

# Prof. HALİME ÖMÜR PAKSOY

## Personal Information

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## Education Information

Doctorate, Cukurova University, Fen Edebiyat, Kimya, Turkey 1987 - 1992

Post Graduate, Cukurova University, Fen Edebiyat, Kimya, Turkey 1983 - 1986

Under Graduate, Bogazici University, Mühendislik Fakültesi, Kimya Mühendisliği, Turkey 1979 - 1983

## Foreign Languages

French, A1 Beginner

German, A1 Beginner

English, C1 Advanced

## Dissertations

Doctorate, Thermal Analysis of Heat Storage Materials and Integrated Heat Pump and Thermal Energy Storage System, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, 1992

Post Graduate, Dolgulu Yatakta Isı Depolaması Üzerine Bir Çalışma, Cukurova University, Fen Bilimleri Enstitüsü, Kimya, 1986

## Research Areas

Chemical Engineering and Technology, Chemical Technologies, Chemistry, Physical Chemistry, nanocomposites, Thermodynamics, Natural Sciences, Engineering and Technology

## Academic Titles / Tasks

Professor, Cukurova University, Fen Edebiyat Fakültesi, Kimya, 2001 - Continues

Associate Professor, Cukurova University, Fen Edebiyat Fakültesi, Kimya, 1996 - 2001

Assistant Professor, Cukurova University, Fen Edebiyat Fakültesi, Kimya, 1994 - 1996

Lecturer PhD, Cukurova University, Fen Edebiyat Fakültesi, Kimya, 1993 - 1994

## Professional Experience

Academic Performance D. Board Member, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2020 - Continues

Rektörlük Kalite Komisyonu Üyesi, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2018 - Continues

Head of Ethics Committee, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2017 - Continues  
Director of the Center, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2011 - Continues  
Dean, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2017 - 2021  
Dean, Cukurova University, Guzel Sanatlar Fakültesi, 2006 - 2007  
Vice Dean, Cukurova University, Guzel Sanatlar Fakültesi, 2001 - 2006  
Head of Department, Cukurova University, Guzel Sanatlar Fakültesi, Tekstil Ve Moda Tasarımı, 1999 - 2006  
Vice Rector, Cukurova University, Fen-Edebiyat Fakültesi, Kimya, 2001 - 2002

## Courses

Thermal Energy Storage Systems and Applications, Doctorate, 2020 - 2021  
Advanced algorithms in chemistry, Post Graduate, 2020 - 2021  
Thermal Energy Storage 2, Post Graduate, 2019 - 2020  
Termal enerji depolama, Under Graduate, 2017 - 2018, 2018 - 2019, 2019 - 2020  
Thermal Energy Storage 1, Post Graduate, 2018 - 2019, 2020 - 2021

## Jury Memberships

Appointment Academic Staff, Appointment Academic Staff, Çukurova Üniversitesi, December, 2020  
Appointment Academic Staff, Appointment Academic Staff, Niğde Ömer Halisdemir Üniversitesi, November, 2020

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

- I. **Benchmarking study of demolition wastes with different waste materials as sensible thermal energy storage**  
Kocak B., Fernandez A., Paksoy H. Ö.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.219, 2021 (Journal Indexed in SCI)
- II. **Performance of laboratory scale packed-bed thermal energy storage using new demolition waste based sensible heat materials for industrial solar applications**  
Kocak B., PAKSOY H. Ö.  
SOLAR ENERGY, vol.211, pp.1335-1346, 2020 (Journal Indexed in SCI)
- III. **Review on sensible thermal energy storage for industrial solar applications and sustainability aspects**  
Koçak B., Fernandez A. I., Paksoy H. Ö.  
Solar Energy, vol.209, pp.135-169, 2020 (Journal Indexed in SCI)
- IV. **Preparation, characterization, and thermal properties of novel fire-resistant microencapsulated phase change materials based on paraffin and a polystyrene shell**  
Kazanci B., Cellat K., Paksoy H. Ö.  
RSC ADVANCES, vol.10, no.40, pp.24134-24144, 2020 (Journal Indexed in SCI)
- V. **Editorial for the Special Issue on the 14th International Conference on Energy Storage- EnerSTOCK2018**  
PAKSOY H. Ö.  
SOLAR ENERGY, vol.200, pp.1, 2020 (Journal Indexed in SCI)
- VI. **Underground thermal heat storage and ground source heat pump activities in Turkey**  
Cetin A., KADIOĞLU Y. K., Paksoy H.  
SOLAR ENERGY, vol.200, pp.22-28, 2020 (Journal Indexed in SCI)
- VII. **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)
- VIII. **2 years of monitoring results from passive solar energy storage in test cabins with phase change materials**  
Cellat K., Beyhan B., Konuklu Y., DÜNDAR C., KARAHAN O., Gungor C., Paksoy H.  
SOLAR ENERGY, vol.200, pp.29-36, 2020 (Journal Indexed in SCI)
- IX. **Enhanced photoelectrochemical water splitting using gadolinium doped titanium dioxide nanorod array photoanodes**  
Ahmad A., Yerlikaya G., Zia-Ur-Rehman Z., Paksoy H. Ö. , Kardas G.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.4, pp.2709-2719, 2020 (Journal Indexed in SCI)
- X. **Using demolition wastes from urban regeneration as sensible thermal energy storage material**  
KOCAK B., Paksoy H.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.12, pp.6454-6460, 2019 (Journal Indexed in SCI)
- XI. **Guest editorial for the special issue on progress in energy storage systems**  
PAKSOY H. Ö.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.12, pp.6060, 2019 (Journal Indexed in SCI)
- XII. **Thermal buffering effect of a packaging design with microencapsulated phase change material**  
Ünal M., Konuklu Y., Paksoy H.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.43, no.9, pp.4495-4505, 2019 (Journal Indexed in SCI)
- XIII. **Energy Analysis and Carbon Saving Potential of a Complex Heating System with Solar Assisted Heat Pump and Phase Change Material (PCM) Thermal Storage in Different Climatic Conditions**  
Stritih U., Zavr1 E., PAKSOY H. Ö.  
EUROPEAN JOURNAL OF SUSTAINABLE DEVELOPMENT, vol.1, pp.1-17, 2018 (Journal Indexed in SCI Expanded)
- XIV. **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)
- XV. **Integration of passive PCM technologies for net-zero energy buildings**  
Stritih U., Tyagi V., Stropnik R., PAKSOY H. Ö. , HAGHIGHAT F., Joybari M. M.  
Sustainable Cities and Society, vol.41, pp.286-295, 2018 (Journal Indexed in SCI)
- XVI. **Energy storage key performance indicators for building application**  
Del Pero C., Aste N., Paksoy H., HAGHIGHAT F., GRILLO S., LEONFORTE F.  
SUSTAINABLE CITIES AND SOCIETY, vol.40, pp.54-65, 2018 (Journal Indexed in SCI)
- XVII. **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)
- XVIII. **A comparative study on corrosion behavior of rebar in concrete with fatty acid additive as phase change material**  
CELLAT K., TEZCAN F., Beyhan B., KARDAŞ G., Paksoy H.  
CONSTRUCTION AND BUILDING MATERIALS, vol.143, pp.490-500, 2017 (Journal Indexed in SCI)
- XIX. **Polystyrene-based caprylic acid microencapsulation for thermal energy storage**  
Konuklu Y., PAKSOY H. Ö.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.159, pp.235-242, 2017 (Journal Indexed in SCI)
- XX. **Determining influences of SiO<sub>2</sub> 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)
- XXI. **Robust microencapsulated phase change materials in concrete mixes for sustainable buildings**  
Beyhan B., CELLAT K., Konuklu Y., GUNGOR C., KARAHAN O., DÜNDAR C., Paksoy H.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.41, no.1, pp.113-126, 2017 (Journal Indexed in SCI)
- XXII. **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)

- XXIII. **Synthesis and properties of microencapsulated phase change materials for thermal energy storage materials**  
Konuklu Y., PAKSOY H. Ö.  
BULGARIAN CHEMICAL COMMUNICATIONS, vol.48, pp.206-209, 2016 (Journal Indexed in SCI)
- XXIV. **Iller bank-Atasehir-building ground source heat pump system and thermal response test - case study**  
CETIN A., ISIK O., CETIN S., Kadioglu Y. K. , Paksoy H.  
BULGARIAN CHEMICAL COMMUNICATIONS, vol.48, pp.27-30, 2016 (Journal Indexed in SCI)
- XXV. **Thermal enhancement of concrete by adding bio-based fatty acids as phase change materials**  
CELLAT K., Beyhan B., GUNGOR C., Konuklu Y., KARAHAN O., DÜNDAR C., Paksoy H.  
ENERGY AND BUILDINGS, vol.106, pp.156-163, 2015 (Journal Indexed in SCI)
- XXVI. **Review on using microencapsulated phase change materials (PCM) in building applications**  
Konuklu Y., OSTRY M., PAKSOY H. Ö. , CHARVAT P.  
ENERGY AND BUILDINGS, vol.106, pp.134-155, 2015 (Journal Indexed in SCI)
- XXVII. **CO2 mitigation accounting for Thermal Energy Storage (TES) case studies**  
Cabeza L. F. , MIRO L., ORO E., DE GRACIA A., MARTIN V., KROENAUER A., RATHGEBER C., FARID M. M. , PAKSOY H. Ö. , MARTINEZ M., et al.  
APPLIED ENERGY, vol.155, pp.365-377, 2015 (Journal Indexed in SCI)
- XXVIII. **Improving performance of household refrigerators by incorporating phase change materials**  
YUSUFOGLU Y., APAYDIN T., YILMAZ Ş., PAKSOY H. Ö.  
INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.57, pp.173-185, 2015 (Journal Indexed in SCI)
- XXIX. **Nanoencapsulation of n-alkanes with poly(styrene-co-ethylacrylate) shells for thermal energy storage**  
Konuklu Y., PAKSOY H. Ö. , Ünal M.  
APPLIED ENERGY, vol.150, pp.335-340, 2015 (Journal Indexed in SCI)
- XXX. **The Preparation and Characterization of Chitosan-Gelatin Microcapsules and Microcomposites with Fatty Acids as Thermal Energy Storage Materials**  
Konuklu Y., PAKSOY H. Ö.  
ENERGY TECHNOLOGY, vol.3, no.5, pp.503-508, 2015 (Journal Indexed in SCI)
- XXXI. **Unconventional experimental technologies used for phase change materials (PCM) characterization: part 2-morphological and structural characterization, physico-chemical stability and mechanical properties**  
INES FERNANDEZ A., SOLE A., GIRO-PALOMA J., MARTINEZ M., HADJIEVA M., BOUDENNE A., CONSTANTINESCU M., ANGHEL E. M. , MALIKOVA M., KRUPA I., et al.  
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.43, pp.1415-1426, 2015 (Journal Indexed in SCI)
- XXXII. **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)
- XXXIII. **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)
- XXXIV. **Microencapsulation of a fatty acid with Poly (melamine-urea-formaldehyde)**  
Konuklu Y., PAKSOY H. Ö. , Unal M., Konuklu S.  
ENERGY CONVERSION AND MANAGEMENT, vol.80, pp.382-390, 2014 (Journal Indexed in SCI)
- XXXV. **Microencapsulation of caprylic acid with different wall materials as phase change material for thermal energy storage**

- Konuklu Y., Unal M., PAKSOY H. Ö.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.120, pp.536-542, 2014 (Journal Indexed in SCI)
- XXXVI. **Root zone temperature control with thermal energy storage in phase change materials for soilless greenhouse applications**  
Beyhan B., Paksoy H., Dasgan Y.  
ENERGY CONVERSION AND MANAGEMENT, vol.74, pp.446-453, 2013 (Journal Indexed in SCI)
- XXXVII. **Exploiting solar energy potential through thermal energy storage in Slovenia and Turkey**  
Stritih U., Osterman E., Eyliya H., Butala V., Paksoy H.  
RENEWABLE & SUSTAINABLE ENERGY REVIEWS, vol.25, pp.442-461, 2013 (Journal Indexed in SCI)
- XXXVIII. **Phase Change Material Sandwich Panels for Managing Solar Gain in Buildings**  
Konuklu Y., PAKSOY H. Ö.  
JOURNAL OF SOLAR ENERGY ENGINEERING-TRANSACTIONS OF THE ASME, vol.131, no.4, 2009 (Journal Indexed in SCI)
- XXXIX. **Utilization of phase change materials in solar domestic hot water systems**  
Mazman M., Cabeza L. F., Mehling H., Nogues M., Evliya H., PAKSOY H. Ö.  
RENEWABLE ENERGY, vol.34, no.6, pp.1639-1643, 2009 (Journal Indexed in SCI)
- XL. **Ground water level influence on thermal response test in Adana, Turkey**  
BOZDAĞ Ş., turgut b., PAKSOY H. Ö., dikici d., mazman m., evliya h.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.32, no.7, pp.629-633, 2008 (Journal Indexed in SCI)
- XLI. **Heat transfer enhancement of fatty acids when used as PCMs in thermal energy storage**  
Mazman M., Cabeza L. F., Mehling H., PAKSOY H. Ö., Evliya H.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.32, no.2, pp.135-143, 2008 (Journal Indexed in SCI)
- XLII. **Microencapsulation of coco fatty acid mixture for thermal energy storage with phase change material**  
Ozonur Y., Mazman M., Paksoy H. O., Evliya H.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.30, no.10, pp.741-749, 2006 (Journal Indexed in SCI)
- XLIII. **Aquifer thermal storage (ATES) for air-conditioning of a supermarket in Turkey**  
Paksoy H., Gurbuz Z., Turgut B., Dikici D., Evliya H.  
RENEWABLE ENERGY, vol.29, no.12, pp.1991-1996, 2004 (Journal Indexed in SCI)
- XLIV. **Borehole thermal energy storage applications and in-situ thermal response test - Example from Turkey and situation in Slovenia**  
Stritih U., Rajver D., Turgut B., Paksoy H.  
STROJNISKI VESTNIK-JOURNAL OF MECHANICAL ENGINEERING, vol.50, no.6, pp.328-340, 2004 (Journal Indexed in SCI)
- XLV. **Heating and cooling of a hospital using solar energy coupled with seasonal thermal energy storage in an aquifer**  
Paksoy H., Andersson O., Abaci S., Evliya H., Turgut B.  
RENEWABLE ENERGY, vol.19, pp.117-122, 2000 (Journal Indexed in SCI)
- XLVI. **Energetic and exergetic efficiency of latent heat storage system for greenhouse heating**  
Bascetincelik A., Ozturk H., Paksoy H., Demirel Y.  
RENEWABLE ENERGY, vol.16, pp.691-694, 1999 (Journal Indexed in SCI)
- XLVII. **Calculations of thermodynamic derivative properties from the NRTL and UNIQUAC models**  
Demirel Y., Paksoy H.  
THERMOCHIMICA ACTA, vol.303, no.2, pp.129-136, 1997 (Journal Indexed in SCI)
- XLVIII. **The performance of UNIFAC and related group contribution models .2. Prediction of Henry's law constants**  
Ornektekin S., Paksoy H., Demirel Y.  
THERMOCHIMICA ACTA, vol.287, no.2, pp.251-259, 1996 (Journal Indexed in SCI)
- XLIX. **The performance of UNIFAC and related group contribution models .1. Prediction of infinite dilution activity coefficients**  
Paksoy H., Ornektekin S., Balci B., Demirel Y.

THERMOCHIMICA ACTA, vol.287, no.2, pp.235-249, 1996 (Journal Indexed in SCI)

- L. **Determining thermal properties of heat storage materials using the twin bath method**  
Paksoy H. Ö.  
ENERGY CONVERSION AND MANAGEMENT, vol.37, no.3, pp.261-268, 1996 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Akiferde termal enerji depolama tekniğinin uygulama çalışmaları**  
BOZDAĞ Ş., Paksoy H. Ö., Turgut B.  
ÇUKUROVA ÜNİVERSİTESİ MÜHENDİSLİK MİMARLIK FAKÜLTESİ DERGİSİ, vol.18, pp.155-160, 2003 (National Refreed University Journal)
- II. **Greenhouse Heating with Solar energy and Phase Change Energy Storage**  
Başçetinçelik A., Öztürk H. H., Paksoy H. Ö.  
Acta Horticulture, vol.443, pp.63-70, 1997 (Refereed Journals of Other Institutions)

## 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 S. Uyar, Editor, Springer, London/Berlin, Basel, pp.411-437, 2020
- II. **Latent Heat Storage Systems**  
Konuklu Y., Şahan N., PAKSOY H. Ö.  
in: Comprehensive Energy Systems, Dinçer İ., Editor, Elsevier, Ottawa, pp.396-434, 2018
- III. **Novel Building Materials**  
Fabiani C., Pisello A. L., PAKSOY H. Ö.  
in: Comprehensive Energy Systems, Dincer I, Editor, Elsevier, Ottawa, pp.980-1017, 2018
- IV. **Thermal energy storage systems for greenhouse technology**  
PAKSOY H. Ö., Beyhan B.  
in: Advances in Thermal Energy Storage Systems, 1st Edition Methods and Applications, Cabeza L.F., Editor, Woodhead Publishing Limited, Cambridge, pp.562-588, 2015

## Refereed Congress / Symposium Publications in Proceedings

- I. **Comparison of Photoelectrochemical Activities of Calcined and Uncalcined TiO<sub>2</sub>/ BiVO<sub>4</sub> Photoanodes**  
Ahmad A., Tezcan F., Yerlikaya G., PAKSOY H. Ö., KARDAŞ G.  
71st Annual Meeting of the International Society of Electrochemistry, Belgrade, Serbia, 30 August 2020
- II. **CO<sub>2</sub> mitigation with thermal energy storage**  
Paksoy H., Evliya H., Abacı Ş., mazman m., konuklu y., Turgut B., gök ö., yılmaz m., yılmaz s., beyhan b.  
global conference on global warming, İstanbul, Turkey, pp.1
- III. **Gadolinium-doped titanium dioxide nanorods array photoanodes for photoelectrochemical water splitting**  
Ahmad A., Yerlikaya G., PAKSOY H. Ö., KARDAŞ G.  
The Fifth International Symposium on Innovative Materials and Processes in Energy Systems, IMPRES2019, Kanazawa, Japan, 20 - 23 October 2019
- IV. **New Multilayered Microencapsulated Phase Change Material Produced with Green Chemistry**  
Emir S., Biçer Göktepe G., Güngör Ö., Ekinci M., KARDAŞ G., PAKSOY H. Ö.  
The Fifth International Symposium on Innovative Materials and Processes in Energy Systems, IMPRES2019,

Kanazawa, Japan, 20 - 23 October 2019

- V. **Numerical Model of Lab-Scale Packed-Bed Thermal Energy Storage System**  
Koçak B., PAKSOY H. Ö.  
IRES 2019, 12 March 2019
- VI. **Review on thermal energy storage for industrial solar applications - special focus on Turkey**  
Koçak B., PAKSOY H. Ö.  
SolarTR2018, İstanbul, Turkey, 29 - 30 November 2018
- VII. **PCM Development Biomimicking Whale Blubber for Thermal Energy Storage**  
Güngör Ö., Emir S., TÜKEL S. S. , BİLGİN R., PAKSOY H. Ö.  
5th International Materials Science and Advanced Nanotechnologies for Next Generation Conference, Nevşehir, Turkey, 4 - 06 October 2018
- VIII. **Using Demolition Wastes from Urban Regeneration as Storage Material in Thermal Energy Storage Systems**  
Koçak B., PAKSOY H. Ö.  
14th International Conference on Energy Storage, Adana, Turkey, 25 - 28 April 2018
- IX. **Underground Thermal Energy Storage and Ground Source Heat Pump Activities in Turkey**  
Çetin A., KADIOĞLU Y. K. , PAKSOY H. Ö.  
14th International Conference on Energy Storage, Adana, Turkey, 25 - 28 April 2018
- X. **New Highly Conductive Packaging Material for Phase Change Materials**  
Küçükaltun E., Fabiani C., Pisello A. L. , PAKSOY H. Ö.  
14th International Conference on Energy Storage, Adana, Turkey, 25 - 28 April 2018
- XI. **2 Years of Monitoring Results From Passive Solar Energy Storage in Test Cabins With Phase Change Materials**  
CELLAT K., BEYHAN B., KONUKLU Y., DÜNDAR C., KARAHAN O., GÜNGÖR C., PAKSOY H. Ö.  
14th International Conference on Energy Storage, Adana, Turkey, 25 - 28 April 2018
- XII. **Thermal Management of Li -ion Batteries for Electric Hybrid Vehicles with Advanced Nano PCM Composites**  
Şahan N., Mazman M., Kaypmaz C., Beyhan B., PAKSOY H. Ö.  
14th International Conference on Energy Storage, Adana, Turkey, 25 - 28 April 2018
- XIII. **Investigation of Thermal/Physical Properties of Colemanite/Ulexite-Mg(OH)<sub>2</sub>Paraffin 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
- XIV. **Thermal Management System of Li-Ion Battery for Electric-hybrid Vehicles with Advanced Nano-PCMs Composites**  
ŞAHAN N., PAKSOY H. Ö. , Mazman M., Kaypmaz C., Beyhan B.  
14.INTERNATIONAL CONFERENCE ON ENERGY STORAGE, Adana, Turkey, 25 - 28 April 2018, pp.112-113
- XV. **Sensible Thermal Energy Storage in Packed Bed for Industrial Solar Applications**  
Kocak B., Paksoy H.  
12th International Conference on Solar Energy for Buildings and Industry (ISES EuroSun), Rapperswil, Switzerland, 01 January 2018, pp.1130-1136
- XVI. **Energy analysis of a complex heating system with phase change material (PCM) thermal storage in different climatic conditions**  
Stritiş U., PAKSOY H. Ö.  
10th International Conference on Sustainable Energy and Environmental Protection (SEEP2017), 27 - 30 June 2017
- XVII. **Thermally Enhanced Concrete Containing Microencapsulated Phase Change Material**  
PAKSOY H. Ö.  
TechConnect World Innovation Conference and Expo, 14 - 17 May 2017
- XVIII. **Using New Phase Change Material Composites in the Latent Heat Storage Applications**  
GÖK Ö., KONUKLU Y., PAKSOY H. Ö.

Innovative Thermal Energy Storage Materials (INOTES) Symposium and Workshop, 27 - 28 March 2017

- XIX. Energy Storage - Key Technology for Sustainable Future**  
PAKSOY H. Ö.  
2nd International on Hydrogen Technologies Conference, 15 - 18 March 2017
- XX. A new approach on corrosion tests for building materials with PCM**  
Tezcan F., Cellat K., KARDAŞ G., PAKSOY H. Ö.  
First International Conference on Building Integrated Renewable Energy Systems, Dublin, Ireland, 6 - 09 March 2017, pp.37
- XXI. Why do we need energy storage for solar future**  
PAKSOY H. Ö.  
SolarTR 2016, 6 - 08 December 2016
- XXII. Integration of passive technologies for net zero energy buildings**  
PAKSOY H. Ö.  
9th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, 23 - 26 October 2016
- XXIII. Two different methods of adding phase change materials to building envelopes for energy saving in Mediterranean Climate**  
PAKSOY H. Ö. , KONUKLU Y.  
9th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, 23 - 26 October 2016
- XXIV. Investigation Of Corrosion Behavior Of Rebar In Concrete With Fatty Acid As PCM Additive**  
Tezcan F., Cellat K., KARDAŞ G., PAKSOY H. Ö.  
14. Uluslararası Korozyon Sempozyumu, Bayburt, Turkey, 5 - 07 October 2016, pp.577-578
- XXV. DESIGNING MICROCAPSULES TO SAVE ENERGY IN BUILDINGS**  
PAKSOY H. Ö. , CELLAT K., BEYHAN B., KONUKLU Y., KARAHAN O., DÜNDAR C.  
Design and Manufacture of Functional Microcapsules and Engineered Particles, Siracusa, Italy, 3 - 07 April 2016
- XXVI. Novel microencapsulated phase change material for thermal energy storage in building applications**  
PAKSOY H. Ö. , Beyhan B., Cellat K., KONUKLU Y., KARAHAN O., DÜNDAR C.  
Innostorage Advances in Thermal Energy Storage Conference, 16 February 2016
- XXVII. Biobased phase change materials for thermal energy storage**  
PAKSOY H. Ö.  
6. Biyotabanlı Kimyasallar Konferansı, San Fransisko, United States Of America, 16 - 17 November 2015, pp.10
- XXVIII. Yer Kaynaklı Sığ Jeotermal Sistemler: İller Bankası Ataşehir İstanbul Örneği**  
Çetin A., Kadioğlu Y. K. , PAKSOY H. Ö.  
Jeotermal Kaynaklar Sempozyumu ve Sergisi, Ankara, Turkey, 4 - 06 November 2015, pp.535-544
- XXIX. Geological Evaluation of Borhole Thermal Energy Storage Potential of Turkey**  
Çetin A., PAKSOY H. Ö. , KADIOĞLU Y. K.  
The 13th International Conference on Energy Storage(Greenstock 2015), Pekin, China, 19 - 22 May 2015, pp.1028-1034
- XXX. Passive Thermal Storage in Buildings with a Novel Composite Panel**  
CELLAT K., BEYHAN B., PAKSOY H. Ö. , GÜNGÖR C., KONUKLU Y., KARAHAN O., DÜNDAR C.  
The 13th International Conference on Energy Storage(Greenstock 2015), 19 - 22 May 2015
- XXXI. New Microencapsulated Phase Change Material for Thermal Energy Storage in Building Applications**  
BEYHAN B., CELLAT K., PAKSOY H. Ö. , KONUKLU Y., KARAHAN O., DÜNDAR C., GÜNGÖR C.  
The 13th International Conference on Energy Storage(Greenstock 2015), 19 - 22 May 2015
- XXXII. Preparation and characterization of tetradecane micro nanocapsules as phase change material for cooling applications**  
KONUKLU Y., PAKSOY H. Ö.  
The 13th International Conference on Energy Storage(Greenstock 2015), 19 - 22 May 2015
- XXXIII. Thermal Characterization of poly styrene co ethylacrylate microcapsules containing coco fatty acid as novel phase change material**



KONUĞLU Y., PAKSOY H. Ö.

The 13th International Conference on Energy Storage(Greenstock 2015), 19 - 22 May 2015, pp.886-889

XXXIV. **Review on Inorganic Materials Salts Salt hydrates and eutectic Mixtures Used as Phase Change Materials PCMs for Thermal Energy Storage TES Applications**

GÖK Ö., PAKSOY H. Ö.

The 13th International Conference on Energy Storage(Greenstock 2015), 19 - 22 May 2015

XXXV. **The Storage Story**

PAKSOY H. Ö.

The 13th International Conference on Energy Storage(Greenstock 2015), 19 - 21 May 2015

XXXVI. **Bina Yapı Malzemeleri İçin Mikrokapsülenmiş Faz Değişiren Madde Geliştirilmesi**

Beyhan B., Cellat K., Karahan O., Konuklu Y., Dündar C., PAKSOY H. Ö.

12. Ulusal Tesisat Mühendisliği Kongresi,Binalarda Enerji Performansı Sempozyumu, İzmir, Turkey, 8 - 11 April 2015, pp.1471-1480

XXXVII. **Bina Isıl Konforunun Sağlanmasında Faz Değişiren Madde Kullanımı**

Cellat K., Beyhan B., PAKSOY H. Ö. , Karahan O., Konuklu Y., Dündar C.

12. Ulusal Tesisat Mühendisliği Kongresi, Termodinamik Sempozyumu, İzmir, Turkey, 8 - 11 April 2015, pp.1689-1700

XXXVIII. **Passive Heating and Cooling of Buildings Using Microencapsulated Phase Change Materials in Concrete Mixtures**

PAKSOY H. Ö. , Cellat K., Beyhan B., Karahan O., Konuklu Y., Dündar C.

SOLARTR 2014 Conference & Exhibition, İzmir, Turkey, 19 - 21 November 2014, pp.451-457

XXXIX. **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

XL. **SEASONAL STORAGE OF SOLAR ENERGY APPLICATION IN TURKEY AND THE WORLD**

Çetin A., PAKSOY H. Ö.

SOLARTR 2014 Conference & Exhibition, İzmir, Turkey, 19 - 21 November 2014, pp.290-297

XLI. **Emülsiyon Polimerizasyonunda Farklı Karıştırma Yöntemlerinin Mikrokapsülenmiş Faz Değişiren Madde Örnekleri Üzerine Etkisi**

Beyhan B., Cellat K., Kazancı B., PAKSOY H. Ö.

V. Ulusal Polimer Bilim ve Teknolojisi Kongresi, Tokat, Turkey, 1 - 04 September 2014, pp.77

XLII. **Faz Değişiren Maddelerin Koaservasyon Yöntemi İle Kapsülenmesi ve Bina Uygulamalarında Kullanımı**

Cellat K., Ünal M., Beyhan B., Karahan O., Konuklu Y., Dündar C., PAKSOY H. Ö.

V. Ulusal Polimer Bilim ve Teknolojisi Kongresi, Tokat, Turkey, 1 - 04 September 2014, pp.127

XLIII. **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

XLIV. **Enhancing Thermal Properties of Concrete Mixtures with Phase Change Materials**

Cellat K., Varkal İ., PAKSOY H. Ö. , Konuklu Y., Karahan O., Dündar C.

Sustainable Energy Storage in Buildings Conference, Dublin, Ireland, 19 - 21 July 2013, pp.48-53

XLV. **A new approach for testing corrosion behavior of various metals in contact with phase change materials**

Yılmaz S., Sahin E. A. , KARDAŞ G., PAKSOY H. Ö.

The 2nd International Energy Storage Conference, Dublin, Ireland, 19 - 21 June 2013, pp.282-284

XLVI. **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

XLVII. **Nano Magnetite Paraffin Composite as a PCM**

ŞAHAN N., PAKSOY H. Ö.

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

**XLVIII. 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

**XLIX. 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

**L. 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

**LI. 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

**LII. Aquifer Thermal Energy Storage Application in Greenhouse Climatization**

turgut b., DAŞGAN H. Y. , abak k., PAKSOY H. Ö. , evliya h., BOZDAĞ Ş.

International Symposium on Strategies Towards Sustainability of Protected Cultivation in Mild Winter Climate, Antalya, Turkey, 31 January 2009, vol.807, pp.143-148

**LIII. 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

**LIV. 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

**LV. Güneş enerjisinin termokimyasal yöntemle depolanması**

ÖZTÜRK H. H. , PAKSOY H. Ö.

VI. Ulusal Temiz Enerji Sempozyumu, Isparta, Turkey, 25 - 27 May 2006, pp.126-134

**LVI. Dolgulu toplaçların ısı analizi**

ÖZTÜRK H. H. , BAŞÇETİNÇELİK A., DEMİREL Y., PAKSOY H. Ö.

Güneş Günü Sempozyumu?99, Kayseri, Turkey, 25 - 27 June 1999, vol.1, pp.43-46

**LVII. The research on storage of solar energy in phase change material (pcm) for greenhouse heating**

ÖZTÜRK H. H. , BAŞÇETİNÇELİK A., PAKSOY H. Ö. , DEMİREL Y.

7th International Congress on Agricultural Mechanization and Energy, Adana, Turkey, 26 - 27 May 1999, pp.326-331

**LVIII. Seasonal latent heat storage system for greenhouse heating**

BAŞÇETİNÇELİK A., PAKSOY H. Ö. , ÖZTÜRK H. H. , DEMİREL Y.

IEA Annex 10, Phase Change Materials and Chemical Reactions for Thermal Energy Storage, Adana, Turkey, 16 - 17 April 1998, pp.45-53

**LIX. Greenhouse heating with solar energy and phase change energy storage**

Bascetincelik A., Paksoy H.

International Conference and British-Israeli Workshop on Greenhouse Technologies, Tel-Aviv-Yafo, Israel, 12 - 16 May 1996, pp.63-70

**LX. Applications of aquifer thermal energy storage systems in Turkey**

PAKSOY H. Ö. , BAŞÇETİNÇELİK A., ÖZTÜRK H. H.

Proceedings of the TIEES-96 First Trabzon International Energy and Environment Symposium, Trabzon, Turkey, 29 - 31 July 1996, vol.1, pp.403-407

- LXI. **Aquifer thermal energy storage**  
PAKSOY H. Ö. , BAŞÇETİNÇELİK A., ÖZTÜRK H. H.  
10. Ulusal Isı Bilimi ve Tekniği Kongresi, Ankara, Turkey, 6 - 08 September 1995, vol.1, pp.761-769
- LXII. **Isı depolama yöntemleri ve yeraltında ısı depolama sistemleri**  
PAKSOY H. Ö. , BAŞÇETİNÇELİK A., ÖZTÜRK H. H.  
5. Türk-Alman Enerji Sempozyumu, İzmir, Turkey, 19 - 21 April 1995, vol.1, pp.151-160
- LXIII. **Sera iklimlendirilmesinde ısı depolamasından yararlanma**  
PAKSOY H. Ö. , DEMİREL Y., BAŞÇETİNÇELİK A., ÖZTÜRK H. H.  
Türkiye 6. Enerji Kongresi, İzmir, Turkey, 17 - 22 October 1994, vol.1, pp.581-587
- LXIV. **Faz değişim materyalinde depolanan güneş enerjisi ile sera Isıtılması**  
BAŞÇETİNÇELİK A., DEMİREL Y., PAKSOY H. Ö. , ÖZTÜRK H. H.  
Tarımsal Mekanizasyon 15. Ulusal Kongresi, Antalya, Turkey, 20 - 22 September 1994, vol.1, pp.698-705

## Supported Projects

- PAKSOY H. Ö. , TUBITAK Project, Düşük Maliyetli Güneş Enerjisi Toplaçları için Termotropik Malzemeler, 2014 - 2016
- PAKSOY H. Ö. , TUBITAK Project, Mikrokapsüllenmiş Faz Değiştiren Madde İçeren Sıcaklık Kontrollü Ambalajların Gıdalarda Kullanımı, 2012 - 2015
- PAKSOY H. Ö. , TUBITAK Project, BETON KARIŞIMLARINDA FAZ DEĞİŞTİREN MADDE KULLANIMIYLA ISIL ÖZELLİKLERİN İYİLEŞTİRİLMESİ, 2012 - 2015
- 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
- PAKSOY H. Ö. , TUBITAK Project, Termal Enerji Depolaması ile Güneş Enerjisinin Verimli Kullanımı, 2010 - 2013
- PAKSOY H. Ö. , TUBITAK Project, Hibrit/Elektrikli Araçlarda Kullanılan Lityum Bataryaların Faz Değiştiren Maddelerle Isıl Yönetimi, 2010 - 2012
- PAKSOY H. Ö. , TUBITAK Project, Yıkama Cihazlarında Termal Enerji Depolamayla Enerji Verimliliğinin Artırılması, 2006 - 2008
- PAKSOY H. Ö. , CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Mikrokapsüllenmiş Faz Değiştiren Maddelerde Termal Enerji Depolama ile Binalarda Enerji Tasarrufu, 2005 - 2006
- PAKSOY H. Ö. , BOZDAĞ Ş., TUBITAK Project, Akdeniz ikliminde akifer termal enerji depolaması ile seralarda ısıtma-soğutma potansiyelinin belirlenmesi, 2004 - 2006
- Paksoy H. Ö. , NATO Supported Research Project, Termal Enerji Depolama ile Sürdürülebilir Enerji Tüketimi, NATO Science for Peace Programme, Advanced Study Institute, 2004 - 2005

## Patent

- Paksoy H. Ö. , NARENCİYE AĞAÇLARININ ISIL KORUNMASI İÇİN FAZ DEĞİŞTİREN MADDE KULLANIMI, Patent, CHAPTER C Chemistry; Metallurgy, Initial Registration, 2020
- Paksoy H. Ö. , İNŞAAT VE YIKINTI ATIKLARINDAN TERMAL ENERJİ DEPOLAMA MALZEMESİ , Patent, CHAPTER C Chemistry; Metallurgy, Initial Registration, 2020
- Paksoy H. Ö. , AŞIRI ISINMAYI ÖNLEYEN AKILLI CEP TELEFONU KILIFLARINA ENTEGRE EDİLEBİLİR GENİŞLETİLMİŞ GRAFİT – FAZ DEĞİŞTİREN MADDE KOMPOZİTİ, Patent, CHAPTER C Chemistry; Metallurgy, Initial Registration, 2020
- Paksoy H. Ö. , 3D Yazıcılar İçin Geliştirilen Kalsiyum Alüminat Çimentosu Esaslı Harç Karışımı, Patent, CHAPTER C Chemistry; Metallurgy, Initial Registration, 2020

## Activities in Scientific Journals

Solar Energy, Assistant Editor, 2010 - Continues

## **Memberships / Tasks in Scientific Organizations**

Türk Tesisat Mühendisleri Derneği, Member, 2010 - Continues

Kimya Mühendisleri Odası, Member, 2000 - Continues

## **Scientific Refereeing**

H2020 Project, RIA Research and Innovation Actions Project, Akademia Gorniczko, Poland, October 2020

H2020 Project, RIA Research and Innovation Actions Project, ESCON Enerji Sistemleri ve Cihazları San. ve Tic. A.Ş., Turkey, October 2020

H2020 Project, RIA Research and Innovation Actions Project, Politecnico di Milano, Italy, October 2020

H2020 Project, RIA Research and Innovation Actions Project, Veolia Serveis Catalunya Sociedad, Spain, October 2020

H2020 Project, RIA Research and Innovation Actions Project, Agenzia Nazionale per le Nuove Tecnologie, Italy, October 2020

H2020 Project, RIA Research and Innovation Actions Project, Fundacion Cener, Spain, October 2020

H2020 Project, RIA Research and Innovation Actions Project, Acondicionamiento Tarrasense Asociacion, Spain, October 2020

H2020 Project, H2020 Research Infrastructures Project, Institut für Nachhaltige Technologien, Austria, April 2019

## **Scientific Research / Working Group Memberships**

Energy Conservation Through Energy Storage, Uluslararası Enerji Ajansı, United States Of America, www.iea-eces.org, 1995 - Continues

## **Edit Congress and Symposium Activities**

Joint Conference Thermal Energy Storage - Perspectives and Applications in an Industrial Environment, Invited Speaker, Frankfurt, Germany, 2016

Greenstock International Conference on Energy Storage, Invited Speaker, Beijing, China, 2015

## **Citations**

Total Citations (WOS):1569

h-index (WOS):23

## **Scholarships**

Doktora sonrası araştırma bursu, TÜBİTAK, 2006 - 2007

Turkish Representative, Official Institutions of Foreign Countries, 1999 - 1999

Doktora bursu, TÜBİTAK, 1990 - 1991

## **Awards**

PAKSOY H. Ö. , Soroptomist Başarılı Kadın Ödülü, Soroptomist International, March 2018

PAKSOY H. Ö. , Best Poster Award, Greenstock International Conference on Energy Storage, May 2015

PAKSOY H. Ö. , Meslek Hizmet Ödülü, Adana Rotary Club, May 2001

PAKSOY H. Ö. , Fen ve Teknik Gelişme, Türkiye Birincisi, Jonior Chamber Turkey, The Outstanding Young Persons Competition, January 2000