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Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, Turkey 2011 - 2018

Post Graduate, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, Turkey 2007 - 2011

Under Graduate, Cukurova University, Fen Edebiyat Fakültesi, Kimya, Turkey 2003 - 2007

Foreign Languages

German, B2 Upper Intermediate

French, B1 Intermediate

English, C1 Advanced

Certificates, Courses and Trainings

Education Management and Planning, Summer Course on Exergy and Its Applications, Yaşar University, İzmir, 2018

Education Management and Planning, Summer School, Exergy and its Applications, Yeditepe University, 2017

Education Management and Planning, Short Term Scientific Mission, Zaragoza University, Mechanical Engineering Department, Spain,, 2016

Education Management and Planning, Visiting Researcher, Minnesota University, Mechanical Engineering Department, Solar Energy Laboratory, 2015

Other, Training on Applied Patent Research, EBILTEM, 2013

Education Management and Planning, Short Term Scientific Mission, Paris Est University, Center of studies and Researches of Thermic, Enviroment and Systems, 2012

Other, Training on Material Safety Data Shield (MSDS), SASA, 2012

Other, Training on Waste Management, SASA, 2012

Education Management and Planning, Training School, Energy efficiency in renewable energy systems in buildings (NeCoE-PCM), Fraunhofer Institute, Freiburg Germany, supported by EU RTD, 2011

Education Management and Planning, Internship, General Directorate of State Hydraulic Works, Adana, 2006

Other, International Organization for Standardization (ISO-9001-2000), KOBIGEM, 2006

Other, Training on Hazard Analysis and Critical Control Points Certificate (HACCP), KOBIGEM, 2006

Other, Management of quality systems training and documentation training certificate, KOBIGEM, 2006

Dissertations

Doctorate, Development of Phase Change Material Nano Composites for Thermal Management of Lithium Ion Batteries Used in Hybrid-Electric Vehicles, Cukurova University, Fen Bilimleri, Kimya, 2018

Post Graduate, Investigation of Using Nano Particles with Phase Change Materials, Cukurova University, Fen Bilimleri,

Academic Titles / Tasks

Assistant Professor, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2019 - Continues

Courses

Staj Dersi (Internship Program), Under Graduate, 2018 - 2019

Mühendislik Kimyası(Chemistry for Engineering), Under Graduate, 2018 - 2019

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

- I. **Designing behenic acid microcapsules as novel phase change material for thermal energy storage applications at medium temperature**
ŞAHAN N., Paksoy H. Ö.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.44, no.5, pp.3922-3933, 2020 (Journal Indexed in SCI)
- II. **Direct impregnation and characterization of Colemanite/Ulexite-Mg(OH)(2) paraffin based form-stable phase change composites**
Horpan M. S. , ŞAHAN N., Paksoy H., Sivrikaya O., Güneş M.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.195, pp.346-352, 2019 (Journal Indexed in SCI)
- III. **Encapsulation of stearic acid with different PMMA-hybrid shell materials for thermotropic materials**
Şahan N., Nigon D., Mantell S. C. , Davidson J. H. , Paksoy H.
SOLAR ENERGY, vol.184, pp.466-476, 2019 (Journal Indexed in SCI)
- IV. **Developing microencapsulated 12-hydroxystearic acid (HSA) for phase change material use**
Şahan N., Paksoy H.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.42, no.10, pp.3351-3360, 2018 (Journal Indexed in SCI)
- V. **Novel shapeable phase change material (PCM) composites for thermal energy storage (TES) applications**
ŞAHAN N., Paksoy H.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.174, pp.380-387, 2018 (Journal Indexed in SCI)
- VI. **Investigating thermal properties of using nano-tubular ZnO powder in paraffin as phase change material composite for thermal energy storage**
ŞAHAN N., Paksoy H.
COMPOSITES PART B-ENGINEERING, vol.126, pp.88-93, 2017 (Journal Indexed in SCI)
- VII. **Determining influences of SiO₂ encapsulation on thermal energy storage properties of different phase change materials**
Şahan N., Paksoy H.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.159, pp.1-7, 2017 (Journal Indexed in SCI)
- VIII. **The effects of various carbon derivative additives on the thermal properties of paraffin as a phase change material**
Şahan N., Fois M., Paksoy H.
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.40, no.2, pp.198-206, 2016 (Journal Indexed in SCI)
- IX. **Improving thermal conductivity phase change materials-A study of paraffin nanomagnetite composites**
Şahan N., Fois M., Paksoy H.
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.137, pp.61-67, 2015 (Journal Indexed in SCI)
- X. **Unconventional experimental technologies available for phase change materials (PCM)**

characterization. Part 1. Thermophysical properties

CABEZA L. F. , BARRENECHE C., MARTORELL I., MIRO L., SARI-BEY S., FOIS M., PAKSOY H. Ö. , SAHAN N., WEBER R., CONSTANTINESCU M., et al.

RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.43, pp.1399-1414, 2015 (Journal Indexed in SCI)

XI. Thermal enhancement of paraffin as a phase change material with nanomagnetite

Şahan N., PAKSOY H. Ö.

SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.126, pp.56-61, 2014 (Journal Indexed in SCI)

Books & Book Chapters

I. Role of energy storage in 100% renewable urban areas

Paksoy H. Ö. , Şahan N., Koçak B.

in: Accelerating the Transition to a 100% Renewable Energy Era, Tanay Sıdkı Uyar, Editor, Springer, London/Berlin , Berlin, pp.411-437, 2020

II. Latent Heat Storage Systems

Konuklu Y., Sahan N., PAKSOY H. Ö.

in: Comprehensive Energy Systems, Dinçer İ., Editor, Elsevier, Ottawa, pp.396-434, 2018

Refereed Congress / Symposium Publications in Proceedings

I. Investigation of Thermal/Physical Properties of Colemanite/Ulexite-Mg(OH)₂Paraffin Composite Blends

Horpan M. S. , ŞAHAN N., PAKSOY H. Ö. , Güneş M.

14.INTERNATIONAL CONFERENCE ON ENERGY STORAGE, Adana, Turkey, 25 - 28 April 2018, pp.102-103

II. Thermal Management System of Li-Ion Battery for Electric-hybrid Vehicles with Advanced Nano-PCMs Composites

ŞAHAN N., PAKSOY H. Ö. , Mazman M., Kayıpmaz C., Beyhan B.

14.INTERNATIONAL CONFERENCE ON ENERGY STORAGE, Adana, Turkey, 25 - 28 April 2018, pp.112-113

III. Nano Materials for Thermal Enhancement of Phase Change Materials for Thermal Energy Storage

ŞAHAN N., PAKSOY H. Ö.

SolarTR 2014 Conference & Exhibition, İzmir, Turkey, 19 - 21 November 2014, pp.107-108

IV. NANO MATERIALS FOR THERMAL ENHANCEMENT OF PHASE CHANGE MATERIALS FOR THERMAL ENERGY STORAGE

Şahan N., PAKSOY H. Ö.

SOLARTR 2014 Conference & Exhibition, İzmir, Turkey, 19 - 21 November 2014, pp.376-379

V. Thermal Properties of Paraffin-Nano Magnetite Composite for Thermal Energy Storage Applications

ŞAHAN N., PAKSOY H. Ö.

10thNanoscience and Nanotechnology Conference, İstanbul, Turkey, 17 - 21 June 2014, pp.100-101

VI. Determining Thermal Conductivity and Diffusivity of Paraffin Composites as Phase Change Materials for Thermal Energy Storage

ŞAHAN N., FOIS M., PAKSOY H. Ö.

2nd International Energy Conference on Sustainable Energy Storage, Dublin, Ireland, 19 - 21 June 2013, pp.113-114

VII. Nano Magnetite Paraffin Composite as a PCM

ŞAHAN N., PAKSOY H. Ö.

12th International Conference Energy Storage,Innostock2012, Lleida, Spain, 16 - 18 May 2012, pp.119-120

VIII. Thermally enhanced paraffin for solar applications

Paksoy H., ŞAHAN N.

1st International Conference on Solar Heating and Cooling for Buildings and Industry (SHC), San-Francisco, Costa

Rica, 9 - 11 July 2012, vol.30, pp.350-352

- IX. Preparing of nano magnetite-paraffin and activated carbon-paraffin composites and determining of thermal properties of these composites**
ŞAHAN N., PAKSOY H. Ö.
25th National Chemistry Congress, Erzurum, Turkey, 27 June - 02 July 2011, pp.188-118
- X. New Binary Alkenes Mixtures As PCMs For Cooling Applications**
Yılmaz S., Sayın K., Gök Ö., Yılmaz M., Beyhan B., ŞAHAN N., PAKSOY H. Ö.
International Conference on Thermal Energy Storage , Effstock, Stockholm, Sweden, 30 May - 03 June 2009, pp.112-115
- XI. Phase Change Material Applications for Domestic Appliances**
Gök Ö., Yılmaz M., Yılmaz S., Turgut B., Mazman M., Beyhan B., ŞAHAN N., PAKSOY H. Ö.
International Conference on Thermal Energy Storage, Effstock, Stockholm, Sweden, 30 May - 03 June 2009, pp.36-38
- XII. Increasing energy efficiency of domestic appliances by thermal energy storage method with phase change materials**
Gök Ö., Yılmaz M., Yılmaz S., Turgut B., Mazman M., Beyhan B., ŞAHAN N., PAKSOY H. Ö. , Evliya H.
VII. National Clean Energy Symposium, UTES?2008, İstanbul, Turkey, 17 - 19 December 2008, pp.12-15
- XIII. Binary Alkenes Mixtures As PCMs For Cooling Applications**
Yılmaz S., Gök Ö., Beyhan B., ŞAHAN N., PAKSOY H. Ö.
11st National Chemical Engineering Congress, Malatya, Turkey, 26 - 29 August 2008, pp.14

Supported Projects

ŞAHAN N., EU Framework Program Project, INPATH-TES PhD on Innovation Pathways for Thermal Energy Storage, 2015 - 2018

ŞAHAN N., Other Supported Projects, Thermotropic Materials for Low Cost Solar Thermal Collectors, 2015 - 2016

PAKSOY H. Ö. , ŞAHAN N., EU Framework Program Project, Next generation cost effective phase change materials for increased energy efficiency in renewable energy systems in buildings (NeCoE-PCM), 2013 - 2013

ŞAHAN N., TUBITAK Project, Thermal Management of Lithium Ion Batteries Used in Hybrid/Electric Vehicles with Phase Change Materials, 2010 - 2013

Invited Congress and Symposium Activities

14.INTERNATIONAL CONFERENCE ON ENERGY STORAGE, ENERSTOCK 2018, Attendee, Adana, Turkey, 2018

Powering the Energy Transition Confrence: the role of Renewable Energy and Energy Efficiency, Attendee, Ankara, Turkey, 2017

Meeting of Turkey Innovation Week, Attendee, Adana, Turkey, 2015

8th Renewable Energy Resources Symposium,, Attendee, Turkey, 2015

Annex 25 - ECES IA - IEA, , 7th Experts Meeting, Attendee, Adana, Turkey, 2013

Personal Development Seminar, European Student?s Forum (AEGEE), Attendee, Adana, Turkey, 2006

Citations

Total Citations (WOS):354

h-index (WOS):8

Scholarships

Awards

ŞAHAN N., First degree award for completing exergy and its application summer course, Exergy and its application summer course, 2017, June 2017

ŞAHAN N., Best poster award, 12th International Conference on Energy Storage, Poster titled `Nano Magnetite Paraffin Composite as a PCM, 2012, Leida, Spain, 12th International Conference on Energy Storage, May 2012

ŞAHAN N., Honor Degree Student, Çukurova University, June 2004

ŞAHAN N., Honor Degree Student, Çukurova University, September 2003