**Bing Hou**

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**Professional Employment**

*Professor*,College of Petroleum Engineering, China University of Petroleum at Beijing (2018.07-present)

*Associate Professor*,China University of Petroleum at Beijing (2013.06 - 2018.07)

*Assistant Professor*,China University of Petroleum at Beijing (2009.07 - 2013.06)

*Visiting Scholar*, University of Oklahoma (2010.04 - 2011.04)

**Education**

**Ph.D.** Petroleum Engineering China University of Petroleum, China 2009

**M.S.** Oil-Gas Drilling Engineering China University of Petroleum, China 2006

**B.S.** Mechanical Engineering Liaoning Shihua University, China 2002

**Areas of Research**

Petroleum Engineering Rock Mechanics; Hydraulic Fracturing; Geostress field calculation and wellbore stability; Fracture network and hydraulic fracturing analysis; Geomechanics and high efficient development in unconventional reservoir

**Research Projects (16: 7 completed, 9 in progress)**

[1] Vertical Propagation Behavior of Hydraulic Fractures in Coal Measure Strata for Coproduction of Coalbed Methane and Tight Gas, National Natural Science Foundation of China (NSFC), PI: 100% credit, 600,000 RMB (~85,000 USD) total; 2019-2022 **(active)**

[2] Non-planar propagation mechanism for hydraulic fracturing in highly deviated wellbore in deep fractured reservoir, National Natural Science Foundation of China (NSFC), PI: 100% credit, 700,000 RMB (~100,000 USD) total; 2016-2019 **(active)**

[3] Non-Planar propagation of hydraulic fracture in transition zones of coal measure strata，- International Exchanges of The Royal Society, 2016-2019 **(active),** Co-Applicant,

[4] Study on Mechanical Mechanism of Lost Circulation Control for Stress Sensitive and Naturally Fractured Deep Formation, National Natural Science Foundation of China (NSFC), PI: 100% credit, 250,000 RMB (~47,000 USD) total; 2013-2015 (**completed**)

[5] Integrated Evaluation Method of Geology-Drilling & Completion-Fracturing in Deep Tight Formations, PetroChina Innovation Foundation, 200,000 RMB (~28,500 USD) total; 2018-2020 (**active**)

[6] Interlayer Fracturing Mechanism of Hydraulic Fractures in Coal Measure Strata, A sub-project of the 13th Five Year National R&D Program, PI: 100% credit, 2.50million RMB (~357,000 USD) total;2016-2020 (**active**)

[7] Investigation of Fracture Propagation Mechanism of Staged Acid Fracturing in Carbonate Reservoirs, State Key Laboratory of Petroleum Resources and Prospecting, PI: 100% credit, 180,000 RMB (~25,700 USD) total; 2017-2019 (**completed**)

[8] Study on the Formation Mechanism of Hydraulic Fractures in Sand-Coal Interbedded Formations, Education Research Program of China University of Petroleum at Beijing, PI: 100% credit, 150,000 RMB (~21,000 USD) total; 2015-2017 **(completed)**

[9] Evaluation Method of Fracture Network Scale Controlled by Induced Stress Field in the Shale Gas Reservoir, Beijing Youth Elite Project, PI: 100% credit, 200,000 RMB (~28,500 USD) total; 2013-2015 (**completed**)

[10] Study on Fracture Network Connection Mechanism of Non-Plane Hydraulic Fracturing in Long Horizontal Shale Gas Wells, Education Research Program of China University of Petroleum at Beijing, PI: 100% credit, 75,000 RMB (~10,000 USD) total; 2015-2017 (completed)

[11] Basic Theory and Method for the Safe Construction of Ultra-deep Wells, National Natural Science Foundation of China, (NSFC), Research Assistant, 2.2 million RMB (~314,000 USD) total; 2018-2021 (active)

[12] Characterization and Prediction of the Nonlinear Geomechanical Behavior of Shale, National Natural Science Foundation of China, (NSFC), Research Assistant,4.0 million RMB (~571,000 USD) total; 2015-2019 (active)

[13] Rock Mechanics for Shale Gas Exploitation, National Natural Science Foundation of China, (NSFC), Research Assistant, 3.0 million RMB (~420,000 USD) total; 2013-2017 (**completed**)

[14] Basic Research on Drilling & Completion of Critical Wells for Oil & Gas, Innovative Research Groups of the National Natural Science Foundation of China, (NSFC), Research Assistant,12.0 million RMB (~1,710,000 USD) total; 2013-2018 (**completed**)

[15] Mechanics of drilling fluid loss to stress-dependent complex formations at graet depth, National Natural Science Foundation of China, (NSFC), Research Assistant, 250,000 RMB (~47,000 USD) total; 2006-2008 (**completed**)

**Classes Taught**

[1] Instructor, Undergraduate Course-Rock Mechanics of Petroleum Engineering (in Chinese), *China University of Petroleum*: Fall 2018

[2] Co-Instructor, Graduate course- Research Progress on Rock Mechanics of Complex Formation Drilling (in Chinese), *China University of Petroleum*: Fall 2018

[3] Co-Instructor, Graduate Course-Advanced Drilling Engineering (in English), *China University of Petroleum*: Spring 2015; Spring 2016; Spring 2018, Spring 2019

[4] Instructor, Undergraduate Course-Rock Mechanics (in Chinese), *China University of Petroleum*: Fall 2012; Fall 2013; Fall 2014

[5] Co-Instructor, Graduate Course-Continuum Mechanics (in Chinese), *China University of Petroleum*: Fall 2012

[6] Teach Assistant, Graduate Course-Continuum Mechanics (in Chinese), *China University of Petroleum*: Fall 2011

**Peer-reviewed Journal Publications (29) - (In English)**

1. R Zhang, B Hou\*, B Zhou, Y Liu, Y Xiao, K ZhangEffect of acid fracturing on carbonate formation in southwest China based on experimental investigations[J]. Journal of Natural Gas Science & Engineering, 2020, 73:1-13.
2. Bing Hou\*, Zhi Chang\*, Weineng Fu, Yeerfulati Muhadasi, Mian Chen. Fracture initiation and propagation in deep shale gas reservoir subject to alternating fluid injection hydraulic fracturing treatment [J]. SPE Journal, 2019, 24(04): 1839-1855.
3. **Bing Hou**, Ruxin Zhang, Mian Chen, et al. Investigation on acid fracturing treatment in limestone formation based on true tri-axial experiment[J]. Fuel, 2019, 235:473-484. （SCI/EI）
4. **Bing Hou\***, Ruxin Zhang\*, Yijin Zeng, Weineng Fu, Yeerfulati Muhadasi, Mian Chen. Analysis of hydraulic fracture initiation and propagation in deep shale formation with high horizontal stress diﬀerence [J]. Journal of Petroleum Science and Engineering, 2018, 170:231-243. （SCI/EI）
5. **Bing Hou**, Ruxin Zhang\*, Peng Tan, Yi Song, Weineng Fu, Zhi Chang, Jiawei Kao, Yeerfulati Muhadasi, Mian Chen. Characteristics of fracture propagation in compact limestone formation by hydraulic fracturing in central Sichuan, China [J]. Journal of Natural Gas Science & Engineering, 2018, 57:122-134.
6. **Bing Hou**, Yijin Zeng, Meng Fan, Dandan Li. Brittleness Evaluation of Shale Based on the Brazilian Splitting Test [J]. Geofluids, 2018, 3602852: 1-11（SCI/EI）
7. Ruxin Zhang, **Bing Hou\***, Peng Tan, Yue Wu, Jie Gao, Xiaofeng Guo. Hydraulic Fracturing Initiation and Near-wellbore Nonplanar Propagation from Horizontal Perforated Boreholes in Tight Formation [J]. Journal of Natural Gas Science & Engineering, 2018, 55:337-349.
8. **Bing Hou**, Ce Diao, Dandan Li. An experimental investigation of geomechanical properties of deep tight gas reservoirs [J]. Journal of Natural Gas Science & Engineering, 2017, 47: 22-33. （SCI/EI）
9. **Bing Hou**, Mian Chen, Cheng Wan, Tengfei Sun. Laboratory Studies of Fracture Geometry in Multistage Hydraulic Fracturing Under Triaxial Stresses [J]. Chemistry and Technology of Fuels and Oils, 2017, 53(2): 219-226. (SCI/EI)
10. **Bing Hou**, Chao Zeng, Dong Chen, Meng Fan, Mian Chen. Prediction of Wellbore Stability in Conglomerate Formation Using Discrete Element Method [J]. Arabian Journal for Science and Engineering, 2017, 42(4): 1609-1619. (SCI/EI)
11. **Bing Hou**, Xiaojin Zheng, Mian Chen, Zhihui Ye, Dong Chen. Parameter simulation and optimization in channel fracturing [J]. Journal of Natural Gas Science And Engineering, 2016, 35: 122-130.（SCI/EI）.（IF2.781）
12. **Bing Hou**, Mian Chen, Wan Cheng, Ce Diao. Investigation of Hydraulic Fracture Networks in Shale Gas Reservoirs with Random Fractures [J]. Arabian Journal for Science And Engineering, 2016, 41(7): 2681-2691. （SCI/EI）.
13. **Bing Hou**, Qingyang Li, Yan Luo. Synthesis and Mechanism of a Novel Organosilicone Used as a Selective Plugging Agent [J]. Journal of Residuals Science & Technology, 2015, 12(3): 149-156. (SCI/EI)
14. **Bing Hou**, Mian Chen, Zhi Meng LI, Yong hui Wang, Ce Diao. Propagation Area Evaluation of Hydraulic Fracture Networks in Shale Gas Reservoirs [J], Petroleum Exploration and Development, 2014, 41(6): 833-838. （SCI/EI）
15. **Bing Hou**, Mian Chen, Ming Liu, Qiquan Xiong. Safe Disposal Technology of Waste Oil-based Drilling Fluids [J]. Journal of the Japan Petroleum Institute, 2013, 56(4): 221-229.（SCI/EI）
16. **Bing Hou**, S. Xie, M. Chen, Y. Jin, H. Deng, and R. S. Wang. The Treatment of Refinery Heavy Oil Sludge [J]. Petroleum Science and Technology, 2013, 31(5): 458-464.（SCI）
17. **Hou Bing**, Chen Mian, Wang Zheng, Yuan Jianbo and Liu Ming. Hydraulic fracture initiation theory for a horizontal well in a coal seam [J], [Petroleum Science](http://link.springer.com/journal/12182), 2013, 10（2）: 219-225. (SCI)
18. **Bing Hou**, Mian Chen, Jianbo Yuan. Optimization and Application of Bit Selection Technology for Improving the Penetration Rate，Research Journal of Applied Sciences, Engineering and Technology, 2014, 8, (2): 179-187.
19. **Bing Hou**, S. XIE, M. CHEN, Y. JIN, H. DENG, AND R. S. WANG. The Treatment of Refinery Heavy Oil Sludge [J]. Petroleum Science and Technology, 2013, 31(5): 458-464. (SCI/EI)
20. **Bing Hou**, K. QIU, M. CHEN, Y. JIN AND K. P. CHEN. The Wellbore Collapse on Sandstone formation during Well Test with Matrix Acidizing Treatment [J]. Petroleum Science and Technology, 2013, 31(3): 237-249. (SCI/EI)
21. **Bing Hou**, Chuan Liang, Hao Deng, Shuixiang Xie，Mian Chen and RONGSHAWANG. Oil Removing Technology of Residues from Waste Oil-based Drilling Fluid Treated by Solid-liquid Separation [J], Journal of Residuals Science & Technology, 2012, 9(4)：143-150. (SCI/EI)
22. **Bing Hou**, Shuixiang Xie, Mian Chen, Chuan Liang, Hao Deng, RONGSHAWANG and Guanquan Liu. Recycling Oily Sludge Pyrolysis Residues as Nano-adsorbents [J]. Journal of Residuals Science & Technology, 2012, 9(3)：95-99. (SCI)
23. Tan Peng, Jin Yan, **Hou Bing**, et al. Experimental investigation on fracture initiation and nonplanar propagation of hydraulic fractures in coal seams [J]. Petroleum Exploration and development, 2017, 44(3): 1-6. (SCI)
24. Peng Tan, Yan Jin, Ke Han, **Bing Hou**, et al. Analysis of hydraulic fracture initiation and vertical propagation behavior in laminated shale formation [J]. Fuel, 2017, 206: 482-493. (SCI)
25. Peng Tan, Yan Jin, Ke Han, **Bing Hou**, et al. Vertical propagation behavior of hydraulic fractures in coal measure strata based on true triaxial experiment [J]. Journal of Petroleum Science and Engineering, 2017, 158: 398-407. (SCI)
26. Tan Peng, Jin Yan, **Hou Bin**g, et al. Experiments and analysis on hydraulic sand fracturing by an improved true tri-axial cell [J]. Journal of Petroleum Science and Engineering, 2017, 158: 766-774. (SCI)
27. Xiaojin Zheng, Mian Chen, **Bing Hou**, [Zhihui Ye,](https://www.sciencedirect.com/science/article/pii/S0920410516306933" \l "!) [Wei Wang,](https://www.sciencedirect.com/science/article/pii/S0920410516306933#!) [Congbin Yin,](https://www.sciencedirect.com/science/article/pii/S0920410516306933#!) [Xingyu Chen](https://www.sciencedirect.com/science/article/pii/S0920410516306933#!). Effect of proppant distribution pattern on fracture conductivity and permeability in channel fracturing [J]. Journal of Petroleum Science & Engineering, 2017, 149:98-106.（SCI）
28. Lichun Jia, Mian Chen, Wei Zhang, Tong Xu, Yu Zhou, **Bing Hou**, Yan Jin. Experimental study and numerical modeling of brittle fracture of carbonate rock under uniaxial compression [J]，Mechanics Research Communications，2013,50：58-62. (SCI/EI)
29. Lichun Jia, Mian Chen, **Bing Hou**, Zhen Sun, Yan Jin. Drilling fluid loss model and loss dynamic behavior of fractured formations. Petroleum Exploration and Development, 2014, 41(1): 105-112.
30. [Yang, Pei](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bYang%2C+Pei%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr), [Chen, Mian](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bChen%2C+Mian%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr), [Jin, Yan](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bJin%2C+Yan%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr), [**Hou Bing**](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bHou%2C+Bing%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr), [Lu, Yunhu](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bLu%2C+Yunhu%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr), [Liang, Chuan](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bLiang%2C+Chuan%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr), [Zhu, Qianqian](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bZhu%2C+Qianqian%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr), [Li, Yawei](http://www.engineeringvillage.com/controller/servlet/Controller?CID=quickSearchCitationFormat&searchWord1=%7bLi%2C+Yawei%7d&section1=AU&database=50177&yearselect=yearrange&sort=yr). Multilayer Pressure Containment Model and its Application in Deep Well Fractured Formation，Rock Mechanics and Rock Engineering, 2013,  46([5](http://link.springer.com/journal/603/46/5/page/1)): 1255-1266. (SCI/EI)

**\*Corresponding author**

**Peer-reviewed Journal Publications (36) - (In Chinese)**

1. **Hou Bing**, Liu Qing, Geng Zhi, Sheng Shifeng. Integrated Geology-Engineering Development Technology for Fractured Tight Oil Reservoirs [J]. Xinjing petroleum Geology, 2018,39(4): 111-115. (In Chinese)
2. **Hou Bing**, Song Zhenyun, JIA Jiangpeng, Su Weidong, Wang Di. Experimental investigation on mechanical properties of tight sandstone under the effect of SC-CO2 [J]. China Offshore Oil and Gas, 2018,30(5): 109-115.(In Chinese)
3. Zhang Ru-xin, **Hou Bing**, Shan Qing-lin, Tan Peng, Wu Yue, Guo Xiao-feng. Parameter optimization of spiral perforations in horizontal well with tight sandstone reservoir [J]. Chinese Journal of Geotechnical Engineering, 2018，40(11): 2143-2147. (In Chinese)
4. Gao Jie, **Hou Bing**, Chen Mian, Fu Weineng, Wu Ye, Zhang Ruxin. Effects of rock strength and interfacial property on fracture initiation and propagation [J]. Journal of Rock Mechanics and Engineering, 2018，37 (S2) : 4108-4114. (In Chinese)
5. **Hou Bing**, Pan Yongjun, Chen Mian, Sang Ning, Zhang Yakun, Han Yannong. Experimental Study on Paleomagnetic of Shale Reservoir Core Stress Direction [J]. Drilling & Poduction Technology, 2017, 40(5): 1-4. (In Chinese)
6. **Hou Bing**, Tan Peng, Chen Mian, Yuan Liang, Xiong Zhen-yu, Xu Chao-lan. Experimental investigation on propagation geometry of hydraulic fracture in compact limestone reservoirs[J]. Chinese Journal of Geotechnical Engineering, 2016，38(02):219-225. (In Chinese)
7. **Hou Bing**, Zhang Ruxin, Diao Ce, Li Liangchuan, Cheng Moji. Experimental Study on Hydraulic Fracture Propagation in H ighly Deviated Wells[J]. China Offshore Oil and Gas, 2016,5(28):85-91. (In Chinese)
8. **Hou Bing**, Jin Yan, Li Song, Zeng Chao. Failure mechanisms of borehole wall rocks in gravel beds with different grain sizes [J]. Natural Gas Industry, 2015, 35 (11): 66-70. (In Chinese)
9. **Hou Bing**, Chen Mian, Tan Peng, Li Dandan. Monitoring of hydraulic fracture network by acoustic emission method in simulated tri-axial fracturing system of shale gas reservoirs [J]. Journal of China University of Petroleum (Edition of Natural Science), 2015, 39(1): 66-71. (In Chinese)
10. **Hou Bing**, Chen Mian, Zhang Baowei, Sang Yu, Cheng Wan, Tan Peng. Propagation of multiple hydraulic fractures in fractured shale reservoir [J]. Chinese Journal of Geotechnical Engineering, 2015, 37 (6): 1041-1046. (In Chinese)
11. **Hou Bing**, Chen Mian, Diao Ce, Li Liangchuan, Cheng Moji. True triaxial experimental study of hydraulic fracture penetrating sand and mud interbedding in deviated wellbore [J]. Science Technology and Engineering, 2015, 15 (26): 54-59. (In Chinese)
12. **Hou Bing**, Cheng Wan, Chen Mian, Tan Peng, Yang Lifeng. Experiments on the non-planar extension of hydraulic fractures in fractured shale gas reservoirs [J]. Natural Gas Industry, 2014, 34 (12): 81-86. (In Chinese)
13. **Hou Bing**, Chen Mian, Cheng Wan, Tan Peng. Fracturing mechanism of shale gas reservoir with variable pump rates [J]. Chinese Journal of Geotechnical Engineering, 2014, 36 (11): 2149-2152. (In Chinese)
14. **Hou Bing**, Chen Mian, Wang Kai, Li Dandan. The key index system of fracability evaluation in gas shale reservoir [J]. Journal of Petrochemical Universities, 2014, 27 (6): 42-49. (In Chinese)
15. **Hou Bing**, Chen Mian, Li Zhimeng, Wang Yonghui, Diao Ce. Propagation area evaluation of hydraulic fracture networks in shale gas reservoirs [J]. Petroleum Exploration and Development,2014,27(6):42-49. (In Chinese)
16. **Hou Bing**, Chen Mian, Zhu Jing. Distribution characteristics evaluation of regional leakage based on fuzzy matter-element [J]. Oil Drilling & Production Technology,2013,35(1):115-117. (In Chinese)
17. **Hou Bing**, Chen Mian, Zhang Bin, Yang Henglin, Hao Hepeng, Cause analysis of lost circulation and plugging method in Paleogene of Kuqa Piedmont structure [J]. Oil Drilling & Production Technology, 2009, 31(4): 40-44. (In Chinese)
18. **Hou Bing**, Chen Mian, Jin Yan, Yang henglin, Liang Hongjun. A method for detemining the In-situ Stresses in multi-compound salt fromation [J]. Natural Gas Industry, 2009, 29 (1): 67-69. (In Chinese)
19. **Hou Bing**, Chen Mian, Jin Yan, Yang henglin,Zhang Guangqing. A method for determining density of drilling fluids used in deep big-thickness salt-bed drilling based on salt rock damage mechanism [J]. A Ct A Petrolei Sinica, 2009,30(5):778-781. (In Chinese)
20. Gao Jie, **Hou Bing**, Tan Peng, Guo Xiaofeng, Chang Zhi, Propagation Mechanism of Hydraulic Fracture In Sand Coal Interbedding [J]. Journal of China Coal Society, 2017, 42 (Supplement 2): 428-433. (In Chinese)
21. Zhang Ruxin, **Hou Bing**, Shan Qinglin, Wang Yajun, Zhang Xiang, Zhou Huabo. Preferred method for perforating parameters using fixed perforation [J]. Drilling & Production Technology, 2017,40(3):38-41. (In Chinese)
22. Ge Fengwei, Chen Mian, Jin Yan, Lu Yunhu, Zhang Fei, **Hou Bing**. Analysis of equivalent stress on casings after casing wear in deep salt-gypsum formation. Journal of China University of Petroleum(Edition of Natural Science) [J], 2013, 37(1): 75-79. (In Chinese)
23. Ma Yue, Chen Mian, Jinyan, **Hou Bing**, Yang Pei. Mechanism of Effect of Ralative Humidity on Creep Behavior of Gypsum Rock [J]. Petroleum Drilling Technology, 2013, 41 (4): 19-22. (In China)
24. Jia Lichun, Chen Mian, Zhang Wei, Zhou Yu, Xu Tong, **Hou Bing**, Jin Yan. Mechanism Analysis of Fractured Well Loss Induced Fractured Sealing. Drilling and Completion Fluids [J], 2013, 30 (5): 85-88. (In Chinese)
25. Li Qinghui, Chen Mian, Jinyan, Fred Wang, **Hou Bing**, Zhang Baowei. Indoor Evaluation Method for Shale Brittleness And Improvement [J]. Chinese Journal of Rock Mechanics and Engineering, 2012, 31(8): 1680-1685. (In Chinese)
26. Chen Mian, Yang Pei, **Hou Bing**, Jinyan, Du Jinlong. Pre-drilling The Study of Stress Sensitivity for Fractured and Matrix Carbonate Rocks before and after Sealing [J]. Journal of Petroleum and Natural Gas, 2012, 34(2):106-120. (In China)
27. Ge Weifeng, Chen Mian, Jinyan, Zhou Xiaohong, **Hou Bing**. Strength analysis of perforated casing in non-uniform geostress field of ultra-deep wells [J]. Journal of Petroleum and Natural Gas, 2012, 34 (8): 123-126. (In China)
28. Yang Pei, Chen Mian, **Hou Bing**, Jinyan. The Study of Stress Sensitivity for Fractured and Matrix Carbonate Rocks before and after Sealing [J]. Petroleum Drilling Technology, 2011, 39(6):31-34. (In China)
29. Meng Shangzhi, **Hou Bing**, Zhang Jian, Tan Peng, Xiong Zhenyu. Experimental research on hudraulic fracture propagation through mixed layer of shale, tight sand and coal seam [J]. Journal of Coal Science, 2016, 41 (1): 221-227. (In Chinese)
30. Zheng Xiaojin, Chen Mian, **Hou Bing**, Jin Yan. Three-dimensional reconstruction of hydraulic fracture in Solidworks [J]. Science Technology and Engineering, 2015, 15 (14): 32-38. (In Chinese)
31. Sang Yu, Yang Shenglai, Zhao Fei, **Hou Bing**. Research on anisotropy and failure characteristics of southern marine shale rock [J]. Drilling & Production Technology, 2015, 38 (02): 71-74+10. (In Chinese)
32. Cheng Wan, Jin Yang, Chen Mian, Zhang Yakun, Diao Ce, **Hou Bing**. Experimental investigation on influence of discontinuities on hydraulic fracture propagation in three-dimensional space [J]. Chinese Journal of Geotechnical Engineering, 2015, 37 (03): 559-563. (In Chinese)
33. Ge Weifeng, Zhang Fei, Chen Mian, Jin Yan, Lu Yunhu, **Hou Bing**. Research on geotress measurement using DRA-Kaiser method in salt-gypsum formation [J]. Chinese Journal of Rock Mechanics and Engineering, 2015, 34 (S1): 3138-3142. (In Chinese)
34. Jia Lichun, Chen Mian, **Hou Bing**, Sun Zhen, Jin Yan. Drilling fluid loss model and loss dynamic behavior in fractured formations [J]. Petroleum Exploration and Development, 2014, 41(01): 95-101. (In Chinese)
35. Cheng Wan, Jin Yan, Chen Mian, **Hou Bing**, Liu Ming, Wang Di. An approach to design fracture spacing in horizontal-well multi-stage fracturing and factors analysis in shale reservoir [J]. Science Technology and Engineering, 2014, 14 (15): 43-46+59. (In Chinese)
36. Liu Zhiyuan, Chen Mian, Jin Yan, Lu Yunhu, **Hou Bing**. The effect of argillaceous interlayers on integrative fracturing of sandstone-mudstone interbedding reservoir with huge thickness [J]. Science Technology and Engineering, 2014, 14 (09): 34-38. (In Chinese)

**Conference Publications (20)**

1. Ruxin Zhang, **Bing Hou**, Yijin Zeng\*, Jian Zhou, Qingyang Li. Investigation on Hydraulic Fracture Initiation and Propagation with LPG Fracturing in Shale Formation based on True Tri-Axial Laboratory Experiments[C] //SPE/IADC Middle East Drilling Technology Conference and Exhibition. Bangkok, Thailand, 27–29 August 2018, SPE/IADC-191107-MS, 2018.
2. Ruxin Zhang, **Bing Hou**, Qinglin Shan, Botao Lin, Yunhu Lu, et al. The Study on Hydraulic Fracture Initiation and Propagation of Coplanar Perforation Technology in the Horizontal Well[C] /IADC/SPE Asia Pacific Drilling Technology Conference and Exhibition. Abu Dhabi, UAE, 29-31 January 2018, SPE/IADC-189374-MS, 2018.
3. Yue Xiao\*, **Bing Hou**, Dandan Li, Zhuojing Li. Study on Loading Rate Sensitivity Test of Shale Mechanical Properties[C]//Asian Rock Mechanics Sympoium Singapore Oct.29 to Nov.3,2018, Asian Rock Mechanics Symposium 2018
4. Ruxin Zhang, **Bing Hou\***, Qinglin Shan, Weineng Fu, Xin Liu Experimental Investigation on Re-fracture Reorientation from the Cased and Perforated Horizontal Well in Tight Formation[C]//Asian Rock Mechanics Singapore UAE, 29-31 January 2018
5. Li, Z.J., **Hou, B.**, Xiao, Y.. Study on mechanism of dynamic fracture propagation induced by long-term water injection of low permeability reservoir. ARMA US Rock Mechanics / Geomechanics Symposium，Seattle, 17-20 June 2018.
6. Chang, Z., **Hou, B.**, Wang, L.Chen, W.G., Muhadasi, Y., Li, Z.J. . Propagation law of hydraulic fracture in coal seam based on element coal cleats model[C]. ARMA US Rock Mechanics / Geomechanics Symposium，Seattle, 17-20 June 2018.
7. Zhang, R.X, **Hou, B**, Zhang, Q.Y, Zhou, X.W, Shan, Q.L, Liu, X. Experimental study on hydraulic fracture non-planar propagation from perforated horizontal well in tight formations[C]. ARMA US Rock Mechanics / Geomechanics Symposium，Seattle, 17–20 June 2018.
8. Zhang, R.X., **Hou, B.**, Kao, J.W., Xiao, Y., Chang, Z., Zhang, K.P., Muhadasi, Y. Investigate on fracture propagation with acid fracturing in fracture-vuggy limestone formation based on true tri -axial laboratory experiments[C]. ARMA US Rock Mechanics / Geomechanics Symposium，Seattle, 17-20 June 2018.
9. Zhang Ruxin, **Hou Bing**, Muhadasi Yeerpulati, Liu Xin, Xiao Yue. Investigation on hydraulic fracture initiation and propagation from perforated horizontal well in the deep tight reservoir[C]. ARMA US Rock Mechanics / Geomechanics Symposium，Seattle, 17-20 June 2018.
10. **Bing Hou**, Mian Chen, Yan Jin, Ce Diao, Botao Lin, Yunhu Lu, Prediction Method of In-situ Stress in Non-isopachous Ultra-deep Composite Salt-gypsum Formation [C], SPE/IATMI Asia Pacific Oil & Gas Conference and Exhibition, 20-22 October, Nusa, Indonesia, SPE. (EI)
11. **Bing Hou**, Mian Chen, Yan Jin, Botao Lin, Ce Diao, Xiang Zhang, Optimum Condition of Hydraulic Fracture-Natural Fracture Interaction in Shale Block Experiments [C], 49th U.S. Rock Mechanics/Geomechanics Symposium, 28 June-1 July, San Francisco, California, USA, 2015-089. (EI)
12. **Bing Hou**, Liang Yuan, Mian Chen, Rixing Zhang, Xiang Zhang, Yonghui Wang, Lifeng Yang, Effect of Critical Fracture Zone on Hydraulic Fracture Propagation with Variable Pump Rate in Shale Reservoir [C], ISRM Congress 2015 Proceedings-13th Int’l Symposium on Rock Mechanics, Montreal, Canada, 210. (EI)
13. **Bing Hou**, Dandan Li, Mian Chen. An Investigation of Salt Rock Creeping Mechanics under Oil-Based Mud [C], Proceedings of the 3rd ISRM Young Scholars’ Symposium on Rock Mechanics, Xi’an, China from November 8-10, 2014.
14. **Bing Hou,** Mian Chen, Jing Ma, Haifeng Zhao, Yonghui Wang. Dynamic Propagation of Hydraulic Fracture Branching in Shale Gas Reservoirs [C], the 1st International Conference on Discrete Fracture Network Engineering, Vancouver, British Columbia, Canada from October 19-22,2014.
15. **Bing Hou**, Mian Chen, Wan Cheng, Yan Jin. Investigation of Hydraulic Fracture Propagation in Naturally Fractured Shale Reservoirs Based on Displacement Discontinuity [C], the 1st International Conferenceon Discrete Fracture Network Engineering,Vancouver, British Columbia, Canada from October 19-22, 2014.
16. **Hou Bing**, Chen Mian, Jin Yan, Qiu Kang, Zhang Qingyuan and Yang Pei. Research of Drilling Complexities in Dabei Belt of Tarim Basin, Advanced Materials Research,2012,402: 715-718. (EI).
17. **Bing Hou**, S.X. Xie, M. Chen, G.C. Jiang, Y. Jin and C. Liang. New Method of Layered Drilling Fluid Design to Overcome Wellbore Instability of Piedmont Structures [J], Natural Resources and Sustainable Development,2012,524: 1480-1483. (EI).
18. Liang Yuan, **Bing Hou\***, Ruxin Zhang, Qinglin Shan, Mian Chen, Zhenyu Xiong. Experimental Investigation on Hydraulic Fracture Initiation and Geometry in the Definite Plane Perforating Technology of Horizontal Well [C], SPE Asia Pacific Hydraulic Fracturing Conference. 2016, SPE 181878-MS.（EI）
19. Liang Yuan, **Bing Hou \***, Wenda Li, Zhenyu Xiong, Maobin Qin, Mian Chen. Experimental Investigation on Fracture Geometry in Multi-stage Fracturing under Tri-axial Stresses [C], 50th US Rock Mechanics/Geomechanics Symposium. 2016, 16-730.（EI）
20. Xiaochun Jin, Subhash N. Shah, Jean-Claude Roegiers, and **Bing Hou**. Breakdown Pressure Determination - A Fracture Mechanics Approach [C], [SPE Annual Technical Conference & Exhibition](http://www.spe.org/atce/2014/), 2013, SPE. (EI).

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**Patents (3)**

1. **Hou B**, Tan P, Guo X, et al. Hydraulic Fracturing Physical Simulation Method of Downhole Cores, Chinese patent of invention. Authorized in 2019. ZL 201611074380.9
2. **Hou B**, Zhang R, Guo X, et al. Hydraulic Fracturing Physical Simulation Method of Horizontal Wells with Spiral Perforation, Chinese patent of invention. Authorized in 2019. ZL 201611074384.7
3. **Hou B**, Tan P, Chen M, et al. A Preparation Method for Fracturing Physical Samples of Coal Bearing Formations, Chinese patent of invention. Authorized in 2018. ZL 201510733474.1
4. **Hou B**, Tan P, Jin Y, et al. A Physical Simulation Method for Sand Fracturing in Coal Rock Directional Wells, Chinese patent of invention. Authorized in 2017. ZL 201510977233.1
5. **Hou B**, Chen M, Jin Y. Measuring Device and Application Method of Fracture Morphology after Fracturing of Physical Samples, Chinese patent of invention. Authorized in 2017. ZL 201420329100.4
6. **Hou B**, Chen M, Jin Y. An Identifying Method for Accumulating Kaiser Points of Acoustic Emission Signals, Chinese patent of invention. Authorized in 2017. ZL 201410319157.0
7. **Hou B**, Chen M, Jin Y. Physical Simulation Method of Staged Hydraulic Fracturing in Perforating Wellbore with Different Well Types, Chinese patent of invention. Authorized in 2017. ZL 201410308665.9
8. **Hou B**, Chen M, Jin Y. A Preparation Method for Artificial Core of Joint Shale, Chinese patent of invention. Authorized in 2016. ZL 201410260860.9
9. **Hou B**, Cheng W, Chen M. A Physical Simulation Method for Multistage Hydraulic Fracturing in Horizontal Wells, Chinese patent of invention. Authorized in 2016. ZL 201410351879.4
10. **Hou B**, Chen M, Jin Y. A Preparation Method of Drilling Fluid Based Oil, Chinese patent of invention. Authorized in 2016. ZL 201410088486.9
11. **Hou B**, Chen M, Jin Y. Determination Method of Rock Mechanics Parameters of Transversely Isotropic Shale Formations, Chinese patent of invention. Authorized in 2015. ZL 20140286109.6
12. **Hou B**, Chen M, Jin Y. Assessment Device for Drilling Plugging Simulation in Stress Sensitivity Formations, Chinese patent of invention. Authorized in 2013. ZL 201010558398.2
13. **Hou B**, Chen M, Jin Y. True Triaxial Drilling Leakage Blockage Simulation Assessment Device, Chinese patent of invention. Authorized in 2013. ZL 201010103563.5
14. **Bing Hou**, Zhi Chang, Mian Chen et al. APPARATUS FOR PHYSICAL SIMULATION EXPERIMENT FOR FRACTURING IN HORIZONTAL WELL LAYER BY LAYER BY SPIRAL PERFORATION AND METHOD THERE OF TECHNICAL FIELD, Application Date：2017-12-28, United State of America, US2019/0055838A1, Publication Date：2019-2-21

**Supervision of Students**

*PhD Dissertation Advisees (1 in progress):*

2019: Yizhao Wang

*Maters Thesis Advisees (9 in progress):*

2018: Yifan Dai; Anan Wu; Tengfei Ma

2017: Yue Xiao; Zhuojing Li; Yeerpolati Muhadasi

2016: Zhangru Xin; Zhi Chang; Yue Wu

*Maters Thesis Advisees (6 completed):*

2015: Jie Gao; Xiaofeng Guo; Xiaojun Wu; Askarova Gaukhar (Kazakhstan); Guanxin Liu; Shengfan Xu

2014: Liang Yuan; Zhenyu Xiong; Maobin Qin; Yassini Hijira (Tanzania); Zishuai Liu

2013: Peng Tan; Dandan Li

**Awards and Honors**

2018 Invention & Entrepreneurship Award, *China Association of Inventions, China*

2018 Petroleum and Chemical Industry Patent Award, *China Petroleum and Chemical Industry Federation*, *China*

2018 Outstanding Faculty Award, *China University of Petroleum, China*

2018 Best Scientific Research Award, *College of Petroleum Engineering, China University of Petroleum, China*

2017 China Industry-University-Research Cooperation Innovation Award, *China Industry-University-Research Institute Collaboration Association, China*

2017 Technical Invention Award, *Chinese Society of Rock Mechanics and Engineering, China*

2017 The 10th “Invention & Entrepreneurship Award·Character Award”, *China Association of Inventions, China*

2017 Petroleum and Chemical Industry Patent Award, *China Petroleum and Chemical Industry Federation*, *China*

2017 Excellent Scientific Paper Award, *China Petroleum and Chemical Industry Association, China*

2017 Outstanding Young Science and Technology Talents Award, *National Natural Science Foundation of China, China*

2017 Excellent Report Award, *National Natural Science Foundation of China, China*

2017 The 1st China Petroleum Science Top Ten Papers, *Petroleum Science Bulletin*

2016 Outstanding Faculty Award, *China University of Petroleum, China*

2016 Outstanding Graduation Design (Thesis) Instructor Award, *Chinese Society of Rock Mechanics and Engineering, China*

2015 Excellent Report Award, *National Natural Science Foundation of China, China*

2015 The 5th Young Teaching Backbone Teachers, *China University of Petroleum, China*

2015 Outstanding Supervisor Award, China Petroleum Engineering Design Competition, *China Petroleum Engineering Design Competition Committee, China*

2014 Outstanding Individual Award, *Chinese Society of Rock Mechanics and Engineering, China*

2013 The 7th Beijing Invention & Innovation Competition Silver Award, *Beijing Association of Inventions, China*

2012 Changping District “Great Wall Cup” Youth Invention Award, *Beijing Changping District Committee of Science and Technology, China*

2011 Evaluation Expert of Petroleum Engineering Design Competition, *China Petroleum Engineering Design Competition Committee, China*

2011 Science and Technology Progress Award, *China Petroleum and Chemical Industry Association, China*

2011 Science and Technology Progress Award, *National Energy Administration, China*

2009 Beijing Science and Technology Progress Award, *People's Government of Beijing Municipality, China*

2008 Science and Technology Special Award of Chinese Society of Rock Mechanics and Engineering, *Chinese Society of Rock Mechanics and Engineering, China*

2008 Excellent Graduate Student Award, *China University of Petroleum, China*

2006 Xinjiang Petroleum Administration Scholarship, *Xinjiang Petroleum Administrative Bureau, China*

**Professional and Social Activities**

***Professional Activities***

2019-present Committee member, *The 9th Academic Committee of China University of Petroleum (Beijing)*

2018-present Committee member, *The 9th Academic Committee of the College of Petroleum Engineering*

2018-present Member, *China Association of Inventions*

2016-present Member, *International Society for Rock Mechanics and Rock Engineering (ARMA)*

2012-present Member, *American Rock Mechanics Association (ARMA)*

2006-present Member, *Society of Petroleum Engineers (SPE)*

2006-present Member, *Chinese Society for Rock Mechanics and Engineering*

2012-present Reviewer for the following journals:

* *SPE Journal*
* *Journal of Petroleum Science and Engineering*
* *Journal of Natural Gas Science and Engineering*
* *Petroleum Science*
* *Engineering Geology*
* *Petroleum Exploration and Development*

2010-present Reviewer for the following domestic academic journals:

* *Acta Petrolei Sinica*
* *Petroleum Exploration and Development*
* *Chinese Journal of Rock Mechanics and Engineering*
* *Chinese Journal of Geotechnical Engineering*
* *Petroleum Drilling Techniques*
* *Journal of China University of Petroleum*

**References**

Available upon request