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: <u>hascakir@tamu.edu</u> Website: <u>http://www.hascakir.com</u>

EDUCATION

2008-2010	Postdoctoral Scholar in Energy Resources Engineering, Stanford University, Stanford, CA, USA			
	<u>Research Area</u> : "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, <u>kovscek@stanford.edu</u> , 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" LINK			
	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)			
	Advisor: 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 <u>MSc Thesis</u> : "Utilization of Natural Polyelectrolyte in Wastewater Treatment" <u>LINK</u> Advisor: Dr. Deniz Dolgen, <u>deniz.dolgen@deu.edu.tr</u> , Phone: +90 232 301 7139			
1996-2001	B.Sc. in Environmental Engineering, Dokuz Eylul University, Izmir, TURKEY <u>BSc Thesis</u> : "Nutrient Removal in Sequential Batch Processing Reactor" Advisor: Dr. Necdet Alpaslan, <u>necdet.alpaslan@deu.edu.tr</u> , Phone: +90 232 301 7100			

POSITIONS

09/2021-09/2022	ADVANCE Administrative Fellow, Texas A&M University		
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	<u>Research and Teaching Assistant</u> , Graduate School of Natural and Applied Sciences, Inonu University, Malatya, TURKEY	
01/2004-09/2008	<u>Research and Teaching Assistant</u> , 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	Project Assistant, Center for Environmental Research and Development, Dokuz Eylul University (ÇEVMER), Izmir, TURKEY	
09/2001-06/2003	<u>Computer Instructor</u> , Altin Computer Course, Izmir, TURKEY and Mimar Kemalettin Elementary School, Izmir, TURKEY	

TRAINING & NETWORKING

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

July 13, 2021*	<u>Assessing Understanding in Mentoring</u> , Center for Teaching Excellence, Texas A&M University, Competency 3.		
July 8, 2021*	Addressing Equity and Inclusion in Mentoring, Center for Teaching Excellence, Texas A&M University, Competency 4.		
June 28, 2021*	<u>Aligning Expectations in Mentoring</u> , Center for Teaching Excellence, Texas A&M University, Competency 2.		
June 25, 2021*	<u>Fostering Independence in Mentoring</u> , Center for Teaching Excellence, Texas A&M University, Competency 5.		
May 19, 2021*	<u>ADVANCE-STRIDE</u> (The Strategies and Tactics for Recruiting to Improve Diversity and Excellence), Texas A&M University		
Nov 12, 2019*	WE: What's My Bias? Understanding the Impact of Internalized Messages, Women in Engineering- Fall 2019 Faculty Focus, Texas A&M University		
May 1-2, 2019*	<u>Transformational Teaching and Learning Conference "Active and Inclusive</u> <u>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*	Visionary Women: Champions of Peace & Nonviolence, 2019 Women's Research on Women, Texas A&M University, Education & Human Development, Education Leadership Research Center		
March 20, 2010*	Suicida Provention Catekooper Training OPP (Question Persuada Pefer) Student		

March 20, 2019* <u>Suicide Prevention Gatekeeper Training, QPR (Question Persuade Refer)</u>, Student Counseling Service, Division of Student Affairs, Texas A&M University

March 19, 2019*	Digital Playgrounds as Learning Spaces: Leveraging Digital Games and Gaming Approaches for Engagement, 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*	<u>Practice, Practice, Practice: Designing Meaningful In-Class Learning Experiences for</u> <u>Students</u> , 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*	<u>Program Evaluator Candidate Training</u> , ABET (Accreditation Board for Engineering and Technology, Inc.), Baltimore, Maryland, USA
Oct. 17, 2017*	<u>Creating Inclusive Classrooms for LGBTQ+ Students</u> , Center for Teaching Excellence, Texas A&M University
April 18, 2017*	<u>Faculty Feedback – It Matters What you Say</u> , 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*	<u>The Seventh Pedagogy Project</u> , Supporting Transformational Learning, Disciplines Related to Technology-Enabled and Distance Education Programs, Texas A&M University
Nov. 22, 2016*	<u>The Sixth Pedagogy Project</u> , Supporting Transformational Learning, Disciplines Related to Graduate and Professional Programs, Texas A&M University
Oct. 27, 2016*	<u>The Second Pedagogy Project</u> , Supporting Transformational Learning, Disciplines Related to Mathematics and the Physical and Earth Sciences, Texas A&M University
August 4, 2015*	<u>FIT A Basic Guide to Digital Multimedia Production for Teaching and Learning 8-4,</u> Center for Teaching Excellence, Texas A&M University.
July 9, 2015*	<u>Working with Students with Disabilities 7-9</u> , 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* & Feb 23, 2015	<u>ADVANCE-STRIDE</u> (The Strategies and Tactics for Recruiting to Improve Diversity and Excellence)

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Workshop focuses on best practices for faculty searches such as inclusive advertising, 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
- April 6-8, 2014 & Attention Faculty in STEM Disciplines: Do you want to reinvigorate your teaching but
- March 31, 2014* 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
- **February 2013*** <u>Fair Use</u>: Using Copyrighted Material in Your Thesis/Dissertation and Other Research Works - Copyright and Publishing Series, Texas A&M University
- **February 2013*** <u>Creative Commons Licenses</u>: A Prerequisite for Publishing Your Research via Open Access, Texas A&M University
- January 2013* <u>Kick Start Your Teaching</u> Effectiveness and Efficiency, Texas A&M University (During Spring 2013)
- **December 2012*** <u>Writing with P.O.W.E.R!</u> 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 Eclipse Thermal, 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 <u>Summer Practice in Ministry of Environment</u>, Office practice Head Office, Antalya, TURKEY (1 month)
- Summer of 1998 <u>Summer Practice at Dokuz Eylul University</u>, Field practice; Topography, Izmir, TURKEY (2 weeks)
- 2002-2003 Intern at Kaplamin Corrugated Packaging Industry, Izmir, TURKEY (1 year)

B. AFFILIATIONS (5 Affiliations)

- 1. Society of Petroleum Engineers (SPE), since 2004 LINK
- 2. American Chemical Society (ACS), since 2015 LINK
- 3. The Combustion Institute, since 2015 LINK
- 4. American Association of University Professors (AAUP), since 2014 LINK
- 5. Chamber of Turkish Environmental Engineers, since 2002 LINK

C. AWARDS (12 Awards)

- 1. Flotek Industries, Inc. Career Development Professor, 2019 for three years
- 2. Distinguished Member of Society of Petroleum Engineers (SPE), 2018 LINK

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

D. INVITED SPEAKER & PANELIST (27 Invited Talks)

- 1. **Seminar:** How to optimize a miscible EOR flood with minimal environmental impact, *SPE Gulf Coast Section, Reservoir Study Group,* 20 May 2021. LINK.
- 2. Lecture: Can zero emissions be a realistic objective? : Future of Petroleum Engineering, SPE Student Chapter –SPE Ecuador Section, Ecuador, 14 May 2021.
- 3. Lecture: Environmental Impact of Oil and Gas Production- Part 1: Gas Emissions, SPE Student Chapter –University of Belgrade, Serbia, 7 December 2020. LINK
- 4. **Webinar**: Introduction to Thermal Enhanced Oil Recovery Methods, *SPE Student Chapter-Universidad del Noreste (UNE)*, Mexico, 13 November 2020. LINK
- 5. **29 October Republic Day Celebration Speaker**: Ataturk, Me, and Reformed Republic, Texas A&M University, Turkish Student Association, 29 October 2020. <u>LINK</u>
- 6. **Graduate Seminar Speaker**: Who to Blame for Climate Change, *Texas A&M University, Petroleum Engineering Department*, 5 February 2019.
- 7. **Graduate Seminar Speaker**: Contribution of Oil and Gas Industry to Global Warming, *Texas A&M University, Qatar Campus Doha Qatar*, 2 December 2018.
- 8. **Graduate Seminar Speaker**: Factors Affecting Asphaltenes Stability, *Petroleum and Geosystem Engineering Department, UT at Austin,* 26 November 2018.
- 9. Webinar: Factors Affecting Asphaltenes Stability, *Schlumberger Heavy Oil Special Interest Group*, October 19, 2017, Mexico City, Mexico. 55 people were attended.
- 10. Workshop Leader: Enhancing the proper management and treatment of produced water for reinjection purposes, *Unconventional Completions Conference*, September 18-20, 2017, Houston, Texas, USA.
- 11. **Seminar**: The Effectiveness of Microwave Heating for High Asphaltenes Content Oil Reservoirs, 7 April 2017, Chevron Cooperation, Richmond Technology Center, Richmond, California, USA.
- 12. Guest Lecturer: Enhanced Oil Recovery, *PETE 402-Section 502-503: Integrated Asset Development,* 14 March 2017, College Station, Texas.
- 13. **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, USA.

- 15. **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. LINK
- 16. **Graduate Seminar**: Fundamentals of Miscible Flooding, 28 June 2016, Petroleum Engineering Department, Kazan Federal University, Kazan, Russia. <u>LINK</u>
- 17. **Seminar**: Hydrocarbon Extraction from Unconventional Reservoirs, Centro de Investigación en Química Aplicada (CIQA), 4 December 2015 in Saltillo Coahuila, México. <u>LINK</u>
- 18. **Panelist for WE LEAD**: Faculty Insight Luncheon, Texas A&M University, Women in Engineering, 28 October 2015. <u>LINK</u>
- 19. **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.
- 20. **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.
- 21. **Panelist for New Faculty Perspectives**, New Faculty Orientation, the Office of the Dean of Faculties, Texas A&M University, 24 August 2015.
- 22. **Graduate Seminar**: Advanced Recovery Techniques for Unconventional Oil Resources, 28 October 2014, Process Engineering Department, Memorial University of Newfoundland and Labrador, Canada.
- 23. **Undergraduate Seminar**, Reservoir Fluids-Dry Gases, 27 October 2014, Mechanical Engineering Department, Memorial University of Newfoundland and Labrador, Canada.
- 24. **Seminar**: Oil Shale extraction with RF heating, 15 March 2013, SLAC-Stanford National Accelerator Laboratory, Stanford, CA, USA.
- 25. **Seminar**: Oil Shale extraction with RF heating, 15 March 2013, CPI-Communications & Power Industries, Palo Alto, CA, USA.
- 26. **Seminar**: Hydrogen Sulfide problem during steam injection processes, 27 March 2013, Ecopetrol, Bogota, Colombia.
- 27. **Seminar**: Complexity behind field-scale modeling of in-situ combustion, 15 February 2011, Schlumberger, Abingdon, UK.

E. MEDIA COVERAGE (<u>www.hascakir.com/news</u>) (18 Media Coverages)

- 1. Study Interprets Electromagnetic-Wave Penetration, Absorption for Bitumen Reservoir, Journal of Petroleum Technology, SPE-0121-0048-JPT. LINK
- 2. Cleaning up the oil industry's produced water concerns, Texas A&M University Engineering. LINK
- 3. Women in Academia, JPT Making a Difference. LINK
- 4. Berna Hascakir promotes student research engagement through National Science Foundation program. <u>LINK</u>
- 5. Research @Texas A&M, Solid crude oil: Researchers explore how to get clogged wells moving. LINK
- 6. Texas A&M University Engineering News, Solving the solid crude oil problem. LINK
- Journal of Petroleum Technology (JPT), SPE Announces 2018 International Award Recipients, July 06, 2018. <u>LINK</u>
- 8. Catching the Wave, New Technology Magazine, 09/28/2015. LINK
- 9. Undergraduate Research: Find Your Fit!, <u>Honors and Undergraduate Research</u>, Texas A&M University, 09/04/2015. <u>LINK</u>
- 10. Thermal EOR, Control Engineering, Oil & Gas Engineering, 12/23/2014. LINK
- 11. Thermal EOR, <u>Upstream Technology, The bimonthly magazine for oil& gas innovators</u>, Issue 4-2014. LINK
- 12. Exploring new methods of thermal recovery, Phys & Org, Aug. 13, 2014. LINK

- 13. Berna Hascakir explores new methods of thermal recovery, <u>College of Engineering, Texas A&M</u> <u>University</u>, Aug. 12, 2014. <u>LINK</u>
- 14. Research from Middle East Technical University yields new findings on hydrologic engineering, <u>Energy</u> <u>Weekly News</u>, Aug. 27, 2010. <u>LINK</u>
- 15. Study Data from Stanford University Update Knowledge of Oil and Gas Research, <u>Energy Weekly</u> <u>News</u>, Nov. 21, 2008. <u>LINK</u>
- 16. Proposed Extraction Process may have economic and environmental benefits, <u>Science Daily</u>, Sep. 24, 2008. <u>LINK</u>
- 17. New hope for tapping vast domestic reserves of oil shale, Phys & Org, Sep. 22, 2008. LINK
- 18. Researchers Develop Process That Could Result in Higher Yield from Oil Shale, <u>Green Car Congress</u>, Sep. 22, 2008. <u>LINK</u>

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)

Oct 11-14, 2020	SPE ATCE 2020, Houston, TX, USA-Virtual
April 18-22, 2020	SPE Improved Oil Recovery Conference, Tulsa, Oklahoma, USA-Virtual
Mar 18-19, 2020	SPE Canada Unconventional Resources Conference, Calgary, Alberta, CANADA-Virtual
Mar 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 253 rd 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	Western 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	9 th 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 2010	SPE Western Regional Meeting, Anaheim, California, USA
Mar 2009	SPE Western Regional Meeting, San Jose, California, USA
Nov 2006	First World Heavy Oil Conference-WHOC, Beijing, CHINA
Sep 2006	Fourth Mediterranean Clay Meeting, Ankara, TURKEY
June 2006	Bridging Clays, d'Oléron, FRANCE
Nov 2005	6 th National Environmental Engineering Conference, Istanbul, TURKEY
Sep 2005	12 th National Clay Conference, Van, TURKEY
May 2005	15 th international petroleum conference of Turkey, Ankara, TURKEY
April 2005	World Geothermal Congress, Antalya, TURKEY
June 2004	9 th Industrial Contamination Congress, Istanbul, TURKEY

A. PROJECTS/FUNDING (Total excluding start-up 2,773,327.69 USD, Hascakir value excluding start-up 1,568,318.11 USD) (24 funding sources)

- 1. APRA-E, Desalination with Asphaltene Cages, 2022-2025, <u>Award: 3,750,000 USD</u>. Under evaluation
- Ocean Energy Safety Institute 2.0, Submitted to Bureau of Safety and Environmental Enforcement (DOI-BSEE), 2021-2026, <u>Award</u>: 51,697,972 USD. Awarded
- 4. Chemical and Physical Characterization of Heavy Crude Oils before and after Blending with VISRED, Carbon Chain Technologies, <u>Award</u>: **73,293 USD**. <u>Project Duration</u>: Fall 2020-Spring 2021.
- 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. Awarded and then suspended due to COVID19
- Use of Biodegradable and Environmentally Friendly Solvents for EOR of Heavy Oils, Chevron, <u>Award</u>: 50,000 USD. <u>Project Duration</u>: Jan 2020- Dec 2020.
- 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.
- 8. <u>Donation</u>: Carbon Chain Technologies, UK. 41,000 USD.
- Feasibility of Steam Flooding in Edwards County, TX. <u>Sponsor</u>: ECB, LLC. <u>Award</u>: **30,000 USD**. <u>Project</u> <u>Duration</u>: October 2017-March 2018.
- 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.
- 11. 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.
- 12. 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. Asphaltenes Stability Determination, <u>Sponsor</u>: Clariant, PI: Berna Hascakir, <u>Award</u>: **30,000 USD**. <u>Project Duration</u>: March 2017.
- 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</u> <u>LINK</u>
- 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.
- Stephen A. Holditch Faculty Fellow, November 2015-November 2018. <u>1,000 USD/month</u>; 36,000 USD/3 years. <u>Not included in total dollar amount</u>
- 17. 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.
- 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.
- 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</u> <u>Duration</u>: 2014- 2015.

- 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- January 2016.
- 21. <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</u> <u>Duration</u>: January 2015-January 2017.
- Emulsion Control and Prevention for In-Situ Combustion, <u>Sponsor</u>: Pacific Rubiales Energy. <u>Award</u>: 150,000 USD. <u>Project Duration</u>: November 2013-November 2014.
- 23. Donation: Cenovus FCCL Ltd., 99,000 USD, October 2013.
- 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</u> <u>contribution</u>: <u>68,777.5 USD</u> (50 %-34,388.75USD), <u>Project Duration</u>: September 2013- September 2015.
- 25. 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

- 1. Dr. Mukul Bhatia <u>Berg-Hughes Center</u>, <u>Geosciences Texas A&M University</u>, College Station, TX, USA <u>LINK</u>
- 2. Dr. Cesar Ovalles & Ian P. Benson Chevron Corporation, Richmond, California, USA LINK
- 3. Dr. Mike Tice, <u>Geology and Geophysics Department</u>, <u>Texas A&M University</u>, College Station, TX, USA <u>LINK</u>
- 4. Dr. Waruna Kulatilaka, Mechanical Engineering, Texas A&M University, College Station, TX, USA LINK
- 5. Dr. Eric Petersen, Mechanical Engineering, Texas A&M University, College Station, TX, USA LINK
- 6. Dr. Anthony H Knap, <u>Geochemical and Environmental Research Group</u>, <u>Texas A&M University</u>, College Station, TX, USA <u>LINK</u>
- 7. Dr. Claude St Thomas and Dr. Enrique Javier Jimenez, Centro de Investigación en Química Aplicada, Saltillo, Mexico LINK
- 8. Dr. Suresh Pillai, <u>National Center for Electron Beam Research</u>, <u>Texas A&M University</u>, College Station, TX, USA <u>LINK</u>
- 9. 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>
- 10. Dr. Carlos Dengo, <u>Berg-Hughes Center</u>, <u>Geosciences Texas A&M University</u>, College Station, TX, USA <u>LINK</u>
- 11. Dr. Ethan Grossman, <u>Geology and Geophysics Department</u>, <u>Texas A&M University</u>, College Station, TX, USA <u>LINK</u>
- 12. Dr. Ian Donald Gates, <u>Chemical and Petroleum Engineering</u>, <u>University of Calgary</u>, Calgary, AB, Canada <u>LINK</u>
- 13. 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>website can be used to see the quality of the journals we are publishing</u>)

	Number of			
Year	Peer Reviewed	Peer Reviewed Conference		
	Publications	Proceedings	Citation	
2017-2021	18	30	1128	
Till tenure (2012-2017)	15	57	427	
At A&M Total	32	84	1,555	
Before A&M Total	7	20	54	
Total	40	107	1609	

C.1. Patents (2 Patents)

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

C.2. Peer Reviewed Publications (40 Peer Reviewed Publications)

- 1. Seng, L.Y.**, **Hascakir, B.**, Role of Intermolecular Forces on Surfactant-steam Performance Into Heavy Oil Reservoirs, *SPE Journal*, 1-6, SPE-201513-PA. LINK
- 2. Kar, T.*, **Hascakir, B.**, Effect of Clay Type on Emulsion Formation in Steam and Solvent-Steam Flooding, *SPE Journal*, SPE 205363-PA. LINK
- 3. 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>
- 4. 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. LINK
- 5. 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>
- 6. 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>
- 7. Ismail, N.*, **Hascakir, B.**, Impact of Asphaltenes and Clay Interaction on In-Situ Combustion Performance, *Fuel*, 2020, Volume 268-15, 117358. <u>LINK</u>
- 8. 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
- 9. 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. LINK
- 10. 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>
- 11. **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

- 12. 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. <u>LINK</u>
- 13. Ismail, 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. LINK
- 14. Prakoso, 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. <u>LINK</u>
- 15. Kartal O. E.[†], Akin S.[†], **Hascakir, B.**, Karaca H.[†], 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
- 16. 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
- 17. 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. <u>LINK</u>
- 18. 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. LINK
- 19. 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. LINK
- 20. 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
- 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. LINK
- 22. 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
- 23. 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
- 24. Punase, A.*, **Hascakir, B.**, Stability Determination of Asphaltenes through Dielectric Constant Measurements of Polar Oil Fractions, *Energy and Fuels*, 2017, 31(1), 65-77. <u>LINK</u>
- 25. 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
- 26. 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. <u>LINK</u>
- 27. **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. LINK
- 28. Mukhametshina, A.*, Kar, T.*, **Hascakir, B.**, Bitumen Extraction by Expanding Solvent-Steam Assisted Gravity Drainage (ES-SAGD) with Asphaltene Solvents and Non-Solvents, *SPE Journal*, Volume 21, Issue 02, 380-392, 2016, SPE-170013-PA. LINK
- 29. 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>
- 30. Kar, T.*, Mukhametshina, 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

- 31. Kar, T.*, **Hascakir, B.**, The Role of Resins, Asphaltenes, and Water in Water-Oil Emulsion Breaking with Microwave Heating, *Energy and Fuels*, 2015, 29, 3684-3690, <u>LINK</u>
- 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. <u>LINK</u>
- 33. **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. LINK

Before Texas A&M (7 Peer Reviewed Publications)

- 34. **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. <u>LINK</u>
- 35. 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. LINK
- 36. **Hascakir, B.**, Babadagli, 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
- 37. **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
- 38. **Hascakir, B.**, Acar, C., Akin, S.⁺, Microwave Assisted Heavy Oil Production: An Experimental Approach, *Energy and Fuels*, 23(12), 6033-6039, 2009. <u>LINK</u>
- 39. **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. <u>LINK</u>
- 40. **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, SPE Reservoir Evaluation & Engineering. 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 asphaltenes in asphlatenes' 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.
- 8. Coelho, R. *, **Hascakir B.**, Factors Affecting CO2 Trapping Mechanisms and Oil Displacement in Porous Media during CO2 Flooding, 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) (107 Conference Proceedings) Paper links are activated on the first day of the conferences.

Conforance accontance	At A		
Conference acceptance rate	After Tenure	Before Tenure	Before A&M
Tate	(Between 2017-2021)	(Between 2012-2017)	
i. Highly Selective (<30%)	14	6	4
ii.Selective (30-60%)	16	41	4
iii. General (>60%)	0	10	12
TOTAL	30	58	20

Summary Table for conference papers

- Kaishentayev, D.*, Hascakir B., Reuse of Produced Waters Containing High Total Dissolved Solids (TDS) for Fracturing, SPE Annual Technical Conference and Exhibition (ATCE 2020), 21-23 September 2021, Dubai, UAE, SPE-206371-MS. Selected among 2180 abstracts LINK
- Mathews, T.*, Cortes, J. A.*, Hascakir B., Bitumen Recovery by Steam And Solvent Injection Using A Novel Solvent, SPE Annual Technical Conference and Exhibition (ATCE 2020), 21-23 September 2021, Dubai, UAE, SPE-206325-MS. Selected among 2180 abstracts LINK
- 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)
- Morte, M.K.*, Alhafidh, 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. LINK
- 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. LINK
- 6. 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>
- 7. 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. LINK
- 8. 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
- 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. LINK
- 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
- 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. LINK

- 12. 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
- 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. LINK
- 14. 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
- 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
- 16. 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
- 17. 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
- Liao, H. *, Morte, M. *, Bloom, E. **, Huff, G.⁺, Hascakir, B., Controlling Microwave Penetration and Absorption in Heavy Oil Reservoirs, SPE Western Regional Meeting, 22-27 April 2018, Garden Grove, California, USA, SPE-190089-MS. LINK
- 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
- 20. 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
- 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. LINK
- 22. 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
- 23. 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>
- 24. 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. LINK
- 25. **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. LINK
- Ismail, N.B.*, Hascakir, B., Increased Asphaltenes 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. LINK

- 27. 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
- 28. 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
- 29. 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
- 30. **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
- 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
- 32. 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
- 33. Punase, A.*, Demir, A.B.*, Bilgesu, H.⁺, **Hascakir, B.**, Inorganic Content of Asphaltenes Impacts Asphaltenes Stability, *SPE Latin American and Caribbean Petroleum Engineering Conference*, 17-19 May 2017, Buenos Aires, Argentina, SPE-185543-MS. LINK
- 34. **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
- 35. 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
- 36. 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
- 37. **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
- 38. 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
- 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
- 40. Pettengell, K.*, **Hascakir, B.**, Horizontal Water Injection: From Initiation to Evaluation, *New Zealand Petroleum Conference* 2017, 21-23 March, New Plymouth, NEW ZEALAND. LINK
- 41. 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. <u>LINK</u>
- 42. 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
- 43. Prakoso, A.A.*, Punase, A.*, **Hascakir, B.**, Pore Scale Representation of Near Wellbore Damage due to Asphaltene 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. LINK

- 44. 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)
- 45. **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>
- 46. 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
- 47. 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. LINK
- 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
- 49. 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
- 50. 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
- 51. **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. <u>LINK</u>
- 52. 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>
- 53. Punase, A.*, Prakoso, A.A.*, **Hascakir, B.**, The Polarity of Crude Oil Fractions Affects the Asphaltenes Stability, *SPE Western Regional Meeting*, 23-26 May 2016, Anchorage, Alaska, USA, SPE-180423-MS. <u>LINK</u>
- 54. Prakoso, 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. LINK
- 55. 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.
- 56. 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. <u>LINK</u>
- 57. 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
- 58. 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. <u>LINK</u>
- 59. 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

- 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>
- 61. 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
- 62. Aleksandrov, 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. <u>LINK</u>
- 63. 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. <u>LINK</u>
- 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. <u>LINK</u>
- 65. 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. LINK
- 66. 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).
- 67. 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).
- Hascakir, B., Real-Time Tracking of Fracture Propagation during Air Injection as an Alternative Fracturing Fluid, SPE Eastern Regional Meeting, 13-15 October 2015, Morgantown, West Virginia, USA, SPE-177303-MS. LINK
- 69. Ali, M.*, **Hascakir, B.**, Water-Rock Interaction for Eagle Ford, Marcellus, Green River, and Barnett Shale Samples, *SPE Eastern Regional Meeting*, 13-15 October 2015, Morgantown, West Virginia, USA, SPE-177304-MS. LINK
- 70. 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.
- 71. 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.
- 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
- 73. **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
- 74. 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**
- 75. 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

- 76. 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
- 77. **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.
- 78. 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. <u>LINK</u>
- 79. 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
- 80. 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
- 81. 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
- 82. 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
- 83. **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>
- 84. Mukhametshina, A.*, **Hascakir, B.**, Bitumen extraction by expanding solvent-steam assisted gravity drainage (ES-SAGD) with asphaltene solvents and non-solvents, *2014 SPE Heavy Oil Conference*, 10-12 June, 2014, Calgary, Alberta, Canada, SPE 170013-MS. LINK
- 85. 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. <u>LINK</u>
- 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
- 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 Conference Proceedings)

- 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
- 89. 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. <u>LINK</u>
- 90. 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

- 91. **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. LINK
- 92. 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. <u>LINK</u>
- Hascakir, B., Kovscek, A.⁺, Reservoir Simulation of Cyclic Steam Injection Including the Effects of Temperature Induced Wettability Alteration, 2010 SPE Western Regional Meeting, Anaheim, California, USA, 27-29 May 2010, SPE 132608. LINK
- 94. 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. LINK
- 95. **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. <u>LINK</u>
- 96. 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.
- 97. 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.
- 98. **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).
- 99. **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.
- 100. **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.
- 101. **Hascakir, B.**, Dolgen, D.⁺, Evaluation of Treatment Efficiencies of Kaolinite for Various Wastewater Samples, *Bridging Clays*, Ile d'Oléron, FRANCE, June 2006.
- 102. Hascakir, B., Hydraulic Potential of Turkey, *3rd Aegean Energy Symposium*, Mugla, TURKEY, May 2006 (Turkish).
- 103. **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).
- 104. **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).
- 105. **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.
- 106. 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).
- 107. **Hascakir, B.**, Dolgen, D.[†], Akkus, M., Treatability 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 Undergraduate level students, † indicates faculty collaborators, ‡ indicates industry collaborators)

- 1. **Hascakir B.**, CO₂ Trapping Mechanisms in Porous Media, SPE Virtual Symposium: CCUS Management-Achieving Net Zero Carbon and Sustainability Goals, 28-30 September 2021, Virtual [UTC +8].
- 2. Zhang, L. *, **Hascakir B.**, Review of Eagle Ford and Marcellus Formations, Unconventional Resources Technology Conference, 26-28 July 2021, Houston, Texas, USA.
- 3. 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.
- 4. 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.
- 5. 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.

C.6. Citation

i- Google Scholar for citation: LINK

Citations: 1570

<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- <u>Scopus</u>: Author ID: 23984761300: 83 Documents, 57 co-authors, 1,054 total citation by 511 documents LINK

iii- <u>Research Gate</u>: 104 Publications, 7,113 reads, 574 Citations: LINK

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

D. REPORTS

 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. <u>LINK</u>

TEACHING (www.hascakir.com/teaching)

To read comments from students about 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/tsfeIMXjOyo

A. COURSES TAUGHT

A.1. At Texas A&M University, Petroleum Engineering Department, College Station, Texas, USA, <u>Role</u>: 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 use 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

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

	Class			Academic		
Level	Preparation	Communication	Responsiveness	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 – Transport 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	PETE 609 – EOR Methods, Graduate Level (7)	4.40 evaluated by 6 students

Summer	PETE 409 – EOR Methods, Undergraduate Level (2)	4.00 evaluated by 1 student
2020 Summer	ICPE 614 – CO_2 Sequestration, Graduate Level (13)	3.21 evaluated by 11 students
2020 Foll 2010	DETE 401 Undergraduate Desserveb (2)	Net avaluated
Fall 2019 Fall 2019	PETE 491 – Undergraduate Research (2) PETE 314 – Transport Processes in Petroleum	Not evaluated 3.72 evaluated by 58 students
Fall 2019	Production, Undergraduate Level (62)	5.72 evaluated by 58 students
Summer	PETE 609 – EOR Methods, Graduate Level (9)	4.51 evaluated by 9 students
2019		
Summer	PETE 409 – EOR Methods, Undergraduate Level (8)	4.64 evaluated by 8 students
2019		
Spring 2019	PETE 314 – Transport Processes in Petroleum	4.65 evaluated by 50 students
	Production, Undergraduate Level (54)	·
Fall 2018	PETE 609 – EOR Methods, Graduate Level (0)	Not evaluated
Fall 2017	PETE 310 – Reservoir Fluids, Undergraduate Level (62)	4.06 evaluated by 62 students
Summer 2017	PETE 489 – Special Topics; Thermal EOR, Undergraduate	4.88 evaluated by 4 students
	Level (4)	
Summer 2017	PETE 606 – EOR Methods-Thermal Processes, Graduate	4.24 evaluated by 26 students
	Level (26)	
Spring 2017	PETE 489 – Special Topics; EOR Methods, Undergraduate	4.28 evaluated by 10 students
	Level (11)	
Spring 2017	PETE 609 – EOR Methods, Graduate Level (15)	4.17 evaluated by 14 students
	IQUICUT AS TENUIDE TRACK ASSISTANT PROFESSOR (Referred	
Fall 2016	HOUGHT AS TENURE-TRACK ASSISTANT PROFESSOR (Before I	4.03 evaluated by 73 students
	PETE 310 – Reservoir Fluids, Undergraduate Level (80) PETE 489 – Special Topics; EOR Methods, Undergraduate	4.35 evaluated by 6 students
Summer 2016	Level (7)	4.55 evaluated by 6 students
Summer 2016	PETE 609 – EOR Methods, Graduate Level (39)	3.57 evaluated by 27 students
Spring 2016	PETE 485 – Directed Study (1)	Not evaluated
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,	Not evaluated
	spectroscopy, calorimetry, gravimetric measurement	
	methods, Graduate Level (4)	
Fall 2015	PETE 485 – Directed Studies: Combustion,	Not evaluated
	Undergraduate Level (1)	
Fall 2015	PETE 681 – Graduate Seminar (108)	3.91 evaluated by 52 students
Fall 2015	PETE 310 – Reservoir Fluids, Undergraduate Level (94)	4.15 evaluated by 85 students
Summer 2015	PETE 485 – Directed Studies: Reaction Kinetics,	Not evaluated
	Undergraduate Level (2)	
	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	3.71 evaluated by 17 students
	Level (17)	
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

Spring 2014	PETE 485 – Directed Studies: Water/Oil Emulsion, Undergraduate Level (1)	Not evaluated
Spring 2014	PETE 310 – Reservoir Fluids, Undergraduate Level (56)	3.64 evaluated by 50 students
Fall 2013	PETE 685 – Directed Studies: PVT Behavior, Graduate Level (1)	Not evaluated
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, Graduate Level (4)	Not evaluated
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 at https://www.hascakir.com/courses

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

<u>Role</u> : 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, <u>Role</u>: Instructor

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

B. ADVISING/SUPERVISING (<u>www.hascakir.com/people</u>) 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:
- 5. Integration of Experimental & Analytical Approaches, Faculty at Chemical & Process Engineering Technology, Universiti Malaysia Pahang.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. Abinash Barooah**, Spring 2019, Expected Graduation Date: August 2022, <u>Dissertation Topic</u>: Multiphase fluid Flow in porous media, Student at Texas A&M University.
- 11. 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 LINK</u>, **Engineer-Lukoil-Russia**.
- 3. Albina Mukhametshina*, September 2012, Graduated in December 2013, <u>Thesis Title</u>: Reducing the Environmental Impact of Bitumen Extraction with ES-SAGD Process <u>LINK</u>, 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, <u>Thesis Title</u>: 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) <u>LINK</u>, **Postdoctoral Researcher in Reservoir Engineering Research Institute, Palo Alto, California, US**.

- 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 <u>LINK</u>, 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 LINK, PhD Student at Texas A&M University.
- 12. Alwin Ng *, Spring 2018, Graduated in August 2018, <u>Thesis Topic</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 (3</u> 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, <u>Research Topic</u>: 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. 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)

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Name, Starting Degree, Starting Semester, Research Topic
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- 1. Rohit Singh*, Junior, Indian Institute of Technology (IITs), Summer 2019, <u>Research Topic</u>: Surfactant Flooding
- 2. Hasan Alhafidh**, Junior, Summer and Fall 2019, <u>Research Topic</u>: Solvent-Steam Efficiency
- 3. Autumn Roberts**, Junior, Fall 2019, <u>Research Topic</u>: 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. <u>Research Topic</u>: Surfactant-Steam Flooding
- 6. John Siu* (Visiting NSF Scholar from University of Rochester), Sophomore, Summer 2018, <u>Research</u> <u>Topic</u>: In-situ Combustion
- 7. Alwin Ng *, Junior-Honor Student, Spring 2017-Fall 2017, <u>Research Topic</u>: Emulsion Formation Mechanism.
- 8. Hindi Mousa Wael, Junior-Honor Student, Fall 2017, <u>Research Topic</u>: Calculation of reaction kinetics parameters.
- 9. Priscilla Rodriguez Tovar, Junior, Fall 2017, <u>Research Topic</u>: Solvent-Steam Processes.
- 10. Shams Z. Al Bayati, Junior-Honor Student, Fall 2017, <u>Research Topic</u>: 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, <u>Research Topic</u>: Insitu Combustion
- 13. Farooq Muhammad Zia * (Visiting student from TAMU Qatar), Sophomore, Summer 2017, <u>Research</u> <u>Topic</u>: 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, <u>Research Topic</u>: 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, <u>Research Topic</u>: 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, <u>Research Topic</u>: 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, <u>Mentoring Topic</u>: 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, <u>Mentoring Topic</u>: Research on Shales
- 7. Sung Yun Han **, MS, 2012-2013, <u>Mentoring Topic</u>: 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. Xingmao 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

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

- 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
- 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
- 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. <u>LINK</u>
- 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

Encouraging Undergraduate Research: 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).

- 1. **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. <u>LINK</u>
- 2. **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>
- 3. 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. <u>LINK</u>

- 4. Alshaikh, M., Lee, Y.S., <u>Hascakir, B.</u>, 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. LINK
- 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>
- 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>
- Ismail, 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>
- 8. 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. LINK
- 9. Ng, A., <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>
- Ismail, 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>
- 11. 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. LINK
- 12. 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>
- 13. Ismail, N.B., Klock, K., <u>Hascakir, B.</u>, 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>
- 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. <u>LINK</u>
- 15. **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>
- 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>
- 17. 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. LINK
- 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).
- 19. 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.
- 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.

- Kar, T., Yeoh, J., Ovalles, C., Rogel, E., Benson, I.P., <u>Hascakir, B.</u>, 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. <u>LINK</u>
- 22. 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. <u>LINK</u>
- 23. **Morrow, A.**, Mukhametshina, A., Aleksandrov, D., <u>Hascakir, B.</u>, Environmental Impact of Bitumen Extraction with Thermal Recovery, *2014 SPE Heavy Oil Conference*, 10-12 June, 2014, Calgary, Alberta, Canada, SPE 170066-MS. <u>LINK</u>
- 24. Mukhametshina, 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. LINK

Students Awards:

- Texas A&M University Petroleum Engineering Department Student Paper Contest,

- 1. The first place in BS division-Junior section among 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

A. UNIVERSITY and DEPARTMENTAL LEVEL SERVICE

- 1. Advance Administrative Fellow for 2021-2022, sponsored by the College of Engineering, 40,000 USD.
- 2. Faculty Senate to serve on the Committee on the Academic Freedom, Responsibility and Tenure (CAFRT), starting from September 1, 2021.
- 3. Faculty Senate to serve on the Committee on the Honor Council, September 1, 2021-2023.
- 4. Graduate Studies Committee, 2019-Cont.', Petroleum Eng. Department, Texas A&M University.
- 5. Engineering Faculty Advisory Council (EFAC), Sept.-2018-May. 2021 College of Engineering, Texas A&M University. LINK
- 6. ADVANCE Science Scholars, Mentoring Junior Female Faculty in College of Science, Texas A&M University, 2019-2024.
- 7. Multidisciplinary Engineering (MTDE) Faculty Steering Committee, April 2020-June 2020. LINK
- 8. Undergraduate Curriculum Committee, 2016-2020, Petroleum Eng. Department, Texas A&M University.
- 9. Honors Program Coordinator for Petroleum Engineering, 2016-2017, College of Engineering, Texas A&M University, <u>LINK</u>
- 10. Vice Chair, Junior Engineering Faculty Advisory Council (JEFAC), 2015 Sept.-2017 College of Engineering, Texas A&M University. LINK
- 11. 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 more than 350 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, <u>LINK</u>
- 6. Managing Guest Editor for the Thermal EOR Special Issue of *Journal of Petroleum Science and Engineering* by Elsevier BV. <u>LINK</u>
- D. EXTERNAL COMMITTEE SERVICE
- 1. Technical Program Committee for SPE ATCE, SPE Annual Conference and Exhibition, 21-23 September 2021, Dubai, UAE. LINK (275 abstracts reviewed).

- 2. Technical Program Committee for Unconventional Resources Technology Conference Fueled by SPE AAPG and SEG. 26-28 July 2021 Houston, Texas. USA (120 abstracts reviewed). LINK
- 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. <u>LINK</u>
- 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. <u>LINK</u>
- 9. The SPE Faculty Innovative Teaching Award Committee (October 2016-October 2019). LINK
- 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. <u>LINK</u>
- 11. Steering Committee, 2018 SPE/EAGE Tar Mats & Heavy Oil Workshop, 30-31 January 2018, Dubai, United Arab Emirates, <u>LINK</u>
- 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
- 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. <u>LINK</u>
- 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. <u>LINK</u>
- E. REVIEWING/EDITING (Quartile: Q1 means highest values and Q4 lowest values <u>SJR</u>: <u>SCImago</u> <u>Journal Rank</u>,)
- E.1. Journal Review (number of papers reviewed) More than 100 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

E.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. 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
- 5. 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. LINK
- 6. SPE Mentoring Program, 2013-cont.'. LINK
- 7. WITSON to encourage women's education in science and engineering, Summer 2012, LINK