee brewing method with cool mist (TR, Pending)**

Training

- **Telecommunication Satellites Environmental Tests, JAXA - Japan Aerospace Exploration Agency, Ankara/Turkey**
- **"STAMP Training - Workshop", MIT, Boston /USA**
- **Space System Verification & Validation, TSTI – Teaching Science & Technology Inc., Ankara /Turkey**
- **Fundamentals of Vibration for Test and Design Applications" TTI Co, Las Vegas / USA**
- **LabVIEW Training, Core 1, Core 2, NI, Ankara/Turkey**

Publications

- **M. Kopru, E. Orhan, S. B. Ocak; Experimental Study of Effects of *Ultrasonic Waves on Heat Distribution in Gaseous Medium*, Procedia - Social and Behavioral Sciences, 195, 2849–2858, doi:10.1016/j.sbspro.2015.06.406**
- **B.Kocaman, M.Kopru, B.Solak, M.Harmandali, E.Guven, E.Yilmaz; *Development of Radiation Detector (Radiation Module) With Three Different Sensors for Space Applications* *RAD Conference Proceedings, vol. 4, 2019*. Abstract accepted, manuscript sent for review.**