Prof. Şeref SOYLU

Personal Information

Birthyear: 1968
Place of birth: Kayseri
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Biography

Dr. Soylu was born in 1968, in Kayseri, Turkey. After receiving his B.S. degree from Gazi University in 1988, he worked as Internal Combustion Engine Instructor for the Ministry of National Education and National Defense in Turkey until 1994. Then, he went to Iowa State University, U.S.A. for his M.S. and Ph.D education in Mechanical Engineering under supervision of Prof. Dr. Jon Van Gerpen. His M.S. and Ph.D. research works focused on alternative fuels (natural gas and bio-diesel) for internal combustion engines, emission measurement, thermodynamic engine modeling and autoignition modeling that were supported by John Deere Product Engineering Center, and many other Industrial and State organizations in the US. Through end of his Ph.D. study, Dr. Soylu worked for Caterpillar Inc. as an Analytical Engineer in Peoria, IL for the development of the advanced diesel engines from 2000 to 2001. After receiving his Ph.D. degree in 2001, Dr. Soylu joined to Sakarya University, Turkey as an Assistant Professor.

His research works at Sakarya University centered on the development of environmentally friendly road transport vehicles by means of improving the efficiency and reducing emissions. He performed research specifically on alternative fuels (natural gas, bio-diesel, bio-gas, and hydrogen) and advance engine/vehicle technologies. The courses that he taught were mainly thermal science courses which were Thermodynamics, Heat Transfer, Air Pollution and Control.

As Dr. Soylu was selected as independent expert by European Commission in the field of Energy and Transport in 2003, he started evaluating and reviewing the FP6 and FP7 projects on behalf of the European Commission. Then Dr. Soylu moved to Italy to work as a Senior/Visiting Scientist in the Joint Research Center of European Commission for a year from November 2004 to November 2005 to provide technical and scientific support to the European Commission for their legislative works. His work, in the Joint Research Center, focused on fuels and additives for internal combustion engines, portable emission measurement systems, and small engines.

After returning to Sakarya University, he clearly indicated his vision and leadership qualities as he coordinated a collaborative research project, that is Sakarya Air Quality Protection and Improvement (SAHAKK-I), with partners from Industry, Sakarya Municipality and Sakarya Governorship to solve real world Transport and Air Pollution problems of Sakarya. The overall goal of SAHAKK-I research project was to provide technical and scientific support to the policymakers and relevant stakeholders for sustainable development. After that he became an Associate Professor of Sakarya University and his scientific and leadership qualities were further strengthened as he coordinated the Hybrid City Bus project in which the first Hybrid City Bus of Turkey was developed and tested under real world urban driving conditions. During this period, he has supervised many graduate students, all of whom have completed their M.S. degrees, and produced several peer-reviewed publications.

Dr. Soylu was promoted to full professor and department head position at Bilecik S. Edebali University in 2015. He had

been appointed various administrative duties such as Department Head, Member of Faculty Administration Committee and Member University Administration Committee. His research in Bilecik S. Edebali University mostly focused on multidisciplinary research projects which focus on the development of particle filters for Internal Combustion Engines. Starting from spring 2020 semester, he has been a faculty of Kocaeli University. He is currently a teaching thermal science courses and performing research on mainly IC Engines and Hybrid Vehicles.

As a result, Dr. Soylu has the expertise, leadership, training, and motivation necessary to successfully carry out energy and automotive related research projects and teach thermal science courses. He has a broad background in mechanical engineering, with specific training and expertise in thermal science and automotive engineering.

Education Information

Doctorate, Iowa State University of Science and Technology, Engineering Faculty, Mechanical Engineering, United States Of America 1996 - 2001
Post Graduate, Iowa State University of Science and Technology, Engineering Faculty, Mechanical Engineering, United States Of America 1994 - 1996
Under Graduate, Gazi University, Teknik Eğitim Fakültesi, Otomotiv, Turkey 1984 - 1988

Foreign Languages

English, C2 Proficiency

Research Areas

Engineering and Technology

Academic Titles / Tasks

Professor, Kocaeli University, Mühendislik Fakültesi, Makina Mühendisliği, 2020 - Continues
Professor, Bilecik Seyh Edebali University, Faculty Of Engıneerıng, Department Of Mechanıcal Engıneerıng, 2015 - 2020
Associate Professor, Sakarya University, Faculty Of Engıneerıng, 2008 - 2015
Assistant Professor, Sakarya University, Faculty Of Engıneerıng, Department Of Envıronmental Engıneerıng, 2005 - 2008
Assistant Professor, European Commission Joint Research Center, Institute of Environment and Sustainability, 2004 - 2005
Assistant Professor, Sakarya University, Faculty Of Technıcal Educatıon, Department Of Mechanıcs Educatıon, 2001 - 2004
Research Assistant, Iowa State University of Science and Technology, Faculty of Engineering, Department of Mechanical Engineering, 1994 - 2001

Professional Experience

Head of Department, Kocaeli University, Mühendislik Fakültesi, Makina Mühendisliği, 2020 - Continues
University Executive Board Member, Bilecik Seyh Edebali University, Faculty Of Engıneerıng, Department Of Mechanıcal And Manufacturıng Engıneerıng, 2015 - 2020
Head of Department, Bilecik Seyh Edebali University, Faculty Of Engıneerıng, Department Of Mechanıcal Engıneerıng, 2015 - 2018

Courses

İçten Yanmalı Motorlar, Under Graduate, 2019 - 2020
Automotive Engineering - Fundamental Technologies, Post Graduate, 2020 - 2021

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Microstructural Characterization, Mechanical, Physical and Thermal Properties of a Diesel Particulate Filter**
  Acikbas N. C. , Ture Y., Gurlek E., Ozcan S., Soylu Ş., Acikbas G., Gudu T.
  ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.43, pp.1383-1394, 2018 (Journal Indexed in SCI)
- **Development of PN emission factors for the real world urban driving conditions of a hybrid city bus**
  Soylu Ş.
  APPLIED ENERGY, vol.138, pp.488-495, 2015 (Journal Indexed in SCI)
- **The effects of urban driving conditions on the operating characteristics of conventional and hybrid electric city buses**
  Soylu Ş.
  APPLIED ENERGY, vol.135, pp.472-482, 2014 (Journal Indexed in SCI)
- **EXAMINATION OF PN EMISSIONS AND SIZE DISTRIBUTIONS OF A HYBRID CITY BUS UNDER REAL WORLD URBAN DRIVING CONDITIONS**
  Soylu Ş.
  INTERNATIONAL JOURNAL OF AUTOMOTIVE TECHNOLOGY, vol.15, pp.369-376, 2014 (Journal Indexed in SCI)
- **COMPARISON OF OPERATING CHARACTERISTICS OF CONVENTIONAL, DIESEL-ELECTRIC AND HYBRID-ELECTRIC CITY BUSSES UNDER REAL WORLD URBAN DRIVING CONDITIONS**
  Soylu Ş.
  ISI BILIMI VE TEKNIGI DERGISI-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.34, pp.143-154, 2014 (Journal Indexed in SCI)
- **EXAMINATION OF THE BRAKING ENERGY RECOVERY POTENTIALS OF A CITY BUS UNDER URBAN DRIVING CONDITIONS**
  Soylu Ş.
  ISI BILIMI VE TEKNIGI DERGISI-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.34, pp.39-47, 2014 (Journal Indexed in SCI)
- **Estimation of Turkish road transport emissions**
  Soylu Ş.
  ENERGY POLICY, vol.35, pp.4088-4094, 2007 (Journal Indexed in SCI)
- **Fueling direct injected diesel engines with 2% biodiesel blend**
  Schumacher L., Soylu Ş., Van Gerpen J., Wetherell W.
  APPLIED ENGINEERING IN AGRICULTURE, vol.21, pp.149-152, 2005 (Journal Indexed in SCI)
- **Examination of combustion characteristics and phasing strategies of a natural gas HCCI engine**
  Soylu Ş.
  ENERGY CONVERSION AND MANAGEMENT, vol.46, pp.101-119, 2005 (Journal Indexed in SCI)
- **Prediction of knock limited operating conditions of a natural gas engine**
  Soylu Ş.
  ENERGY CONVERSION AND MANAGEMENT, vol.46, pp.121-138, 2005 (Journal Indexed in SCI)
- **Development of empirically based burning rate sub-models for a natural gas engine**
  Soylu Ş., Van Gerpen J.

ENERGY CONVERSION AND MANAGEMENT, vol.45, pp.467-481, 2004 (Journal Indexed in SCI)

- **Development of an autoignition submodel for natural gas engines**
  Soylu Ş., Van Gerpen J.
  FUEL, vol.82, pp.1699-1707, 2003 (Journal Indexed in SCI)
- **The speed of sound and isentropic bulk modulus of biodiesel at 21 degrees C from atmospheric pressure to 35 MPa**
  Tat M. E. , Van Gerpen J. H. , Soylu Ş., Canakci M., Monyem A., Wormley S.
  JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.77, pp.285-289, 2000 (Journal Indexed in SCI)

Scientific Consultations

Tubitak MAM, TÜLOMSAŞ, Project Consultancy, Kocaeli University, Mühendislik Fakültesi, Makina Mühendisliği, Turkey, 2018 - Continues

Citations

Total Citations (WOS):339
h-index (WOS):7