LIST OF PUBLICATIONS

Invited Talks

1. Farid A.K.M. Uddin and Masayasu OHTSU, "*Fracture Mechanics of Corrosion Cracking in Reinforced Concrete by AE-SiGMA and BEM*", Fraunhofer-Institute for Nondestructive Testing of Dresden, Germany, March 16-19, 2005.
2. Masayasu Ohtsu and Farid A.K.M. Uddin, "Mechanisms of Corrosion Cracking in Concrete by AE and BEM", the 46th Regular meeting of AEWG, Portland State University, USA, August 4-6, 2003.

In Journal

1. Farid A.K.M. Uddin, Shigeishi, M. and Ohtsu, M., "Fracture Mechanics of Corrosion Cracking in Concrete by Acoustic Emission", International Journal of the Italian Association of Theoretical and Applied Mechanics-AIMETA, (In Press).
2. Ohtsu, Masayasu, Farid A. K. M. Uddin, Tong, Weiguang and Murakami, Kiyoshi, "Dynamism of Spall Failure in Fiber Reinforced Concrete due to Blasting", Journal of Construction and Building Materials (In Press).
3. Farid A.K.M. Uddin and Masayasu OHTSU, "Micromechanics of Corrosion Cracking in Concrete by AE-SiGMA", Journal of Acoustic Emission, (In Press).
4. Farid A.K.M. Uddin and Masayasu Ohtsu, "*Cracking Mechanisms due to Corrosion in Concrete Identified by AE and BEM*", Journal of Materials, Concrete Structures and Pavements, JSCE, No.760/V-63, pp.261-268, May 2004.
5. Farid A.K.M. Uddin, K. Numata, J. Shimasaki, M. Shigeishi and Masayasu Ohtsu, "*Mechanisms of Crack-propagation by means of NDT method due to Corrosion of Reinforcement in Concrete*", Journal of Construction and Building Materials Vol.18, No.3, pp.181-188, April 2004.
6. Farid A.K.M. Uddin and Masayasu Ohtsu, "*Application of Acoustic Emission to Determination of Fracture Toughness of Concrete and Analysis of Crack Propagation by Boundary Element Method*", International Journal of Science and Technology, Special Issue Vol. 13, No.1 & 2, October 2002.
7. Farid A.K.M. Uddin and Masayasu Ohtsu, "*Application of AE to Fracture Toughness and Crack Analysis by BEM in Concrete*", the e-Journal of Nondestructive Testing, http://www.ndt.net/vo7n09.htm; ISSN: 1435-4934, Issue Vol.7 No.9, September 2002.
8. Farid A.K.M. Uddin and Masayasu Ohtsu, "*BEM Analysis of Mixed-Mode Crack Propagation due to Corrosion of Reinforcement in Concrete*", Journal of Materials, Concrete Structures and Pavements, JSCE, No.704/V-55, pp.271-280, May 2002.

- **In Conference Proceedings**

1. Ohtsu, M. and Farid A.K.M. Uddin, "Crack Extension due to Corrosion by Sigma-AE and BEM", the 16th European Conference of Fracture on Failure Analysis of Nano and Engineering Materials and Structrures, Alexandroupolis, Greece, July 3-7, 2006 (accepted for presentation and publication into proceedings).
2. Farid A.K.M. Uddin and Masayasu Ohtsu, "Process of Corrosion Cracking in Concrete Identified by Two-Domain Boundary Element Method and Acoustic Emission Technique", The proceedings of the International Conference on Modeling and Simulation, Kuala Lumpur, Malaysia, 3–5 April 2006.
3. Farid A.K.M. Uddin and Ohtsu, M., "Blasting Failure of Fiber Reinforced Concrete Slabs based on Elastodynamics", the 2nd Internation COE (Center of Excellency) Forum on Pulsed Power Science, Kumamoto University, Japan, Noverber 15, 2005.
4. Farid A.K.M. Uddin, Shigeishi, M. and Ohtsu, M., "Process of corrosion cracking in concrete identified by AE-SiGMA and two-domain BEM", The 3rd International Conference on

Construction Materials, Performance, Innovations & Structural Implications, Vancouver, Canada, August 22-24, 2005.

5. Farid A.K.M. Uddin and Ohtsu, M., "Moment Tensor Identification of Corrosion Cracking in Concrete by AE-SiGMA and Two-domain BEM", the 3rd US-Japan Symposium on Advancing Applications and Capabilities in NDE, Hawaii, USA, June 19-24, 2005.
6. Schubert, F., Grosse, C., Frankenstein, B., Hentschel, D., Koehler, B., and Farid A.K.M. Uddin, "Von MEMS und Motes * Ein lick in die (mögliche) Zukunft des Bauwerk-Monitorings mit Hilfe intelligenter Sensornetzwerke", Symposiums. Experimentelle Untersuchungen von Baukonstruktionen, Institut fuer Massivbau, Technische Universitaet Dresden, June 23, 2005 (in German).
7. Farid A.K.M. Uddin and Masayasu OHTSU, "*Micromechanics of Corrosion Cracking in Reinforced Concrete by AE*", the proceedings of the 11th International Conference on Fracture, Turin, Italy, March 20-25, 2005.
8. Farid A.K.M. Uddin and Masayasu OHTSU, "*Fracture Mechanics of Corrosion Cracking in Reinforced Concrete by AE-SiGMA Analysis*", the proceedings of the 2nd KITECH-KU Symposium, Kumamoto, Japan, January 20-21, 2005.
9. Farid A.K.M. Uddin and Masayasu OHTSU, "*Virtual Reality Modeling for AE-SiGMA Results of Corrosion Cracking in Concrete*", the proceedings of the 2nd KITECH-KU Symposium, Kumamoto, Japan, January 20-21, 2005.
10. Farid A.K.M. Uddin and Masayasu OHTSU, "*Micromechanics of Corrosion Cracking in Concrete by AE-SiGMA*", the progress in acoustics emission, 17th international acoustics symposium, Tokyo, pp.127-133, November 9-12, 2004.
11. Farid A.K.M. Uddin and Masayasu OHTSU, "*Three-Dimensional Visualization of AE-SiGMA by VRML for Micro-Cracking in Concrete*", the proceedings of the annual meeting of Japan Society of Civil Engineers, September 8-10, 2004.
12. Farid A.K.M. Uddin and Masayasu Ohtsu, "Crack propagation due to corrosion of reinforcement in concrete by two-domain BEM", the proceedings of the 2nd International Conference on Construction Technology, University Malaysia Sabah, Malaysia, October 13-15, 2003.
13. Farid A.K.M. Uddin, K. Numata, and Masayasu Ohtsu, "Initiation and propagation of cracks due to simulated corrosion of reinforcement in concrete", the proceedings of the 25th annual convention of Japan Concrete Institute, July 16-18, 2003.
14. Farid A.K.M. Uddin, K. Ishiharaguchi and Masayasu OHTSU, "*Mechanisms of Crack Propagation due to Corrosion in Concrete*", the proceedings of the annual convention of Japan Concrete Institute, June 19-21, 2002.
15. Farid A.K.M. Uddin and Masayasu Ohtsu, "*Cracking Mechanisms due to Corrosion of Reinforcement in Concrete*", the 30th annual conference of Canadian Society for Civil Engineering, Canada, June 5-8, 2002.
16. Farid Uddin A.K.M. and Masayasu Ohtsu. (2002). "Crack Propagation due to Corrosion of Reinforcement in Concrete by Boundary Element Method and Acoustics Emission", the proceedings of the International Association for Boundary Element Methods, UT Austin, USA, May 28-30, 2002.
17. K. Ishiharaguchi, M. OHTSU, Farid A.K.M. Uddin, and K. NUMATA (2002). "Analysis of Crack Propagation due to Corrosion of Reinforcement", The Proceeding of the 51st National Congress of Theoretical and Applied Mechanics 2002, Tokyo, January 22, 2002.
18. Masayasu OHTSU and Farid A.K.M. Uddin, "Crack Propagation in Cementitious Materials by Acoustic Emission based on Fracture Mechanics", The Conference Proceeding of the 10th International Conference on Fracture, Advances in Fracture Research, Honolulu 2001, Hawaii, USA, December 2-6, 2001.

19. Farid A.K.M. Uddin, K. Ishiharaguchi, and Masayasu OHTSU, "*Mix-Mode Crack Propagation in Concrete Analyzed by Boundary Element Method*", the proceedings of the Annual Conference of Japan Society of Civil Engineers, October 2-4, 2001.
20. Farid A.K.M. Uddin and Masayasu Ohtsu, "*Mix-mode Crack Propagation in Concrete by Boundary Element Method and Acoustic Emission*" the 29th annual conference of Canadian Society of Civil Engineers, May 30th - June 2nd , 2001.
21. Noudomi Yasuyuki, Farid A.K.M. Uddin, K. Ishiharaguchi, M. OHTSU (2001). "Analysis of Crack Propagation in Concrete", The Conference Proceeding of the Annual Conference of Japan Society of Civil Engineers, (JSCE-Kyushu) Kyushu Sangyo University, Japan, March 10th 2001.
22. Farid A.K.M. Uddin and Masayasu Ohtsu, "*Application of Acoustic Emission to Determination of Fracture Toughness of Concrete and Analysis of Crack Propagation by Boundary Element Method*", the proceeding of the 25th Annual AMSE Conference, Engineering, Science and Technology for the New Millennium, Georgetown University, Washington D.C., USA, October 13-16, 2000.
23. Farid A.K.M. Uddin, K. Ishiharaguchi, and Masayasu OHTSU, "*Stress Intensity Factors by Acoustic Emission and Analysis of Crack Propagation by Boundary Element Method*", progress in acoustics emission, 15th international acoustics symposium, Tokyo, pp.11-16, September 11-14, 2000.
24. Farid A.K.M. Uddin, *"Risk and Reliability Based Structural and Foundation Design of a Water Reservoir (Capacity: 10 Million Gallons) on the top of Bukit Permatha Hill in Malaysia*", the proceeding of the 8th Probabilistic Mechanics and Structural Reliability Conference (ASCE), South Bend, IN, USA, July 24-26, 2000.