



International Conference on Petroleum Engineering (ICPE 2019)

Bangladesh University of Engineering and Technology
Dhaka-1000, Bangladesh

Program Details

21st December, 2019

Inaugural Ceremony (08:00 AM – 10:30 AM)

Venue: Council Bhaban, BUET

8:00 AM	Registration and Breakfast
9:00 AM	Guests Take Their Seats
9:05 AM	Recitation From the Holy Quran
9:10 AM	Opening Remarks by Dr. Mohammed Mahbubur Rahman, Chairman, ICPE 2019
9:15 AM	Speech by Dr. Aziz Rahman, Chairman, Technical Committee, ICPE 2019
9:20 AM	Speech by the Chief Guest Dr. Ijaz Hossain, Professor, Chemical Engineering, & Dean, Faculty of Engineering, BUET
9:30 AM	Keynote Speech by Dr. Abu Rashid Hasan, Professor, Dept. of Petroleum Engineering, Texas A & M University, USA

10:00 AM -10:30 AM: Tea Break

SESSIONS AND VENUE LAYOUT

Time	Venue (ARI – ITN Building)			
	A	B	C	D
11:00 AM – 12:00 PM	ARI Class Room (1 st Floor)	ARI Seminar Room (1 st Floor)	ITN Seminar Room (5 th Floor)	ITN Class Room (5 th Floor)
	Session 1: Geology	Session 2: Drilling & Reservoir Engg	Session 3: Emerging Technology & Overarching Themes	Session 4: Production & Development
12:00 – 12:10 PM	Tea Break			
12:10 – 01:00 PM	Session 1 (contd.): Geology	Session 2 (contd.): Drilling & Reservoir Engg	Session 3 (contd.): Emerging Technology & Overarching Themes	Session 5: Facilities
01:00 – 02:00 PM	Lunch Break			
02:00 – 03:00 PM	Session 6: Mining	Session 9: Health, Safety & Environment		

TECHNICAL SESSIONS

Technical Session 1: Geology (11:00 AM – 01:00 PM)

Chair: Dr. Aftab Alam Khan, Professor, Dhaka University, Dhaka

Venue - A: ARI Class Room, ARI-ITN Building (1st Floor)

- 11:00 AM **Article No:** ICPE 2019-107
Title: Hydrocarbon potentiality of the Bangladesh offshore basin in the Bay of Bengal
Authors: Dr. Aftab Alam Khan
- 11:15 AM **Article No:** ICPE 2019-001
Title: Petrophysical Characterization of the Gas Reservoir in the Meghna Gas Field, Bangladesh.
Authors: Mahbulul Hasan, H. M. Zakir Hossain, Nafisa Hossain, S. Moktadir Hossain and Md. Abul Basher
- 11:30 AM **Article No:** ICPE 2019-052
Title: Role of depositional environment in controlling sand bodies geometry and petrophysical properties in Titas gas field, Bangladesh.
Authors: Joydeb Dutta, Mohammad Ismile Molla and Meer Md. Ashraf Islam
- 11:45 AM **Article No:** ICPE 2019-058
Title: Lithology Identification and Estimation of Shale Volume and Formation Water Saturation of Fenchuganj Gas Field Using Wireline Log Data
Authors: Musfika Rahman, Istiaque Muhammad Khan and Muhammed Rashik Mojid

12:00 AM-12:10 PM: Tea Break

Technical Session 1 (contd.): Geology

Chair: Dr. Aftab Alam Khan, Professor, Dhaka University, Dhaka

Venue - A: ARI Class Room, ARI-ITN Building (1st Floor)

- 12:10 PM **Article No:** ICPE 2019-088
Title: Reservoir Property Modeling and Volumetric Reserve Estimation of Narsingdi Gas Field
Authors: Bishnu Podo Debnath and Rakib Bhuyan

12:25 PM **Article No:** ICPE 2019-079
Title: An Integrated Approach of 3D Gas Reservoir Modelling
Authors: Sayeda Mehera Ahmed, Swagata Saha and Mohammad Amirul Islam
Islam

12:40 PM **Article No:** ICPE 2019-112
Title: Hydrocarbon Potential of Offshore Bengal Basin: A Comparative Study Between Block SS-11 Prospects and Shwe Gas Field, Offshore Rakhine Basin,
Authors: Abdus Samad Azad, Zabir Hossain and Edwin Bowles

Technical Session 2: Drilling & Reservoir Engineering (11:00 AM – 01:00 PM)

Chair: Dr. Mohammed Mahbubur Rahman, PMRE, BUET

Venue - B: ARI Seminar Room, ARI-ITN Building (1st Floor)

11:00 AM **Article No:** ICPE 2019-003
Title: A Numerical Simulation Study of Single-Phase and Multiphase Reservoir
Authors: Rafin Hasan, A.K.M. Emranul Hoque Chowdhury, Maidur Rashid Noor and Noor Hasan

11:10 AM **Article No:** ICPE 2019-018
Title: Integrated Production Modeling of a Natural Gas Field in Southern Surma Basin
Authors: Mohammad Shafaet Jamil and Mizanur Rahman

11:20 AM **Article No:** ICPE 2019-044
Title: A Numerical Reservoir Simulation Study of Single-Phase and Multiphase Reservoir with Fundamental Approach
Authors: Md. Aliul Azim and Md. Jakaria

11:30 AM **Article No:** ICPE 2019-042
Title: Development of a Compressibility Model for the sensitivity analysis of Material Balance Equation
Authors: Mohammad Mamun Ur Rashid, Enamul Hossain and Tareq Uz Zaman

11:40 AM **Article No:** ICPE 2016-026
Title: Performance Evaluation and Future Prediction of Production Recovery by Polymer Flooding in Enhance Oil Recovery using ECLIPSE
Authors: Farzana Mubassira

11:50 AM **Article No:** ICPE 2019-57
Title: Enhanced Oil Recovery by Low Salinity Waterflooding
Authors: Bintun Zaman, Md. Asif Iqbal and Nadia Mahjabin

12:00 AM-12:10 PM: Tea Break

Technical Session 2 (Contd.): Drilling & Reservoir Engineering

Chair: Dr. Mohammed Mahbubur Rahman, PMRE, BUET

Venue - B: ARI Seminar Room, ARI-ITN Building (1st Floor)

12:10 PM **Article No:** ICPE 2019-102
Title: Understanding Drilling Fluid Swelling from Gas Kick Dissolution
Authors: Rashid Hasan, Kaushik Manikonda, Nazmul Rahmani, and Mohammad Azizur Rahman

12:25 PM **Article No:** ICPE 2019-103
Title: Effects of Salinity on non-Spherical Solid Particle Settling Velocity in a Non-Newtonian Fluid
Authors: Syeda Akhter, Anurag Srivastava, Robert Moukhametov, Jerahmeel Bautista, Hadeer Hassan, Hicham Ferroudji, Mohammad Azizur Rahman and Ibrahim Hassan

12:35 PM **Article No:** ICPE 2019-024
Title: Effect of Nanoparticles on Filtration Loss Control of Drilling Fluids – A Review
Authors: Nayem Ahmed and Prof. Dr Md Saiful Alam

12:45 PM **Article No:** ICPE 2019-063
Title: An Experimental Investigation on the Rheology of Natural Clay in Bangladesh as Drilling Mud
Authors: Md. Al Amin, Forhad Uddin, Md. Sumon Chowdhury, Jumman Al Jawad and Hazzaz Bin Yousuf

12:55PM **Article No:** ICPE 2019-110

Title: An Investigation on the Rapid Pressure Decline of the Gas Fields of Bangladesh

Authors: Abed Inan Chowdhury, Debasish Ghosh, and Md. Mostafijul Karim

Technical Session 3: Emerging Technologies & Overarching Themes (11:00 AM - 01:00 PM)

Chair: Dr. Md. Iqbal Hossain, Associate Professor, ChE, BUET & Dr. Pradip Chandra Mandal, Manager, Titas Gas T & D Co. Ltd., Dhaka.

11:00 AM **Article No:** ICPE 2019-114

Title: Boosting the Octane Number of Motor Spirit by Methane

Authors: Manos Roy, Abir Debnath and Md. Iqbal Hossain

11:10 AM **Article No:** ICPE 2019-113

Title: Investigation of Heavy Oil under 1-ethyl-3-methylimidazolium Chloride Ionic Liquid

Authors: Pradip Chandra Mandal

11:20 AM **Article No:** ICPE 2019-010

Title: Liquid Petroleum Gas (LPG) as an Alternative to Compressed Natural Gas (CNG) in Vehicle Fuels and Its Future Directions

Authors: Srimonta Roy, Sujan Kumar Mondal, Milon Roy, Shekh Sadakat Sharif and Md. Shaheen Shah

11:30 AM **Article No:** ICPE 2019-015

Title: Prospect of Underground Coal Gasification (UCG) Technology in Jamalganj Coal Field, Bangladesh

Authors: Ali Ahmad, Abu Hurayra and Rafica Akter

11:40 AM **Article No:** ICPE 2019-025

Title: Innovative multi-stage anaerobic modelling of a 10 mw biogas plant using aspen hysys

Authors: Md. Burhan Kabir Suhan, Sanzeeda Baig Shuchi, Md. Riad Al Rabbi Abir and Rahatul Hasan

11:50 AM **Article No:** ICPE 2019-006
Title: Suitability analysis of carbon dioxide sequestration in Habiganj, Bakhrabad and Jalalabad gas fields
Authors: Aурpita Sen Gupta and Sarwat Tanjil

12:00 AM -12:10 PM: Tea Break

Technical Session 3 (Contd.): Emerging Technologies & Overarching Themes

Chair: Dr. Md. Iqbal Hossain, Associate Professor, ChE, BUET &
Dr. Pradip Chandra Mandal, Manager, Titas Gas T & D Co. Ltd., Dhaka.

Venue - C: ITN Training Room, ARI-ITN Building (5th floor)

12:10 PM **Article No:** ICPE 2019-46
Title: Underground Coal Gasification: A clean and eco-friendly path to resurrect Bangladesh's energy sector.
Authors: Himadri Shakher Das and Basel Ahmad Shabab

12:20 PM **Article No:** ICPE 2019-108
Title: A Review of Liquefied Petroleum Gas (LPG) as an Alternative Fuel Option and Its Market Scenario in Bangladesh
Authors: Nishat Tasnim, Mysha Momtaz and Dr. M.A.A. Shoukat Choudhury

12:30 PM **Article No:** ICPE 2019-030
Title: Energy Security and Management of Bangladesh (Natural Gas Prospect)
Authors: Mirza Shahanaoaz Latif and Hazzaz Bin Yousuf

12:40 PM **Article No:** ICPE 2019-004
Title: Prospect of Autogas (LPG) in Bangladesh as an alternative fuel over CNG
Authors: Md. Setaur Rahman, S. M. Samiur Sany, Faisal Kabir and Annyesha Chowdhury

Technical Session 4: Production and Development (11:00 AM – 12:00 AM)

Chair: Dr. Md. Shahinoor Islam, Associate Professor, ChE, BUET &

Engr. Md. Fazlul Haque, GM (In charge), BAPEX

Venue - D: ITN Seminar Room, ARI-ITN Building (5th floor)

- 11:00 AM **Article No:** ICPE 2019-047
Title: The use of vegetable oil-based additives for improving surface tension and pour point in Indian waxy
Authors: Biswadeep Pal and Tarun Kumar Naiya
- 11:15 AM **Article No:** ICPE 2019-069
Title: Gas Quality Evaluation of Four Different Gas Fields in Bangladesh and a New Payment System Based On Energy Content
Authors: Sharaf Anika and Aqif Hosain Khan
- 11:30 AM **Article No:** ICPE 2019-012
Title: Design of a Water Treatment System for Beneficial Use of the Produced Water of a Gas Field in Bangladesh
Authors: Md. Mehedi Hasan and Mohammed Mahbubur Rahman
- 11:40 AM **Article No:** ICPE 2019-039
Title: Enhanced Gas Recovery by Downhole Gas Compression Technology
Authors: Mohammad Amirul Islam
- 11:50 AM **Article No:** ICPE 2019-040
Title: Field Development Challenges and Opportunities in Oil Rim Reservoir
Authors: Mohammad Amirul Islam

12:00 AM -12:10 PM: Tea Break

Technical Session 5: Facilities (12:00 AM – 01:00 PM)

Chair: Dr. Md. Shahinoor Islam, Associate Professor, ChE, BUET &

Engr. Md. Fazlul Haque, GM (Incharge), BAPEX

Venue - D: ITN Seminar Room, ARI-ITN Building (5th floor)

- 12:10 PM **Article No:** ICPE 2019-028
Title: A Review on Various Natural Gas Dehydration Methods
Authors: Md. Sarder Nasir Uddin, Kazi Ashraful Alam, Faheem Mahfuz Kabir, Azmol Hosen Arjue and Md. Shahadot Hossain
- 12:20 PM **Article No:** ICPE 2019-55
Title: De-Risking Gas Restart Operations in Subsea Jumpers
Authors: Shakil Ahmed and Mauricio Di Lorenzo
- 12:30 PM **Article No:** ICPE 2019-54
Title: An Approach to Develop A Gas, Smoke and Fire detection Model with Controlling System For Underground Mine and Household Purpose
Authors: Hussain Nafizul Mannan and Istiaque Muhammad Khan
- 12:40 PM **Article No:** ICPE 2019-92
Title: Remote Monitoring and Intelligent Controls of Cathodic Protection System of Gas Transmission Pipelines
Authors: Biplab Das and Dr. Mohammed Mahbubur Rahman
- 12:50 PM **Article No:** ICPE 2019-041
Title: An Approach to Pipeline Flow Capacity Increment of Karnaphuli Gas Distribution Network
Authors: Aurpita Sen Gupta, Md. Zayed Bin Sultan, Sarwat Tanjil and Mohammed Adnan Noor Abir

1.00 PM - 2.00 PM : Lunch Break

Technical Session 6: Mining (02:00 PM – 03:00 PM)

Chair: Mr. Javed Chowdhury, MD, Barapukuria Coal Mining Company Ltd

Venue - A: ARI Class Room, ARI-ITN Building (1st Floor)

- 2:00 PM **Article No:** ICPE 2019-002
Title: An analysis of feasible mining method for coal extraction in phulbari coal field, bangladesh
Authors: Adnan Abir and Aqif Khan
- 2:15 PM **Article No:** ICPE 2019-111
Title: An Experimental Approach To Determine Water Inrush in Barapukuria Coal Mine, Bangladesh
Authors: Md. Istiak Ahmed , Md. Jabir Bin Mohiuddin, and Md. Mostafijul Karim
- 2:30 PM **Article No:** ICPE 2019-076
Title: Prediction of Mine Induced Subsidence of a Long Wall Mine: A Case Study from Barapukuria Coal Mine, Bangladesh
Authors: Shakil Ahmed Razo, Sayeda Mehera Ahmed, Nasir Uddin Ahmed and Akm Badrul Alam
- 2:40 PM **Article No:** ICPE 2019-029
Title: Management and Control of Ramp (Haulage Road) for Open Pit Mine in the Northern Part of Barapukuria Coal Field, Dinajpur, Bangladesh
Authors: Md. Rokonzaman, Chowdhury Quamruzzaman and Md. Sumon Chowdhury
- 2:50 PM **Article No:** ICPE 2019-095
Title: Proposed Mining method for coal extraction of Khalashpir Coal Field
Authors: Md.Fazle Rabbi, Latifur Nesa Lutfa, Chowdhury Quamruzzaman and Md.Aliur Rahman

Technical Session 7: Health, Safety and Environment (02:00 PM – 03:00 PM)

Chair: Dr. Md. Easir Arafat Khan, ChE, BUET &

Dr. Mohammad Moniruzzaman, Deputy Secretary, EMRD, MoEPMR, GoB

Venue - B: ARI Seminar Room, ARI-ITN Building (1st Floor)

02:00 PM **Article No:** ICPE 2019-021

Title: Estimating the Rate of Sulfur Dioxide (SO₂) Emission and Its Impact on Human Health in the Study Area of Barapukuria Coal Mine

Authors: Md. Rokonzaman, Chowdhury Quamruzzaman and Md. Sumon Chowdhury

02:10 PM **Article No:** ICPE 2019-022

Title: A Review on Impact of Coal Mining on Vegetation: A Case Study on Barapukuria Coal Mining Field, Dinajpur, Bangladesh

Authors: Md. Rokonzaman, Chowdhury Quamruzzaman and Md. Sumon Chowdhury

02:20 PM **Article No:** ICPE 2019-035

Title: An assessment of the level of safety awareness among the LPG consumers in Dhaka city, Bangladesh

Authors: Md. Sumon Chowdhury, Farjana Junaky, Md. Al Amin, Simanto Kumar Pal, Md. Rokonzaman and Mahbubur Rahman

02:30 PM **Article No:** ICPE 2019-045

Title: A Study on Risk Assessment and Safety Analysis in Natural Gas Transmission and Distribution, Bangladesh

Authors: Md. Khalid Hasan, Farjana Junaky, A.K.M. Emranul Hoque Chowdhury, Md. Sumon Chowdhury and Md. Rokonzaman

02:45 PM **Article No:** ICPE 2019-070

Title: Impact of Water Pollution on Environment and Assessment of Water Quality around Barapukuria Coal Mine Area, Dinajpur, Bangladesh

Authors: Sayeda Mehera Ahmed and Swagata Saha

3:00 PM - 3:30 PM: Tea Break

Afternoon Session: Awards, Open Discussion and Closing (3:30 PM – 05:30 PM)

Venue: Council Bhaban, BUET

03:30 PM	Guests Take Their Seats
03:35 – 03:40 PM	Opening Remarks by Dr. Aziz Rahman, Chairman, Technical Committee, ICPE 2019
03:40 – 03:50 PM	Award Giving Ceremony of Student Poster Competition
03:50 – 03:55 PM	Speech by the Chief Guest, Professor Dr. Saiful Islam, Honorable Vice Chancellor, BUET
03:55 – 04:15 PM	Speeches by the Designated Discussants
04:15 – 05:00 PM	Open Discussion
05:00 – 05:05 PM	Speech by the Special Guest, Dr. M. Tamim, Professor, PMRE, BUET, and Pro Vice Chancellor, BRAC University
05:05 – 05:10 PM	Closing Remarks by Dr. Mohammed Mahbubur Rahman, Chairman, ICPE 2019
05:10 PM	Socialization

6.30 PM - 7.30 PM: Dinner

Venue: BUET Central Cafeteria