Resume of Isam SHAHROUR

- *Distinguished Professor at Lille University, France*
- *Member of the French Water Academy (Since June 2019)*
- *Chair professor at Tongji University (Since September 2016)*
- *Director of the Civil and geo-Environmental Engineering Research Laboratory (LGCgE)*
- *Former Vice President of Lille1 University "Research and industrial Partnership" (2007 – 2012)*
- *Associate Editor of Infrastructures Journal (MDPI)*
- *Associate Editor of Smart Cities Journal (MDPI)*
- *Co-chair of the conference series "Smart Underground Space"*

Resume

Graduate from the National School of Bridges and Roads (Ponts et Chaussées - Paris), I have been strongly involved in research, higher education and partnership with the socio-economic sector. During the period 2007 -2012, I was Vice President "Research and innovation" at the University Lille1. I was also president of the Innovation Agency "Lille Metropole Technopole" for regional economic development via innovation.

My research activity concerns smart and sustainable cities, sustainable management of natural resources and geo-environmental Engineering.

Currently, I'm director of the Regional Research Laboratory "Civil and Geo-Environment Engineering - LGCgE" (around 200 members included 90 PhD students) and head of the international master "Urban Engineering and Habitat."

Since January 2011, I coordinate a large-scale Smart City project "SunRise: a large-scale demonstrator of the smart and sustainable city" which involves a large partnership with local government, water, energy and information technology providers and startups. I coordinated also the French partners of the European project "SmartWater4Europe". I work with some cities and other local governments on the construction of road maps for smart city implementation.

I conducted an intensive research activity with a strong socio-economic partnership. My activity resulted in about 120 refereed journal papers and the supervision of around 90 PhD dissertations and more than 5 million Euros of industrial and public contracts.

Recently, I gave more than 30 lectures on topics related to cities: Sustainable cities, Smart cities, and Resilient Cities, including tow TEDx talks.

In addition to my courses at Lille University, I give lectures about the Smart and Sustainable City in different institutions such as Tongji University in Shanghai, American University of Sciences and Technology (AUST) in Beirut, ESPRIT in Tunis and Ecole Nationale d'Administration (l'ENA – Paris).

Personal Information

Date of birth: April 22, 1956, Tulkarm, Palestine
Status: Married, two children, Nadia (26 years old) and Karam (22 years old)
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Social Media :
https://www.linkedin.com/in/ishahrour (around 30 000 connections)
https://www.facebook.com/isam.shahrour
https://www.youtube.com/user/ishahrour/videos
https://univ-lille1.academia.edu/IShahrour
https://www.researchgate.net/profile/Isam_Shahrour2/publications

Academic Education
- June 1982 : Civil Engineering Diploma (Master), Ecole Nationale des Ponts et Chaussées, Paris
- June 1982: Master's degree in applied Mechanics, University of Paris VI.
- December 1984: Ph.D. in Civil Engineering, Ecole Nationale des Ponts et Chaussées, Paris
- September 1988: Habilitation (Degree required for professor position), Lille1 University

Professional Experience
- 1984-1985: Assistant Professor at Lille University, Polytech'Lille
- 1985-1989: "Maître de Conférences" at Lille University, Polytech'Lille
- Jan 1989- Sept 89: Research Engineer at the French Institute of Petroleum, Paris.
- 1989-1997: Professor at Ecole Centrale de Lille
- Since1997: Professor at Lille University, Polytech'Lille

Major responsibilities
- Since January 2010: Director of the Civil and geo-Environmental Engineering Regional Laboratory (LGCgE) (200 members, included 90 PhD students)
- Since September 2010: Responsible of the SUNRISE project "Large scale Demonstrator of the Smart and Sustainable City"
- Since January 2010: Director of the International master's degree "Urban Engineering and Habitat".
- 2007-2012: Vice President "Research & Innovation" of Lille1 University (1200 faculty members, 1000 PhD Student, 43 Research Laboratories in the field of fundamental science, engineering, economy, social sciences and management).
- 2007 – 2012: President of the Innovation Agency "Lille Metropole Technopole" for regional economic development via innovation
- 2011 – 2013: President of the Regional Innovation Center" Contactless Technology"

Academic Activity
- Academic and innovation fields: Sustainable & Smart Cities, Geo-environmental Engineering and Urban Engineering.
- Author of about 120 refereed journal papers and 200 papers in national and international conferences
- Full supervision of 90 PhD dissertations in the area of Smart and Sustainable Cities, geo-environment, urban engineering.
- Research Expert for various funded research programs.
- Successfully carried out research programs for Urban Services providers, Local authorities, French Research Ministry and European commission (more than 40 funded projects).
- Consulting activity for local government 'Road Map for Smart City implementation"

Education Activity
- Sustainable City, International Master's Degree "Urban Engineering and Habitat", Lille University
- Natural Disaster and Urban soils, International Master "Urban Engineering and Habitat", Lille University.
- Urban Systems, Mastere "CréaCity", Polytech'Lille.
- Urban Government, Civil Engineering master's degree, Lille University
- Energy and Sustainable Development, Civil Engineering master's degree, Lille University
- Smart City: Concept and Implementation, master's degree, American University of Science and Technology, Beirut
- Smart Underground Space, Tongji University, Shanghai
- Smart city and territories professional training, Al Riyad, Riyadh, Saudi Arabia.

Invited Conferences (Snice 2014)

- Isam Shahrour TEDxLille « The Renaissance » "Un démonstrateur pour la ville intelligente », March, 2014.
- Isam Shahrour TEDX – Sciences Po Paris « Let's build smart cities for a smart world », 14/11/2015.
- Isam Shahrour « Smart Campus: Effective concept for the development of the Smart City », World Bank, Washington (within MEDEF International Delegation) 21/05/2014.
- SHAHROUR I. (2018) "Could the Smart City improve the resilience and sustainability of cities?", Woh Hup Distinguished Lecture, National University of Singapore (NUS), May, 30, 2018.
- SHAHROUR I. (2018) "How the Underground Space could help the Smart City Transformation? International Forum on Underground space Development and Utilization in Xi'an, 7-8, June 2018.
- SHAHROUR I. (2018) "Smart Water concept and implementation: Feedback of the European project SmartWater4Eurpe", Chongqing, January 12, 2018.
- SHAHROUR I. ((2018) "How the Smart City could help building Sustainable and Resilient City ?" Invited conference at Zhejiang University of Water resources and Electric Power, Hangzhou, July 19, 2018
- SHAHROUR I. (2018) "Could the Smart City improve the resilience and sustainability of urban systems?", Invited conference, 6th International Symposium on Reliability Engineering and Risk Management (ISRERM), Singapore, 31 May - 1st June 2018.
- SHAHROUR I. (2017) "Smart Utility Tunnels: How the Smart Technology could help meet the utility tunnels challenges?" North China Municipal Engineering Design & Research Institute, Tianjin, November 21, 2017.
- SHAHROUR I. (2017) "What do we know about Smart Cities Concept and Implementation?" Key note lecture, International Conference "SENSORS NETWORKS SMART AND EMERGING TECHNOLOGIES (SENSET)", September 12-14, Beirut.
- Isam Shahrour (2016) "Smart Water – Water in the City" Dunkerque Metropolis, April, 22, 2016.
- Isam Shahrour « Smart Cities for developing Countries », Tunis, ENIT,6 May, 2016.
- Isam Shahrour (2016) "Smart City: Concept et retour experience" Training for the Directors of Municipalities, INET, Strasbourg, 7 June 2016.
- Isam Shahrour (2016) "Smart Campus: Lessons learned from large Scale Demonstrator", Green Building and Sustainable Development, 6 – 7 October, 2016, PERM, RUSSIA.
- Isam Shahrour (2016) "Rôle de la « Smart City » dans la transition énergétique", Conférence Internationale Transition Energétique en Afrique entre défis économiques et enjeux environnementaux" 1-2 Oc., 2016, Alger.
- Isam Shahrour (2015) « Ville intelligente en France », Journée parlementaire, Paris 10/11/ 2015.
- Isam Shahrour 2015) "Large Scale Demonstrator of the Smart City », Arab Future Cities Summit, Doha, Qatar, 14/04/2015.
- Isam Shahrour 2015) «Smart City for developing countries: Utopia or real opportunity », American University of Science and Technology, Beirut, 24/04/2015
- Isam Shahrour (2015) « Smart Campus : une nouvelle approche de pilotage des universités » Colloque Directeurs Généraux des Services des Universités, Strasbourg, 24/06/2015
- Isam Shahrour (2015)« Smart City: solution innovante pour la ville », Oran, Algeria, 27/09/2015
- Isam Shahrour (2015) « Démonstrateur à Grande Echelle de la Ville Intelligente et Durable », Colloque international Eco-Campus, Paris, 15/10/2015
- Isam Shahrour (2015)« Smart City and environmental Challenges » Shandong University, China, 23/12/2015
- Isam Shahrour (2015) «Smart Water: Lessons from large scale experimentation"» Shandong Hydrogeology office, Shandong, China, 24/12/2015

TV emission, Public biography and Journal articles

- **BFM Business "Lille rendre ma ville intelligente »** GREEN BUSINESS, 28 /04/ 2014,https://www.youtube.com/watch?v=S2IqdqIax1I
- **Isam Shahrour : une vie guidée par la connaissance et la curiosité,** by Sophie Mayeux, CRAZY, https://be-crazy.org/2015/07/07/isam-shahrour-une-vie-guidee-par-la-connaissance-et-la-curiosite
- **Isam Shahrour, TÉMOIN INSPIRANT,** 3ème Révolution Industrielle (Rev 3), Hauts de France ; https://rev3.fr/temoin-inspirant-2-isam-shahrour/
- **Isam Shahrour, la Ville Intelligente**, Pole National de Compétences, Education au Développement durable, https://crdp.ac-amiens.fr/edd/index.php/parolesdescientifiques/villes/1284-isam-shahrour-la-ville-intelligente
- **Isam Shahrour, Smart City: à Lille, SunRise teste les enjeux urbains de demain,** La Tribune, 27/4/2017. https://www.latribune.fr/regions/nord-pas-de-calais/smart-city-a-lille-sunrise-teste-les-enjeux-urbains-de-demain-744838.html
- **Smart Grid, Point de vue d'Isam Shahrour, Commission de régulation de l'énergie (CRE),** http://www.smartgrids-cre.fr/index.php?p=reseaux-eau-universite-lille.
- **Isam Shahrour, "Si on n'arrive pas à faire adhérer le citoyen à la smart city, c'est qu'on a échoué",** L'atelier, mars, 2016, https://atelier.bnpparibas/smart-city/article/si-n-arrive-adherer-citoyen-smart-city-qu-on-a-echoue
- **Isam Shahrour constructeur numérique de villes intelligentes**, Med Generation, 21/07/2015, http://www.medgeneration.eu/fr/success-story-diaspora-isam-shahrour
- **Isam Shahrour, la ville intelligente en gestation,** EDUCPROs, Jan 2014., https://www.letudiant.fr/educpros/enquetes/portrait-d-universite-numerique-lille-1-campus-connecte/recherche-la-ville-intelligente-en-gestation-a-lille-1.html
- **Isam Shahrour, la ville intelligente s'invente à Lille,** ECO121, 29/06/2015, https://www.eco121.fr/sunrise-la-ville-intelligente-sinvente-a-lille/

Referred Papers (Since 2010)

1. Saab, Christine; Shahrour, Isam; Chehade, Fadi Hage (2019) Risk Assessment of Water Accidental Contamination Using Smart Water Quality Monitoring.   Exposure and Health, 1, 13   01/05/2019. https://doi.org/10.1007/s12403-019-00311-1

2. Xie, Xiongyao; Zhao, Mingrui; Shahrour, Isam (2019) Experimental Study of the Behavior of Rectangular Excavations Supported by a Pipe Roof   Applied Sciences. 9, 10, 2082.   01/05/2019, DOI: 10.3390/app9102082

3. Attoue N. Shahrour I., Mroueh H.Younes R. (2019) Determination of the Optimal Order of Grey-Box Models for Short-Time prediction of Buildings' Thermal Behavior Buildings. Journal   Energies, 9, 9, 01/09/2019, doi:10.3390/buildings9090198.

4. Krim A., Arab A., Chemam M., Brahim A., Sadek M., Shahrour I. (2019) "Experimental study on the liquefaction resistance of sand-clay mixtures: Effect of clay content and grading characteristics"MARINE GEORESOURCES & GEOTECHNOLOGY, Volume: 37, Issue: 2, 129-141, DOI: 10.1080/1064119X.2017.1407974

5. Xie, Xiongyao, Wang, Qiang, Shahrour, Isam, Li, Jun, Zhou, Biao (2018) A real-time interaction platform for settlement control during shield tunnelling construction, AUTOMATION IN CONSTRUCTION, Volume: 94 Pages: 154-167, DOI: 10.1016/j.autcon.2018.06.012

6. Isam SHAHROUR (2018) "Use of GIS in Smart City Projects: Managing and Visualizing Geospatial Data in a User-friendly Environment, GIM International Magazine, Mapping the world, October 2018,

7. Abou Rjeily Y., O Abbas, M Sadek, I Shahrour, FH Chehade "Model Predictive Control for Optimising the Operation of Urban Drainage Systems, Journal of Hydrology, 2018, DOI: 10.1016/j.jhydrol.2018.09.044

8. Elie Nasr, Isam Shahrour, Farid Nakhle, Daniel Sakr, Liliane Karam (2018) "Smart City DDoS Attacks Maneuver Based on Identification, Heuristics and Load Balancers", International Journal of Scientific and Engineering Research (IJSER), Volume 9, Issue 3, March 2018

9. Farah E., Shahrour I, (2018) "Smart Water Technology for Leakage Detection: Feedback of large-scale experimentation", accepted Analog Integrated Circuits and Signal Processing,

10. Saab, C., Farah, E., Shahrour, I., Hage-Chehade, F., Ounaies, S. (2018) "Use of the smart technology for water quality control: feedback from large-scale experimentation" Analog Integr Circ Sig Process; https://doi.org/10.1007/s10470-018-1143-3

11. ATTOUE N., SHAHROUR I, YOUNES R. (2018) Smart Building: Use of the ANN Approach for Indoor Temperature Forecasting, Energies 2018, 11(2), 395; doi: 10.3390/en11020395

12. El Meouche R.; M. Abunemeh; I. Hijaze; A. Mebarki; and I. Shahrour (2018) "Developing Optimal Paths for Evacuating Risky Construction Sites" Journal of Construction Engineering and Management, Volume 144 Issue 2 - February 2018.

13. Shahrour I., S. Ali, Z. Maaziz, A. Soulhi (2017) Comprehensive Management Platform for Smart Cities. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125019

14. Shahrour I., O. Abbas, A. Abdallah, Y. Abou Rjeily, A. Afaneh, A. Aljer, B. Ayari, E. Farrah, D. Sakr, F. Al Masri (2017). Lessons from a Large Scale Demonstrator of the Smart and Sustainable City. In Happy City Book, A. Brdulak and H. Brdulak (eds.), Springer International Publishing AG 2017, DOI 10.1007/978-3-319-49899-7_11

15. Shahrour I., L. Alileche, A. Al furjani (2017) Smart Cities: System and Tools used for the digital Modelling of Physical Urban Systems. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125056.

16. Shahrour I., K. Jnat, Y. Abdelghani, A. Benyahya (2017). Smart Technology for a comprehensive approach of comfort in social housing. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125059.

17. Shahrour I. (2017) « La Smart City au service de l'environnement », Key note lecture, 6ème Congrès International Eau, Déchets et Environnement (EDE6), Béni Mellal, Maroc, 12-14 Décembre 2017,

18. Shahrour I.(2017). Comment la mutation technologique peut-elle répondre à l'urgence de la transformation urbaine ?., Pouvoirs Locaux N° 110 II/2017 z

19. Saab C., I. Shahrour, F. Hage-Chehade (2017) Smart Technology for Water Quality Control: Feedback about use of water quality sensors. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125060.

20. SAAB C., E. FARAH, I. SHAHROUR, F. HAGE CHEHADE (2017) FIELD STUDY OF REAL-TIME WATER QUALITY CONTROL, WIT Transactions on Ecology and The Environment, Vol 216, © 2017 WIT Press, www.witpress.com, ISSN 1746-448X (on-line)

21. Ola, A. H., A. Hassane, S. Isam & D. Didier (2017) Building energy consumption flatness-based control using algebraic on-line estimation. Energy Efficiency, 10, 657-671.

22. Nasr E.; I. Shahrour (2017) Evaluating wireless network vulnerabilities and attack paths in smart grid comprehensive analysis and implementation. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125032

23. Mezeh R., M. Sadek, F.Hage Chehade, I. Shahrour (2017) Adaptive analysis of infinite beams dynamics problems using the periodic configuration update method in the time domain, Int J Numer Anal Methods Geomech. 2017;1–18.

24. Loriot, M. A. Aljer, I. Shahrour (2017) Analysis of the use of LoRaWan technology in a large-scale smart city demonstrator Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125011.

I. SHAHROUR "What do we know about Smart Cities Concept and Implementation?", Keynote lecture, IEEE conference SENSET2017 International Conference on Sensors, Networks, Smart and Emerging Technologies, Beirut, September 12-14, 2017.

25. SHAHROUR "Smart Utility Tunnels", Keynote lecture, International Symposium for Intelligent Transportation and Smart City; ITASC 2017; Shanghai, May 19–20, 2017.

26. H. Bian, I. Shahrour, Y. Jia (2017). Influence of soil saturation on the free field response of liquefiable soils. Underground Space 2 (2017) 30–37, https://doi.org/10.1016/j.undsp.2017.04.001

27. Farah, E. & I. Shahrour (2017) Leakage Detection Using Smart Water System: Combination of Water Balance and Automated Minimum Night Flow. Water Resources Management, 31, 4821-4833.

28. Farah F., I. Shahrour (2017) Smart Water for Leakage Detection: Feedback about the Use of Automated Meter Reading Technology. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125061.

29. FARAH E., A. ABDALLAH & I. SHAHROUR (2017). SunRise: LARGE SCALE DEMONSTRATOR OF THE SMART WATER SYSTEM. Int. J. Sus. Dev. Plann. Vol. 12, No. 1 (2017) 112–121

30. ATTOUE N., I. SHAHROUR, R. ,YOUNES, A. ALJER, M. LORIOT (2017) Analysis of Buildings Energy Losses Using Smart Monitoring, Proceedings ITISE 2017. Granada, 18-20, September, 2017.ISBN: 978-84-17293-01-7

31. Alqadad A., I. Shahrour, A. Sukik (2017) Smart system for safe and optimal soil investigation in urban areas. Underground Space Journal, 2, 220–226, https://doi.org/10.1016/j.undsp.2017.10.003

32. Aljer A., M. Loriot, I. Shahrour, A. Benyahya (2017) Smart system for social housing monitoring. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, 10.1109/SENSET.2017.8125057.

33. Afaneh A., I. Shahrour (2017) Use of GIS for SunRise Smart City project, large scale demonstrator of the Smart City. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125071.

34. Abunemeh, M., R. El Meouche, I. Hijaze, A. Mebarki & I. Shahrour (2017) HAZARDS, VULNERABILITY AND INTERACTIONS AT CONSTRUCTION SITES: SPATIAL RISK MAPPING. Journal of Information Technology in Construction, 22, 63-79.

35. Abou Rjeily, Y., O. Abbas, M. Sadek, I. Shahrour & F. H. Chehade (2017) Flood forecasting within urban drainage systems using NARX neural network. Water Science and Technology, 76, 2401-2412.

36. Abou Rjeily Y., O. Abbas, I. Shahrour, M. Sadek, F. Hage-Chehade (2017) Smart system for urban sewage: Feedback on the use of smart sensors. Sensors Networks Smart and Emerging Technologies (SENSET), Beirut, Lebanon, 2017, IEEE Xplore, DOI: 10.1109/SENSET.2017.8125058.

37. Abbas, O., Y. A. Rjeily, M. Sadek & I. Shahrour (2017) A large-scale experimentation of the smart sewage system. Water and Environment Journal, 31, 515-521.

I. SHAHROUR "How the Smart Technology could help in meeting the utility tunnels challenges?" Keynote lecture, International Symposium for Intelligent Transportation and Smart City; ITASC 2017; Shanghai, May 19–20, 2017.

38. Shahrour I. (2017) Editorial "Smart Underground Space", Underground Space Journal, isuue2, 207

39. Krim, A., A. Arab, R. Bouferra, M. Sadek & I. Shahrour (2016) Characteristics of Cyclic Shear Behavior of Sandy Soils: A Laboratory Study. Arabian Journal for Science and Engineering, 41, 3995-4005.

40. Kosheleva, N., I. Shahrour, C. E. Bruzek, G. Vega & G. Kolmogorov (2016) Development of a Simplified Numerical Model for the Design of 2G High-Temperature Superconductors. Ieee Transactions on Applied Superconductivity, 26.

41. Abune'meh, M., R. El Meouche, I. Hijaze, A. Mebarki & I. Shahrour (2016) Optimal construction site layout based on risk spatial variability. Automation in Construction, 70, 167-177.

42. Abdelkader, B., A. Ahmed, B. Mostefa & S. Isam (2016) Laboratory study of geotextiles performance on reinforced sandy soil. Journal of Earth Science, 27, 1060-1070.

43. Sekkal, W., A. Zaoui & I. Shahrour (2015) Stability and adhesion of calcite/montmorillonite assembly. American Mineralogist, 100, 516-521.

44. Chen, S. H., X. Zhang & I. Shahrour (2015) Composite element model for the bonded anchorage head of stranded wire cable in tension. International Journal for Numerical and Analytical Methods in Geomechanics, 39, 1352-1368.

45. Xue, L. L., S. H. Chen & I. Shahrour (2014) Algorithm of Coupled Normal Stress and Fluid Flow in Fractured Rock Mass by the Composite Element Method. Rock Mechanics and Rock Engineering, 47, 1711-1725.

46. Mhanna, M., I. Shahrour, M. Sadek & P. Dunez (2014) Efficiency of heavy mass technology in traffic vibration reduction: Experimental and numerical investigation. Computers and Geotechnics, 55, 141-149.

47. Hasan, O. A., D. Defer & I. Shahrour (2014) A simplified building thermal model for the optimization of energy consumption: Use of a random number generator. Energy and Buildings, 82, 322-329.

48. Atik, M., M. M. Badawi, I. Shahrour & M. Sadek (2014) Optimum Level of Shear Wall Curtailment in Wall-Frame Buildings: The Continuum Model Revisited. Journal of Structural Engineering, 140.

49. Arab, A., M. Sadek, M. Belkhatir & I. Shahrour (2014) Monotonic Preloading Effect on the Liquefaction Resistance of Chlef Silty Sand: a Laboratory Study. Arabian Journal for Science and Engineering, 39, 685-694.

50. Zhao, Z. Q., I. Shahrour, Z. K. Bai, W. X. Fan, L. R. Feng & H. F. Li (2013b) Soils development in opencast coal mine spoils reclaimed for 1-13 years in the West-Northern Loess Plateau of China. European Journal of Soil Biology, 55, 40-46.

51. Tabbal, D., I. Shahrour, A. Al-Qadad, F. H. Chehade & M. Sadek. 2013. INFLUENCE OF CRACKS ON THE SOIL-ATMOSPHERE INTERACTION: NUMERICAL COUPLED MODEL OF THERMO- ATMOSPHERE-POROUS MEDIA. 5th International Conference on Computational Methods for Coupled Problems in Science and Engineering

52. Souli, M. & I. Shahrour (2013) A coupling method for soil structure interaction problems. International Journal for Numerical and Analytical Methods in Geomechanics, 37, 1140-1153.

53. He, J., S.-h. Chen & I. Shahrour ((2013a) Numerical estimation and prediction of stress-dependent permeability tensor for fractured rock masses. International Journal of Rock Mechanics and Mining Sciences, 59, 70-79.

54. Burlon, S., H. Mroueh & I. Shahrour (2013) Influence of diaphragm wall installation on the numerical analysis of deep excavation. International Journal for Numerical and Analytical Methods in Geomechanics, 37, 1670-1684.

55. Xue, L. L., S. H. Chen & I. Shahrour. 2012. Algorithm of coupled seepage and normal stress processes in fractured rock mass by composite element method. Rock Mechanics and Rock Engineering, 47, 1711-1725.

56. Souli, M. & I. Shahrour (2012) Arbitrary Lagrangian Eulerian formulation for soil structure interaction problems. Soil Dynamics and Earthquake Engineering, 35, 72-79.

57. Shahrour I., A. Hassan & S. Mhamed (2012) 3D elastoplastic analysis of the seismic performance of inclined micropiles. Computers and Geotechnics, 39, 1-7.

58. Mhanna, M., M. Sadek & I. Shahrour (2012) Numerical modeling of traffic-induced ground vibration. Computers and Geotechnics, 39, 116-123.

59. He, J., S.-h. Chen & I. Shahrour (2012a) A REVISED SOLUTION OF EQUIVALENT PERMEABILITY TENSOR FOR DISCONTINUOUS FRACTURES. Journal of Hydrodynamics, 24, 711-717.

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63. Carlier, E., L. Zouhri & I. Shahrour (2012) Development of analogue reservoir modelling for anomalous recession investigation. Hydrological Sciences Journal-Journal Des Sciences Hydrologiques, 57, 913-927.

64. Al-Mahallawi, K., J. Mania, A. Hani & I. Shahrour (2012) Using of neural networks for the prediction of nitrate groundwater contamination in rural and agricultural areas. Environmental Earth Sciences, 65, 917-928.

65. Al Qadad, A., I. Shahrour & M. Rouainia (2012) Influence of the soil-atmosphere exchange on the hydric profile induced in soil-structure system. Natural Hazards and Earth System Sciences, 12, 2039-2049.

66. Zheng, Y., A. Zaoui & I. Shahrour (2011) A theoretical study of swelling and shrinking of hydrated Wyoming montmorillonite. Applied Clay Science, 51, 177-181.

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