



# CHE NEWSLETTER

SEPTEMBER 2020

# CHE NEWSLETTERS

## Industry Expert Capstone Design Lecture Series: EIA and Process Optimization

ChE Department is known for working closely with local oil and gas industry to enhance students learning experience. In this context, the Department of Chemical Engineering in collaboration with AIChE student chapter annually host a series of Industry Expert Capstone Design Lectures. The series mainly aims at exposing senior design project teams to standard practices in oil and gas industrial sector and to give them insights of real chemical engineer work. In addition, these lectures enlighten the students on major process design topics that helps them to successfully complete their senior design projects.

Issue 11, September 2020

Industry Expert Lecture  
Series  
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Top Peer Reviewer  
Highly Cited ChE  
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First ChE Qatari Female  
TA QU Sponsored in  
NUS Page 7

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# QATAR CHEMICAL COMPANY LTD *A Qatari Share Company*

ACTING AS OPERATOR FOR QATAR CHEMICAL COMPANY II LTD (Q-CHEM II) AND RAS LAFFAN OLEFINS COMPANY LTD (RLOC)



On Wednesday October 23<sup>rd</sup>, 2019 Eng. Ahmed Homssi *Environment Manger of Qatar Chemical Company QChem* delivered a lecture on Environmental Impact Assessments highlighting their importance for industrial facilities. Eng. Homssi explained that EIA is a multiple stage assessment that starts in design stage and continues with start-up, operation until plant decommissioning stage. Powerful tools QChem is using for assessing and analyzing environmental impacts of the ethylene and polyethylene facilities were introduced to students.



**Industry Expert Capstone Design Lecture Series**  
Department of Chemical Engineering

**LNG Process Optimization**  
by Eng. Abdulrahman Alahmad  
Senior Engineer

**QATARGAS**

**Wednesday February 19, 2020**  
8:00 – 9:15 am      11:00 – 12:15 pm  
Female @ C07 – 0138      Male @ BCR – E112

**Abdulrahman Alahmad** is senior engineer in F&D Engineering Department at Qatargas Operation Company Ltd. with responsibility for leading flare minimization & energy efficiency projects and optimization initiatives. He has over 20 years of work experience in oil, gas and LNG fields. Prior to joining Qatargas, he worked as a process engineer at several companies, including Mott-MacDonald Engineering Company and Alforat petroleum company (Shell J.V.) Abdulrahman Alahmad has a Bachelor degree from Chemical and Petroleum Engineering College, Albaath University, Syria.



A second lecture was organized on Wednesday February 19<sup>th</sup>, 2020 where the senior students met Eng. Abdulrahman Alahmed, Senior Process Engineer at QChem who shared his expertise in LNG process optimization schemes and their impact on process operation, safety and energy intensity.

These interactive session granted the students a great opportunity for very enlightening discussions that positively affect their progress in their design projects and motivated them to take a leading role as future chemical Engineers.



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## ChE Professor Dr. Bassim Hameed Receives Multiple Prestigious Awards and Recognitions

Professor Dr. Bassim Hameed who joined the department of Chemical Engineering in 2019 has recently been recognized for his excellence in research.

Professor Dr. Bassim was listed in the 12<sup>th</sup> Edition of Webometrics as a “Highly Cited Researcher (h-index >100)” according to Google Scholar citations public profile. He is the first and only faculty member from Qatar University to be listed in this edition. With this achievement, Dr. Bassim has made it to a list of 4,167 Highly Cited Researchers of all disciplines (as of April 2020) around the world.



RANKING WEB OF UNIVERSITIES				
RANK	RESEARCHER	ORGANIZATION	H INDEX	CITATIONS
4114	<a href="#">Lena Claesson Welsh</a>	Uppsala University	100	40016
4115	<a href="#">Dionysios D. Dionysiou</a>	University of Cincinnati	100	39876
4116	<a href="#">P.F. Fox</a>	University College Dublin	100	39736
4117	<a href="#">Ilpo Huhtaniemi</a>	Imperial College London	100	39690
4118	<a href="#">Kwok Kin Wong</a>		100	39529
4119	<a href="#">Bassim H. Hameed</a>	Qatar University	100	39352
4120	<a href="#">Peter Hersey</a>	University of Sydney	100	39199
4121	<a href="#">David Nieman</a>	Appalachian State University	100	38417
4122	<a href="#">Barbara D. Boyan</a>	Virginia Commonwealth University	100	38245
4123	<a href="#">Gleb Sukhorukov</a>	Queen Mary University of London	100	38187
4124	<a href="#">Thomas F. Cash</a>	Old Dominion University	100	37892
4125	<a href="#">Yijay Pande</a>	Stanford University	100	37854
4126	<a href="#">Emanuele Bonamente</a>	University of Perugia	100	37847
4127	<a href="#">Samir Mitraoetri</a>	Harvard University; Wyss Institute; UC Santa Barbara; MIT	100	37748



### Bassim H. Hameed

Web of Science ResearcherID<sup>®</sup>  
C-1270-2009

🏆 Highly cited   
 👤 Top peer reviewer

Professor - Department of Chemical Engineering, Qatar University, QU

PUBLICATIONS	TOTAL TIMES CITED	H-INDEX	VERIFIED REVIEWS	VERIFIED EDITOR RECORDS
280	24,354	83 <sup>®</sup>	203	1



Proudly, Dr. Bassim was also named the ‘Highly Cited Researcher’ for the year 2019 by the Web of Science Group. He earned this distinction for his significant influence through the publication of multiple papers, for being highly cited by his peers over the last decade and for ranking in the top 1% by citations for field and year in Web of Science. Dr. Bassim was given the title of “Highly Cited Researcher” in the field of engineering for six consecutive years (2014–2019).



Professor Dr. Bassim achievements continue with Publons global reviewer database announcing that he secured his place among the top 1% of reviewers in Cross-Field and in Chemistry. This award is part of the Global Peer Review Awards, which honor the elite contributions to scholarly peer review and editorial pursuits internationally.

Dr. Bassim great achievements were highly recognized by local media. Qatar University and the Department of Chemical Engineering in particular is very proud to have such a distinguished research leader in our team. Congratulations to Dr. Bassim we wish you continuous success!



# QU faculty member named 'Highly Cited Researcher '19'

Prof Dr Bassim Hamid Hammadi, a Qatar University (QU) faculty member from the College of Engineering, has been named 'Highly Cited Researcher' for the year 2019 by the Web of Science Group.

Prof Hammadi earned this distinction for his significant influence through the publication of multiple papers, for being highly cited by his peers over the last decade and also ranking in the top 1% by citations for field and year in Web of Science.

According to Clarivate Analytics, of which Web of Science Group is a part of, "In 2019, fewer than 6,300, or 0.1%, of the world's researchers, across 21 research fields, have earned this exclusive distinction."



Prof Hammadi named 'Highly Cited Researcher 2019' by Web of Science Group.

This is not the first time Prof Hammadi received such international recognition. He has been given the title of Highly Cited Researcher in the field of engineering for six consecutive years (2014-2019).

In addition, he was listed as one of the Most Cited Re-

searchers in 2016 for chemical engineering, and environmental science and engineering by the Shanghai Global Rankings of Academic Subjects. Prof Hammadi successfully supervised the works of five post-doctoral fellows, 22 PhD and 26 MSc students, and more than 70 final year research projects to completion.

He achieved a milestone of 21 research grants as a lead principal investigator. To date, he has published more than 280 articles in ISI-indexed journals, and more than 100 articles in other international and national journals and proceedings. According to Google Scholar, his total number of received citations is more than 37,000, and he has an author h-index of 97 and i-10 index of 273.



# GULF TIMES

Gulf Times | 7  
Monday, December 2, 2019



## QU College of Engineering faculty member named as Highly Cited Researcher 2019

THE PENINSULA  
DOHA

Professor Dr. Bassim Hamid Hammadi (pictured), a Qatar University (QU) faculty member from the College of Engineering is named 'Highly Cited Researcher' for the year 2019 by the Web of Science Group.

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MONDAY 2 DECEMBER 2019 | The Peninsula



## Scholarship at National University of Singapore (NUS)

Eng. Janaa Alnaemi is a national graduate from the department of Chemical Engineering. She joined the department as a teaching assistant on August 2019. As part of her academic career development plan, she has been sponsored by QU to pursue a Master's degree in Chemical Engineering at the prestigious National University of Singapore (NUS). With that, Eng. Janaa is officially the first Qatari female faculty member in the Department of Chemical Engineering to secure QU scholarship for graduate studies abroad.

Eng. Janaa officially started at the top ranked University of Singapore in Spring 2020. She is enjoying the experience so far. According to her, the NUS faculty have been very welcoming and the students there are very eager to learn which creates a competitive environment that motivates her to work harder on her courses.

Eng. Janaa is interested in process optimization and simulation research and is currently locally supervised by Dr. Essa Al Musleh from QU ChE department.

We wish her the best of luck in her academic journey!



## Scholarship





# The Annual Gathering: Pizza with Chemical Engineering Faculty!



**PIZZA**  
**WITH CHEMICAL ENGINEERING FACULTY**

Come and see Chem Eng & What it is all about!

AICHE Student Chapter Welcome & Launch Chem-E Car Competition

Department Activities & How you can be an active member of the family

**Male Chem Eng**  
Wednesday, Sep18<sup>th</sup>  
12:30 – 1:30 pm  
Room G122

**Female Chem Eng**  
Wednesday, Sep25<sup>th</sup>  
12:30 – 1:30 pm  
Room C07 – 149

It is a ChE department tradition to get together at the beginning of each academic year. Students, faculty and staff members join in for a light Pizza brunch where they get to know each other and extend their best wishes for a fruitful academic year.

This annual event was organized by the Department of Chemical Engineering in collaboration with the QU AICHE Student Chapter on September 18<sup>th</sup> and 25<sup>th</sup>, 2019 for male and female students respectively. The event featured a brief opening speech by the HoD, Prof. Majeda Khraisheh who welcomed the students, faculty and staff members to a new academic year in the Department of Chemical Engineering. The speech included a short presentation introducing ChE program.





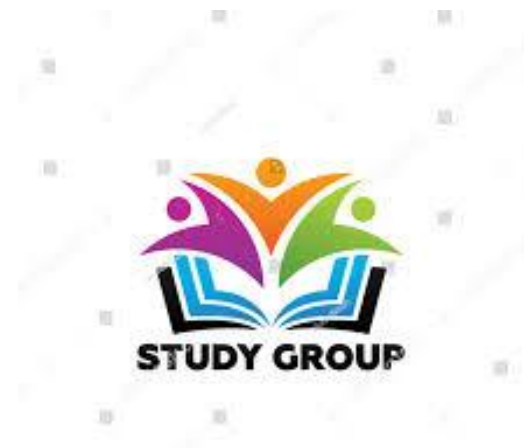
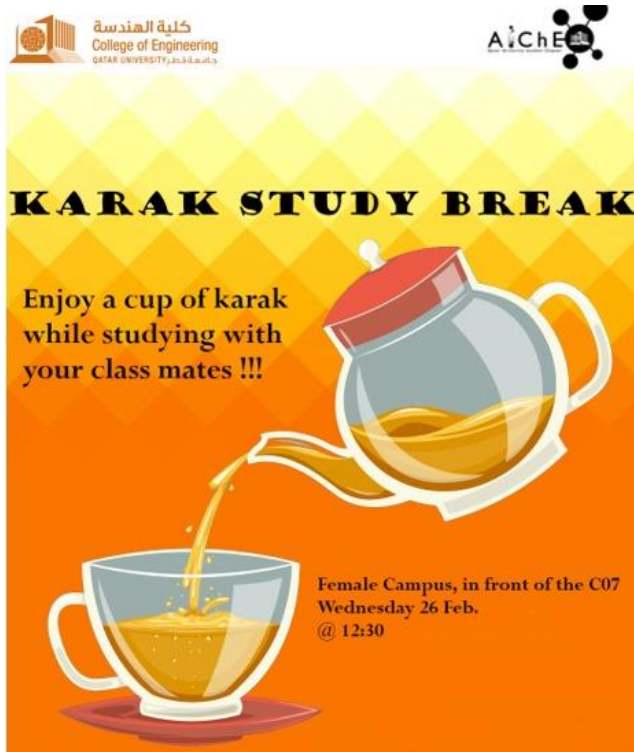
QU AIChE student chapter takes lead in hosting this event. The chapter officers gave a presentation introducing the chapter goals and the list of planned student activities for this year including the famous ChemE Car annual competition. The event included fun ice breaking games such as “quick draw” guessing game where students and faculty members played together while enjoying the yummy pieces of pizza!



## AIChE Activity: Karak Study Break

Extending support to ChE students during midterm exams, QU AIChE Student Chapter invited ChE students to a Karak Study Break, where students can sit and study together while enjoying a hot cup of Karak as a courtesy from the student chapter.

This service was extended to students during midterm exams period. The aim of Karak Study Break was to encourage students to study together and benefit from each other's knowledge.



## ChE Winning Teams Honored in QU CENG Virtual Closing Ceremony of CENG Senior Design Contest 2020



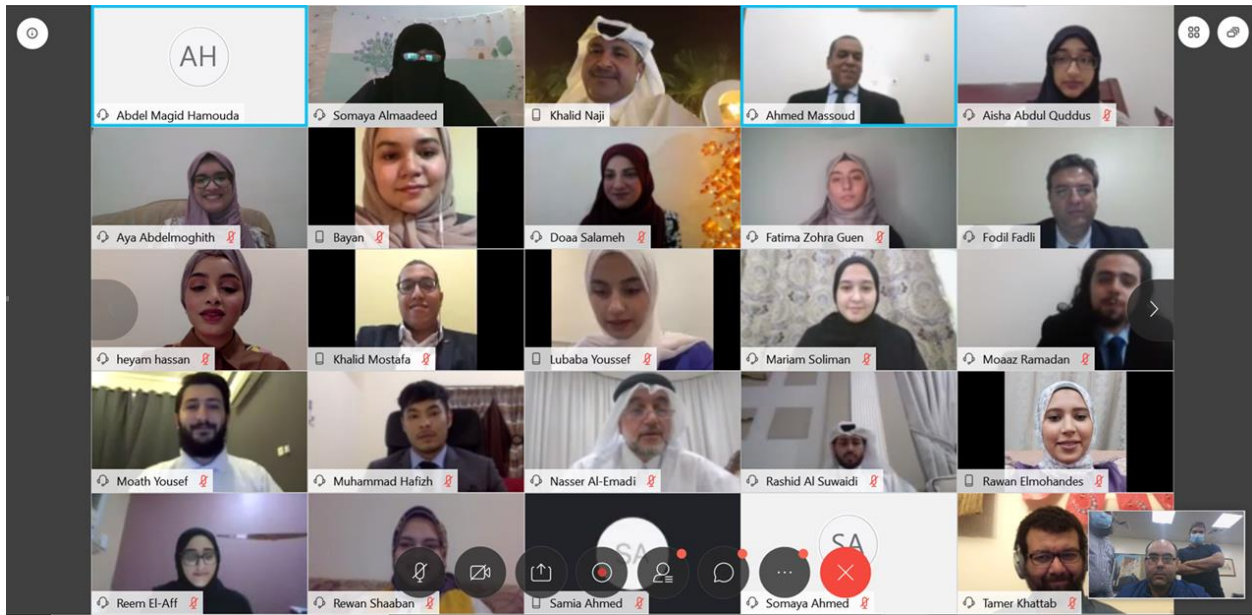
May 10, 2020

QU College of Engineering CENG organized virtual closing ceremony for senior design contest 2020 on WebEx platform. The successful event was supported by Qatar Petrochemical Company QAPCO and was widely attended over 400 attendees. The event aimed at honoring CENG students who won the Senior Design Contest of 2020.

Our graduates Aisha Abdul Quddus, Fatima Zohra Guen and Raafat Alenany, representatives of the first, second and third place winning teams respectively showcased a brief summary of their winning design project in the presence of CENG dean Dr. Khalid Naji, associate deans, department heads, faculty and students. The showcases were excellently prepared and showed with confidence that reflects the quality of student learning in ChE department and student hard work and dedication.

Congratulations to our winning teams. We wish them all the brightest future!





SDP Contest Winners - 2019/2020	Project Title	Student name
First Place	Design of Formaldehyde Production Plant	Somaya Ahmed
		Reem Elaf
		Mariam Soliman
		Aisha Abdul Quddus
Second Place	Design of Formaldehyde Production Plant	Amera Abdelbar
		Zainab Elkahlout
		Fatima Zohra Guen
		Ameneh Saedi
Third Place	Design of Acetic Acid Production Plant	Abdulaziz Al Amri
		Hamad Al-Harami
		Abdulrahman Al-Selmi
		Raafat Alenany
		Mustafa Alisawi



## ChE Graduates Awarded QNRF REMP Grants



QNRF has recently launched the Researchers Exchange and Mobility Program (REMP). The purpose of this grant is to support graduate students and employees in gaining the knowledge and skills necessary to build research collaborations to spur strong economic growth. REMP also focuses on encouraging graduate students to tackle and overcome the global challenges confronting the sciences. The program encourages partnerships by providing rewarding experiences to applicants. During the program, applicants will undertake a research experience opportunity abroad.

Two ChE graduates were successfully awarded REMP grant to undertake research experience in top class universities in Australia: Eng. Mona Gulied and Eng. Tasneem Syedahmed.

Eng. Mona Gulied completed her MSc degree in Environmental Engineer in 2019 and a BSc in Chemical Engineering in 2016 from QU ChE department. She is currently working as a research assistant in QU Centre for Advanced Material (CAM). She will pursue her research training in the University of Technology Sydney to support her research on “Fertilizer Drawn Forward Osmosis Desalination using Seawater for Qatar’s Water and Food Security”.

Eng. Tasneem Syedahmed received a BSc in Chemical Engineering from QU ChE in 2018. She will be joining the University of Sydney to gain expertise and enhance her research on “Electrochemical Lithium Capturing System”.

Congratulations to Eng.(s) Mona and Tasneem! we wish them a successful experience and great advancements in their research!



REMP-Award Details				
Local Submitting Institution	Monthly Stipend	Travel	Duration	Two cycles per year
Vetting of Applications	\$3000	One Economy Return Ticket	Up to 4 Months for Employee and Graduate student	Trainings occurring at least 4 months after the submission deadline



# ChE Graduates Successfully Completed Master’s Degree in Environmental Engineering



ChE graduates Eng. Mohamed Shamlooh and Eng. Reem Jalab have successfully passed their environmental engineering master thesis defense on Spring 2020. Due to the unfortunate spread of COVID19 pandemic and the health measures and precautions instructed by local authorities, their defense sessions were conducted using online platforms. Their research work was supervised by a team of faculty members from QU Gas Processing Centre (GPC).

Eng. Mohamed Shamlooh submitted a thesis on “Development of Polymeric Crosslinkable Formulations for Conformance Control in Oil and Gas Reservoirs”, supervised by Prof. Ibnelwlaeed Hussein, Upstream Research Professor and and co-supervised by Dr. Mustafa Nasser, Associate Research Proffessor. The external examiner, Dr. João B. P. Soares, Editor-in-Chief of The Canadian Journal of Chemical Engineering and Professor in the University of Alberta, acknowledged Mohamed’s outstanding defense. Dr. Soares rated his thesis among the top 5% theses he participated in in his long years’ experience with graduate studies. Dr. Soares stated the Mohamed’s work qualifies for a PhD degree. The outstanding research resulted great outcomes: filling 2 US patents, 5 journal papers, and 2 conference papers.

On April 2020, Eng. Reem Jalab successfully defended her thesis on “Pilot Scale Investigation of Osmotic Concentration for Reducing Wastewater Injection Volumes in Qatari Gas Fields” supervised by Dr. Mustaf Nasser , Associate Research Professor at QU GPC. Eng. Reem spend the past two years working dedicatedly under the close supervision of Dr. Nasser and a consultant from the UK to cost modeling her process. Eng. Reem shares with ChE newsletter that she dedicates her success to the excellent supervision of Dr. Nasser and his team during two years. Her excellent work received positive feedback from the examining committee and attendees. The Department of Chemical Engineering congratulates Eng.(s) Mohamed and Reem on the MSc award and wishes them the best!



## ChE Graduate and Former Department Member Obtained a PhD in Sustainable Energy

ChE graduate and former teaching assistant Ahmed Al Nouss has recently been awarded a PhD degree in Sustainable Energy for Hamad Bin Khalifa University HBKU in Qatar. Dr. Ahmed Al Nouss obtained his BSc in Chemical Engineering from Qatar University in 2010 and MSc in the Same field from Texas A&M University in Qatar in 2013. Dr. Ahmed received the prestigious QNRF Graduate Student Research Award GSRA in support to his PhD research on “Optimum Utilization of Biomass for the Production of Power and Fuel Using Gasification”. Dr. Al Nouss was also awarded the outstanding ORYX GTL Student Award in recognition of his research contribution into advancing local research and scholarly work in the state of Qatar. Dr. Ahmed Al Nouss research focus is on process modeling, optimization, and renewable energy. He has more than 27 peer reviewed published journal papers in this research area.



Dr. Ahmed Al Nouss dedicatedly served the department of Chemical Engineering during his employment as a TA in the department between 2010 – 2019. He was a great asset to both faculty and students. Currently Dr. Ahmed is working as a Process Engineer at Qatar Gas Operating Company and is continuing to make recognizable achievements.

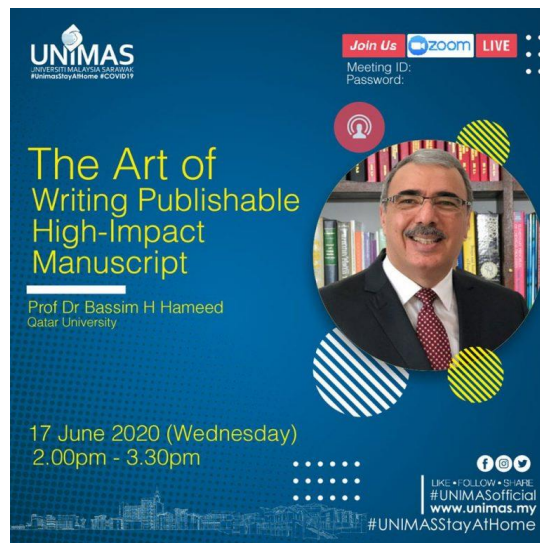
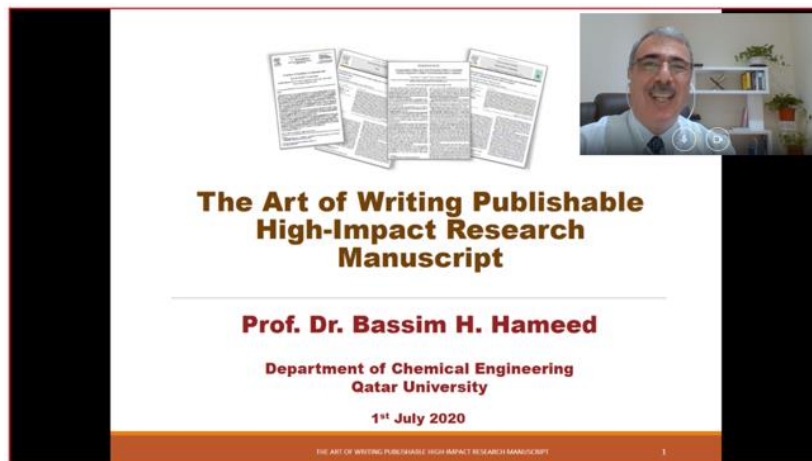


ChE family sends the warmest congratulations to Dr. Ahemed on his PhD. We are very proud of him!





## Webinar on the Art of Writing Publishable High-Impact Research Manuscript



Professor Dr. Bassim H. Hameed shared his expertise in writing high impact manuscript through a successful Webinar titled “The Art of Writing Publishable High-Impact Research Manuscript”. The webinar was conducted twice: First, on July 1<sup>st</sup>, 2020 for the faculty of the Universiti Teknologi PETRONAS (UTP). This first offering was organized by the Centre for Excellence in Teaching and Learning (CETaL), Universiti Teknologi PETRONAS (UTP). The Faculty of Engineering, Universiti Malaysia Sarawak, (UNIMAS), organized the second offering of the webinar on June 17<sup>th</sup>, 2020. The webinar was attended by 62 participants from UNIMAS engineering faculty.



## Promotion to Associate Professor Rank

Proud of his great work and dedication, the chemical engineering family offers the warmest congratulations to Dr. Rahul Bhosale for his promotion to the rank of Associate Professor. We wish Dr. Rahul continued success in his career. Dr. Rahul Bhosale joined the Department of Chemical Engineering as an Assistant professor on September 2013. He received his B. S. degree in Chemical Engineering from University of Mumbai (2006), M. S. degree in Chemical Engineering from Institute of Chemical Technology, University of Mumbai (2008), and Ph. D. degree in Chemical and Biological Engineering from South Dakota School of Mines and Technology, SD, USA (2012). Before joining Qatar University, he worked for one year as a postdoctoral research scientist at Solar Technology Laboratory, Paul Scherrer Institute, Switzerland. His research focus is Solar Thermal Processes, Solar Desalination, Alternative Energy, CO<sub>2</sub> Capture and Utilization, Catalysis, Material Synthesis and Applications, Computational Thermodynamics, Advanced Oxidation, and others.



# *Congratulations!*



## ChE Faculty and TA Receives Recognition in CENG End of Year Event 2019 -2020

College of Engineering CENG end of the year celebration event took place virtually on WebEx platform on May 27<sup>th</sup>, 2020. The dean of the College of Engineering, Dr. Khalid Najj, started the event with an opening speech highlighting CENG achievements of this year. The dean thanked all CENG members for their great roles and dedication especially during COVID19 pandemic period and the corresponding shift to online teaching mode. During the event, the Head of ChE Department Dr. Majeda Khraisheh thanked all ChE department members for their excellent work and support to the department. The HoD recognized ChE faculty member Dr. Mohammed Ali Salah Saad and teaching assistant Eng. Hesan El Faki for their dedicated work and services to ChE department.



### RECOGNITION



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DEPARTMENT OF  
CHEMICAL  
ENGINEERING

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