|  |
| --- |
| **SUVASH CHANDRA PAUL**  Nationality: Bangladeshi  Date of birth: 31 December 1982  Languages: Bengali (home), English  Email: suvashpl[@sun.ac.za](mailto:suvashpl@yahoo.com)  suvashpl[@yahoo.com](mailto:suvashpl@yahoo.com)  **EDUCATIONAL ATTAINMENTS**  **Pursuing Doctor of Philosophy in Civil Engineering (Structure)**  University of Stellenbosch, South Africa **January 2012 - Present**  **Masters of Science in Civil Engineering (Structure)**  University of Stellenbosch, South Africa **December 2011**  **Courses studied:**Finate Element Analysis, Dynamics of Structures, Advanced Steel Structures Design, Seismic Design of Building Structures,Advanced Design of Concrete Structures, Advanced Concrete Technology, Soil Mechanics, Soil Dynamics, Constitutive Modelling in Soil Mechanics, Earthquake Engineering, Earth Dams and Stability of Slopes, Advanced Foundation Design, Geometric Design of Highwaysand Transportation Safety.  **Bachelors of Science in Civil Engineering**  The University of Asia Pacific, Dhaka, Bangladesh **September 2007**  **Courses studied:**Basic courses related to the Civil Engineering, Mathematics, Strength of Materials, Design of Concrete Structures, Dynamics of Structures, Design of Steel Structures, Geotechnical Engineering, Transportation Engineering etc.  **TEACHING SKILLS**  Mentoring undergraduate students in the following courses: Applied Mathematics, Strength of Materials, Therory of Structures, Structures Design at the Department of Civil Engineering, Stellenbosch University, South Africa. **February 2010 - Present**  **RESEARCH SKILLS**   * **Ongoing PhD thesis under supervision of Professor Gideon .P.A.G van Zijl**   **Research topic:** Role of chloride and cracks in corrosion of reinforced in strain hardening cement based composites (R/SHCC). **January 2012 - Present**   * **Completed MSc thesis under supervision of Professor Gideon .P.A.G van Zijl**   **Research topic:** Mechanical Behavior and Durability Performance of Concrete Containing Recycled Concrete Aggregate.  **December 2011**   * **Completed BSc thesis under supervision of Professor Md. Tarek Uddin**   **Research topic:** Recycling of Demolished Concrete for Concrete Works. **September 2007**   * **Co-supervision of Final year BSc Projects July 2012 - Present**   While pursuing my PhD at the Stellenbosch University, I have also served as a co-supervisor of final year undergraduate thesis projects listed below:   * Malan, C.T. (2014). The role of chloride in corrosion of steel in cracked and un-cracked reinforced concrete, *Final year BEng (Civil) project, Stellenbosch University*. * Lehman, J. (2014). Chloride induced corrosion of steel reinforcement in pre-cracked strain hardening fibre-reinforced cement-based composites based on crack spacing’s, *Final year BEng (Civil) project, Stellenbosch University*. * Rens, J.P. (2013). Corrosion of steel in advanced fibre concrete under load, *Final year BEng (Civil) project, Stellenbosch University*. * Theunissen, A.I. (2012).Corrosion of steel bar and synthetic fibre reinforced concrete in coastal environments, *Final year BEng (Civil) project, Stellenbosch University*. * **Visiting Researcher at BAM in Germany**  **May 2013 – November 2013**   In January 2013 there was a International Conference on Advances in Cement and Concrete Technology in Africa (ACCTA), Johannesburg, South Africa where I did present one of my research paper and won an award for the best paper from the African affiliation. That award was decorated with a six months research visit to BAM Federal Institute for Materials Research and Testing, in Berlin, Germany. I was a guest researcher in the Department 7.0 – Safety of Structures, Division 7.4 at BAM for a period of six months. In BAM, I conducted experimental research work linked to my PhD topic on durabiliy of strain hardening cement-based composites (SHCC) such as freeze-thaw resistance, corrosion and chloride ion penetration materials under supervision of **Dr. Wolfram Schmidt**.  **RESEARCH PUBLICATIONS**  All my research papers are available at Google scholar indexed articles: goo.gl/ntZCsQ     * **International Journal papers**  1. **Paul, S.C**., Pirskawetz, S., van Zijl, G. P.A.G., and Schmidt, W. Acoustic Emission for Characterizing the Crack Propagation in Strain Hardening Cement-Based Composites (SHCC), *submitted to Cement and Concrete Research.* 2. **Paul, S.C.,** and van Zijl, G.P.A.G. (2014). Crack Formation and Chloride Induced Corrosion in Reinforced Strain Hardening Cement-Based Composite (R/SHCC), *Journal of Advanced Concrete Technology,Vol. 12, p: 340-351.* 3. **Paul, S.C.,** and van Zijl, G.P.A.G. (2013). Mechanically Induced Cracking Behaviour in Fine and Coarse Sand Strain Hardening Cement Based Composites (SHCC) at Different Load Levels, *Journal of Advanced Concrete Technology, Vol. 11, p: 301-311.* 4. **Paul, S.C.,** and van Zijl, G.P.A.G. (2013). Durability Index Test Performance of Recycled Concrete Aggregate Mixed with Natural Aggregate, *International Journal of Advanced Civil Engineering and Architecture Research, Vol. 2, Issue.1, p:53-64.* 5. **Paul, S.C.,** and van Zijl, G.P.A.G. (2013). Mechanical and durability properties of recycled concrete aggregate for normal strength structural concrete, *International Journal of Sustainable Construction Engineering and Technology, Vol. 4, No.1, p: 89-103.* 6. Dinar, Y., M.N. Alam, M.N., and **Paul, S.C.** (2013). Performance Based Analysis of RC Building Consisting Shear Wall and Varying Infill Percentage, *European Academic Research, Vol.1, Issue 9, p: 2927-2947.*  * **Local and International conference papers**  1. **Paul, S.C.,** van Zijl, G.P.A.G., and James, L. (2015). Influence of cracks in chloride penetration and corrosion of fibre reinforced strain hardening materials under sustained loading condition**,** *In preparation for the ConMat’15 conference, Whistler, Canada.* 2. van Zijl, G.P.A.G., **Paul, S.C.,** and Malan, C.T. (2015). Rebar corrosion linked to free and total chloride presence in cracked cement-based construction material,*In preparation for the ConMat’15 conference, Whistler, Canada.* 3. **Paul, S.C.,** Ebell, G., van Zijl, G.P.A.G., and Schmidt, W. (2014). Cracked and uncracked SHCC specimens under different exposure conditions, *In proceeding of the SHCC3 3rd RILEM conference on Strain Hardening Cementitious Composite, Dordrecth, Netherland, Schlangen et al. (eds), © 2014 RILEM – Tous droits reserves, ISBN:978-2-35158-150-6, p:25-32.* 4. van Zijl, G.P.A.G., **Paul, S.C.,** and Rens, J.P. (2014). Corrosion of steel reinforcing bars in strain hardening cement-based composite under sustained loads, *In proceeding of the SHCC3 3rd RILEM conference on Strain Hardening Cementitious Composite, Dordrecth, Netherland, Schlangen et al. (eds), © 2014 RILEM – Tous droits reserves, ISBN:978-2-35158-150-6, p:69-76.* 5. **Paul, S.C.,** and van Zijl, G.P.A.G. (2013). Assessment of fracture toughness in strain hardening cement-based composite (SHCC) made from fine and coarse sand, *In proceeding of the fifth SEMC conference, Cape Town, South Africa, Research and Applications in Structural Engineering, Mechanics and Computation, Cape Town, South Africa, Zingoni (eds) © 2013 Taylor & Francis Group, London, ISBN:978-1-138-00061-2, p:619-624.* 6. Paul, S.C., Theunissen, A.I., and van Zijl, G.P.A.G. (2013). Chloride Induced Corrosion in Cracked Reinforced Strain Hardening Cement-Based Composite (R/SHCC), *In proceeding of International Conferenceon Sustainable Construction Materials & Technologies (SCMT3), Kyoto, Japan (received best paper award).* 7. van Zijl, G.P.A.G. and Paul, S.C. (2013). Crack spacing in steel bar reinforced strain hardening cement-based composites (R/SHCC), towards corrosión modelling”, *In proceeding of International Conference on Sustainable Construction Materials & Technologies (SCMT3), Kyoto, Japan.* 8. Paul, S.C., and van Zijl, G.P.A.G. (2013). Strain Hardening Cement Based Composite (SHCC) with fine and coarse sand under tensile load and chloride attack, *In proceeding of 8th International Conference on Fracture Mechanics of Concrete and Concrete Structures (Framcos), Toledo, Spain, J.G.M. Van Mier, G. Ruiz, C. Andrade, R.C. Yu and X.X. Zhang (eds).* 9. **Paul, S.C.,** and van Zijl, G.P.A.G. (2013). Mechanical behaviour of strain hardening cement-based composites (SHCC) based on micromechanical design, *In proceeding of International Conference on Advances in Cement and Concrete Technology in Africa (ACCTA), Johannesburg, South Africa* ***(received best paper award).*** 10. **Paul, S.C.,** and van Zijl, G.P.A.G. (2012). Strength of recycled concrete aggregate for structural uses, *In proceeding of ICCRRR conference, Cape Town, South Africa, Concrete Repair, Rehabilitation and Retrofitting III – Alexander et al. (eds) © 2012 Taylor & Francis Group, London, ISBN 978-0-415-89952-9, p:1340-1346.* 11. **Paul, S.C.,** and van Zijl, G.P.A.G. (2010). Mechanical properties of concrete containing recycled concrete aggregate, *In proceeding of Concrete for a Sustained Environment Conference, Johannesburg, South Africa.*     **ATTENDANCE IN LOCAL AND INTERNATIONAL CONFERENCES**   * **2013:** 3rd International Conference on Sustainable Construction Materials & Technologies (SCMT3), August 2013, Kyoto, Japan. * **2013:** 8th International Conference on Fracture Mechanics of Concrete and Concrete Structures (FraMCos8), March 2013, Toledo, Spain. * **2013:**International Conference on Advances in Cement and Concrete Technology in Africa (ACCTA), January 2013, Johannesburg, South Africa. * **2012:**8th RILEM International Symposium on Fibre Reinforced Concrete: challenges and opportunities (BEFIB), September 2012, Guimares, Portugal. * **2012:**3rd International Conference on Concrete Repair, Rehabilitation and Retrofitting (ICCRR), September 2012, Cape Town, South Africa. * **2010:** Conference on Concrete for a Sustained Environment, August 2010, Johannesburg, South Africa.   **BURSARIES, AWARDS AND ACADEMIC EXCELLENCES**   * Full bursaries in the MSc and PhD studies at Stellenbosch University from the South African Industry and the Technology and Human Resources for Industry Programme (THRIP) of the South African Ministry of Trade and Industry. * The young researchers prize of the German South African year of science for the best junior scientist’s paper from South African affiliation at the ACCTA conference, Johannesburg, South Africa, January 2013 (with GPAG van Zijl). * Best paper award at the International Conference on Sustainable Construction Materials & Technologies (SCMT3), Kyoto, Japan, August 2013 (with GPAG van Zijl & Andrew Theunissen). * Vice Chancellor Gold Medal Award of Spring 2007 at The University of Asia Pacific (UAP), Department of Civil Engineering, Bangladesh. * 3rd Position in the 1st CE Department Math Competition, Spring 2006 session at The University of Asia Pacific (UAP), Department of Civil Engineering, Bangladesh. * The outstanding student of Fall 2005 and Spring 2006 sessions 2007 at The University of Asia Pacific (UAP), Department of Civil Engineering, Bangladesh.   **PROFESSIONAL EXPERIENCE**  Worked as a Junior Structural Design Engineer of Consultancy Group of Saudi Arabia at their New Saudi Embassy Project, Baridhara, Dhaka, Bangladesh. **May 2008- April 2009**  The major responsibility performed are as follows:   * Design of Concrete Structure * Supervision of all types of construction and civil related works * Quality control and cheek mixed used of materials * Preparation of estimate of selected of building plan   **COMPUTER SKILLS**   * AutoCAD * Etabs * Abaqus   **MEMBERSHIPS**   * RILEM Member # 27853 * Student Member of ACI * Student Member of ASTM * Student Member of Concrete Society of Southern Africa |
| **REFERENCES:**  **Md.Tarek Uddin, Ph.D**  Professor  Dept. of Civil and Environmental Engineering, Islamic University of Technology (IUT), Bangladesh  Email: [tarek@iut-dhaka.edu](mailto:tarek@iut-dhaka.edu)  **Gideon.P.A.G van Zijl, Ph.D**  Professor and Chairman  Dept. of Civil Engineering  University of Stellenbosch, South Africa.  Email: [gvanzijl@sun.ac.za](mailto:gvanzijl@sun.ac.za)  **Wolfram Schmidt, Ph.D**  Division 7.4 Technology of Construction Materials  BAM Federal Institute for Materials Research and Testing, Berlin, Germany  Email: [wolfram.schmidt@bam.de](mailto:wolfram.schmidt@bam.de)  **Hossain M Azam, Ph.D**  Assistant Professor  Dept. of Civil and Environmental Engineering, Manhattan College, Riverdale, Bronx, NYC, New York  E-mail: [hossain.azam@manhattan.edu](mailto:hossain.azam@manhattan.edu) |