Zaman, Sharif Fakhruz
Associate Professor, Department of Chemical and Materials Engineering, King Abdulaziz University

Education

Degree	*Field of Study*	*Institution*	*Year*
PhD	Chemical Engineering	University of British Columbia (UBC), Vancouver, Canada.	2010
MS	Chemical Engineering	King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, KSA.	2004
BS	Chemical Engineering	Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.	1999

Academic Experience

From	*To*	*Institution*	*Rank*	*Title*	*Full or Part Time*
2010	2011	University of British Columbia	Post Doc	Dr.	Full Time
2011	2016	King Abdulaziz University	Assist. Prof.	Dr.	Full Time
2016	Till now	King Abdulaziz University	Associate. Prof.	Dr.	Full Time

Non Academic Industrial Experience *(including Consultations)*

From	*To*	*Company/Entity*	*Title*	*Position Description*	*Full or Part Time*
None					

Funded Research Projects and Patents from the Past two Years

1. Principle Investigator "*Investigation of transition metal promoted high surface area Mo_2N catalyst for Fischer Tropsch Olefin (FTO) Synthesis*." KAU research Group fund, May 2015
2. Co Investigator "*Investigation of Dry Reforming of Methane over Pd Promoted Ni/CeZrO_x Catalysts.*" KAU research DSR fund, May 2017.
3. Principle Investigator "*A novel catalyst for dimethyl ether synthesis from methanol" KAU Fund for Patent, 2017.*
4. Co- Investigator "*A novel catalyst for formaldehyde synthesis from methanol" KAU Fund for patent, 2017.*
5. US Patent: *Partial oxidation of methanol to produce hydrogen with low selectivity of carbon mono oxide, US Patent No : 15/394,738.*
6. US Patent: *Partial oxidation of methanol to produce dimethyl ether, US Patent No : 15/468,624.*

Certifications and Professional Registrations

None

Current Membership in Professional Societies and Organizations

	Society/organization	*Rank*	*Member Since*
1.	Institution of Engineers, Bangladesh	Associate member	2003
2.	Bulgarian catalysis Club	Member	2014

Honors and Awards

1. Young Scientist award of ICC (International Congress of Catalysis), Seoul, Korea, 2008.

2.	University scholarship from 1995-1999 (BUET undergrauatescholarship)
3.	KFUPM graduate Scholarship for MS in Chemical Engineering (2002-2004)
4	UBC international graduate student scholarship for PhD in Chemical Engineering.(2004-2010).

Institutional and Professional Services *(administration, committees, units, etc.)*	
1.	Chemical and Materials Engineering Department, King Abdulaziz University, Curriculum Committee member.
2.	PhD comprehensive exam coordinator, Chemical and Materials Engineering Department, King Abdulaziz University.

Principal Publications/Presentations from the Past five Years	
1.	Seetharamulu Podila, **Sharif F. Zaman**, Hafedh Driss,, Abdulrahim A. AlZahrani, Muhammad A. Daous, Lachezar A. Petrov, *High performance of bulk Mo_2N and Co_3Mo_3N catalysts for hydrogen production from ammonia: Role of citric acid to Mo molar ratio in preparation of high surface area nitride catalysts*, International Journal of Hydrogen Energy, January 2017.
2.	**Sharif F. Zaman**, Nagaraju Pasupulety, Abdulrahim A Al-Zahrani, Muhammad A Daous, Saad S Al-Shahrani, Hafedh Driss, Lachezar A Petrov, Kevin J Smith, *Carbon monoxide hydrogenation on potassium promoted Mo2N catalysts*; Article in Applied Catalysis A: General 532, December 2016.
3.	Hitoshi Inokawa, Hafedh Driss, Florencio Trovela, Hiroki Miyaoka, Takayuki Ichikawa, **Sharif F. Zaman**, Abdulrahim Al-Zahrani, Yahia Alhamed, Lachezar Petrov, *Catalytic hydrolysis of sodium borohydride on Co catalysts*, International Journal of Energy Research (Wiley), DOI: 10.1002/er.3582, July, 2016.
4.	Bake Habibulla, **Sharif F. Zaman**, Mohammad Daous, Abdulrahim Al-Zahrani, Samiullah Rather, Lachezar Petrov, "*Partial Oxidation of Methanol Over Co_3O_4–CeO_2 Composite System promoted by Nano Structured Iron Particles*" , Comptes rendus de l'Acad´emie bulgare des Sciences, Tome 69, No 8, 2016.
5.	**Sharif F. Zaman**, Dumitru Baleanu, Ivo Petras, *Measurements of Para-xylene Diffusivity in Zeolites and Analyzing Desorption Curves Using The Mittag-Leffler Function*, Fractional Calculus and Applied Analysis 19(2):551-56, March 2016.
6.	Habibullah Bake, **Sharif F. Zaman**, Yahia A. Alhamed, Abdulrahim A. Al-Zahrani, Muhammad A. Daous, Sami Ullah Rather, Hafedh Driss and Lachezar A. Petrov, *Partial oxidation of methanol over Au/CeO_2–ZrO_2 and Au/CeO_2–ZrO_2–TiO_2 catalysts*, RSC Advances, 6(27): 22555, 2016.
7.	Seetharamulu Podila, Hafedh Driss, **Sharif F. Zaman**, Yahia A. Alhameda, Abdulrahim A. AlZahrani, Muhammad A. Daous, Lachezar A. Petrov, *Hydrogen Generation by Ammonia Decomposition Using Co/MgO-La_2O_3 catalyst: Influence of support calcination atmosphere*, Journal of Molecular Catalysis A Chemical 414 · January 2016.
8.	Sami-ullah Rather, Aqeel Ahmad Taimoor, Ayyaz Muhammad, Yahia Abobakor Alhamed, **Sharif Fakhruz Zaman**, Arshid Mahmood Ali, *Kinetics of Hydrogen Adsorption on MgH2/CNT Composite*, Materials Research Bulletin 77 · January 2016
9.	**Sharif F. Zaman**, *A DFT study of CO adsorption and dissociation over γ-Mo_2N(111) plane*, Bulgarian Chemical Communications, Volume 47, Special issue C (pp. 125–132) 2015.
10	Nagaraju Pasupulety, Hafedh Driss, **Sharif F. Zaman**, Yahia Abobakor Alhamed, Abdulrahim Ahmed Alzahrani, Muhammad A. Daous, Lachezar Petrov, *Influence of alumina precursor on the physico-chemical properties of V–Sb–P–W/Al_2O_3 catalyst studied in the ammoxidation of propane*, Applied Catalysis A General 512, 2015.
11	**Sharif F. Zaman**, Daous M., Petrov L., Dissociative adsorption of hydrogen on MoP(100) plane. A DFT study, Comptes Rendus de l Académie des Sciences - Series IIC - Chemistry 68(12) · December 2015.

12	Seetharamulu Podila, **Sharif F. Zaman**, Yahia A. Alhamed, Abdulrahim A. Al-Zahrania, Hafedh Driss, Lachezar A. Petrov, *Hydrogen production by ammonia decomposition using high surface area Mo_2N and Co_3Mo_3N catalysts*, Catalysis Science & Technology · September 2015.
13	**Sharif F. Zaman**, Loughlin, Kevin F., Al-Khattaf, Sulaiman S., *Kinetics of Desorption of 1,3-Diisopropylbenzene and 1,3,5-Triisopropylbenzene. 2. Diffusion in FCC Catalyst Particles by Zero Length Column Method*, Industrial & Engineering Chemistry Research 54(16) 2015. (ACS)
14	Yahia Abobakor Alhamed, Sami Ullah Rather, Ahmad Hasan El-Shazly, **Sharif Fakhruz Zaman**, Mohammad Abdulrhaman Daous, Abdulrahim Ahmad Al-Zahrani, *Preparation of activated carbon from fly ash and its application for CO_2 capture*, Korean Journal of Chemical Engineering 32(4) 2015.
15	**Sharif F. Zaman,** Daous M., Petrov L., *DFT study of CO adsorption and dissociation over MoP(100) plane*, Bulletin of Bulgarian Academy of Science, Vol 67, No 8, 2014, page 1083-7.
16	Machado T. J. A., **Zaman S. F**., Baleanu D., "*Fractional order modeling of zero length column desorption response for adsorbents with variable particle size*", Central European Journal of physics, Vol 11. No 6, 2013, Page 881-885.
17	**Sharif F. Zaman**, Daous M., Petrov L., *DFT study of CO adsorption and dissociation over MoP(001) plane*, Bulletin of Bulgarian Academy of Science, Vol 66 No 11, 2013, page 1535-1540.
18	**Sharif F. Zaman** and Kevin Smith "*A review of molybdenum catalysts for synthesis gas conversion*", Catal. Rev. –Sci. Eng., 54 (1) 2012.
	Conference Presentation
1	Seetharamulu Podila, Hafedh Driss, **Sharif F. Zaman**, Abdulrahim A. Al-Zahrania, Lachezar A. Petrov, *Clean hydrogen production by ammonia decomposition using Co catalyst supported on Mg mixed system*, KEY NOTE SPEECH by Professor L Petrov, Asia pacific Congress on catalysis (APCAT-7), 17-21 January 2017, Mumbai, India..
2	**Sharif F Zaman, Invited lecture and also a Session Chair**. Lecture on "*Influence of Citric Acid to Molybdenum Molar Ratio on the structure and catalytic Activity of Molybdenum and Cobalt Molybdenum Nitride Catalysts*, International Conference on Gas Oil Petroleum and Energy, Las Vegas, USA, 14-16 November, 2016.
3	**Sharif F. Zaman**, Nagaraju Pasupulety, Yahia A. Alhamed, Mohammad A. Daous , Abdulrahim A. Al-Zahrani, Kevin J. Smith, Lachezar A. Petrov, *Studies of Potassium Promoted Molybdenum Nitride Catalysts for CO Hydrogenation*, International Catalytic Congress(ICC), 3-8 July, Beijing 2016.
4	Seetharamulu Podila, **Sharif F. Zaman**, Yahia A. Alhamed, Abdulrahim A. Al-Zahrania, Hafedh Driss, Lachezar A. Petrov, *Preparation of high surface area molybdenum nitride and cobalt molybdenum nitride catalysts: Influence of citric acid to Mo molar ratio on hydrogen production efficiency via ammonia decomposition*, International Catalytic Congress (ICC), 3-8July, Beijing 2016.
5	**Sharif F. Zaman**, Bake Aibibula, Abdulraheem Al-Zahrani, Yahia A. Alhamed, L. Petrov, *Hydrogen Production by partial oxidation of methanol over Au/CeO_2-ZrO_2 and Au/CeO_2-ZrO_2-TiO_2 catalysts*, 1st International conference of applied chemistry – ICAC-2015, 18-19 November, Jeddah Saudi Arabia.
6	Seetharamulu Podila, **Sharif F. Zaman**, Yahia A. Alhamed, Abdulrahim A. Al-Zahrania, Hafedh Driss, Lachezar A. Petrov, *Hydrogen production by ammonia decomposition using high surface area Mo_2N and Co-Mo_2N catalysts*, The Eleventh International Symposium on Heterogeneous Catalysis, 6 – 9 September 2015, Varna, Bulgaria.
7	**Sharif F. Zaman**, Bake Aibibula, Abdulraheem Al-Zahrani, Yahia A. Alhamed, L. Petrov, *Effects of Transition Metal Elements (Fe, Co, Ni, Cu, Zn) on Au/CeO_2-ZrO_2 Catalyst for POM Reaction to Produce Hydrogen*, The Eleventh International Symposium on Heterogeneous Catalysis, 6 – 9 September 2015, Varna, Bulgaria.
8	Sharif F. Zaman, Nagaraju Pasupulety, Yahia A. Alhamed, Abdulrahim A. Al-Zahrania, M. Daous, Hafedh Driss, Lachezar A. Petrov, *Mixed alcohols synthesis from syngas on Mo_2N supported on activated carbon*, The Eleventh International Symposium on Heterogeneous Catalysis, 6 – 9 September 2015, Varna, Bulgaria.

9	Sharif F. Zaman, Yahia Alhamed, Mohammad Daous, Abdulrahim Ahmad Al-Zahrani, Lachezar Petrov *"CO and H_2 dissociation over MoP planes-A DFT Study"*, ICTAC-15 conference, UCL, London UK, June 2014.

Chapter in a Book: Chapter 20 "A study of synthesis gas conversion to methane and methanol over Mo_6P_3 cluster using density functional theory", in *"Industrial application of molecular simulations"*, Taylor and Francis, Publication date, November 2011.

Chapter in a Book: Chapter 2, "Advanced Materials for Gene Delivery", In Advanced Materials Research Vol. 995 (2014) pp 29-47.

Recent Professional Development Activities *(Workshops, training, etc.)*	
1.	ABET Program Assessment Workshop, ABET Professional Services, King Abdulaziz University, Jeddah, Saudi Arabia, 2011.