## The 3rd UK InterPore Conference on Porous Media and the 1st Monash-Warwick PREFRAC Workshop on Hydraulic Fracturing

**Programme** 

Programme				
	4 September 2017			
8.00 – 8:50				
8.50 – 9.00	Opening and Welcome talk (Dr Mohad Mousavi Nezhad&Professor Ian Guymer)			
9.00 – 9:40	<b>Keynote Lecture 1:</b> Understanding Gas Flow in Shale Gas Resource Plays: Experimental Methods and Numerical modelling	<b>Keynote speaker:</b> Professor Quentin Fisher		
	on 1: Fundamental Theories and Modelling	Chair: Dr Mohammad Rezania		
9.40 – 9:55	rdraulic Fracturing (1)			
9.40 – 9:55	Plane Strain Propagation of a Hydraulic Fracture with Fluid Lag in Permeable Rock	Bin Chen (Swansea University)		
9.55 – 10:10	Upscaling a shale pore system from nm-scale to cm-scale: An example from the Haynesville-Bossier Shale, southeast USA	Lin Ma (University of Manchester)		
10.10 – 10:25	Destabilisation of Granular Packing due to Fluid Flow	David W. James (Swansea University)		
10.25 – 10:40	Revised model of Penny-Shaped Hydraulic Fracture	Daniel T. Peck (Aberystwyth University)		
10.40 - 11.00	Break and Poster Viewing			
	on 2: Fundamental Theories and Modelling draulic Fracturing (2)	Chair: Dr Sina R. Gomari		
11.00 – 11:15	A new coupled computational framework for	Alexander J. Hardcastle		
	fluid pressurised crack evolution in porous media	(University of Nottingham)		
11.15 – 11:30	Analytical solutions of stress and strain and prediction of permeability around a wellbore in elastic-brittle-plastic reservoir	Mohsen S. Masoudian (University of Nottingham)		
11.30 – 11:45	3D CFD Modelling of Fluid Flow through Fractured Porous Reservoirs	Yatin Suri (Robert Gordon University)		
11.45 – 12:00	CFD-DEM coupled approach for numerical simulation of proppant transport and distribution in hydraulic fractures	Yatin Suri (Robert Gordon University)		
12.00 – 12:15	Numerical Modeling of Oil-Water Immiscible Flow and Heat Transfer in a Porous Media	Yakubu Balogun (Robert Gordon University)		
12.15 – 12:30	Multiphase Flow Simulation with Application in Proppant Transportation	Beatriz Ramos Barbozar (Swansea University)		
12.30 – 13.30	Lunch & InterPore committee meeting			
13.30 – 14.30	Simpleware workshop and WMG Tour			
14.30 – 14.40	Break			
14.40 – 15.20	Keynote Lecture 2: Modelling Gas Transport in Shales	<b>Keynote speaker:</b> Professor Yonghao Zhang		
	on 3: Fundamental Theories and Modelling orderaulic Fracturing (3)	Chair: Dr Volkan Degirmenci		
15.20 – 15.35	On the apparent permeability of rarefied gas flows in porous media	Lefki Germanou (University of Strathclyde)		
		· · ·		

		_
15.35 – 15.50	Optimizing the hydraulic fracturing job to govern	Sina R. Gomari (Teesside
	its environmental impact	University)
15.50 – 16.05	Evaluating the non-Darcy flow effect on the short,	Sina R. Gomari (Teesside
	medium and long term production of a	University)
	hydraulically fractured well	
16.05 – 16.30	Break	
Scientific session Engineering	n 4: CO2 Capture and Storage, and Environmental	Chair: Dr Seyed Shariatipour
16.30 – 16.45	Equivalent relative permeability for CO <sub>2</sub> injection	Samuel Jackson (Imperial
	& storage in the North Sea Captain sandstone	College London)
16.45 – 17.00	The impact of interbedded rock grains at the	Michael U. Onoja (Coventry
	reservoir/seal interface on CO2 storage and	University)
	security	.,
17.00 – 17.15	Investigating the Effect of Caprock Morphology	Masoud Ahmadinia
	and Reservoir Boundary on the CO2 Storage	(Coventry University)
17.15 – 17.30	Geo-electrical Characterisation for CO2	Rabiu K. Olawale
	Sequestration in Porous Media	(Loughborough University)
17.30 – 17.45	Where is the LNAPL mass?	Simiao Sun (ESI
	Laboratory study on LNAPL dynamics in porous	Consulting)
	medium under cyclic water table fluctuations	33.134.1.1.87
17.45 – 18.45	Drink and Poster Session (including judging of best	t posters)
18.45 – 21.00	Conference dinner	
	5 September 2017	
9.00 - 9:40	Keynote Lecture 3: Darcy Flow in Fractured	Keynote speaker: Professor
	Porous Media by an Embedded Multidimensional	Luca Formaggia
	Model.	
Scientific sessio	n 5: Applied Mathematics and Scientific	Chair: Dr Matteo Icardi
Computing for F	Porous Media (1)	
9.40 - 9:55		
	A Numerical Investigation of Stochastic and	Babatunde Lashore
	A Numerical Investigation of Stochastic and Deterministic Upscaling Methods for Permeability	Babatunde Lashore (University of Aberdeen)
	_	
9.55 – 10:10	Deterministic Upscaling Methods for Permeability	
	Deterministic Upscaling Methods for Permeability Fields	(University of Aberdeen)
	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural	(University of Aberdeen)  Matteo Icardi (University of
9.55 – 10:10	Deterministic Upscaling Methods for Permeability Fields Rapid prototyping of complex porous media simulations with DUNE-Python interface	(University of Aberdeen)  Matteo Icardi (University of Warwick)
9.55 – 10:10	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea
9.55 – 10:10 10.10 – 10:25	Deterministic Upscaling Methods for Permeability Fields Rapid prototyping of complex porous media simulations with DUNE-Python interface Correlation Analysis between Microstructural Descriptors of Porous Media	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)
9.55 - 10:10 10.10 - 10:25 10.25 - 10:40 10.40 - 11.00	Deterministic Upscaling Methods for Permeability Fields Rapid prototyping of complex porous media simulations with DUNE-Python interface Correlation Analysis between Microstructural Descriptors of Porous Media Model reduction and upscaling for porous electrodes and reactive flows Break and Poster Viewing	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)  Matteo Icardi ( University of
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific session	Deterministic Upscaling Methods for Permeability Fields Rapid prototyping of complex porous media simulations with DUNE-Python interface Correlation Analysis between Microstructural Descriptors of Porous Media Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing n 6: Applied Mathematics and Scientific	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)  Matteo Icardi ( University of
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific session Computing for F	Deterministic Upscaling Methods for Permeability Fields Rapid prototyping of complex porous media simulations with DUNE-Python interface Correlation Analysis between Microstructural Descriptors of Porous Media Model reduction and upscaling for porous electrodes and reactive flows Break and Poster Viewing on 6: Applied Mathematics and Scientific Porous Media (2)	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific session	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural Descriptors of Porous Media  Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing  n 6: Applied Mathematics and Scientific Porous Media (2)  A multiscale model for filter efficiency	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)  Chair: Dr Diganta B. Das  Galina Printsypar (University
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific sessio Computing for F 11.00-11.15	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural Descriptors of Porous Media  Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing  on 6: Applied Mathematics and Scientific Porous Media (2)  A multiscale model for filter efficiency simulations	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)  Chair: Dr Diganta B. Das  Galina Printsypar (University of Oxford)
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific session Computing for F	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural Descriptors of Porous Media  Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing  n 6: Applied Mathematics and Scientific Porous Media (2)  A multiscale model for filter efficiency	(University of Aberdeen)  Matteo Icardi (University of Warwick) Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)  Chair: Dr Diganta B. Das  Galina Printsypar (University of Oxford)  Marco Discacciati
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific sessio Computing for F 11.00-11.15	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural Descriptors of Porous Media  Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing  on 6: Applied Mathematics and Scientific Porous Media (2)  A multiscale model for filter efficiency simulations	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)  Chair: Dr Diganta B. Das  Galina Printsypar (University of Oxford)
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific sessio Computing for F 11.00-11.15	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural Descriptors of Porous Media  Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing  on 6: Applied Mathematics and Scientific Porous Media (2)  A multiscale model for filter efficiency simulations	(University of Aberdeen)  Matteo Icardi (University of Warwick) Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)  Chair: Dr Diganta B. Das  Galina Printsypar (University of Oxford)  Marco Discacciati
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific sessio Computing for F 11.00-11.15 11.15-11.30	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural Descriptors of Porous Media  Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing  n 6: Applied Mathematics and Scientific Porous Media (2)  A multiscale model for filter efficiency simulations  Iterative methods for the Stokes/Darcy problem  Uncertainty evaluation in modelling of matrix acidizing process	(University of Aberdeen)  Matteo Icardi (University of Warwick) Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)  Chair: Dr Diganta B. Das  Galina Printsypar (University of Oxford)  Marco Discacciati (Loughborough University)
9.55 – 10:10 10.10 – 10:25 10.25 – 10:40 10.40 – 11.00 Scientific sessio Computing for F 11.00-11.15 11.15-11.30	Deterministic Upscaling Methods for Permeability Fields  Rapid prototyping of complex porous media simulations with DUNE-Python interface  Correlation Analysis between Microstructural Descriptors of Porous Media  Model reduction and upscaling for porous electrodes and reactive flows  Break and Poster Viewing on 6: Applied Mathematics and Scientific Porous Media (2)  A multiscale model for filter efficiency simulations  Iterative methods for the Stokes/Darcy problem  Uncertainty evaluation in modelling of matrix	(University of Aberdeen)  Matteo Icardi (University of Warwick)  Jinlong Fu (Swansea University)  Matteo Icardi ( University of Warwick)  Chair: Dr Diganta B. Das  Galina Printsypar (University of Oxford)  Marco Discacciati (Loughborough University)  Masoud Babaei (University

flow in porous media via spatial-temporal Gaussian process emulation  12.15-12.30 Uncertainty Quantification of Darcy Flow through Porous Media Using Deep Gaussian Process  12.30 – 13.30 Lunch  13.30-14.10 Keynote Lecture 4: Analysis of Flow Through Porous Media During Composites Manufacturing  Scientific session 7: Technological applications  14.10-14.25 Mathematical modelling of water filtration and purification devices  14.25-14.40 OCT Assessment of Internal Structure in Thermal Barrier Coatings Novel Amorphous Silica and Silica Xerogels as adsorbents for organic pollutants: a Feasibility Study from Synthesis to Regeneration  14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils  Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media Warwick Oslume of Fluid Method  Namir Golparvar (University of Aberdeen)  Aberdeen)				
Gaussian process emulation   12.15-12.30	12.00-12.15	Uncertainty quantification for transient ground	Wei W. Xing (University of	
12.15-12.30   Uncertainty Quantification of Darcy Flow through Porous Media Using Deep Gaussian Process   (Coventry University)		flow in porous media via spatial-temporal	Warwick)	
Porous Media Using Deep Gaussian Process   (Coventry University)		Gaussian process emulation		
12.30 - 13.30   Lunch   Keynote Lecture 4: Analysis of Flow Through Porous Media During Composites Manufacturing   Andy Long	12.15-12.30	Uncertainty Quantification of Darcy Flow through	Alireza Daneshkhah	
Reynote Lecture 4: Analysis of Flow Through Porous Media During Composites Manufacturing Andy Long		Porous Media Using Deep Gaussian Process	(Coventry University)	
Porous Media During Composites Manufacturing   Andy Long	12.30 - 13.30	Lunch		
Scientific session 7: Technological applicationsChair: Dr Masoud Jabbari14.10-14.25Mathematical modelling of water filtration and purification devicesAntonios Parasyris (Loughborough University)14.25-14.40OCT Assessment of Internal Structure in Thermal Barrier CoatingsDaciana D. Iliescu (University of Warwick)14.40-14.55Novel Amorphous Silica and Silica Xerogels as adsorbents for organic pollutants: a Feasibility Study from Synthesis to RegenerationAndrea Luca Tasca (University of Strathclyde)14.55-15.10One-dimensional Creep of Unsaturated Soft SoilsMeghdad Bagheri (University of Nottingham)15.10-15.30BreakChair: Dr Vahid J. NiasarScientific session 8: Pore and Particle Scale Theories and ModellingChair: Dr Vahid J. Niasar15.30-15.45Diffusion in random networksJuan C. Padrino (University of Warwick)15.45-16.00Adoptive Pore Network Model with Localization of Time StepsMohamed Regaieg (TOTAL)16.00-16.15Role of pore geometry in governing the wettability of porous mediaHarris Rabbani (University of Manchester)16.15-16.30Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid MethodAmir Golparvar (University of Aberdeen)	13.30-14.10	Keynote Lecture 4: Analysis of Flow Through	Keynote speaker: Professor	
14.10-14.25   Mathematical modelling of water filtration and purification devices (Loughborough University)  14.25-14.40   OCT Assessment of Internal Structure in Thermal Barrier Coatings of Warwick)  14.40-14.55   Novel Amorphous Silica and Silica Xerogels as adsorbents for organic pollutants: a Feasibility Study from Synthesis to Regeneration  14.55-15.10   One-dimensional Creep of Unsaturated Soft Soils (University of Nottingham)  15.10 - 15.30   Break   Chair: Dr Vahid J. Niasar Modelling  15.30 - 15.45   Diffusion in random networks   Juan C. Padrino (University of Warwick)  15.45-16.00   Adoptive Pore Network Model with Localization of Time Steps   Harris Rabbani (University of Manchester)  16.15-16.30   Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method		Porous Media During Composites Manufacturing	Andy Long	
purification devices  14.25-14.40 OCT Assessment of Internal Structure in Thermal Barrier Coatings of Warwick)  14.40-14.55 Novel Amorphous Silica and Silica Xerogels as adsorbents for organic pollutants: a Feasibility Study from Synthesis to Regeneration  14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils Meghdad Bagheri (University of Nottingham)  15.10 – 15.30 Break  Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks Juan C. Padrino (University of Warwick)  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  (Loughborough University of Warwick)  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Nottingham)  Andrea Luca Tasca (University of Nottingham)  Lagranda Bagheri (University of Nottingham)  Chair: Dr Vahid J. Niasar  Chair: Dr Vahid J. Niasar  Mohamed Regaieg (TOTAL)  Mohamed Regaieg (TOTAL)  Amir Golparvar (University of Aberdeen)	Scientific session 7: Technological applications		Chair: Dr Masoud Jabbari	
14.25-14.40 OCT Assessment of Internal Structure in Thermal Barrier Coatings Of Warwick)  14.40-14.55 Novel Amorphous Silica and Silica Xerogels as adsorbents for organic pollutants: a Feasibility Study from Synthesis to Regeneration  14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media using a coupled Level Set with Volume of Fluid Method  Daciana D. Iliescu (University of Warwick)  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Nottingham)  Meghdad Bagheri (University of Nottingham)  Meghdad Bagheri (University of Nottingham)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Scientific session 8: Pore and Particle Scale Theories and Maghdad Bagheri (University of Warwick)  Amarchada Maghdad Bagheri (University of Warwick)  Amarchad M	14.10-14.25	Mathematical modelling of water filtration and	Antonios Parasyris	
Barrier Coatings  14.40-14.55 Novel Amorphous Silica and Silica Xerogels as adsorbents for organic pollutants: a Feasibility Study from Synthesis to Regeneration  14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media University of Aberdeen)  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Strathclyde)  Andrea Luca Tasca (University of Nottingham)  Applied Bagheri (University of Nottingham)  Chair: Dr Vahid J. Niasar  Chair: Dr Vahid J. Niasar  Mohamed Regaieg (TOTAL)  Mohamed Regaieg (TOTAL)  Harris Rabbani (University of Manchester)  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method		purification devices	(Loughborough University)	
14.40-14.55 Novel Amorphous Silica and Silica Xerogels as adsorbents for organic pollutants: a Feasibility Study from Synthesis to Regeneration  14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media Name of Fluid Method  Andrea Luca Tasca (University of Strathclyde)  Meghdad Bagheri (University of Nottingham)  Chair: Dr Vahid J. Niasar  Modelling  Juan C. Padrino (University of Warwick)  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen) Volume of Fluid Method	14.25-14.40	OCT Assessment of Internal Structure in Thermal	Daciana D. Iliescu (University	
adsorbents for organic pollutants: a Feasibility Study from Synthesis to Regeneration  14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils  15.10 – 15.30 Break  Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwellow wet porous media using a coupled Level Set with Volume of Fluid Method  (University of Strathclyde)  Meghdad Bagheri (University of Nottingham)  Chair: Dr Vahid J. Niasar  Mohamed Regaieg (TOTAL)  Mohamed Regaieg (TOTAL)  Manchester)  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)		Barrier Coatings	of Warwick)	
Study from Synthesis to Regeneration  14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils Meghdad Bagheri (University of Nottingham)  15.10 – 15.30 Break  Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks Juan C. Padrino (University of Warwick)  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  16.15-16.30 Neghdad Bagheri (University of Nottingham)  Meghdad Bagheri (University of Nottingham)  Meghdad Bagheri (University of Nottingham)  Harri: Dr Vahid J. Niasar  Mohamed Regaieg (TOTAL)  Mohamed Regaieg (TOTAL)  Manchester)  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method	14.40-14.55	Novel Amorphous Silica and Silica Xerogels as	Andrea Luca Tasca	
14.55-15.10 One-dimensional Creep of Unsaturated Soft Soils (University of Nottingham)  15.10 – 15.30 Break  Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Meghdad Bagheri (University of Nottingham)  Meghdad Bagheri (University of Nottingham)  Meghdad Bagheri (University of Nottingham)  Hair: Dr Vahid J. Niasar  Mohamed Regaieg (TOTAL)  Mohamed Regaieg (TOTAL)  Manchester)  Amir Golparvar (University of Aberdeen)		adsorbents for organic pollutants: a Feasibility	(University of Strathclyde)	
15.10 – 15.30 Break  Scientific session 8: Pore and Particle Scale Theories and Modelling  15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  (University of Nottingham)  (Chair: Dr Vahid J. Niasar  (Mohamed Regaieg (TOTAL)  Mohamed Regaieg (TOTAL)  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)		Study from Synthesis to Regeneration		
15.10 – 15.30BreakChair: Dr Vahid J. NiasarScientific session 8: Pore and Particle Scale Theories and Modelling15.30 – 15.45Diffusion in random networksJuan C. Padrino (University of Warwick)15.45-16.00Adoptive Pore Network Model with Localization of Time StepsMohamed Regaieg (TOTAL)16.00-16.15Role of pore geometry in governing the wettability of porous mediaHarris Rabbani (University of Manchester)16.15-16.30Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid MethodAmir Golparvar (University of Aberdeen)	14.55-15.10	One-dimensional Creep of Unsaturated Soft Soils	Meghdad Bagheri	
Scientific session 8: Pore and Particle Scale Theories and ModellingChair: Dr Vahid J. Niasar15.30 – 15.45Diffusion in random networksJuan C. Padrino (University of Warwick)15.45-16.00Adoptive Pore Network Model with Localization of Time StepsMohamed Regaieg (TOTAL)16.00-16.15Role of pore geometry in governing the wettability of porous mediaHarris Rabbani (University of Manchester)16.15-16.30Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid MethodAmir Golparvar (University of Aberdeen)			(University of Nottingham)	
Modelling  15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Diffusion in random networks  Juan C. Padrino (University of Warwick)  Mohamed Regaieg (TOTAL)  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)	15.10 – 15.30	Break		
15.30 – 15.45 Diffusion in random networks  15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Juan C. Padrino (University of Warwick)  Mohamed Regaieg (TOTAL)  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)	Scientific session 8: Pore and Particle Scale Theories and Chair: Dr Vahid J. Niasar			
15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  of Warwick)  Mohamed Regaieg (TOTAL)  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)	Modelling			
15.45-16.00 Adoptive Pore Network Model with Localization of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Mohamed Regaieg (TOTAL)  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)	15.30 – 15.45	Diffusion in random networks	Juan C. Padrino (University	
of Time Steps  16.00-16.15 Role of pore geometry in governing the wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)			of Warwick)	
16.00-16.15 Role of pore geometry in governing the wettability of porous media Manchester)  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Harris Rabbani (University of Manchester)  Amir Golparvar (University of Aberdeen)	15.45-16.00	Adoptive Pore Network Model with Localization	Mohamed Regaieg (TOTAL)	
wettability of porous media  16.15-16.30 Pore scale modelling of multiphase flow in mixedwet porous media using a coupled Level Set with Volume of Fluid Method  Manchester)  Amir Golparvar (University of Aberdeen)		of Time Steps		
16.15-16.30 Pore scale modelling of multiphase flow in mixed- wet porous media using a coupled Level Set with Volume of Fluid Method  Amir Golparvar (University of Aberdeen)	16.00-16.15	Role of pore geometry in governing the	Harris Rabbani (University of	
wet porous media using a coupled Level Set with Volume of Fluid Method of Aberdeen)		wettability of porous media	Manchester)	
Volume of Fluid Method	16.15-16.30	Pore scale modelling of multiphase flow in mixed-	Amir Golparvar (University	
		wet porous media using a coupled Level Set with	of Aberdeen)	
16.30-16.45 Unrayeling pore-scale mechanisms underlying the Rimsha Aziz (University of				
10.00 10.10	16.30-16.45	Unraveling pore-scale mechanisms underlying the	Rimsha Aziz (University of	
non-Fickian transport and mixing in unsaturated Manchester)		non-Fickian transport and mixing in unsaturated	Manchester)	
porous media				
16.45 – 17.00 Award of poster and presentation prizes, and closing	16.45 - 17.00	Award of poster and presentation prizes, and closing		