BERNA HASÇAKIR

Associate Professor

Flotek Industries, Inc. Career Development Professor

3116 TAMU- 401N College Station, TX, 77843-3116, Phone: +1 979 845 6614,

E-mail: hascakir@tamu.edu

Website: http://www.hascakir.com

EDUCATION

2008-2010	Postdoctoral Scholar in Energy Resources Engineering, Stanford University, Stanford, CA, USA Research Area: "Visualizing In-Situ Combustion Dynamics with X-Ray Computed Tomography" and "Simulation of Cyclic Steam Injection with Temperature Induced Wettability Change" Advisor: Dr. Anthony R. Kovscek, kovscek@stanford.edu, Phone: +1 650 723 1218
2003-2008	Ph.D. in Petroleum and Natural Gas Engineering, Middle East Technical University, Ankara, TURKEY <u>Dissertation</u> : "Investigation of Productivity of Heavy Oil Carbonates and Oil Shales Using Electrical Heating Methods" <u>LINK</u> Advisor: Dr. Serhat Akin, <u>serhat@metu.edu.tr</u> , Phone: +90 312 210 4892
2007-2008	Visiting Ph.D. Student in Petroleum Engineering, University of Alberta, Edmonton, AB, CANADA (6 months) Advis or: Dr. Tayfun Babadagli, <u>tayfun@ualberta.ca</u> , Phone: +1 780 492 9626
2001-2003	M.Sc. in Environmental Technologies, Dokuz Eylul University, Izmir, TURKEY MSc Thesis: "Utilization of Natural Polyelectrolyte in Wastewater Treatment" Advisor: Dr. Deniz Dolgen, deniz.dolgen@deu.edu.tr, Phone: +90 232 301 7139
1996-2001	B.Sc. in Environmental Engineering, Dokuz Eylul University, Izmir, TURKEY BScThesis : "Nutrient Removal in Sequential Batch Processing Reactor"

Advisor: Dr. Necdet Alpaslan, <u>necdet.alpaslan@deu.edu.tr</u>, Phone: +90 232 301 7100

POSITIONS

09/2018-Present	Associate Professor Texas A&M University, Petroleum Engineering Department, College Station, TX, USA
04/2012-08/2018	Assistant Professor Texas A&M University, Petroleum Engineering Department, College Station, TX, USA
05/2011-04/2012	Senior Heavy Oil Reservoir Engineer, Schlumberger PCE, Bogota, Colombia
06/2011-12/2011	Consultant on Thermal EOR Methods, Pacific Rubiales Energy, Bogota, Colombia
01/2011-03/2011	Reservoir Simulation Engineer, Schlumberger AbTc, Abingdon, UK
11/2010-05/2011	Reservoir Simulation Engineer, Schlumberger PTT, Puerto La Cruz, Venezuela
10/2008-06/2010	<u>Postdoctoral Researcher</u> , Stanford University, Energy Resources Eng. Department, Stanford, CA, USA
09/2008-12/2008	Research and Teaching Assistant, Graduate School of Natural and Applied Sciences, Inonu University, Malatya, TURKEY
01/2004-09/2008	Research and Teaching Assistant, Petroleum and Natural Gas Engineering Department, Middle East Technical University, Ankara, TURKEY
08/2005-08/2007	<u>Project Assistant</u> , Supported by BAP (Scientific Research Projects) and TUBİTAK (The Scientific & Technological Research Council of Turkey), METU, Ankara, TURKEY
02/2003-08/2003	Environmental Engineer, Harmandali Waste Disposal Site, Izmir, TURKEY
09/2001-08/2003	<u>Project Assistant</u> , Center for Environmental Research and Development, Dokuz Eyl ul University (ÇEVMER), Izmir, TURKEY
09/2001-06/2003	<u>Computer Instructor</u> , Altin Computer Course, Izmir, TURKEY and Mi mar Ke malettin Elementary School, Izmir, TURKEY

TRAINING & NETWORKING

A. SHORT COURSES AND INTERNSHIPS (* Teaching Related Training)

- Nov 12, 2019* WE: What's My Bias? Understanding the Impact of Internalized Messages, Women in Engineering- Fall 209 Faculty Focus, Texas A&M University
- May 1-2, 2019* <u>Transformational Teaching and Learning Conference "Active and Inclusive Engagement"</u>, Texas A&M University
- April 18, 2019* Articulating the Value of Diversity in Our Courses and Disciplines, Center for Teaching Excellence, Texas A&M University
- March 26, 2019* <u>Visionary Women: Champions of Peace & Nonviolence</u>, 2019 Women's Research on Women, Texas A&M University, Education & Human Development, Education Leadership Research Center
- March 20, 2019* Suicide Prevention Gatekeeper Training, QPR (Question Persuade Refer), Student Counseling Service, Division of Student Affairs, Texas A&M University
- March 19, 2019* <u>Digital Playgrounds as Learning Spaces: Leveraging Digital Games and Gaming Approaches for Engagement,</u>
 Center for Teaching Excellence, Texas A&M University
- March 6, 2019* Aggie Disability Awareness Workshop, Education & Human Development, Texas A&M University

 Feb. 26, 2019* Practice: Practice: Practice: Designing Meaningful In Class Learning Experiences for Students. Contex for
- Feb. 26, 2019* Practice, Practice: Designing Meaningful In-Class Learning Experiences for Students, Center for Teaching Excellence, Texas A&M University
- Feb. 20, 2019* Promoting Classroom Climate: Laying the Social Groundwork for Better Learning, Center for Teaching Excellence, Texas A&M University
- June 2-3, 2018* Program Evaluator Candidate Training, ABET (Accreditation Board for Engineering and Technology, Inc.),
 Baltimore, Maryland, USA
- Oct. 17, 2017* Creating Inclusive Classrooms for LGBTQ+ Students, Center for Teaching Excellence, Texas A&M University
- April 18, 2017* Faculty Feedback It Matters What you Say, Women in Engineering (WE) Program-Faculty Focus, Texas A&M University.
- Mar. 23, 2017* Increasing Diversity within YOUR Faculty Pool, Women in Engineering (WE) Program-Faculty Focus, Texas A&M University.
- Feb. 2, 2017* Discussing Growth Mindset, Women in Engineering (WE) Program-Faculty Focus, Texas A&M University.
- Nov. 29, 2016* The Seventh Pedagogy Project, Supporting Transformational Learning, Disciplines Related to Technology-Enabled and Distance Education Programs, Texas A&M University
- Nov. 22, 2016* The Sixth Pedagogy Project, Supporting Transformational Learning, Disciplines Related to Graduate and Professional Programs, Texas A&M University
- Oct. 27, 2016* The Second Pedagogy Project, Supporting Transformational Learning, Disciplines Related to Mathematics and the Physical and Earth Sciences, Texas A&M University
- August 4, 2015* FIT A Basic Guide to Digital Multimedia Production for Teaching and Learning 8-4, Center for Teaching Excellence, Texas A&M University.
- July 9, 2015* Working with Students with Disabilities 7-9, Center for Teaching Excellence, Texas A&M University
- June 25, 2015* Lecture Well 6-25, Center for Teaching Excellence, Texas A&M University
- April 28, 2015* Course Design Series Session III 4/28, Center for Teaching Excellence, Texas A&M University
- April 23, 2015* Diversity & Global Learning 4/23, Center for Teaching Excellence, Texas A&M University
- April 21, 2015* Course Design Series Session II 4/21, Center for Teaching Excellence, Texas A&M University
- April 14, 2015* Course Design Series Session I 14/14, Center for Teaching Excellence, Texas A&M University
- April 13, 2015* <u>ADVANCE-STRIDE</u> (The Strategies and Tactics for Recruiting to Improve Diversity and Excellence) Workshop focuses on best practices for faculty searches such as inclusive a dvertising, reducing bias in the evaluation
- process, and hosting effective candidate visits
- Mar 30-31, 2015* Roadmap for a Successful Academic Career Workshop, Advance Center, Texas A&M University
- March 31, 2014*

 Attention Faculty in STEM Disciplines: Do you want to reinvigorate your teaching but don't have the time or resources? Would you like to enhance the professional development of your graduate students and post-doctoral fellows with easy-to-access programs on campus?, CIRTL, Center for Teaching Excellence, and Office of Graduate and Professional Studies, Texas A&M University

& April 6-8, 2014

February 2013* Fair Use: Using Copyrighted Material in Your Thesis/Dissertation and Other Research Works - Copyright and

Publishing Series, Texas A&M University

February 2013* Creative Commons Licenses: A Prerequisite for Publishing Your Research via Open Access, Texas A&M

University

January 2013* Kick Start Your Teaching – Effectiveness and Efficiency, Texas A&M University (During Spring 2013)

December 2012* Writing with P.O.W.E.R! A Writing Productivity Program for New Faculty, Texas A&M University

March 2011 Petrel Reservoir Engineering, Schlumberger, Calgary, AB, CANADA (3 days)

March 2011 Oil Field Manager (OFM) Fundamentals and Forecast Analysis, Schlumberger, Crawley, UK (3 days)

February 2011 <u>Eclipse Thermal</u>, Schlumberger, Abingdon, UK (5 days)

Summer of 2006 European School of English, Paceville, MALTA (3 weeks)

Summer of 2006 International Summer School of Geothermal Exploration, Prospecting, and Reservoir Engineering Monitoring,

Izmir, TURKEY (2 weeks)

Summer of 2000 Summer Practice in Ministry of Environment, Office practice - Head Office, Antalya, TURKEY (1 month)

Summer of 1998 Summer Practice at Dokuz Eylul University, Field practice; Topography, Izmir, TURKEY (2 weeks)

2002-2003 Intern at Kaplamin Corrugated Packaging Industry, Izmir, TURKEY (1 year)

B. AFFILIATIONS

5. Society of Petroleum Engineers (SPE), since 2004 LINK

- 4. American Chemical Society (ACS), since 2015 LINK
- 3. The Combustion Institute, since 2015 LINK
- 2. American Association of University Professors (AAUP), since 2014 LINK
- 1. Chamber of Turkish Environmental Engineers, since 2002 LINK

C. AWARDS

- 12. Flotek Industries, Inc. Career Development Professor, 2019 for three years
- 11. Distinguished Member of Society of Petroleum Engineers (SPE), 2018 LINK
- 10. Stephen A. Holditch Faculty Fellow, Starting from November 1, 2015 for three years LINK
- 9. SPE Innovative Teaching Award, SPE Faculty Awards, 2015. Award Amount: 10,000 USD LINK
- 8. SPE Faculty Enhancement Travel Grant for the Gulf Coast North America Region, 2015. Award Amount: 2,000 USD LINK
- 7. Top 10 Associate Editors, Journal of Petroleum Science and Engineering, Elsevier, 2014 LINK
- 6. SPE Junior Faculty Research Grant, SPE Faculty Awards, 2014. Award Amount: 100,000 USD LINK
- 5. SPE Faculty Enhancement Travel Grant for the Gulf Coast North America Region, 2014. Award Amount: 2,000 USD LINK
- 4. Postdoctoral Scholarship, SUPRIA, Energy Resources Engineering, Stanford University, CA, USA (2008-2010) LINK
- 3. <u>Clay Mineral Society Travel Grant</u> to attend Bridging Clays Conference, FRANCE (2006) <u>LINK</u>
- 2. The Scientific & Technological Research Council of Turkey Travel Grant to attend the 1st WHOC, CHINA (2006) LINK
- 1. The Scientific & Technological Research Council of Turkey Visiting Researcher Grant, six months, CANADA (2007-2008) LINK

D. INVITED SPEAKER & PANELIST

- 25. **Lecture**: Environmental Impact of Oil and Gas Production Part 1: Gas Emissions, SPE Student Chapter University of Belgrade, Serbia, 7 December 2020. <u>LINK</u>
- 24. **Webinar**: Introduction to Thermal Enhanced Oil Recovery Methods, *SPE Student Chapter-Universidad del Noreste (UNE)*, Mexico, 13 November 2020. LINK
- 23. **29 October Republic Day Celebration Speaker**: Ataturk, Me, and Reformed Republic, Texas A&M University, Turkish Student Association, 29 October 2020. <u>LINK</u>
- 22. **Graduate Seminar Speaker**: Who to Blame for Climate Change, *Texas A&M University, Petroleum Engineering Department*, 5 February 2019.
- 21. **Graduate Seminar Speaker**: Contribution of Oil and Gas Industry to Global Warming, *Texas A&M University, Qatar Campus Doha Qatar*, 2 December 2018.
- 20. **Graduate Seminar Speaker**: Factors Affecting Asphaltenes Stability, *Petroleum and Geosystem Engineering Department, UT at Austin, 26* November 2018.
- 19. **Webinar**: Factors Affecting Asphaltenes Stability, *Schlumberger Heavy Oil Special Interest Group*, October 19, 2017, Mexico City, Mexico. 55 people were attended.

- 18. **Workshop Leader**: Enhancing the proper management and treatment of produced water for reinjection purposes, *Unconventional Completions Conference*, September 18-20, 2017, Houston, Texas, USA.
- 17. **Seminar**: The Effectiveness of Microwave Heating for High Asphaltenes Content Oil Reservoirs, 7 April 2017, Chevron Cooperation, Richmond Technology Center, Richmond, California, USA.
- 16. **Guest Lecturer**: Enhanced Oil Recovery, *PETE 402-Section 502-503: Integrated Asset Development,* 14 March 2017, College Station, Texas.
- 15. Panelist for New Faculty Perspectives, New Faculty Orientation, the Office of the Dean of Faculties, Texas A&M University, 22 August 2016.
- 14. **Chevron Lunch and Learn**: Solvent-Steam Processes: Benefits and Drawbacks, 20 July 2016, RPE Chevron, Houston, Texas,
- 13. **Plenary Lecture**: The Impact of Asphaltenes on Thermal EOR Performance, 30 June 2016, *Thermal EOR International Workshop, "Thermal Methods for Enhanced Oil Recovery: Laboratory Testing, Simulation and Oilfields Applications"*, 28 June-1 July 2016, Kazan, Russia. <u>LINK</u>
- 12. **Graduate Seminar**: Fundamentals of Miscible Flooding, 28 June 2016, Petroleum Engineering Department, Kazan Federal University, Kazan, Russia. <u>LINK</u>
- 11. **Seminar**: Hydrocarbon Extraction from Unconventional Reservoirs, Centro de Investigación en Química Aplicada (CIQA), 4 December 2015 in Saltillo Coahuila, México. <u>LINK</u>
- 10. Panelist for WE LEAD: Faculty Insight Luncheon, Texas A&M University, Women in Engineering, 28 October 2015. LINK
- 9. Panelist in SPE Heavy Oil Workshop: Lifting Recovery to the Next Level, In-situ electrical heating stimulation for heavy oil recovery, 22-23 September 2015 in Budapest, Hungary.
- 8. **Seminar**: Solvent-Steam Processes for Heavy Oil and bitumen Extraction: International Science and Practice Conference "Specific of Survey and Exploration of Alternative Hydrocarbon Fields", Kazan, Republic of Tatarstan, Russia.
- 7. Panelist for New Faculty Perspectives, New Faculty Orientation, the Office of the Dean of Faculties, Texas A&M University, 24 August 2015.
- 6. **Graduate Seminar**: Advanced Recovery Techniques for Unconventional Oil Resources, 28 October 2014, Process Engineering Department, Memorial University of Newfoundland and Labrador, Canada.
- 5. **Undergraduate Seminar**, Reservoir Fluids-Dry Gases, 27 October 2014, Mechanical Engineering Department, Memorial University of Newfoundland and Labrador, Canada.
- 4. **Seminar**: Oil Shale extraction with RF heating, 15 March 2013, SLAC-Stanford National Accelerator Laboratory, Stanford, CA, USA.
- 3. Seminar: Oil Shale extraction with RF heating, 15 March 2013, CPI-Communications & Power Industries, Palo Alto, CA, USA.
- 2. Seminar: Hydrogen Sulfide problem during steam injection processes, 27 March 2013, Ecopetrol, Bogota, Colombia.
- 1. Seminar: Complexity behind field-scale modeling of in-situ combustion, 15 February 2011, Schlumberger, Abingdon, UK.

E. MEDIA COVERAGE (www.hascakir.com/news)

- 18. Study Interprets Electromagnetic-Wave Penetration, Absorption for Bitumen Reservoir, Journal of Petroleum Technology, SPE-0121-0048-JPT. LINK.
- 17. Cleaning up the oil industry's produced water concerns, Texas A&M University Engineering, LINK
- 16. Women in Academia, JPT Making a Difference, LINK
- 15. Berna Hascakir promotes student research engagement through National Science Foundation program, LINK
- 14. Research @Texas A&M, Solid crude oil: Researchers explore how to get clogged wells moving. LINK
- 13. Texas A&M University Engineering News, Solving the solid crude oil problem. LINK
- 12. Journal of Petroleum Technology (JPT), SPE Announces 2018 International Award Recipients, July 06, 2018. LINK
- 11. Catching the Wave, New Technology Magazine, 09/28/2015 LINK
- 10. Undergraduate Research: Find Your Fit!, Honors and Undergraduate Research, Texas A&M University, 09/04/2015 LINK
- 9. Thermal EOR, Control Engineering, Oil & Gas Engineering, 12/23/2014 LINK
- 8. Thermal EOR, <u>Upstream Technology</u>, The bimonthly magazine for oil & gas innovators, Issue 4-2014 <u>LINK</u>
- 7. Exploring new methods of thermal recovery, Phys & Org, Aug. 13, 2014 LINK
- 6. Berna Hascakir explores new methods of thermal recovery, College of Engineering, Texas A&M University, Aug. 12, 2014 LINK
- 5. Research from Middle East Technical University yields new findings on hydrologic engineering, <u>Energy Weekly News</u>, Aug. 27, 2010 <u>LINK</u>
- 4. Study Data from Stanford University Update Knowledge of Oil and Gas Research, Energy Weekly News, Nov. 21, 2008 LINK
- 3. Proposed Extraction Process may have economic and environmental benefits, Science Daily, Sep. 24, 2008 LINK

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2. New hope for tapping vast domestic reserves of oil shale, Phys & Org, Sep. 22, 2008 LINK
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1. Researchers Develop Process That Could Result in Higher Yield from Oil Shale, Green Car Congress, Sep. 22, 2008 LINK

F. ATTENDED CONFERENCES-WORKSHOP-SYMPOSIUM (SPE: Society of Petroleum Engineers, ACS: American Chemical Society, ATCE: Annual Technical Conference and Exhibition, HOLA: Heavy Oil Latin America, * to be attended)

April 18-22, 2020 SPE Improved Oil Recovery Conference, Tulsa, Oklahoma, USA-Virtual

March 18-19, 2020 SPE Canada Unconventional Resources Conference, Calgary, Alberta, CANADA-Virtual

March 18-19, 2020 SPE Canada Heavy Oil Conference, Calgary, Alberta, CANADA-Virtual

Sep 30- Oct 2, 2019 SPE ATCE 2019, Calgary, AB, Canada.

Apr 23-26, 2019 SPE Western Regional Meeting, San Jose, California, USA.

Sep 24-26, 2018 SPE ATCE 2018, Dallas, Texas, USA. **Oct 9-11, 2017** SPE ATCE 2017, San Antonio, Texas, USA.

May 22, 2017 NSF CAREER Mock Panel Review, College of Engineering, Texas A&M University.

May 11-17, 2017 SPE Latin American and Caribbean Petroleum Engineering Conference, Buenos Aires, Argentina.

May 1, 2017 NSF CAREER Workshop, College of Engineering, Texas A&M University.

Apr 2-6, 2017 ACS 253rd National Meeting, San Francisco, California, USA.

Mar 23, 2017 Dean of Faculties - Demystifying the Tenure and Promotion Process, Texas A&M University

Feb 15-16, 2017 SPE Canada Heavy Oil Technical Conference, Calgary, Canada.

Dec 6-8, 2016 SPE International Heavy Oil Conference and Exhibition (HOCE), Mangaf, Kuwait.

Sep 26-28, 2016 SPE ATCE 2016, Dubai, UAE.

Jun 28-Jul1, 2016 Thermal Methods for Enhanced Oil Recovery, Kazan, Russia.

June 7-9, 2016 SPE Canada Heavy Oil Technical Conference, Calgary, Alberta, Canada.

May 23-26, 2016 SPE Western Regional Meeting, Anchorage, Alaska, USA.

Nov 18-20, 2015 SPE Latin American and Caribbean Petroleum Engineering Conference, Quito, Ecuador.

Oct 13-15, 2015 SPE Eastern Regional Meeting, Morgantown, West Virginia, USA.

Oct 5-6, 2015 We stern States Section of Combustion Institute, Fall Meeting, at Brigham Young University, Provo, UT, USA.

Sep 28-30, 2015 SPE ATCE 2015, Houston, USA.

Sep 22-23, 2015 SPE Heavy Oil Workshop, Budapest, Hungary.

Sep 2-3, 2015 International Science and Practice Conference "Specific of Survey and Exploration of Alternative

Hydrocarbon Fields", Kazan, Republic of Tatarstan, Russia.

June 9-11, 2015 SPE Heavy Oil Conference, Calgary, Alberta, Canada.

May 17-20, 2015 9th US National Combustion Meeting, Combustion Institute, Cincinnati, Ohio.

Mar 26-27, 2015 Center for Petroleum and Geosystems, Frontiers in Subsurface Energy Symposium, Austin, TX, USA

Sep 24-26, 2014 SPE Heavy and Extra Heavy Oil Conference-Latin America, Medellin, Colombia.

June 10-12, 2014 SPE Heavy Oil Conference, Calgary, Alberta, Canada.

April 16-18, 2014 SPE Western North America and Rock Mountain Joint Regional Meeting, Denver, Colorado, USA.

March 20, 2014 Dean of Faculties - Demystifying the Tenure and Promotion Process, Texas A&M University

Oct 2012 SPE ATCE 2012, San Antonio, Texas, USA.

Before A&M

Nov 2011 SPE ATCE 2011, Denver, USA

Aug 2011 SPE History Matching: Field Experiences and Lessons Learned, Cartagena, Colombia

Aug 2011 HOLA, Heavy Oil Latin America Congress, Bogotá, COLOMBIA

Sep 2010 SPE ATCE 2010, Florence, ITALY

May 2010SPE Western Regional Meeting, Anaheim, California, USAMar 2009SPE Western Regional Meeting, San Jose, California, USANov 2006First World Heavy Oil Conference-WHOC, Beijing, CHINASep 2006Fourth Mediterranean Clay Meeting, Ankara, TURKEY

June 2006 Bridging Clays, d'Oléron, FRANCE

Nov 2005 6th National Environmental Engineering Conference, Istanbul, TURKEY

Sep 2005 12th National Clay Conference, Van, TURKEY

May 2005 15th international petroleum conference of Turkey, Ankara, TURKEY

April 2005 World Geothermal Congress, Antalya, TURKEY

June 2004 9th Industrial Contamination Congress, Istanbul, TURKEY

RESEARCH (www.hascakir.com/research)

Texas A&M University College of Engineering Indicators of Excellence/Effectiveness in

Research (LINK). In the table below, excellence indicators are given in red and effectiveness indicators are given in blue. Proves summarize the excellence and effectives indicators for Dr. Hascakir. Further information on proves can be found in the relevant section of the Dr. Hascakir's CV.

Indicators	Proof/Explanations
Publications in high quality, peer-reviewed	➤ Almost all of my peer review publications are considered as Q1 (Best
journals or prestigious conference proceedings	Quartile) a ccording to the journal metrics given in <u>SCImago Journal Rank</u>
pre-identified by departmental faculty as highly	➤ One of the most selective and prestigious petroleum engineering
selective forums	events is SPE Annual Meeting (SPE-ATCE). I published 9 conference
	proceedings in ATCE between September 2017-2020.
Evidence of substantial impact in the field, as	I have two issued US patents and pending EP and Canadian patent
demonstrated by citations, patent licenses, etc.	applications. This patent is creating significant revenue to TAMU.
	My citation records between 2012-2017 was 435 and between 2017-2021
	was over 1000 (2.5 times more than tenure-track appointment)
Delivery of seminars or similar invited talks at	- Petroleum and Geosystem Engineering Department, UT Austin, 2018.
top-ranked institutions	- Texas A&M University, Qatar Campus Doha Qatar, 2018.
Election to the rank of Fellow in a technical	SPE Distinguished Membership 2018: I am the first assistant professor in
society	our department who was selected to this prestigious international
	membership/award in the 6th year of academic appointment.
Leadership positions in scholarly or industry	- I am serving as an associate editor for one of the most prestigious
publications	petroleum engineering journal; Journal of Petroleum Science and
	Engineering.
	- I have also served as guest editor for the 3 Thermal EOR special issues of
	Journal of Petroleum Science and Engineering
	- I have also served as an associate editor for Energy Reports in 2019
Participation in conferences through contributed	I have 105 published conference papers and several under review. Most
presentations by the faculty or their students;	of them are published with my graduate and undergraduate researchers.
Research funding that sustains a vibrant research	Since 2015, we are collaborating with Chevron in several research
program and financially supports graduate	projects. This continuous support provided by Chevron gives significant
students;	funding source to my research team.
Leadership role in pursuing/obtaining large multi-	- University Lands Water Management Project, University of Texas
PI grant funding that involves local collaborators	Systems-University Lands, <u>Award</u> : 744,582 USD. I am the only PI who is
as well as external partners;	conducting research on feasible water treatment technologies.

SUMMARY [After Tenure Package Submission (February 2017) till Spring 2021]

Since my tenure package submission (February 2017), I have raised 705,426 USD (Hascakir value of 1,789,796 USD total). I have published 17 peer reviewed papers (which are appeared in Q1 —Best Quartile Journals) and 28 conference proceedings (12 of them are in highly selective conferences and 16 of them are in selective conferences) with my graduate and undergraduate students/researchers. I have 2.5 times more per year citation after February 2017 than before February 2017. I have 7 PhD students (only for one of them, I was co-advising but I was the main advisor for that student as well), 2 Master of Science (MS) students, and 2 Master of Engineering (MEng) students graduated. I am the first assistant professor in our department who has been elected as an SPE Distinguished Member after being faculty only for 6 years and 10 years after getting my PhD. Currently, I advise 3 PhD, 2 MS, and 2 MEng students and I have 3 active sponsored projects. One of these three projects is a large multi-PI grant.

A. PROJECTS/FUNDING (Total excluding start-up 2,773,327.69 USD, Hascakir value excluding start-up 1,568,318.11 USD)

- 24. Ocean Energy Safety Institute 2.0, Submitted to Bureau of Safety and Environmental Enforcement (DOI-BSEE), 2021-2026, Award: 51,697,972 USD. Under evaluation
- 23. Method and system for stability determination of asphaltenes utilizing dielectric constant measurements, Patent, Revenue: 157,000 USD, between 2017-2020
- 22. Chemical and Physical Characterization of Heavy Crude Oils before and after Blending with VISRED, Carbon Chain Technologies, Award: 73,293 USD. Project Duration: Fall 2020-Spring 2021.

- 21. In-situ combustion in Lopez North Oil Field, submitted to Aspen Operating Company, LLC <u>Award</u>: **60,000 USD**. <u>Project Duration</u>: January 2020-September 2020. <u>Awarded and then suspended due to COVID19</u>
- 20. Use of Biodegradable and Environmentally Friendly Solvents for EOR of Heavy Oils, Chevron, Award: 50,000 USD. Project Duration: Jan 2020- Dec 2020.
- 19. University Lands Water Management Project, University of Texas Systems-University Lands, <u>Award</u>: 744,582 USD. <u>Hascakir's contribution</u>: <u>119,133.12 USD</u> (16 %). <u>Project Duration</u>: October 2019-September 2021. PI: Dr. Mukul Bhatia, Berg-Hughes Center.
- 18. <u>Donation</u>: Carbon Chain Technologies, UK. **41,000 USD**.
- 17. Fe a sibility of Steam Flooding in Edwards County, TX. <u>Sponsor</u>: ECB, LLC. <u>Award</u>: **30,000 USD**. <u>Project Duration</u>: October 2017-March 2018.
- 16. Characterization of hydraulic fracturing produced water with high salinity content, <u>Sponsor</u>: Southwest through Crisman Institute for Petroleum Research. <u>Award</u>: **100,000 USD**. <u>Project Duration</u>: September 2017-September 2019.
- 15. Enhanced Oil Recovery Utilizing the Piezoelectric or Inverse Piezoelectric Method, <u>Sponsor</u>: Litezon LLC. <u>Award</u>: **100,000 USD**. <u>Project Duration</u>: April 2017- April 2018.
- 14. The Effect of Asphaltenes Precipitant and an Environmentally Friendly Solvent on Solvent-Steam Performance, <u>Sponsor</u>: Chevron, <u>Award</u>: **20,000 USD**. <u>Project Duration</u>: March 2017- March 2018.
- 13. As phaltenes Stability Determination, Sponsor: Clariant, PI: Berna Hascakir, Award: 30,000 USD. Project Duration: March 2017.
- 12. Second Renewal for Undergraduate Research in Energy and Propulsion for Summer 2017-2019, <u>Sponsor</u>: National Science Foundation, <u>Award Number</u>: 1560155-NSF. PI: Eric L. Petersen with 8 Co-PI, <u>Total Award</u>: 443,921 USD. <u>Project Duration</u>: Summer 2017. <u>Not included in total dollar amount LINK</u>
- 11. Solid and Soluble Products of Engineered Water/Rock Interactions in Eagle Ford Group Chemofacies, <u>Sponsor</u>: Berg-Hughes Center for Petroleum and Sedimentary Systems. Co-PI: Dr. Mike Tice. <u>Award</u>: **204,913 USD**. <u>Project Duration</u>: January 2016 for 3 years.
- 10. Stephen A. Holditch Faculty Fellow, November 2015-November 2018. 1,000 USD/month; 36,000 USD/3 years. Not included in total dollar amount
- Effect of Solvent Dose and Type on Steam Assisted Gravity Drainage Performance, <u>Sponsor</u>: Chevron, <u>Award</u>: 20,000 USD, <u>Project Duration</u>: January 2016- January 2017.
- 8. Support for two graduate students over summer 2015, <u>Sponsor</u>: Crisman Institute for Petroleum Research, <u>Award</u>: **25,000 USD** <u>Project Duration</u>: Summer 2015.
- 7. Field-Scale Simulation of In-Situ Combustion, <u>Sponsor</u>: Skoltech University, PI: Berna Hascakir, Co-PI: John Killough, <u>Total Award</u>: 610,984.72 USD, <u>Hascakir's contribution</u>: <u>100,201.49 USD</u> (16.4%), <u>Project Duration</u>: 2014- 2015.
- 6. Effect of Solvent Dose and Type on Steam Flooding Performance, <u>Sponsor</u>: Chevron. <u>Award</u>: **20,000 USD**. <u>Project Duration</u>: January 2015.
- 5. <u>SPE Junior Faculty Research Grant</u>, The role of saturates, aromatics, resins, and asphaltenes (SARA) fractions of crude oils in the mechanism of asphaltenes destabilization. <u>Award</u>: **100,000 USD**. <u>Project Duration</u>: January 2015-January 2017.
- 4. Emulsion Control and Prevention for In-Situ Combustion, <u>Sponsor</u>: Pacific Rubiales Energy. <u>Award</u>: <u>150,000 USD</u>. <u>Project</u> Duration: November 2013-November 2014.
- 3. Donation: Cenovus FCCL Ltd., 99,000 USD, October 2013.
- 2. Physicochemical Interactions of Shale with Injected Water-Based Fluids, <u>Sponsor</u>: Crisman Institute for Petroleum Research, PI: Robert H. Lane, Co-PI: Berna Hascakir, <u>Award</u>: 137,555 USD. <u>Hascakir's contribution</u>: 68,777.5 USD (50 %-34,388.75USD), <u>Project Duration</u>: September 2013- September 2015.
- 1. Texas A&M University, Engineering Faculty, start-up fund to be used in 2012-2014, 250,000 USD. Not included in total dollar amount

B. COLLABORATIONS

- 14. Dr. Mukul Bhatia Berg-Hughes Center, Geosciences Texas A&M University, College Station, TX, USA LINK
- 13. Dr. Cesar Ovalles & Ian P. Benson <u>Chevron Corporation</u>, Richmond, California, USA <u>LINK</u>
- 12. Dr. Mike Tice, Geology and Geophysics Department, Texas A&M University, College Station, TX, USA LINK
- 11. Dr. Waruna Kulatilaka, Mechanical Engineering, Texas A&M University, College Station, TX, USA LINK
- 10. Dr. Eric Petersen, Mechanical Engineering, Texas A&M University, College Station, TX, USA LINK
- 9. Dr. Anthony H Knap, Geochemical and Environmental Research Group, Texas A&M University, College Station, TX, USA LINK
- 8. Dr. Claude St Thomas and Dr. Enrique Javier Jimenez, Centro de Investigación en Química Aplicada, Saltillo, Mexico LINK
- 7. Dr. Suresh Pillai, National Center for Electron Beam Research, Texas A&M University, College Station, TX, USA LINK

- 6. Dr. Hisham Nasr-El-Din, Dr. John Killough, Dr. Robert Lane, Dr. Maria Barrufet, Dr. Sam Noynaert, <u>Petroleum Engineering</u>, <u>Texas A&M University</u>, College Station, TX, USA <u>LINK</u>
- 5. Dr. Carlos Dengo, Berg-Hughes Center, Geosciences Texas A&M University, College Station, TX, USA LINK
- 4. Dr. Ethan Grossman, Geology and Geophysics Department, Texas A&M University, College Station, TX, USA LINK
- 3. Dr. Ian Donald Gates, Chemical and Petroleum Engineering, University of Calgary, Calgary, AB, Canada LINK
- 2. Dr. Serhat Akin, Petroleumand Natural Gas Eng. Department, Middle East Technical University, Ankara, TURKEY LINK
- 1. SLAC National Accelerator Laboratory, Menlo Park, California, USA LINK

C. PUBLICATIONS <u>www.hascakir.com/publications</u> (*indicates MS, MEng, or PhD level students, **indicates Undergraduate level students, †indicates faculty collaborators, † indicates industry collaborators) (<u>SCImago Journal Rank</u>, <u>we bsite can be used</u> to see the quality of the journals we are publishing)

Year	Number of				
Teal	Peer Reviewed Publications	Conference Proceedings	Google Scholar Citation		
2017-2021	17	28	1077		
Till te nure (2012-2017)	15	57	427		
At A&M Total	32	84	1,468		
Before A&M Total	7	20	54		
Total	39	105	1558		

C.1. Patents

- 2. **Hascakir, B.**, Punase, A.*, Method and system for stability determination of asphaltenes utilizing dielectric constant measurements, *US20190113473A1*, *US* <u>licensed by Clariant Corporation in November 2017</u>. LINK
- 1. Hascakir, B., Punase, A.*, Method and system for stability determination of asphaltenes utilizing dielectric constant measurements, US20180024084A1, EP, CA, US, WO, <u>licensed by Clariant Corporation in November 2017</u>. LINK

C.2. Peer Reviewed Publications

- 40. Seng, L.Y.**, **Hascakir, B.**, Role of Intermolecular Forces on Surfactant-steam Performance Into Heavy Oil Reservoirs, *SPE Journal*, <u>Under Second round of review</u>.
- 39. Kar, T.*, **Hascakir, B.**, Effect of Clay Type on Emulsion Formation in Steam and Solvent-Steam Flooding, *SPE Journal*, SPE 205363-PA. LINK
- 38. Zhang, L.*, **Hascakir, B.**, A Review of Issues, Characteristics, and Management for Wastewater due to Hydraulic Fracturing in the U.S., *Journal of Petroleum Science and Engineering*, <u>Accepted</u>. <u>LINK</u>.
- 37. Kar, T.*, **Hascakir, B.**, Effect of Solvent Type on Emulsion Formation in Steam and Solvent-Steam Flooding Processes for Heavy Oil Recovery, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 2021, Volume 611, Pages 125783. <u>LINK</u>.
- 36. Seng, L.Y.**, Al-Shaikh, M.*, **Hascakir, B.**, Intermolecular Interaction between Heavy Crude Oils and Surfactants during Surfactant-Steam Flooding Process, *ACS Omega*, 2020, 5, 27383-27392. <u>LINK</u>.
- 35. Bealessio, B.A.*, Blánquez Alonso, N. A.*, Mendes, N. J.*, Sande, A. V.*, **Hascakir, B.**, A Review of Enhanced Oil Recovery (EOR) Methods Applied in Kazakhstan, *Petroleum*, Article in Press. <u>LINK</u>.
- 34. Is mail, N.*, **Hascakir, B.**, Impact of Asphaltenes and Clay Interaction on In-Situ Combustion Performance, *Fuel*, 2020, Volume 268-15, 117358. LINK.
- 33. Zhang, L.*, Tice, M.†, **Hascakir, B.**, A Laboratory Study of the Impact of Re-Injecting Flowback Fluids on Formation Damage in the Marcellus Shale, *SPE Journal*, 2020, Volume 25-02, SPE-195336-PA. LINK
- 32. Morte, M.*, **Hascakir, B.**, Characterization of complex permittivity for consolidated core samples by utilization of mixing rules, *Journal of Petroleum Science and Engineering*, 2019, Volume 181, 106-178. <u>LINK</u>
- 31. Morte, M.*, Dean, J.‡, Kitajima, H.†, **Hascakir, B.**, Increasing the Penetration Depth of Microwave Radiation Using Acoustic Stress to Trigger Piezoelectricity, *Energy & Fuels*, 2019,33, 6327-6334. <u>LINK</u>
- 30. **Hascakir, B.**, Editorial: Introduction to Thermal Enhanced Oil Recovery (EOR) special issue, *Journal of Petroleum Science and Engineering*, SI:Thermal EOR, 171 (2018) 1292-1293. LINK
- 29. Banerjee, S.*, **Hascakir, B.**, Flow Control Devices in SAGD Completion Design: Enhanced Heavy Oil/ Bitumen Recovery through Improved Thermal Efficiency, *Journal of Petroleum Science and Engineering*, SI:Thermal EOR, 2018, Volume 169, 297-308. LINK

- 28. Is mail, N.*, Seber, E.**, **Hascakir, B.**, Water and Aromatics Fraction Interaction at Elevated Temperature and Their Impact on Reaction Kinetics of In-situ Combustion, Journal of Petroleum Science and Engineering, SI:Thermal EOR, Volume 169, October 2018, Pages 24-32. <u>LINK</u>
- 27. Pra kos o, A.*, Punase, A.*, Rogel, E.‡, Ovalles, C.‡, **Hascakir, B.**, Effect of Asphaltene Characteristics on Its Solubility and Overall Stability, Energy & Fuels, 2018, 32 (6), 6482-6487. LINK
- 26. Kartal O. E.ł, Akin S.ł, **Hascakir, B.**, Karaca H.ł, Liquefaction of Nigde-Ulukisla Oil Shale: The Effects of Process Parameters on the Conversion of Liquefaction Products, *Oil Shale*, 34-4 (2017), 336-353. LINK
- 25. Banerjee, S.*, **Hascakir, B.**, Design of Flow Control Devices in Steam Assisted Gravity Drainage (SAGD) Completion, *Journal of Petroleum Exploration and Production Technology*, 2018, 8, 785-797. LINK
- 24. Banerjee, S.*, Abdulsattar, Z.R.*, Agim, K.*, Lane, R.H.[†], **Hascakir, B.**, Adsorption Mechanism of the Water-Based Fracturing Fluids on Shale Surface, *Petroleum*, 3 (2017) 384-390. LINK
- 23. **Hascakir, B.**, Editorial: Introduction to Thermal Enhanced Oil Recovery (EOR) special issue, Journal of Petroleum Science and Engineering, SI:Thermal EOR, 154 (2017) 438-411. <u>LINK</u>
- 22. Aleksandrov, D.*, Kudryavtsev, P.*, **Hascakir, B.**, Variations in In-Situ Combustion Performance due to Fracture Orientation, *Journal of Petroleum Science and Engineering, Thermal EOR Special Issue*, 154 (2017) 488-494. <u>LINK</u>
- 21. Kar, T.*, Hascakir, B., In-Situ Kerogen Extraction via Combustion and Pyrolysis *Journal of Petroleum Science and Engineering, Thermal EOR Special Issue*, 154 (2017) 488-494. LINK
- 20. Prakoso, A.*, Punase, A.*, **Hascakir, B.**, A Mechanistic Understanding of Asphaltene Precipitation from Varying Saturate Concentration Perspective, *SPE Production & Operations*, 2017, 32(01), 86-98, SPE-177280-PA. <u>LINK</u>
- 19. Ali, M.*, **Hascakir, B.**, Water-Rock Interaction for Eagle Ford, Marcellus, Green River, and Barnett Shale Samples and Implications for Hydraulic Fracturing Fluid Engineering, *SPE Journal*, 2017, 22(01), 162-171, SPE-177304-PA. LINK
- 18. Coelho, R.*, Ovalles, C.‡, Benson, I.‡, **Hascakir, B.**, Effect of Clay Presence and Solvent Dose on Hybrid Solvent Steam Performance, *Journal of Petroleum Science and Engineering*, 2017, 150, 203-207. LINK
- 17. Punase, A.*, **Hascakir, B.**, Stability Determination of Asphaltenes through Dielectric Constant Measurements of Polar Oil Fractions, *Energy and Fuels*, 2017, 31(1), 65-77. LINK
- 16. Kar, T.*, Stape, P. *, Mukhametshina, A. *, **Hascakir, B.**, Effect of Solvent Type on Water-in-Oil Emulsion Formation for Steam Flooding and Steam-Assisted Gravity Drainage, *Canadian Heavy Oil Association Journal (CHAO Journal)*. October 2016 Edition, 13-19, 2016. LINK **Invited**
- 15. Morte, M.*, **Hascakir, B.**, Estimation of Pseudo-Relative Permeability Curves through an Analytical Approach for Steam Assisted Gravity Drainage (SAGD) and Solvent Aided-Steam Assisted Gravity Drainage, *Journal of Unconventional Oil and Gas Resources*. 16, 45-52, 2016. LINK
- 14. **Hascakir, B.**, How to select the right solvent for solvent-aided steam injection processes, *Journal of Petroleum Science and Engineering*, Volume 146, 746-751, 2016. <u>LINK</u>
- 13. Mukha metshina, A.*, Kar, T.*, **Hascakir, B.**, Bitumen Extraction by Expanding Solvent-Steam Assisted Gravity Drainage (ESSAGD) with As phaltene Solvents and Non-Solvents, *SPE Journal*, Volume 21, Issue 02, 380-392, 2016, SPE-170013-PA. <u>LINK</u>
- 12. Kar, T.*, Ovalles, C. †, Rogel, E. †, Vien, J. †, **Hascakir, B.**, The Residual Oil Saturation Determination for Steam Assisted Gravity Drainage (SAGD) and Solvent-SAGD, *Fuel*, 2016, 172, 187-195. <u>LINK</u>
- 11. Kar, T.*, Mukha metshina, A.*, Unal, Y.*, **Hascakir B.**, The Effect of Clay Type on Steam Assisted Gravity Drainage Performance, SPE Journal of Canadian Petroleum Technology, 2015, 54(6), 412-423, SPE-173795-PA. LINK
- 10. Kar, T.*, **Hascakir, B.**, The Role of Resins, As phaltenes, and Water in Water-Oil Emulsion Breaking with Microwave Heating, *Energy and Fuels*, 2015, 29, 3684-3690, <u>LINK</u>
- 9. Aleksandrov, D.*, **Hascakir, B.**, Laboratory Screening Tests on the Effect of Initial Oil Saturation for the Dynamic Control of In-Situ Combustion, *Fuel Processing Technology*, Volume 130, 224-234, February 2015. LINK
- 8. **Hascakir, B.,** Ross, C., Castanier, L. Kovscek, A. ⁺, Fuel Formation and Conversion during In-Situ Combustion of Crude Oil, *SPE Journal*, Volume 18, Issue 6, 1217-1228, 2013, SPE 146867-PA. <u>LINK</u>

Before Texas A&M

- 7. Hascakir, B., Glatz, G., Castanier, L. Kovscek, A. †, In-Situ Combustion Dynamics Visualized with X-Ray Computed Tomography, SPE Journal, Volume 16, Issue 3, 524-536, 2011, SPE 135186-PA. LINK
- 6. Cinar, M., **Hascakir, B.**, Castanier, L. Kovscek, A. [†], Predictability of Crude Oil In-Situ Combustion by the Isoconversional Kinetic Approach, *SPE Journal*, Volume 16, Issue 3, 537-547, 2011, SPE 148088-PA. <u>LINK</u>
- 5. **Hascakir, B.**, Ba ba dagli, T.[†], Akin, S.[†], Field Scale Analysis of Heavy-Oil Recovery by Electrical Heating, *SPE Reservoir Evaluation* & Engineering, 13-1, 131-142, 2010, SPE 117669-PA. LINK
- 4. **Hascakir, B.**, Akin, S.[†], Recovery of Turkish Oil Shales by Electromagnetic Heating and Determination of the Dielectric Properties of Oil Shales by an Analytical Method, *Energy and Fuels*, 24(1), 503-509, 2010 LINK

- 3. Hascakir, B., Acar, C., Akin, S.[†], Microwave Assisted Heavy Oil Production: An Experimental Approach, *Energy and Fuels*, 23(12), 6033-6039, 2009. LINK
- 2. **Hascakir, B.**, Babadagli, T.[†], Akin, S.[†], Experimental and Numerical Simulation of Oil Recovery from Oil Shales by Electrical Heating, *Energy and Fuels*, 22 (6), 3976–3985, 2008. LINK
- 1. Hascakir, B., Dolgen, D.[†], Utilization of Clay Minerals in Wastewater Treatment: Organic Matter Removal with Kaolinite, *Ekoloji*, 66 (6), 47-54, 2008 (Turkish). <u>LINK</u>
- C.3. Peer Reviewed Publications under review or in preparation stage (experimental studies finalized, paper writing in progress)
- 1. Barooah, A.*, Khan M.S. *, Rahman, M. A.†, Hassan, I.†, Hasan, R.†, Maheshwari, P.†, **Hascakir B.**, Investigation of cutting transport in Horizontal/Deviated annulus using pressure response data for two phase slurry flow, International Journal of Multiphase Flow, Under review.
 - 2. Pope, C. **, Hascakir B., Role of Reservoir rock and Oil Composition on reaction kinetics of a crude oil, Fuel. Under review.
- 3. Demir, A.B. *, Bilgesu H., **Hascakir B.**, The Effect of Clay and Salinity on Asphaltene Stability, *Journal of Petroleum Science* and Engineering, Under review.
- 4. Pettengell, K. *, **Hascakir B.**, Horizontal Water Injection to Sustain Production in a Low Oil Price Environment, *Petroleum*, Under review.
- 5. Al Atwah, I.*, Alshaikh, M.*, Sweet, S.T.†, Knap, A.†, Hascakir, B., Extension of Existing Screening Criteria Tables for Thermal Enhanced Oil Recovery Methods through Compositional Analyses of Heavy Oils, *Geology*, Under review.
- 6. Punase, A. *, Demir, A.B. *, Bilgesu H. †, **Hascakir B.**, Impact of Inorganic content of a sphaltenes in a sphlatenes' stability, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, Under review
 - 7. Punase, A. *, Hascakir B., Near Wellbore damage due to asphaltenes deposition, Transport in Porous Media, Under review.
- C.4. Conferences-Workshops-Seminars (SPE: Society of Petroleum Engineers, ACS: American Chemical Society, ATCE: Annual Technical Conference and Exhibition, AIChE: American Institute of Chemical Engineers, HOLA: Heavy Oil Latin America)

At A&M Conference acceptance rate **After Tenure Before Tenure** Before A&M (Between 2017-2021) (Between 2012-2017) i. Highly Selective (<30%) 12 4 ii.Selective (30-60%) 16 41 4 iii.General (>60%) 0 10 12 TOTAL 28 20 58

Paper links are activated on the first day of the conferences.

- 105. Barooah, A.*, Khan M.S. *, Rahman, M. A.†, Hassan, I.†, Hasan, R.†, Maheshwari, P.†, **Hascakir B.**, Cutting transport in Horizontal/Deviated annulus using pressure response data for two phase slurry flow, OMAE, 40th International Conference on Ocean, Offshore & Arctic Engineering, Virtual Conference: June 21 June 30, 2021. (Peer reviewed)
- 104. Morte, M.K.*, Alha fidh, H.M. **, **Hascakir, B.**, Sensitivity of Dielectric Properties to Varying Reservoir Properties, *SPE Annual Technical Conference and Exhibition (ATCE 2020)*, 11-14 October 2020, Houston, Texas, USA, SPE-201371-MS. <u>LINK</u>
- 103. Seng, L.Y.**, **Hascakir, B.**, Role of Intermolecular Forces on Surfactant-steam Performance Into Heavy Oil Reservoirs, *SPE Annual Technical Conference and Exhibition (ATCE 2020)*, 11-14 October 2020, Houston, Texas, USA, SPE-201513-MS. <u>LINK</u>
- 102. Pope, C. **, Ismail, N.*, **Hascakir, B.**, Catalytic Impact Of Clays During In-situ Combustion, *SPE Improved Oil Recovery Conference*, 18-22 April 2020, Tulsa, Oklahoma, USA, SPE-200381-MS. <u>LINK</u>
- 101. Zhang, L.*, **Hascakir, B.**, A systematic study of water-rock reactions to reveal the relationship between total dissolved solids and colloidal system parameters, *SPE Canada Unconventional Resources Conference*, 18-19 March 2020, Calgary, Alberta, CANADA, SPE-200013-MS. <u>LINK</u>
- 100. Seng, L.Y.**, **Hascakir, B.**, Surfactant flooding performance for a Canadian bitumen recovery: Effect of polarity, *SPE Canada Heavy Oil Conference*, 18-19 March 2020, Calgary, Alberta, CANADA, SPE-199915-MS. LINK
- 99. Pope, C. **, Ismail, N.*, **Hascakir, B.**, Impact of Carbonates on Reaction Kinetics of Bitumen Combustion, *SPE Canada Heavy Oil Conference*, 18-19 March 2020, Calgary, Alberta, CANADA, SPE-199959-MS. <u>LINK</u>
- 98. Morte, M.K.*, Alhafidh, H.M. **, Hascakir, B., Interpretation of Electromagnetic Wave Penetration and Absorption for Different Reservoir Mineralogy (Quartz-rich, Limestone-rich, and Clay-rich) and at High and Low Water Saturation Values for a Bitumen Reservoir, SPE Canada Heavy Oil Conference, 18-19 March 2020, Calgary, Alberta, CANADA, SPE-199941-MS. LINK

- 97. Alshaikh, M.*, Lee, Y.S.**, **Hascakir, B.**, Anionic Surfactant and Heavy Oil Interaction during Surfactant-Steam Process, *SPE Western Regional Meeting*, 23-26 April 2019, San Jose, California, USA, SPE-195254-MS. <u>LINK</u>
- 96. Zhang, L.*, Tice, M.†, **Hascakir, B.**, The Impact of Re-injection of Flowback Fluids on Formation Damage of Marcellus Shale, SPE Western Regional Meeting, 23-26 April 2019, San Jose, California, USA, SPE-195336-MS. LINK
- 95. Liao, H.*, Morte, M. *, **Hascakir, B.**, Determination of the Effectiveness of Microwave Heating for Heavy Oil Extraction, *SPE Western Regional Meeting*, 23-26 April 2019, San Jose, California, USA, SPE-195263-MS. <u>LINK</u>
- 94. Ng, A.*, Vishnumolakala, N.*, **Hascakir, B.**, The Use of Asphaltenes Precipitants and Environmentally Friendly Solvents during Solvent-Steam Processes, SPE Western Regional Meeting, 23-26 April 2019, San Jose, California, USA, SPE-195316-MS. LINK
- 93. Lancon, O.*, **Hascakir, B.**, Contribution Of Oil And Gas Production In The US To The Climate Change, *SPE Annual Technical Conference and Exhibition (ATCE 2018)*, 24-26 September 2018, Dallas, Texas, USA, SPE-191482-MS. LINK
- 92. Ismail, N.*, Siu, J. **, Hascakir, B., Kinetics Analysis Validation for In-Situ Combustion by Coupling Experimental Data with Analytical and Numerical Methods, SPE Annual Technical Conference and Exhibition (ATCE 2018), 24-26 September 2018, Dallas, Texas, USA, SPE-191745-MS. LINK
- 91. Hascakir, B., Heavy Oil Extraction in Texas with a Novel Downhole Steam Generation Method: A Field-Scale Experiment, SPE Annual Technical Conference and Exhibition (ATCE 2018), 24-26 September 2018, Dallas, Texas, USA, SPE-191392-MS. LINK
- 90. Liao, H. *, Morte, M. *, Bloom, E. **, Huff, G. †, **Hascakir, B.**, Controlling Microwave Penetration and Absorption in Heaw Oil Reservoirs, *SPE Western Regional Meeting*, 22-27 April 2018, Garden Grove, California, USA, SPE-190089-MS. LINK
- 89. Al Atwah, I.*, Alshaikh, M.*, Sweet, S.T.⁺, Knap, A.⁺, **Hascakir, B.**, Extension of Existing Screening Criteria Tables for Thermal Enhanced Oil Recovery Methods through Compositional Analyses of Heavy Oils, *SPE Western Regional Meeting*, 22-27 April 2018, Garden Grove, California, USA, SPE-190026-MS. LINK
- 88. Ng, A.**, Ovalles, C.‡, Benson, I.P.‡, **Hascakir, B.**, Asphaltenes Contribution in Emulsion Formation during Solvent-Steam Processes, *SPE Western Regional Meeting*, 22-27 April 2018, Garden Grove, California, USA, SPE-190057-MS. LINK
- 87. Ismail, N.B.*, Seber, E.**, **Hascakir, B.**, Role of Aromatics Fraction of Crude Oil on In-Situ Combustion Performance, *SPE Improved Oil Recovery Conference (IOR 2018)*, 14-18 April 2018, Tulsa, OK, USA. SPE-190307-MS. <u>LINK</u>
- 86. Morte, M.*, Bloom, E. **, Huff, G. †, **Hascakir, B.**, Factors Affecting Electromagnetic Wave Penetration in Heavy Oil Reservoirs, SPE Canada Heavy Oil Technical Conference, 13-14 March 2018, Calgary, Alberta, Canada. SPE-189746-MS. LINK
- 85. Alshaikh, M.*, Huff, G.†, **Hascakir, B.**, An Innovative Dielectric Constant Measurement Method to Determine the Ideal Surfactant Candidate to Enhance Heavy Oil Recovery, *SPE Canada Heavy Oil Technical Conference*, 13-14 March 2018, Calgary, Alberta, Canada. SPE-189752-MS. <u>LINK</u>
- 84. Ng, A.**, Seber, E.**, Ovalles, C.†, Benson, I.P.†, **Hascakir, B.**, The Use of Asphaltenes Precipitants and Environmentally Friendly Solvents during Solvent-Steam Processes, *SPE/EAGE Tar Mats & Heavy Oil Workshop: Fluid Characterization and Development/Operational Challenges*, 30-31 Jan 2018, Dubai, UAE. <u>LINK</u>
- 83. **Hascakir, B.**, Noynaert, S.[†], Prentice, J.[‡], Heavy oil extraction in Texas with a Novel Downhole Steam Generation Method: A Field-Scale Experiment, *SPE/EAGE Tar Mats & Heavy Oil Workshop: Fluid Characterization and Development/Operational Challenges*, 30-31 Jan 2018, Dubai, UAE. <u>LINK</u>
- 82. Is mail, N.B.*, **Hascakir, B.**, Increased As phaltenes Surface Aides Fuel Formation with the Presence of Clays during In-situ Combustion, *SPE Annual Technical Conference and Exhibition (ATCE 2017)*, 9-11 October 2017, San Antonio, Texas, USA, SPE-187362-MS. <u>LINK</u>. Out of 2,521 abstracts
- 81. Zhang, L.*, Tice, M.†, Marcantonio, F.†, **Hascakir, B.**, Solid and Soluble Products of Engineered Water/Rock Interactions in Eagle Ford Group Chemofacies, *SPE Annual Technical Conference and Exhibition (ATCE 2017)*, 9-11 October 2017, San Antonio, Texas, USA, SPE-187296-MS. LINK. Out of 2,521 abstracts
- 80. **Hascakir, B.**, A New Approach to Determine Asphaltenes Stability, SPE Annual Technical Conference and Exhibition (ATCE 2017), 9-11 October 2017, San Antonio, Texas, USA, SPE-187278-MS. LINK. Out of 2,521 abstracts
- 79. Pettengell, K.*, **Hascakir, B.**, Horizontal Water Injection: From Initiation to Evaluation, *SPE Annual Technical Conference and Exhibition (ATCE 2017)*. 9-11 October 2017. San Antonio, Texas. USA, SPE-187197-MS, LINK, Out of 2.521 abstracts
- 78. **Hascakir, B.**, Enhancing the Proper Management and treatment of Produced Water for Reinjection Purposes, *Unconventional Completions*, 18-20 September 2017, Houston, Texas, USA. **Invited LINK**.
- 77. Kar, T. *, **Hascakir, B.**, Impact of Clay Type on SAGD Performance Part I: Microscopic Scale Analysis of Clay-SARA Interactions in Produced Oil, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 17-19 May 2017, Buenos Aires, Argentina. SPE-185533-MS. LINK.
- 76. Kar, T. *, **Hascakir, B.**, Impact of Clay Type on SAGD Performance Part II: Microscopic Scale Analysis of Clay-SARA Interactions in Spent Rock, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 17-19 May 2017, Buenos Aires, Argentina, SPE-185547-MS. LINK.
- 75. Punase, A.*, Demir, A.B.*, Bilgesu, H.[†], **Hascakir, B.**, Inorganic Content of As phaltenes Impacts Asphaltenes Stability, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 17-19 May 2017, Buenos Aires, Argentina, SPE-185543-MS. LINK.

- 74. **Hascakir, B.**, Carbon Dioxide Storage in High Asphaltene Content Oil Reservoirs, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 17-19 May2017, Buenos Aires, Argentina, SPE-185559-MS. LINK.
- 73. Kar, T.*, Nezhad, P.B.**, Ng, A.Z.Y.**, Ovalles, C.†, Benson, I.P.†, **Hascakir, B.**, Mobilization of Trapped Residual Oil via Secondary SAGD with Propane, *SPE Western Regional Meeting*, 23-27 April 2017, Bakersfield, California, USA, SPE-185684-MS. LINK.
- 72. Banerjee, S.*, **Hascakir, B.**, Flow Control Devices in SAGD Completion Design: Enhanced Heavy Oil/Bitumen Recovery through Improved Thermal Efficiencies, *SPE Western Regional Meeting*, 23-27 April 2017, Bakersfield, California, USA, SPE-185703-MS. LINK.
- 71. **Hascakir, B.**, Carbon dioxide storage in heavy oil reservoirs, 13th International Symposium on Heavy Oil Upgrading, Production & Characterization, ACS 253rd National Meeting, April 2-6, 2017, San Francisco, California, USA, PAPER ID: 2657158. LINK
- 70. Kar, T.*, Ovalles, C.‡, Benson, I.P.‡, **Hascakir, B.**, Propane-Steam Assisted Gravity Drainage (propane-SAGD) as a follow-up process to SAGD, 13th International Symposium on Heavy Oil Upgrading, Production & Characterization, ACS 253rd National Meeting, April 2-6, 2017, San Francisco, California, USA, PAPER ID: 2657699. LINK
- 69. **Hascakir, B.**, Reservoir rock-asphaltenes interaction impacts asphaltenes stability, 13th International Symposium on Heavy Oil Upgrading, Production & Characterization, ACS 253rd National Meeting, April 2-6, 2017, San Francisco, California, USA, PAPER ID: 2657777. LINK
- 68. Pettengell, K.*, **Hascakir, B.**, Horizontal Water Injection: From Initiation to Evaluation, *New Zealand Petroleum Conference* 2017, 21-23 March, New Plymouth, NEW ZEALAND. <u>LINK</u>.
- 67. Kar, T. *, **Hascakir, B.**, The Interaction of Asphaltenes with Solvents, Water, and Clays during Bitumen Extraction through Solvent-Steam Injection, *SPE International Heavy Oil Conference & Exhibition*, 6-8 December 2016, Mangaf, Kuwait, SPE-184081-MS. LINK.
- 66. Ali, M. *, Banerjee, S.*, **Hascakir, B.**, The Environmental Aspect of Produced Water Management for the Oil Field Waters Originated Thermal EOR, *SPE International Heavy Oil Conference & Exhibition*, 6-8 December 2016, Mangaf, Kuwait, SPE-184139-MS. LINK.
- 65. Pra koso, A.A.*, Punase, A.*, **Hascakir, B.**, Pore Scale Representation of Near Wellbore Damage due to As phaltene Deposition: Effect of Sand Grain Size and the Amount of Clay in Reservoir Rock, *SPE International Heavy Oil Conference & Exhibition*, 6-8 December 2016, Mangaf, Kuwait, SPE-184099-MS. <u>LINK</u>.
- 64. Banerjee, S.*, **Hascakir, B.**, Field Use of Tubing-Deployed Flow Control Devices to Improve the Economics and Environmental Costs of Albertan SAGD Operations, *The Seventh Annual Berg-Hughes Symposium*, 10-11 October 2016, Texas A&M University, College Station, Texas, USA (POSTER)
- 63. **Hascakir, B.**, In-Situ Combustion for Fracturing, *Thermal EOR International Workshop, "Thermal Methods for Enhanced Oil Recovery: Laboratory Testing, Simulation and Oilfields Applications"*, 28 June-1 July 2016, Kazan, Russia. <u>LINK</u>.
- 62. Stape, P.*, **Hascakir, B.**, Wettability Alteration during Solvent Assisted-Steam Flooding with Asphaltenes Insoluble Solvents, *SPE Latin America and Caribbean Heavy and Extra Heavy Oil Conference*, 19-20 October 2016, Lima, PERU, SPE-181148-MS. LINK.
- 61. Demir, A.B. *, Bilgesu, H.†, **Hascakir, B.**, The Effect of Brine Concentration on Asphaltene Stability, *SPE Annual Technical Conference and Exhibition (ATCE)*, 26-28 September 2016 in Dubai, UAE, SPE-181706-MS. <u>LINK</u>.
- 60. **Hascakir, B.**, The Impact of Asphaltenes on Thermal Enhanced Oil Recovery Performance, *Thermal Methods for Enhanced Oil Recovery: Laboratory Testing Simulation and Oilfields Applications*, 28 June 1 July 2016, Kazan-Republic of Tataristan, RUSSIA. **Invited**
- 59. Ismail, N.B.*, Klock, K. **, **Hascakir, B.**, In-situ Combustion Experiences in Heavy Oil Carbonates, *SPE Canada Heavy Oil Technical Conference*, 7-9 June 2016, Calgary, Alberta, Canada, SPE-180724-MS. <u>LINK</u>.
- 58. Coelho, R.S.C.*, Ovalles, C.‡, Benson, I.P.‡, **Hascakir, B.**, Clay-Asphaltene Interactions during Hybrid Solvent-Steam Injection Into Bitumen Reservoirs, *SPE Canada Heavy Oil Technical Conference*, 7-9 June 2016, Calgary, Alberta, Canada, SPE-180723-MS. LINK.
- 57. **Hascakir, B.**, Finding the Right Recipe to Effective Extraction of High Viscosity and Low API Gravity Hydrocarbon Resources, SPE Western Regional Meeting, 23-26 May 2016, Anchorage, Alaska, USA, SPE-180424-MS. LINK.
- 56. Demir, A. B. *, Bilgesu, H.I. †, **Hascakir, B.**, The Effect of Clay and Salinity on Asphaltene Stability, *SPE Western Regional Meeting*, 23-26 May 2016, Anchorage, Alaska, USA, SPE-180425-MS. <u>LINK</u>.
- 55. Punase, A.*, Prakoso, A.A.*, **Hascakir, B.**, The Polarity of Crude Oil Fractions Affects the As phaltenes Stability, *SPE Westem Regional Meeting*, 23-26 May 2016, Anchorage, Alaska, USA, SPE-180423-MS. <u>LINK</u>.
- 54. Pra koso, A.A.*, Klock, K.**, Punase, A.*, Rogel, E.†, Ovalles, C.†, **Hascakir, B.**, Determination of the Stability of Asphaltenes through Physicochemical Characterization of Asphaltenes, *SPE Western Regional Meeting*, 23-26 May 2016, Anchorage, Alaska, USA, SPE-180422-MS. <u>LINK</u>.
- 53. Punase, A.*, **Hascakir, B.**, The Role of Deasphalted Oil in the Stability of Asphaltenes, *2016 AlChE Spring Meeting & 12th Global Congress on Process Safety, 4th International Conference on Upstream Engineering and Flow Assurance*, 10-14 April 2016. Houston, Texas, USA.

- 52. Stape, P.*, Ovalles, C.‡, **Hascakir, B.**, Pore Scale Displacement Mechanism of Bitumen Extraction with High Molecular Weight Hydrocarbon Solvents, 20th SPE Improved Oil Recovery Conference, 9-13 April 2016, Tulsa, Oklahoma, USA, SPE-179608-MS. LINK.
- 51. Morte, M.*, **Hascakir, B.**, Relative Permeability Estimation in Steam Assisted Gravity Drainage (SAGD) Using a Fractional Flow Model, 20th SPE Improved Oil Recovery Conference, 9-13 April 2016, Tulsa, Oklahoma, USA, SPE-179532-MS. LINK.
- 50. Kar, T.*, **Hascakir, B.**, Effective Extraction of Green River Oil Shale via Combustion, *20th SPE Improved Oil Recovery Conference*, 9-13 April 2016, Tulsa, Oklahoma, USA, SPE-179610-MS. LINK.
- 49. Banerjee, S.*, **Hascakir, B.**, Management of Steam Flashing in SAGD Completion Designs via the Implementation of Flow Control Devices, *SPE Thermal Well Integrity and Design Symposium*, 23-25 November 2015, Banff, Alberta, Canada, SPE-178459-MS. LINK.
- 48. Coelho, R.S.C.*, **Hascakir, B.**, The Pore Scale Description of Carbon Dioxide Storage into High Asphaltene Content Reservoirs, *Carbon Management Technology Conference*, Sugar Land, Texas, USA, 17-19 November 2015, CMTC 439523. <u>LINK</u>.
- 47. Coelho, R.S.C.*, Barrufet, M.†, **Hascakir, B.**, Effect of Impurities in Carbon Dioxide Stream on Phase Behavior for Geological Storage of Carbon Dioxide in Low API Gravity Oil Reservoirs, *Carbon Management Technology Conference*, Sugar Land, Texas, USA, 17-19 November 2015, CMTC 439524. LINK.
- 46. Ale ksandrov, D.*, Kudryavtsev, P.*, **Hascakir, B.**, Impact of Fracture Orientation on In-Situ Combustion Performance, SPE Latin American and Caribbean Petroleum Engineering Conference, 18-20 November 2015, Quito, ECUADOR, SPE-177063-MS. LINK.
- 45. Prakoso, A.**, Punase, A.*, **Hascakir, B.**, A Mechanistic Understanding of Asphaltene Precipitation from Varying Saturate Concentration Perspective, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 18-20 November 2015, Quito, ECUADOR, SPE-177280-MS. LINK.
- 44. Kozlowski M.L.**, Punase, A.*, Nasr-El-Din, H.[†], **Hascakir, B.**, The Catalytic Effect of Clay on In-Situ Combustion Performance, SPE Latin American and Caribbean Petroleum Engineering Conference, 18-20 November 2015, Quito, ECUADOR, SPE-177166-MS. LINK.
- 43. Klock, K.**, **Hascakir, B.**, Simplified Reaction Kinetics Model for In-Situ Combustion, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 18-20 November 2015, Quito, ECUADOR, SPE-177134-MS. <u>LINK</u>.
- 42. Kar, T.*, Punase, A.*, **Hascakir, B.**, Investigation of Chemical Physical Properties of Oil Shales with Spectral and Thermal Methods, *The Sixth Annual Berg-Hughes Symposium*, 16 October 2015, Texas A&M University, College Station, Texas, USA (POSTER).
- 41. Kar, T.*, Kozlowski M.L.**, **Hascakir, B.**, Characterization of Kerogen for Green River Oil Shale, *The Sixth Annual Berg-Hughes Symposium*, 16 October 2015, Texas A&M University, College Station, Texas, USA. (POSTER).
- 40. **Hascakir, B.**, Real-Time Tracking of Fracture Propagation during Air Injection as an Alternative Fracturing Fluid, *SPE Eastem Regional Meeting*, 13-15 October 2015, Morgantown, West Virginia, USA, SPE-177303-MS. <u>LINK</u>.
- 39. Ali, M.*, **Hascakir, B.**, Water-Rock Interaction for Eagle Ford, Marcellus, Green River, and Barnett Shale Samples, *SPE Eastem Regional Meeting*, 13-15 October 2015, Morgantown, West Virginia, USA, SPE-177304-MS. LINK.
- 38. Kozlowski, M.**, Kar, T. *, **Hascakir, B.**, Ex-situ Extraction of Green River Oil Shale by Combustion, *Western States Section of the Combustion Institute Fall Meeting*, Provo, Utah, USA. October 5-6, 2015. 134IE-0051.
- 37. Klock, K.**, Prakoso, A.*, Punase, A.*, **Hascakir, B.**, The combustion behavior of various hydrocarbons with complex molecular structures, *Western States Section of the Combustion Institute Fall Meeting*, Provo, Utah, USA. October 5-6, 2015. 134CK-0042.
- 36. **Hascakir, B.,** Description of In-situ Oil Upgrading Mechanism for In-situ Combustion Based on a Reductionist Chemical Model, SPE Annual Technical Conference and Exhibition (ATCE), 28-30 September 2015 in Houston, Texas, USA, SPE 175086-MS. DR: 47. LINK.
- 35. **Hascakir, B.**, Evaluation of Thermal Enhanced Oil Recovery Methods, SPE Heavy Oil Workshop: Lifting Recovery to the Next Level, 22-23 September 2015 in Budapest, Hungary. LINK. Invited
- 34. Stape, P.*, **Hascakir, B.**, The Performance Evaluation of Solvent-Steam Processes for Bitumen Extraction, *International Science* and Practice Conference "Specific of Survey and Exploration of Alternative Hydrocarbon Fields", 2-3 September, 2015, Kazan, Republic of Tatarstan, Russia. **Invited**
- 33. Kar, T.*, Yeoh, J.**, Ovalles, C.†, Rogel, E.†, Benson, I.P.†, **Hascakir, B.**, The Impact of Asphaltene Precipitation and Clay Migration on Wettability Alteration for Steam Assisted Gravity Drainage (SAGD) and Expanding Solvent SAGD (ES-SAGD), *2015 SPE Heavy Oil Conference*, 9-11 June, 2015, Calgary, Alberta, Canada, SPE-174439-MS. LINK.
- 32. Guven, S.*, Akin, S.†, **Hascakir, B.**, Spectral and Thermal Analysis Explains the Mechanisms of Oil Shale Recovery with Microwave Heating, 20th International Petroleum and Natural Gas Congress and Exhibition of Turkey, 27-29 May 2015, Ankara, Turkey. LINK.
- 31. **Hascakir, B.**, Soot Particle and Ash Analysis for Combustion, Combustion Institute, 9th U.S. National Combustion Meeting, May 17-20 2015, Cincinnati, Ohio, USA, 114DI-0066.
- 30. Unal, Y.*, Kar, T.*, Mukhametshina, A.*, **Hascakir B.**, The Impact of Clay Type on the Asphaltene Deposition during Bitumen Extraction with Steam Assisted Gravity Drainage, *International Symposium on Oil Field Chemistry*, 13-15 April 2015, The Woodlands, Texas, USA, SPE-173795-MS. LINK.

- 29. Abdulsattar, Z.R.*, Agim, K.*, Lane, R.H.[‡], **Hascakir, B.**, Physicochemical Interactions of Shale with Injected Water-Based Fluids, *International Symposium on Oil Field Chemistry*, 13-15 April 2015, The Woodlands, Texas, USA, SPE-173727-MS. LINK.
- 28. Ali, M.*, Hascakir, B., A Critical Review of Emerging Challenges for the Oil Field Waters in United States, SPE E&P Health, Safety, Security, and Environmental Conference-Americas, 16-18 March 2015, Denver, Colorado, USA, SPE 173529-MS. LINK.
- 27. Guven, S.*, Akin S.*, Hascakir, B., Comprehensive Spectral and Thermal Characterization of Oil Shales, SPE Middle East Unconventional Resources Conference and Exhibition, 26-28 January 2015, Muscat, Oman, SPE-172952-MS. LINK.
- 26. Kar, T.*, Williamson, M.**, Hascakir, B., The Role of Asphaltenes in Emulsions Formation for Steam Assisted Gravity Drainage (SAGD) and Expanding Solvent-SAGD (ES-SAGD), 2014 SPE Heavy and Extra Heavy Oil Conference-Latin America, 24-26 September 2014, Medellin, Colombia, SPE-171076-MS. LINK
- 25. **Hascakir, B.**, Kovscek A.[†], Analysis of In-Situ Combustion Performance in Heterogeneous Media, *2014 SPE Heavy Oil Conference*, 10-12 June, 2014, Calgary, Alberta, Canada, SPE 170008-MS. <u>LINK</u>
- 24. Mukha metshina, A.*, **Hascakir, B.**, Bi tumen extraction by expanding solvent-steam assisted gravity drainage (ES-SAGD) with as phaltene solvents and non-solvents, *2014 SPE Heavy Oil Conference*, 10-12 June, 2014, Calgary, Alberta, Canada, SPE 170013-MS. <u>LINK</u>
- 23. Morrow, A.**, Mukhametshina, A.*, Aleksandrov, D.*, **Hascakir, B.**, Environmental Impact of Bitumen Extraction with Thermal Recovery, 2014 SPE Heavy Oil Conference, 10-12 June, 2014, Calgary, Alberta, Canada, SPE 170066-MS. LINK
- 22. Mukhametshina, A.*, Morrow, A.**, Aleksandrov, D.*, **Hascakir, B.**, Evaluation of Four Thermal Recovery Methods for Bitumen Extraction, *2014 SPE Western North America and Rocky Mountain Joint Regional Meeting*, 16-18 April 2014 Denver, CO, USA, SPE 169543-MS. LINK
- 21. Kudryavtsev, P.*, **Hascakir, B.,** Towards Dynamic Control of In-situ Combustion: Effect of Initial Oil and Water Saturations, 2014 SPE Western North America and Rocky Mountain Joint Regional Meeting, 16-18 April 2014 Denver, Colorado USA, SPE 169542-MS. LINK

Before Texas A&M

- 20. **Hascakir, B.**, Ross, C., Castanier, L. Kovscek, A.[†], Fuel Formation During In-Situ Combustion of Heavy Oil, *SPE Annual Technical Conference and Exhibition (ATCE)*, 30 October-2 November 2011 in Denver, Colorado, USA, SPE-146867-PP. LINK
- 19. Glatz, G., **Hascakir, B.**, Clemens, T.‡, Castanier, L., Kovscek, A.†, Kinetic Cell and Combustion Tube Results for a Central European Crude, *SPE Annual Technical Conference and Exhibition (ATCE)*, 30 October-2 November 2011 in Denver, Colorado, USA, SPE-146089-PP. LINK
- 18. **Hascakir, B.**, Babadagli, T.[†], Akin, S.[†], Heavy Oil Recovery from Oil Shales by Electrical Heating, *SPE History Matching: Field Experiences and Lessons Learned*, Cartagena, Colombia, 29-31 August 2011. **Invited**
- 17. **Hascakir, B.**, Castanier, L., Kovscek, A.[†], In-Situ Combustion Dynamics Visualized with X-Ray Computed Tomography, *SPE Annual Technical Conference and Exhibition (ATCE)*, Florence, Italy, 20-22 September 2010, SPE-135186-PP. <u>LINK</u>
- 16. Karaca, H.[†], Kartal, O. E.[†], Akin, S.[†], **Hascakir, B.**, Characterization of Solid and Liquid Hydrocarbons Obtained from Liquefaction of Nigde-Ulukisla Oil Shales, *The 9th National Chemistry Congress*, 22-25 June, 2015, Ankara/Turkey. LINK.
- 15. **Hascakir, B.,** Kovscek, A. [†], Reservoir Simulation of Cyclic Steam Injection Including the Effects of Temperature Induced Wetta bility Alteration, 2010 SPE Western Regional Meeting, Anaheim, California, USA, 27-29 May 2010, SPE 132608. LINK
- 14. **Hascakir, B.**, Acar, C., Demiral, B.[†], Akin, S.[†], Microwave Assisted Gravity Drainage of Heavy Oils, *International Petroleum Technology Conference*, Kuala Lumpur, Malaysia, 3–5 December 2008, IPTC-12536-MS. <u>LINK</u>
- 13. **Hascakir, B.**, Babadagli, T.[†], Akin, S.[†], Experimental and Numerical Modeling of Heavy-Oil Recovery by Electrical Heating, *SPE International Thermal Operations and Heavy Oil Symposium*, Calgary, Alberta, CANADA, 21-23 October 2008, SPE-117669. LINK
- 12. Karaca, H.[†], Kartal, O. E.[†], Akin, S.[†], **Hascakir, B.**, Liquefaction of Nigde-Ulukisla Oil Shales and the Waste Paper, *The 22nd National Chemistry Congress*, 6-10 October, 2015, Famagusta/Cyprus.
- 11. Acar, C., **Hascakir, B.**, Demiral, B.[†], Akin, S.[†], Karaca, H.[†], Kartal, O.E.[†], Microwave Heating of Heavy Oil Reservoirs: Effect of Wettability, *150 Years of Petroleum Industry: Tradition & Challenges*, Bucharest, ROMANIA, October 2007.
- 10. **Hascakir, B.**, Acar, C., Demiral, B⁺, Akin, S.⁺, Karaca, H.⁺, Kartal, O.E.⁺, Heavy Oil Recovery from Thin Pay Zones by Microwave Heating, *International Petroleum and Natural Gas Congress & Exhibition of Turkey*, Ankara, TURKEY, May 2007 (Turkish).
- 9. Hascakir, B., Akin S.†, Effect of Metallic Additives on Upgrading Heavy Oil with Microwave Heating, First World Heavy Oil Conference (WHOC), Beijing, CHINA, November 2006.
- 8. **Hascakir, B.**, Dolgen, D.†, Investigation of Treatment Performance of Kaolinite onto Different Wastewater Types and Treatment Methods, *Fourth Mediterranean Clay Meeting*, Ankara, TURKEY, September 2006.
- 7. **Hascakir, B.**, Dolgen, D.†, Evaluation of Treatment Efficiencies of Kaolinite for Various Wastewater Samples, *Bridging Clays*, lle d'Oléron, FRANCE, June 2006.
- 6. Hascakir, B., Hydraulic Potential of Turkey, 3rd Aegean Energy Symposium, Mugla, TURKEY, May 2006 (Turkish).
- 5. **Hascakir, B.**, Dolgen, D.†, Chemical Treatment of Wastewaters Originated From Printing Processes of Corrugated Box Industries, 6th National Environmental Engineering Conference, Istanbul, TURKEY, November 2005 (Turkish).
- 4. Hascakir, B., Dolgen, D.[†], Utilization of Clay Minerals in Wastewater Treatment: Organic Matter Removal with Kaolin (China Clay), 12th National Clay Conference, Van, September 2005 (Turkish).

- 3. **Hascakir, B.**, Demiral, B[†], Akin, S.[†], Experimental and Numerical Analysis of Oil Shale Production Using Retort Technique, *15th International Petroleum and Natural Gas Congress and Exhibition of Turkey*, Ankara, TURKEY, May 2005.
- 2. Dolgen, D.⁺, **Hascakir, B.**, Akkus, M., Application of Clay Minerals in the Environmental Engineering: Experiments with Domestic Wastewater, *Ecology Congress*, Bolu, TURKEY, October 2004 (Turkish).
- 1. **Hascakir, B.**, Dolgen, D.†, Akkus, M., Tre atability of Corrugated Paperboard Industry Wastewater by Physicochemical Treatment Methods, *9th Industrial Contamination Congress*, Istanbul, TURKEY, June 2004 (Turkish).
- **C.5. Abstracts Under Review** (*indicates MS or PhD level students, **indicates Undergraduatelevel students, †indicates faculty collaborators, ‡ indicates industry collaborators)
- 7. Zhang, L. *, **Hascakir B.**, Review of Eagle Ford and Marcellus Formations, Unconventional Resources Technology Conference, 26-28 July 2021, Houston, Texas, USA.
- 6. Mathews, T.A. *, **Hascakir B.**, Feasible and Less Toxic Mobility Enhancement for a Bitumen with A New Solvent Through Solvent-steam Injection, SPE Oklahoma City Oil and Gas Symposium, 5-9 April 2021, Oklahoma City, USA.
- 5. Badham, S. *, Hascakir B., A Method To Determine Mobile Fluid Saturations In Oil Reservoirs Via Injection Of A Partitioning Tracer, SPE Oklahoma City Oil and Gas Symposium, 5-9 April 2021, Oklahoma City, USA.
- 4. Kaishentayev, D.*, **Hascakir B.**, Treatment of High Salinity Produced Waters For Reinjection In Hydraulic Fracturing Operation, SPE Oklahoma City Oil and Gas Symposium, 5-9 April 2021, Oklahoma City, USA.
- 3. Cortes, J.A., Mathews, T.A. *, **Hascakir B.**, Explaining the Viscosity Reduction Mechanism At First Contact For Heavy Oil Recovery And Transportation, *SPE Annual Technical Conference and Exhibition (ATCE 2021)*, 21-23 September 2021, Dubai, UAE. Among 2180 abstracts
- 2. Barooah, A. *, Khan M.S. *, Rahman, M. A., Hassan, I. Hasan, R., Maheshwari, P., **Hascakir B.**, Investigation Of Two Phase Nonnewtonian Flow Using Electrical Resistance Tomography And Dynamic Pressure Techniques For Early Kick Detection, *SPE Annual Technical Conference and Exhibition (ATCE 2021)*, 21-23 September 2021, Dubai, UAE. Among 2180 abstracts
- 1. Kais hentayev, D. *, **Hascakir B.**, Reuse f Produced Waters Containing High Total Dissolved Solids (TDS) for Fracturing, *SPE Annual Technical Conference and Exhibition (ATCE 2021)*, 21-23 September 2021, Dubai, UAE. Among 2180 abstracts

C.6. Citation

i- Google Scholar for citation: LINK

Citations: 1532

<u>h-index</u>: 23 (Attempts to measure both the productivity and impact of the published work of a scientist or scholar) <u>i10-index</u>: 50 (Indicates the number of academic publications that have at least ten citations from others)

ii- Scopus: Author ID: 23984761300: 81 Documents, 55 co-authors, total citation by 493 documents LINK

iii- <u>Research Gate</u>: 104 Publications, 6582 reads, 533 Citations: <u>LINK</u>

iv- ORCID ID: https://orcid.org/0000-0001-6190-903X

D. REPORTS

1. Karaca, H.[†], Akın, S.[†], Kartal, Ö.E.[†], **Hascakir, B.**, Liquefaction of Nigde-Ulukisla Oil Shales by Catalytic and non-catalytic thermal methods, The Scientific & Technological Research Council of Turkey, 2007, Report No: 104M181. LINK

TEACHING (www.hascakir.com/teaching)

Texas A&M University College of Engineering Indicators of Excellence/Effectiveness in Teaching

(LINK). In the table below, excellence indicators are given in red and effectiveness indicators are given in blue. Proofs summarize the excellence and effectiveness indicators for Dr. Hascakir. Further information on proofs can be found in the relevant section of Dr. Hascakir's CV

Indicators	Proof/Explanation
Student evaluations significantly a bove departmental norms	 Evaluations are given between 2017 and 2020 The department score average for junior level (3XX) undergraduate course teaching is 3.90 with an average grade of 3.0. My junior level (3XX) undergraduate course evaluation score is 4.01/5.00 with an average grade of 2.53/4.00. The department score average for senior level (4XX) undergraduate course teaching is 4.17/5.00 with an average grade of 3.4/4.00. My senior level (4XX) undergraduate course evaluation score is 4.36/5.00 with an average grade of 3.75/4.00.
Supervision and mentoring of graduate students to complete theses or dissertations within appropriate timelines for the discipline	Average PhD graduation is 3 years and Master of Science graduation is less than 2 years in my research group. See some examples below; 1. Denis Aleksandrov finished his MS within 2 semesters (he was a transfer student and he started his MS in September 2012 and finished in May 2013), He published 3 conference proceedings and 2 peer reviewed journal papers) 2. Andreas Prakoso was an honor undergraduate student and he completed some of his graduate level classes while he was an undergraduate student and was able to finish his MS within 3 semesters (Summer 2015, Fall 2015, & Spring 2015). He published 5 conference papers and two peer reviewed journal papers. 3. Alwin Ng was an honor undergraduate student and he completed most of his graduate level classes while he was an undergraduate student and was able to finish his MS within two semesters (Spring 2018 and Summer 2018). Alwin published 3 conference papers 4. Philipp Kudrya vtsev and Albina Mukhametshina were able to finish their MS within 3 semesters with several publications (peer reviewed and proceedings) 5. Matthew Morte completed his MS and PhD in 4.5 years with 6 conference proceedings and 2 peer reviewed publications. 6. Taniya Kar completed her MS and PhD in 4.5 years with 9 conference proceedings and 10 peer reviewed publications. 7. Abhishek Punase completed his MS and PhD in 4.5 years with 9 conference proceedings and 3 peer reviewed publications.
Successful career mentoring of graduate students, including job placement;	I have graduated 7 PhD, 13 MS, and 2 MEng students. All of my students have jobs. One of my female PhD students is now a faculty in Malaysia. One of my PhD student is the first PhD transfer from Texas A&M main campus to Texas A&M Qatar Campus.
External invited presentations at highly visible venues or prestigious institutions;	4 of out of 10 invited talks were given to international institutions (Please see under invited talk section of my CV the details of these talks)
- Outstanding contributions to the improvement of teaching practices, procedures, or tools. For example, the creation/piloting of new initiatives to provide outof-class student support, improve feedback to students, improve the effectiveness of TA support; - Outstanding contributions to undergraduate students' experiences or career guidance;	➤ I provide every class to students an In-Class-Activity (ICA). These activities are lecture notes given to students in a question format (fill-in-blank, true/false, giving definition, derivation of an equation, solving an engineering problem). I only provide the answers of those activities in the class, and randomly collect them back and grade them. ICAs make students take notes. ➤ I devote some of my classes to off-topics in which I talk about the students' future plans. I give short presentations on what is awaiting them in the future; what research is; what graduate study is; etc. I

	also get help from Students Services to provide information about on campus facilities. For more information on how I teach off-topics, see this video (https://youtu.be/zgEl380NsAk). These off-topics are very well appreciated by the students and these communications make me more approachable to students and I believe these activities aid in students' learning.
Publications with students as primary co-authors;	Most of my publications are with my graduate level students. I have also published 24 conference proceedings and 1 peer reviewed publication with undergraduate students (list of those publications can be found in teaching section of my CV) I have encouraged several graduate students taking my classes to publish their term projects that they have completed in my dasses. Through this interaction, 5 groups of students published their work in peer reviewed journals and one in a conference. This way, I also teach graduate level students the publication process (paper preparation, selection of right journal, review process, etc.)

SUMMARY [from Tenure Package Submission (February 2017) till Spring 2021]

Since my tenure package submission (February 2017), I have been taught three graduate level (PETE 609, PETE 606, and ICPE 614) and 4 undergraduate level (PETE 409, PETE 489, PETE 310, and PETE 314) classes. I have developed three new classes (ICPE 614 – CO2 Sequestration, PETE 409 – EOR Methods, and PETE 489 – Special Topics: Thermal EOR) and I started to teach a new undergraduate level class (PETE 314 – Transport Processes in Petroleum Production). In total, 380 students enrolled these classes since February 2017. My average teaching score since February 2017 for junior level classes is 4.01/5.00 with an average student grade of 2.53/4.00 and for senior level classes is 4.36/5.00 with an average student grade of 3.75/4.00. In my research group, the average graduation duration for MS students is 1.5 years and for PhD students is 3.5 years (to reach students comment on my teaching, please click on this LINK). Example of one of my lectures (Date posted on March 12, 2021, for PETE 314-Transport Processes in Petroleum Production, https://youtu.be/tsfelMXiOyo

A. COURSES TAUGHT

A.1. At Texas A&M University, Petroleum Engineering Department, College Station, Texas, USA, Role: Instructor

NOTE for teaching evaluation interface used by A&M: starting from 2012 till the end of Summer 2020, my teaching evaluations are provided to be through PICA by A&M. Starting from Fall 2020, AEFIS is used to evaluate instructors' performances. PICA and AEFIS used different evaluation techniques. Thus, PICA evaluation results are summarized with two tables below; for before and after tenure. I have AEFIS evaluation results only for one class that I thought in FALL 2020. The results of AEFIS evaluation is given only for Fall 2020—PETE 314 below, each metric in AEFIS has different weight, I normalized the results of each metric and adapt it to PICA norm by using direct correlation.

Itemized and Overall Teaching Evaluation Scores evaluated by 518 students between Spring 2017-Summer 2020-after tenure package submission through PICA

Level	Class Preparation	Communication	Responsiveness	Academic Concern	Environment	Overall
Undergraduate	4.57	3.99	3.95	4.38	3.93	4.09
Graduate	4.38	4.14	4.25	4.42	4.15	4.20
Overall	4.49	4.06	4.08	4.40	4.02	4.14

Texas A&M University, Petroleum Engineering Department, Teaching Evaluations Average for undergraduate classes 3.03 and graduate classes 4.02

Itemized and Overall Teaching Evaluation Scores evaluated by 518 students between Fall 2012-Fall 2016-during tenure-track appointment through PICA

Level	Class Preparation	Communication	Responsiveness	Academic Concern	Environment	Overall
Undergraduate	4.54	4.17	4.17	4.57	4.07	4.15
Graduate	4.14	3.74	4.13	4.21	4.10	3.98
Overall	4.28	3.89	4.14	4.33	4.09	4.04

Texas A&M University, Petroleum Engineering Department, Teaching Evaluations Average for undergraduate classes 3.89 and graduate classes 4.02

Semester	Course Description, (number of enrolled students)	Teaching Evaluation over 5.00; 5: Excellent, 4: Very Good, 3: Good
Spring 2021	PETE 314 – Transport Processes in Petroleum Production, Undergraduate Level (34)	, ,
Fall 2020	PETE 314 – Trans port Processes in Petroleum Production, Undergraduate Level (71)	3.87* evaluated by 60 students *AEFIS results and calculated by normalizing the data to PICA
Summer 2020 Summer 2020	PETE 609 – EOR Methods, Graduate Level (7) PETE 409 – EOR Methods, Undergraduate Level (2)	4.40 evaluated by 6 students 4.00 evaluated by 1 student
Summer 2020 Fall 2019	ICPE $614 - CO_2$ Sequestration, Graduate Level (13) PETE $491 - Undergraduate$ Research (2)	3.21 evaluated by 11 students Not evaluated
Fall 2019	PETE 314 – Trans port Processes in Petroleum Production, Undergraduate Level (62)	3.72 evaluated by 58 students
Summer 2019	PETE 609 – EOR Methods, Graduate Level (9)	4.51 evaluated by 9 students
Summer 2019	PETE 409 – EOR Methods, Undergraduate Level (8)	4.64 evaluated by 8 students
Spring 2019	PETE 314 – Trans port Processes in Petroleum Production, Undergraduate Level (54)	4.65 evaluated by 50 students
Fall 2018	PETE 609 – EOR Methods, Graduate Level (0)	Not e va l uated
Fall 2017	PETE 310 – Reservoir Fluids, Undergraduate Level (62)	4.06 evaluated by 62 students
Summer 2017	PETE 489 – Special Topics; Thermal EOR, Undergraduate Level (4)	4.88 e valuated by 4 students
Summer 2017	PETE 606 – EOR Methods-Thermal Processes, Graduate Level (26)	4.24 e valuated by 26 students
Spring 2017	PETE 489 – Special Topics; EOR Methods, Undergraduate Level (11)	4.28 evaluated by 10 students
Spring 2017	PETE 609 – EOR Methods, Graduate Level (15)	4.17 e valuated by 14 students
	DUGHT AS TENURE-TRACK ASSISTANT PROFESSOR (Before I submitted my ten	
Fall 2016	PETE 310 – Reservoir Fluids, Undergraduate Level (80)	4.03 evaluated by 73 students
Summer 2016	PETE 489 – Special Topics; EOR Methods, Undergraduate Level (7)	4.35 evaluated by 6 students
Summer 2016	PETE 609 — EOR Methods, Graduate Level (39) PETE 485 — Directed Study (1)	3.57 e valuated by 27 students Not e valuated
Spring 2016 Spring 2016	PETE 681 – Graduate Seminar (65)	4.04 evaluated by 23 students
Spring 2016	PETE 489 — Waterflooding Undergraduate Level (1)	Not evaluated
Spring 2016	PETE 623 – Waterflooding, Graduate Level (7)	3.9 evaluated by 6 students
Fall 2015	PETE 685 – Directed Studies: Principles of IR, spectroscopy, calorimetry,	Not evaluated
	gra vi metric measure ment methods, Gra duate Le vel (4)	
Fall 2015	PETE 485 – Directed Studies: Combustion, Undergraduate Level (1)	Not evaluated
Fall 2015 Fall 2015	PETE 681 – Graduate Seminar (108)	3.91 evaluated by 52 students
Summer 2015	PETE 310 – Reservoir Fluids, Undergraduate Level (94) PETE 485 – Directed Studies: Reaction Kinetics, Undergraduate Level (2)	4.15 e valuated by 85 students Not e valuated
Summer 2015	PETE 623 – Waterflooding, Graduate Level (25)	3.84 evaluated by 21 students
Spring 2015	PETE 609 – EOR Methods, Graduate Level (28)	4.18 evaluated by 25 students
Spring 2015	PETE 489 – Special Topics; EOR Methods, Undergraduate Level (17)	3.71 evaluated by 17 students
Fall 2014	PETE 310 – Reservoir Fluids, Undergraduate Level (38)	4.34 evaluated by 27 students
Summer 2014	PETE 609 – EOR Methods, Graduate Level (33)	4.12 evaluated by 28 students
	PETE 485 – Directed Studies: Water/Oil Emulsion, Undergraduate Level (1)	Not evaluated by 20 students
Spring 2014	PETE 310 – Reservoir Fluids, Undergraduate Level (56)	
Spring 2014		3.64 evaluated by 50 students
Fall 2013	PETE 685 – Directed Studies: PVT Be havior, Graduate Level (1)	Not e valuated
Fall 2013	PETE 606 – EOR Methods-Thermal Processes, Graduate Level (19)	4.32 evaluated by 18 students
Spring 2013	PETE 685 – Directed Studies: Thermal EOR, Gra duate Le vel (4)	Notevaluated
Spring 2013	PETE 310 – Reservoir Fluids, Undergraduate Level (58)	4.39 evaluated by 44 students
Fall 2012	PETE 606 – EOR Methods-Thermal Processes, Graduate Level (23)	4.17 evaluated by 15 students
	Students' and the peer reviewed teaching evaluations can be found a	t https://www.hascakir.com/courses

A.2. At Middle East Technical University, Petroleum and Natural Gas Engineering Department, Ankara, Turkey,

Role: Teaching Assistant

Semester	Course Description	Instructor
Spring 2007	PETE 342 – Petroleum Reservoir Engineering I, Undergraduate Level	Prof. Dr. Mahmut Parlaktuna
Fall 2006	PETE 211 – Introduction to Fluid Mechanics, Undergraduate Level	Prof. Dr. Serhat Akin
Fall 2005	PETE 342 – Petroleum Reservoir Engineering I, Undergraduate Level	Prof. Dr. Mahmut Parlaktuna

Fall 2005	PETE 441 – Petroleum Reservoir Engineering II, Undergraduate Level	Prof. Dr. Ender Okandan
Spring 2005	PETE 216 – Reservoir Rock & Fluid Properties, Undergraduate Level	Prof. Dr. Tanju Mehmetoglu
Fall 2004	ES 202 – Mathematics for Engineers, Undergraduate Level	Prof. Dr. Tanju Mehmetoglu
Spring 2004	PETE 110 – Introduction to Petroleum Engineering, Undergraduate Level	Prof. Dr. Birol Demiral

A.3. At Mimar Kemalettin Elementary School and Altin Computer Course, Izmir, Turkey, Role: Instructor

Semester	Course Description
Spring 2003	Computer, Primary and Secondary School, 4th-7th grades
Fall 2002	Computer, Primary and Secondary School, 4th-7th grades
Spring 2002	Computer, Primary and Secondary School, 1st-7th grades

B. ADVISING/SUPERVISING (www.hascakir.com/people) LINK

- B. 1. Graduate Students-PhD (*: sponsored, **: Supported by Dr. Hascakir's research fund) (7 graduated, 3 continuing)
 Name, Start Date, Graduation Date, Dissertation Title/Topic, Current Position
- 1. Sudiptya Banerjee **, Fall 2013, Graduated in December 2016, <u>Dissertation Title</u>: Flow Control Devices in SAGD Completion Design: Enhanced Heavy Oil/Bitumen Recovery Through Improved Thermal Efficiencies <u>LINK</u>, Global Technology Manager at Johnson Matthey-Tracerco.
- 2. Abhishek Punase **, Summer 2015, Graduated in May 2017, <u>Dissertation Title</u>: Factors Affecting Asphaltenes Stability, Engineer in Clariant Corporation, North Carolina.
- **3.** Taniya Kar **, Fall 2015, Graduated in August 2017, <u>Dissertation Title</u>: Emulsion Formation Mechanism for Solvent-Steam Processes, Postdoctoral Researcher in Reservoir Engineering Research Institute, Palo Alto, California, US.
- 4. Norasyikin Ismail*, Fall 2015, Graduated in December 2019, <u>Dissertation Title</u>: Reaction Kinetics Study of In-situ Combustion: Integration of Experimental & Analytical Approaches, Faculty at Chemical & Process Engineering Technology, Universiti Malaysia Pahang.
- **5. Matthew Morte****, Fall 2016, **Graduated in December 2019**, <u>Dissertation Title</u>: Testing Electromagnetic Energy Penetration and Absorption Under Reservoir Conditions: The Influence of Piezoelectricity, **currently looking for faculty position in the US**.
- **6. Murtdha Alshaikh***, Fall 2015, **Graduated in December 2019**, <u>Dissertation Title</u>: Impact of Ionic and Polar Interaction Between Heavy Crude Oil and Surfactants During Surfactant-Steam Flooding Processes, **Reservoir Engineer at Aramco**.
- 7. Lifu Zhang (CoAd.)**, Spring 2016, Graduated in December 2020, <u>Dissertation Title</u>: Solid and Soluble Products of Engineered Water/Rock Interactions in Shale Reservoirs, currently looking for faculty position in China.
- **8.** Roly Simangunsong**, Spring 2016, Expected Graduation Date: August 2020-Passed the PhD Qualification, <u>Dissertation Topic</u>: Cyclic solvent-steam injection, **Student at Texas A&M University**.
- **9. Abinash Barooah****, Spring 2019, **Expected Graduation Date: August 2022**, <u>Dissertation Topic</u>: Multi-phase fluid Flow in porous media, **Student at Texas A&M University**.
- **10.** Jairo A. Cortes**, Summer 2020, Expected Graduation Date: August 2022, <u>Dissertation Topic</u>: Viscosity reduction mechanism for heavy oils and bitumen, Student at Texas A&M University.
- B.2. Graduate Students-MS (*: sponsored, **: Supported by Dr. Hascakir's research fund) LINK (13 graduated, 2 continuing)
 Name, Start Date, Graduation Date, Thesis Title/Topic, Current Position
- 1. Denis Aleksandrov*, September 2012, Graduated in August 2013, <u>Thesis Title</u>: Effect of Initial Oil Saturation on In-Situ Combustion Performance of a Canadian Bitumen <u>LINK</u>, Engineer-Lukoil-Russia.
- **2.** Philipp Kudryavtsev*, September 2012, Graduated in December 2013, <u>Thesis Title</u>: An Experimental Investigation of Water Influence on Dry Forward In-Situ Combustion <u>LINK</u>, Engineer-Lukoil-Russia.
- **3.** Albina Mukhametshina*, September 2012, Graduated in December 2013, <u>ThesisTitle</u>: Reducing the Environmental Impact of Bitumen Extraction with ES-SAGD Process LINK, Engineer-Lukoil-Russia.
- **4. Yasin Unal ***, September 2012, **Graduated in December 2014**, <u>Thesis Title</u>: Thermally Induced Wettability Change during SAGD for Oil Sand Extraction <u>LINK</u>, **Engineer-TPAO-Turkey**.
- **5. Zade R. Satter (CoAd.)****, September 2013, **Graduated in May 2015**, <u>Thesis Title</u>: Physicochemical Interactions of Source-Rocks with Injected Water-Based Fluids <u>LINK</u>
- **6. Maaz I. Ali** **, September 2013, **Graduated in August 2015**, <u>Thesis Title</u>: Produced Water Quality Based on Thermal Recovery Processes and After Interaction with Shale, **Engineer-Schlumberger**, **USA**.
- 7. Kar, Taniya**, September 2013, Graduated in August 2015, Thesis Title: Analysis of Saturates, Aromatics, Resins, Asphaltenes (SARA), Water, and Clays in Water-Oil Emulsions for Steam-Assisted Gravity Drainage (SAGD) and Expanding Solvent-SAGD (ES-SAGD) LINK, Postdoctoral Researcher in Reservoir Engineering Research Institute, Palo Alto, California, US.
- **8.** Raphael Coelho *, September 2014, Graduated in May 2016, <u>Thesis Title</u>: Microscopic Displacement of Bitumen during Solvent-Steam flooding: Effects of Reservoir Clays and Solvent Type <u>LINK</u>, Reservoir Engineer in Shell Brazil.
- 9. Philip Stape *, September 2014, Graduated in May 2016, <u>Thesis Title</u>: Performance Evaluation of Solvent Assisted-Steam Injection Processes with Asphaltene Insoluble Solvents <u>LINK</u>, PhD Student at Universidade Federal do Rio de Janeiro, Brazil.

- 10. Andreas Prakoso**, Summer 2015, Graduated in May 2016, <u>Thesis Title</u>: Physicochemical Characterization of Asphaltenes LINK, Energy Consultant in Accenture, Indonesia.
- 11. Matthew Morte **, Fall 2015, Graduated in August 2016, <u>Thesis Title</u>: Wettability Alteration for Steam Assisted Gravity Drainage (SAGD) and Solvent-SAGD <u>LINK</u>, PhD Student at Texas A&M University.
- **12.** Alwin Ng *, Spring 2018, Graduated in August 2018, <u>ThesisTopic</u>: The use of environmentally friendly solvents to extract heavy oil and bitumen through solvent-steam processes, Intern in Malaysia.
- **13. Michael (Huaiqi) Liao***, Fall 2016, **Graduated in May 2019**, <u>Thesis Topic</u>: Efficiency of Microwave Heating on Breaking Polar Asphaltenes, **MS Student at Texas A&M University**.
- **14.** Tanya Ann Mathews**, Fall 2019, Expected Graduation in May 2021, <u>Thesis Topic</u>: Use of Biodegradable and Environmentally-Friendly Solvents for EOR of Heavy Oils, MS Student at Texas A&M University.
- **15.** Damir Kaishentayer**, Spring 2020, Expected Graduation in December 2021, <u>Thesis Topic</u>: Feasibility of low-cost pretreatment methods in the Permian Basin, MS Student at Texas A&M University.
- **B.3. Graduate Students- MEng** (*: sponsored, **: Supported by Dr. Hascakir's research fund) <u>LINK</u> (3 graduated, 2 continuing) Name, Start Date, Graduation Date, Thesis Title/Topic, Current Position
- **1. Katherine Pettengell ***, Spring 2016, **Graduated in May 2016**, <u>Research Topic</u>: Horizontal Water Injection: From Initiation to Evaluation, **Reservoir Eng. in OMV in New Zealand**.
- **2. Olivier Henri Armand Lancon** *, September 2016, **Graduated in December 2017**, <u>Research Topic</u>: Contribution of Oil and Gas Production within the U.S. to The Climate Change, **Engineer in Total in France**.
- **3. Scott James Badham** *, September 2015, **Graduated in August 2019**, <u>Research Topic</u>: A Method to Determine Mobile Fluid Saturations in Oil Reservoirs via Injection of a Partitioning Tracer, **Lead Engineer at Chemical Tracers Inc.**.
- 4. Kevin Volz *, September 2016, Expected Graduation Date: May 2021, Research Topic: TBD, Field Engineer at Baker Hughes Oil Tools and MEng Student at Texas A&M University.
 - 5. Harry Liu*, September 2016, Expected Graduation Date: December 2021, Research Topic: TBD.
 - 6. Brittany L. Black, August 2019, Expected Graduation Date: May 2021, Research Topic: TBD.
- B.4. Graduate Students-Visiting Undergraduate (UG), MSc and PhD (*: sponsored, **: Supported by Dr. Hascakir's research fund) (2 graduated MS)

Name, Degree, Graduation Date, Institution

- 1. Selin Guven (CoAd.)**, MSc-LINK, Graduated in December 2015, Middle East Technical University
- 2. Ahmet Birkan Demir (CoAd.) **, MS, Graduated in December 2016, West Virginia University
- 3. Elizabeth Seber*, UG, Sophomore, Pennsylvania State University-NSF Sponsored.
- **4. Farooq Muhammad Zia ***, UG, **Sophomore**, Texas A&M University, Qatar.
- **5. John Siu***, UG, **Sophomore**, University of Rochester-**NSF Sponsored**.
- **6. Yeh Seng Lee***, UG, **Junior**, Universiti Teknologi Petronas, Malaysia.
- **7. Connor Pope** *, UG, **Junior**, University of Rochester-**NSF Sponsored**.
- 8. Rohit Singh*, Junior, Indian Institute of Technology (IITs)
- **B.5.** Undergraduate Students (*: sponsored, **: Supported by Dr. Hascakir's research fund) (26 completed, 0 continuing)

 Name, Starting Degree, Starting Semester, Research Topic
 - 1. Rohit Singh*, Junior, Indian Institute of Technology (IITs), Summer 2019, Research Topic: Surfactant Flooding
 - 2. Hasan Alhafidh**, Junior, Summer and Fall 2019, Research Topic: Solvent-Steam Efficiency
- 3. Autumn Roberts**, Junior, Fall 2019, Research Topic: The use of Viscosity Reducers to Enhance Oil Mobility
- 4. Connor Pope *, UG, Junior, University of Rochester-NSF Sponsored.
- 5. Yeh Seng Lee*, (Visiting Scholar from Universiti Teknologi Petronas), Junior, January 14-April 19, 2019. Research Topic: Surfactant-Steam Flooding
- 6. John Siu* (Visiting NSF Scholar from University of Rochester), Sophomore, Summer 2018, Research Topic: In-situ Combustion
- 7. Alwin Ng *, Junior-Honor Student, Spring 2017-Fall 2017, Research Topic: Emulsion Formation Mechanism.
- 8. Hindi Mousa Wael, Junior-Honor Student, Fall 2017, Research Topic: Calculation of reaction kinetics parameters.
- 9. Priscilla Rodriguez Tovar, Junior, Fall 2017, Research Topic: Solvent-Steam Processes.
- 10. Shams Z. Al Bayati, Junior-Honor Student, Fall 2017, Research Topic: The Use of Microwave as an EOR method.
- 11. Tracey Onyinye Ike, Junior-Honor Student, Fall 2017, Research Topic: Solvent-Steam Processes.
- 12. Elizabeth Seber* (Visiting NSF Scholar from PennState), Sophomore, Summer 2017, Research Topic: In-situ Combustion
- 13. Farooq Muhammad Zia * (Visiting student from TAMU Qatar), Sophomore, Summer 2017, Research Topic: Steam Processes
- 14. Abrar Alshaikh *, Senior-Honor Student, Spring 2017, Research Topic: Solvent-Steam Processes
- 15. Philipos Melake *, Junior, Summer 2016, Research Topic: Solvent –Steam Processes

- 16. Pedram Bakhtiari Nezhad *, Junior, Summer 2016, Research Topic: Solvent Steam Processes
- 17. Ryan Reyna*, Junior, Summer 2015, Research Topic: Review on Thermal EOR
- 18. Hasun D. Kim*, Junior, Summer 2015, Research Topic: In-Situ Combustion
- 19. Catherine E. Sparkes *, Junior, Summer 2015, Research Topic: In-Situ Combustion
- 20. Andreas Prakoso **, Senior, 2014-2015, Research Topic: Asphaltenes Characterization
- 21. Kristina Klock **, Sophomore, 2013-2016, Research Topic: In-Situ Combustion and Reaction Kinetics
- 22. Matthew Lee Kozlowski, Junior, Fall 2014, Research Topic: In-Situ Combustion
- 23. Jun Yeoh **, Junior, Summer/Fall 2014, Research Topic: Steam Assisted Gravity Drainage (SAGD)
- 24. Jennifer Nguyen **, Junior, Summer 2014, Research Topic: Residual Oil Saturation Determination
- 25. Anderson Morrow**, Junior, Summer 2013, Research Topic: Steam Flooding, In-situ Combustion, and SAGD
- 26. Niraj Shah **, Sophomore, Spring 2014, Research Topic: In-Situ Combustion
- 27. Matthew Williamson **, Sophomore-Honor Student, Fall 2013, Research Topic: Steam Assisted Gravity Drainage (SAGD)

B.6. Mentoring (Students were mentored on research and teaching) (*: sponsored, **: Supported by Dr. Hascakir's research fund) Name, Degree, Duration, Mentoring Topic

- 1. Narendra Vishnumolakala**, PhD, Summer-Fall 2019, Mentoring Topic: Radio Frequency Heating
- 2. Ahmed Hanafy **, PhD, 2014-2015, Mentoring Topic: Alternative Fracturing Fluids
- 3. Nesreen Elsayed *, PhD, Spring 2013, Mentoring Topic: Teaching in Higher Education
- 4. Enrique Vidal *, PhD, 2012-2013, Mentoring Topic: Research on Steam Processes
- 5. Sherif Abdelmoneim **, MS, Fall 2013, Mentoring Topic: 3D in-situ combustion test
- 6. Mengdi Gao **, MS, 2012-2013, Mentoring Topic: Research on Shales
- 7. Sung Yun Han **, MS, 2012-2013, Mentoring Topic: Research on Seismic
- 8. Assiya Suleimenova **, MS, 2012-2014, Mentoring Topic: Research on Thermal Recovery

B.7. Teaching Assistants

Name, Advisor, Semester, Class

- 1. Masoud Alfi, Dr. John Killough & Dr. Maria Barrufet, Spring 2013-Spring 2014, PETE 310-Reservoir Fluids
- 2. Xiaoda Liu, Dr. Peter Valko, Summer 2014, PETE 609-EOR
- 3. Abhishek Punase, Dr. Hisham Nasr-El-Din, Fall 2014, PETE 310-Reservoir Fluids
- 4. Abhishek Punase, Dr. Hisham Nasr-El-Din, Spring 2015, PETE 609/PETE 489-EOR
- 5. Xiaoda Liu, Dr. Peter Valko, Summer 2015, PETE 623-Waterflooding
- 6. Abhishek Punase, Dr. Berna Hascakir, Fall 2015, PETE 310-Reservoir Fluids
- 7. Matthew Morte, Dr. Berna Hascakir, Fall 2015, PETE 310-Reservoir Fluids
- 8. Matthew Morte, Dr. Berna Hascakir, Summer 2016, PETE 609/-EOR
- 9. Abhishek Punase, Dr. Berna Hascakir, Fall 2016, PETE 310-Reservoir Fluids
- 10. Taniya Kar, Dr. Berna Hascakir, Fall 2016, PETE 310-Reservoir Fluids
- 11. Matthew Morte, Dr. Berna Hascakir, Fall 2017, PETE 310-Reservoir Fluids
- 12. Kiran Nandlal, A New PhD Student, Fall 2017, PETE 310-Reservoir Fluids
- 13. Matthew Morte, Dr. Berna Hascakir, Spring-Fall 2019, PETE 314-Transport Processes in Petroleum Production
- 14. Jairo A. Cortes, Dr. Berna Hascakir, Fall 2020 AND Spring 2021, PETE 314-Transport Processes in Petroleum Production

B.8. Internal Committees

Name, Advisor, Degree, Thesis

- 1. Viacheslau Kudrashou, Dr. Hisham Nasr-El-Din, PhD
- 2. Omer Kaldirim, Dr. Jerome Schubert, PhD
- 3. Xiaona Cui, Dr. John Killough, PhD
- 4. Paul Ofoche, Dr. Sam Noynaert, PhD
- 5. Mohammed Almobarky, Dr. David Schechter, PhD
- 6. Hessah Alrashidi, Dr. Hisham Nasr-El-Din, PhD
- 7. Omar S. Mahmoud, Dr. Hisham Nasr-El-Din, PhD
- 8. Ahmed M. Ibrahim, Dr. Hisham Nasr-El-Din, PhD
- 9. Jingjing Zhang, Dr. David Schechter, MS
- 10. Jun Hong, Dr. Hisham Nasr-El-Din, MS
- 11. Tuan Phi, Dr. David Schechter, MS, LINK
- 12. Candan Unal. Dr. Hisham Nasr-El-Din. MS. LINK
- 13. Thanakrich Pummarapanthu. Dr. Hisham Nasr-El-Din. MS. LINK
- 14. Erick Martinez Antunez, Dr. David Schechter, MS, LINK
- 15. Salar Afra, Dr. Hisham Nasr-El-Din, MS, LINK
- 16. Aymen Abduljalil Jafar Alramadhan, Dr. David Schechter, MS, LINK

- 17. Adrian Sukal, Dr. Maria Barrufet, MEng
- 18. Hammad A. Irshad, Dr. Rashid Hasan, MEng

B.9. External Committees

Name, Advisor, Degree & Link, Institution

- 1. Jingyi Guo, Dr. Yuefeng Sun, PhD, Geology& Geophysics, Texas A&M University
- 2. Sebastian Smith, Dr. Tom Yancey, MS, Geology& Geophysics-2019, Texas A&M University
- 3. Konstantinos Christou, Dr. Vladimir Nikora, PhD-2018, School of Eng., The University of Aberdeen, UK
- 4. Robert Geiger, Dr. David Staack, PhD-LINK, Mechanical Engineering, Texas A&M University
- 5. Mehdi Majdi Yazdi, Dr. Jerry Jensen, PhD-02/24/2013 LINK, University of Calgary, Canada
- 6. Hongcai Wang, Dr. Reza Rezaee, PhD-LINK, Curtin University, Australia
- 7. Sebastian Smith, Dr. Julia Reece, MS, Geology& Geophysics, Texas A&M University
- 8. Noah Miller, Dr. Yuenfeng Sun, MS, Geology & Geophysics, Texas A & M University
- 9. Jingyi Guo, Dr. Yuefeng Sun, MS, Geology& Geophysics, Texas A&M University
- 10. Tyler F. Hussey, Dr. Xingma o Ma, MS, Civil Engineering, Texas A&M University
- 11. Ahmet Unal, Dr. Frederick Chester, MS-TBD, Geology & Geophysics, Texas A&M University
- 12. Harika Rao Damarla, Dr. David Staack, MS-LINK, Mechanical Engineering, Texas A&M University
- 13. Celal Bilgi, Dr. Erchin Serpedin, MS-LINK, Electrical Engineering, Texas A&M University
- 14. Selin Guven, Dr. Serhat Akin & Dr. Berna Hascakir, MSc-LINK, Middle East Technical University, Turkey

B.10. Opportunities Provided to Graduate or Undergraduate Level Students

Encouraging Graduate Level Students to Publish Independent Studies: The aim is to teach graduate level students on the selection of the right journal for their work, a cademic writing & publication ethics, working in teams to construct new ideas, and publishing an independent study by themselves.

- 1. Yousef, Z., AlDaif, H., Al Otaibi, M., An Overview of Steam Injection Projects in Fractured Carbonate Reservoirs in the Middle East, Journal of Petroleum Science Research (JPSR), Volume 3 Issue 3, July 2014. LINK
- 2. Alvarez, J., Hun S., Current Overview of Cyclic Steam Injection Process, Journal of Petroleum Science Research, Volume 2 Issue 3, July 2013, (The most downloaded article among all articles in this journal). LINK
- 3. Mukhametshina, A., Martynova, E., Electromagnetic Heating of Heavy Oil and Bitumen: A review of Experimental Studies and Field Applications, Journal of Petroleum Engineering, Volume 2013 (2013), Article ID 476519. LINK
- 4. Punase, A., Zou A., Elputranto, R. How Thermal Recovery Methods Affect Wettability Alteration?, Journal of Petroleum Engineering, Volume 2014. LINK
- 5. Bealessio, B.A., Blánquez Alonso, N. A., Mendes, N. J., Sande, A. V., <u>Hascakir, B.</u>, A Review of Enhanced Oil Recovery (EOR) Methods Applied in Kazakhstan, *Petroleum*, Article in Press. <u>LINK</u>.
- Vishnumolakala, N., Zhang, J., Ismail, N. B., A Comprehensive Review of Enhanced Oil Recovery Projects in Canada and Recommendations for Planning Successful Future EOR projects, SPE Canada Heavy Oil Conference, September 28—October 2, 2020. SPE-199951-MS. LINK

<u>Encouraging Undergraduate Research</u>: In total, 21 undergraduate students contributed the research studies over 5 years. We published 20 conference papers with these undergraduate students (the undergraduate students are highlighted with bold fonts in the listed papers below).

- 24. **Pope, C.**, Ismail, N., <u>Hascakir, B.</u>, Catalytic Impact Of Clays During In-situ Combustion, *SPE Improved Oil Recovery Conference*, 18-22 April 2020, Tulsa, Oklahoma, USA, SPE-200381-MS. LINK
- 23. **Pope, C.**, Ismail, N., <u>Hascakir, B.</u>, Impact Of Carbonates On Reaction Kinetics Of Bitumen Combustion, *SPE Canada Heavy Oil Conference*, 18-19 March 2020, Calgary, Alberta, CANADA, SPE-199959-MS. <u>LINK</u>
- 22. **Alhafidh, H.M.**, Morte, M.K., <u>Hascakir, B.</u>, Interpretation Of Electromagnetic Wave Penetration And Absorption For Different Reservoir Mineralogy (quartz-rich, Limestone-rich, And Clay-rich) And At High And Low Water Saturation Values For A Bitumen Reservoir, *SPE Canada Heavy Oil Conference*, 18-19 March 2020, Calgary, Alberta, CANADA, SPE-199941-MS. LINK
- 21. Alshaikh, M., Lee, Y.S., <u>Hascakir, B.</u>, Anionic Surfactant and Heavy Oil Interaction during Surfactant-Steam Process, *SPE Westem Regional Meeting*, 23-26 April 2019, San Jose, California, USA, SPE-195254-MS. <u>LINK</u>
- 20. Liao, H., Morte, M., **Bloom, E.**, Huff, G., <u>Hascakir, B.</u>, Controlling Microwave Penetration and Absorption in Heavy Oil Reservoirs, SPE Western Regional Meeting, 22-27 April 2018, Garden Grove, California, USA, SPE-190089-MS. <u>LINK</u>
- 19. **Ng, A.**, Ovalles, C., Benson, I.P., <u>Hascakir, B.</u>, Asphaltenes Contribution in Emulsion Formation during Solvent-Steam Processes, SPE Western Regional Meeting, 22-27 April 2018, Garden Grove, California, USA, SPE-190057-MS. <u>LINK</u>
- 18. Is mail, N.B., **Seber, E.**, <u>Hascakir, B.</u>, Role of Aromatics Fraction of Crude Oil on In-Situ Combustion Performance, *SPE Improved Oil Recovery Conference (IOR 2018)*, 14-18 April 2018, Tulsa, OK, USA. SPE-190307-MS. LINK

- 17. Morte, M., **Bloom, E.**, Huff, G., <u>Hascakir, B.</u>, Factors Affecting Electromagnetic Wave Penetration in Heavy Oil Reservoirs, *SPE Canada Heavy Oil Technical Conference*, 13-14 March 2018, Calgary, Alberta, Canada. SPE-189746-MS. <u>LINK</u>
- 16. Ng, A., Hascakir, B., Asphaltenes Contribution in Emulsion Formation during Solvent-Steam Processes, SPE Western Regional Meeting, 22-27 April 2018, Garden Grove, California, USA, SPE-190057-MS. LINK
- 15. Is mail, N.B., **Seber, E.**, <u>Hascakir, B.</u>, Role of Aromatics Fraction of Crude Oil on In-Situ Combustion Performance, *SPE Improved Oil Recovery Conference (IOR 2018)*, 14-18 April 2018, Tulsa, OK, USA. SPE-190307-MS. <u>LINK</u>
- 14. Ng, A., Seber, E., Ovalles, C., Benson, I.P., <u>Hascakir, B.</u>, The Use of Asphaltenes Precipitants and Environmentally Friendly Solvents during Solvent-Steam Processes, *SPE/EAGE Tar Mats & Heavy Oil Workshop: Fluid Characterization and Development/Operational Challenges*, 30-31 Jan 2018, Dubai, UAE. <u>LINK</u>
- 13. Kar, T., **Nezhad, P.B.**, **Ng, A.Z.Y.**, Ovalles, C., Benson, I.P., <u>Hascakir, B.</u>, Mobilization of Trapped Residual Oil via Secondary SAGD with Propane, *SPE Western Regional Meeting*, 23-27 April 2017, Bakersfield, California, USA, SPE-185684-MS. <u>LINK</u>.
- 12. Ismail, N.B., Klock, K., Hascakir, B., In-situ Combustion Experiences in Heavy Oil Carbonates, SPE Canada Heavy Oil Technical Conference, 7-9 June 2016, Calgary, Alberta, Canada, SPE-180724-MS. LINK.
- 11. Prakoso, A.A., **Klock, K.**, Punase, A., Rogel, E., Ovalles, C., <u>Hascakir, B.</u>, Determination of the Stability of Asphaltenes through Physicochemical Characterization of Asphaltenes, *SPE Western Regional Meeting*, 23-26 May 2016, Anchorage, Alaska, USA, SPE-180422-MS. LINK.
- 10. **Prakoso, A.**, Punase, A., <u>Hascakir, B.</u>, A Mechanistic Understanding of Asphaltene Precipitation from Varying Saturate Concentration Perspective, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 18-20 November 2015, Quito, ECUADOR, SPE-177280-MS. <u>LINK</u>.
- 9. **Kozlowski M.L.**, Punase, A., Nasr-El-Din, H., <u>Hascakir, B.</u>, The Catalytic Effect of Clay on In-Situ Combustion Performance, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 18-20 November 2015, Quito, ECUADOR, SPE-177166-MS. <u>LINK</u>.
- 8. Klock, K., <u>Hascakir, B.</u>, Simplified Reaction Kinetics Model for In-Situ Combustion, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 18-20 November 2015, Quito, ECUADOR, SPE-177134-MS. <u>LINK</u>.
- 7. Kar, T., **Kozlowski M.L.**, <u>Hascakir, B.</u>, Characterization of Kerogen for Green River Oil Shale, *The Sixth Annual Berg-Hughes Symposium*, 16 October 2015, Texas A&M University, College Station, Texas, USA. (POSTER).
- 6. **Kozlowski, M.**, Kar, T., <u>Hascakir, B.</u>, Ex-situ Extraction of Green River Oil Shale by Combustion, *Western States Section of the Combustion Institute Fall Meeting*, Provo, Utah, USA. October 5-6, 2015. 134IE-0051.
- 5. **Klock, K.**, Prakoso, A., Punase, A., <u>Hascakir, B.</u>, The combustion behavior of various hydrocarbons with complex molecular structures, *Western States Section of the Combustion Institute Fall Meeting*, Provo, Utah, USA. October 5-6, 2015. 134CK-0042.
- 4. Kar, T., Yeoh, J., Ovalles, C., Rogel, E., Benson, I.P., <u>Hascakir, B.</u>, The Impact of Asphaltene Precipitation and Clay Migration on Wetta bility Alteration for Steam Assisted Gravity Drainage (SAGD) and Expanding Solvent SAGD (ES-SAGD), 2015 SPE Heavy Oil Conference, 9-11 June, 2015, Calgary, Alberta, Canada, SPE-174439-MS. <u>LINK</u>.
- 3. Kar, T., **Williamson, M.**, <u>Hascakir, B.</u>, The Role of Asphaltenes in Emulsions Formation for Steam Assisted Gravity Drainage (SAGD) and Expanding Solvent-SAGD (ES-SAGD), 2014 SPE Heavy and Extra Heavy Oil Conference-Latin America, 24-26 September 2014, Medellin, Colombia, SPE-171076-MS. LINK
- 2. Morrow, A., Mukhametshina, A., Aleksandrov, D., <u>Hascakir, B.</u>, Environmental Impact of Bitumen Extraction with Themal Recovery, 2014 SPE Heavy Oil Conference, 10-12 June, 2014, Calgary, Alberta, Canada, SPE 170066-MS. <u>LINK</u>
- Mukha metshina, A., Morrow, A., Aleksandrov, D., <u>Hascakir, B.</u>, Evaluation of Four Thermal Recovery Methods for Bitumen Extraction, 2014 SPE Western North America and Rock Mountain Joint Regional Meeting, 16-18 April 2014 Denver, CO, USA, SPE 169543-MS. <u>LINK</u>

Students Awards:

- Texas A&M University Petroleum Engineering Department Student Paper Contest,
 - 1. The first place in BS division-Junior section a mong around 100 Junior students, January 2015 (Student Name: Kristina Klock)
 - 2. The third place in MS division among around 100 MS students, January 2015 (Student Name: Raphael Coelho)
 - 3. The first place in MS division among around 100 MS students, January 2014 (Student Name: Assiya Suleimenova)
- The Texas A&M University Petroleum Engineering Department Faculty Excellence Awards Outstanding Master of Science Award
 - 1. Albina Mukhametshina, May 2014
 - 2. Taniya Kar, May 2016
- Texas A&M University Geology Department, Annual Berg-Hughes Symposium Poster Competition
 - 1. Sudiptya Banerjee, 3rd Place, 7th Annual Berg-Hughes Symposium, 2016

SERVICE (www.hascakir.com/service)

Texas A&M University College of Engineering Indicators of Excellence/Effectiveness in Service (LINK). In the table below, excellence indicators are given in red and effectiveness indicators are given in blue. Proves summarize the excellence and effectives indicators for Dr. Hascakir. Further information on proves can be found in the relevant section of the Dr. Hascakir's CV

Indicators	Proof/Explanation
Position as Editor-in-Chief (or equivalent) of archival	- I have served as guest editor (equivalent to Editor-in-Chief)
journal(s);	for the 3 Thermal EOR special issues of Journal of Petroleum
	Science and Engineering.
Leadership and commitment to excellence demonstrated	- I served in Multidisciplinary Engineering (MTDE) Faculty
by identifying needs at the departmental or higher level	Steering Committee to make recommendations on starting a
and developing a plan to address them, including setting	new department at TAMU.
up new initiatives, building sustainable programs,	- I am the only ABET (Accreditation Board for Engineering and
establishing new practices, and the like.	Technology, Inc.) Engineering Accreditation Commission (EAC)
	Program Evaluator in our department.
Leadership of mentorship and outreach efforts.	I am mentoring Junior Female Faculty in College of Science,
	Texas A&M University, under ADVANCE Science Scholars.
Participation as elected or appointed member of a	I have served as technical committee members for 13
professional or technical committee within a professional	conferences (please see the details in my CV)
society	
Position as Associate Editor (or equivalent) of an archival	- I am serving as an associate editor for one of the most
journal and/or substantial role on the program	prestigious petroleum engineering journal; Journal of
committee of well-regarded conferences;	Petroleum Science and Engineering.
	- I have also served as an associate editor for Energy Reports
	in 2019
Significant portfolio of peer-reviewing activities for	I have reviewed proposals for
funding agencies, conferences, and journals.	- Department of Energy's Technology Commercialization Fund
	(TCF)
	- Natural Science and Engineering Research Council of Canada
	(NSERC)
	- <u>American Chemical Society (ACS), Petroleum Research Fund</u>

SUMMARY [from Tenure Package Submission (February 2017) till Spring 2021]

Since my tenure package submission (February 2017), I have worked in two departmental level (Undergraduate Curriculum Committee and Graduate Committee), three college level (Junior Faculty Advisory Council (JFAC), Engineering Faculty Advisory Council (EFAC), and Multidisciplinary Engineering (MTDE) Faculty Steering Committee), one university level (ADVANCE Science Scholars, Mentoring Junior Female Faculty in College of Science), and two national/international level (The SPE Faculty Innovative Teaching Award Committee and ABET (Accreditation Board for Engineering and Technology, Inc.) Engineering Accreditation Commission (EAC) Program Evaluator) services. After my tenure and promotion, I have served in four editorial boards for high quality journals (Associate editor for Journal of Petroleum Science and Engineering, Associate editor for Energy Reports, Guest Editor and Managing Guest Editor for the Thermal EOR special issues of Journal of Petroleum Science and Engineering) and 12 conference/workshop committees (nine of them are for SPE and three of them are non-SPE conferences). Apart from editing and reviewing for many journals in energy, water security, and petroleum engineering related subjects, I devote significant time to review proposals for the federal government and non-profit organizations (Department of Energy, the Technology Commercialization Fund (TCF); Petroleum Research fund of the American Chemical Society; and Mitacs).

A. UNIVERSITY and DEPARTMENTAL LEVEL SERVICE

- 1. Graduate Studies Committee, 2019-Cont.', Petroleum Eng. Department, Texas A&M University.
- 2. Engineering Faculty Advisory Council (EFAC), Sept. -2018-May. 2021 College of Engineering, Texas A&M University. LINK
- 3. ADVANCE Science Scholars, Mentoring Junior Female Faculty in College of Science, Texas A&M University, 2019-2024.
- 4. Multidisciplinary Engineering (MTDE) Faculty Steering Committee, April 2020-June 2020 LINK.
- 5. Undergraduate Curriculum Committee, 2016-2020, Petroleum Eng. Department, Texas A&M University.

- 6. Honors Program Coordinator for Petroleum Engineering, 2016-2017, College of Engineering, Texas A&M University, LINK
- 7. Vice Chair, Junior Engineering Faculty Advisory Council (JEFAC), 2015 Sept.-2017 College of Engineering, Texas A&M University. LINK
- 8. Undergraduate scholarship committee, 2014-2016, Texas A&M University, Petroleum Engineering Department.

B. PROFESSIONAL SERVICE

- 1. ABET (Accreditation Board for Engineering and Technology, Inc.) Engineering Accreditation Commission (EAC) Program Evaluator, 2018-Cont.'
- 2. The SPE Faculty Innovative Teaching Award Committee (October 2016-October 2019). LINK

C. EDITORIAL BOARD Total decision was made for 324 papers

- 1. Associate Editor in Journal of Petroleum Science and Engineering by Elsevier BV January 2014- Cont.'., LINK
- 2. Associate Editor in Energy Reports, August 2019-March 2020 LINK
- 3. Guest Editor for the Thermal EOR Special Issue of *Journal of Petroleum Science and Engineering* by Elsevier BV. This issue will be published in 2019. <u>LINK</u>
- 4. Managing Guest Editor for the Thermal EOR Special Issue of *Journal of Petroleum Science and Engineering* by Elsevier BV. This issue will be published online on July 1, 2018. <u>LINK</u>
- 5. Managing Guest Editor for Enhanced Heavy Oil and Oil Shale Recovery Special Issue of Geosciences (ISSN 2076-3263) by Walter de Gruyter GmbH & Co. KG, LINK.
- 6. Managing Guest Editor for the Thermal EOR Special Issue of *Journal of Petroleum Science and Engineering* by Elsevier BV. LINK

D. EXTERNAL COMMITTEE SERVICE

- 1. Technical Program Committee for SPE ATCE, SPE Annual Conference and Exhibition, 21-23 September 2021, Dubai, UAE. LINK
- 2. Technical Program Committee for Unconventional Resources Technology Conference Fueled by SPE AAPG and SEG. 26-28 July 2021 Houston, Texas. USA (74 abstracts reviewed). <u>LINK</u>
- 3. Technical Program Committee for SPE/IADC Middle East Drilling Technology Conference and Exhibition, 15-17 September 2020, Abu Dhabi, UAE. LINK
- 4. Technical Program Committee for the 4th Thermal EOR International Workshop, "Thermal Methods for Enhanced Oil Recovery: Laboratory Testing, Simulation and Oilfields Applications", 6-8 May 2020, Bucaramanga, Colombia. LINK
- 5. Technical Program Committee for Unconventional Resources Technology Conference Fueled by SPE AAPG and SEG. 20-22 July 2020 Austin, Texas. USA (74 abstracts reviewed). LINK
- 6. Technical Program Committee for SPE ATCE, SPE Annual Conference and Exhibition, 5-7 October 2020, Denver, Colorado, USA. LINK
- 7. Technical Program Committee for SPE Heavy Oil Canada, 18- 19 March 2020, Calgary Canada. LINK
- 8. Technical Program Committee for SPE ATCE, SPE Annual Conference and Exhibition, 30 September- 2 October 2019, Calgary Canada. LINK
- 9. The SPE Faculty Innovative Teaching Award Committee (October 2016-October 2019). LINK.
- 10. Technical Program Committee for Thermal EOR International Workshop, "Thermal Methods for Enhanced Oil Recovery. Laboratory Testing, Simulation and Oilfields Applications", 16-19 October 2018, Chengdu, China. LINK.
- 11. Steering Committee, 2018 SPE/EAGE Tar Mats & Heavy Oil Workshop, 30-31 January 2018, Dubai, United Arab Emirates, LINK.
- 12. Technical Program Committee for SPE/IADC Middle East Drilling Technology Conference and Exhibition, 29-31 January 2018, Abu Dhabi, UAE. LINK.
- 13. Technical Program Committee for SPE Heavy Oil Technical Conference, 13-14 March 2018, Calgary, AB, Canada. LINK.
- 14. Technical Program Committee for Thermal EOR International Workshop, "Thermal Methods for Enhanced Oil Recovery. Laboratory Testing, Simulation and Oilfields Applications", 19-24 June 2017, Kazan, Russia. LINK
- 15. Technical Program Committee for SPE Heavy Oil Technical Conference, 15-16 February 2017, Calgary, AB, Canada. LINK.
- 16. Technical Program Committee for SPE Latin America and Caribbean Heavy and Extra -Heavy Oil Conference, 19-20 October 2016, Lima, PERU. LINK
- 17. Technical Program Committee for Thermal EOR International Workshop, "Thermal Methods for Enhanced Oil Recovery: Laboratory Testing, Simulation and Oilfields Applications", 28 June -1 July 2016, Kazan, Russia. LINK.
- E. REVIEWING/EDITING (Quartile: Q1 means highest values and Q4 lowest values SJR: SCImago Journal Rank,)
 - D.1. Journal Review (number of papers reviewed) Total 86 papers were reviewed
- 1. Energy &Fuel, (20 papers reviewed), Q1. LINK

- 2. Journal of Petroleum Science and Engineering (18 papers reviewed), Q1. LINK
- 3. Fuel, (15 papers reviewed) Q1. LINK
- 4. Fuel Processing Technology, (10 papers reviewed), Q1. LINK
- 5. International Journal of Oil, Gas, and Coal Technology (IJOGCT) (4 papers reviewed), Q2. LINK
- 6. SPE Journal, (5 papers reviewed), Q1. LINK
- 7. Industrial & Engineering Chemistry Research (2 paper reviewed), Q1. LINK
- 8. Journal of Canadian Petroleum Technology (2 papers reviewed), Q1. LINK
- 9. Combustion Science and Technology (2 papers reviewed), Q1. LINK
- 10. Chemical Engineering Journal (2 papers reviewed), Q1. LINK
- 11. Scientific Reports by Nature (1 paper reviewed), Q1. LINK
- 12. SPE Reservoir Evaluation & Engineering, (1 paper reviewed), Q1. LINK
- 13. Journal of Petroleum Exploration and Production Technology (1 paper reviewed), Q2. LINK
- 14. Journal of Petroleum Engineering (1 paper reviewed). LINK
- 15. Catalysis Reviews (1 paper reviewed), Q1. LINK
- 16. Energy, (1 paper reviewed), Q1. LINK
- 17. Journal of Energy Resources Technology, ASME (1 paper reviewed), Q2. LINK
- 18. Transport in Porous Media, (1 paper reviewed), Q1. LINK
- 19. Colloids and Surfaces A: Physicochemical and Engineering Aspects, (1 paper reviewed), Q2. LINK

D.2. Research Funding Review (number of research proposals reviewed) Total 13 proposals were reviewed

- 1. Department of Energy's Technology Commercialization Fund (TCF) administered by DOE's Office of Technology Transitions (OTT) (2 proposals reviewed)
- 2. Natural Science and Engineering Research Council of Canada (NSERC) (5 proposals reviewed), LINK
- 3. Canada Foundation for Innovation (1 proposal reviewed), LINK
- 4. Mitacs (3 proposals reviewed), LINK
- 5. American Chemical Society (ACS), Petroleum Research Fund (1 proposal reviewed), LINK
- 6. Research North Dakota Grant Program (2 proposal reviewed), LINK

F. CONSULTANCY

- 1. Emulsion control for thermal recovery, Pacific Rubiales Energy, Bogota, Colombia, Nov.2013- Nov.2014.
- 2. Saleski Pilot Plans, Husky Energy, Calgary, AB, June 5-6, 2012.
- 3. Field-scale Simulation of In-Situ Combustion for SUPLACY Oil Field, Schlumberger-Stanford University, 2008-2012.
- 4. In-Situ Combustion of Mexican Heavy Crude Oils with PEMEX-Stanford, 2008-2010.

G. MENTORING

- $1. \quad ADVANCE\,Science\,Scholars, Mentoring\,Junior\,Female\,Faculty\,in\,College\,of\,Science,\,Texas\,\,A\&M\,\,University,\,2019-2024.$
- 2. Junior Faculty Mentoring, at Petroleum Engineering Department, Texas A&M University, in 2015-2016.
- 3. Volunteer for Women in Engineering (WE) at Texas A&M University, LINK.
- 4. The Academy of Future Faculty (AFF) at Texas A&M University, LINK.
- Combustion Institute, The Central States Section, Mentoring High School Teachers for grant proposal writing on combustion to encourage high school students involvement in research and for a college degree, July 2015-2016. <u>LINK</u>.
- 6. SPE Mentoring Program, 2013-cont.', LINK
- 7. WITSON to encourage women's education in science and engineering, Summer 2012, LINK