

|                             |  |
|-----------------------------|--|
| Name                        | Prof. Ruwan Weerasekara  |
| Photo (Will be taken later) |   |
| Position                    | Consultant Senior Professor  |
| Qualifications              | PhD, (The University of Calgary), B.Sc Eng (Hons) (UoM), M(IESL), SLAAS, SSE-SL  |
| Teaching Modules            | CE3313 Structural Analysis II  |
| Research Interests          | <p>Prestressed concrete (Transfer and flexural bond in pretensioned prestressed concrete, Controlled detensioning)</p> <p>Structural Concrete (Reactive powder concrete)</p> <p>Computer aided Analysis (Computational Mechanics, Finite element method, Finite difference method, Boundary element method)</p> <p>Bridge Engineering (Thermal analysis)</p> <p>New Materials (Nano technology)</p> <p>Structural Mechanics (Cohesive cracking, Anisotropic analysis)</p> <p>Structural Analysis (Unified Matrix &amp; Classical approach)</p> |
| Specialization              | Education Technology   |

|              |  |
|--------------|--|
|              | Structures<br>Civil Engineering  |
| Publications | <ol style="list-style-type: none"> <li>1. Herath, H.M.M.V and Weerasekera, I.R.A. (2020), "Feasibility of Applying Nano Technology in steel as a structural material", Modulus, Society of Structural Engineers, Sri Lanka, Vol 30, No. 04, December 2020, pp 09-16</li> <li>2. Apsara, D.D.D. and Weerasekera, I.R.A., (2019), "Formulation of a new approach for corbel design in reinforced concrete", Modulus, Society of Structural Engineers, Sri Lanka, Vol 29, No. 02, December 2019, pp 15-20</li> <li>3. Imega, H.G.U. and Weerasekera, I.R.A., (2018), "New insights on reactive powder concrete for application in bridges", Modulus, Society of Structural Engineers, Sri Lanka, Vol 28, No. 04, December 2018, pp 25-33</li> <li>4. Arunan A., and Weerasekera, I.R.A., (2017), "Potential of reactive powder concrete (RPC) for precast construction in Sri Lanka", Modulus, Society of Structural Engineers, Sri Lanka, Vol 27, No. 02, June 2017, pp 06-11</li> <li>5. Jasotharan S and Weerasekera, I.R.A., (2017) "An exact finite element using hyperbolic shear deformation beam theory", Proceeding of 3rd International Multidisciplinary Engineering Research Conference (MERCon 2017), on 31st May 2017, Moratuwa, Sri Lanka.</li> <li>6. Jasotharan S and Weerasekera, I.R.A., (2016) "Modified hyperbolic shear deformation theory for Static flexure analysis of thick isotropic beam", Proceeding of the 7th International Conference on Sustainable Built Environment (ICSBE 2016), on 17th December 2016, Kandy, Sri Lanka.</li> <li>7. Thiruvassagar K. and Weerasekera, I.R.A., (2016) "Prestress transfer length prediction for multiple strands and varying covers", Modulus, Society of Structural Engineers, Sri Lanka, Vol 26, No. 03, September 2016, pp 07-10</li> <li>8. Wickramage, W.K.H.R.E. and Weerasekera, I.R.A., (2011), "Evaluation of Shear Design Procedures for Reinforced Concrete Beams without Stirrups", Proceedings of the Inaugural Annual Sessions, Society of Structural Engineers – Sri Lanka, Colombo, November 2011.</li> <li>9. Weerasekera, I.R.A., (2009), "Analysis of the Prestress Transfer Bond Problem Incorporating Cohesive Cracking of Concrete", Annual Sessions – Transactions, The Institution of Engineers, Sri Lanka, Colombo, October 2009.</li> <li>10. Sureshkumar, V., and Weerasekera, I.R.A., (2009), "Development of a Rational Procedure for Shear Design in Structural Concrete", Proceedings of</li> </ol> |

|  |  |
|--|--|
|  | <p>the 15th Annual Symposium, Engineering Research Unit, Faculty of Engineering University of Moratuwa, Sri Lanka, November 2009.</p> <p>Recent publications</p> |
|--|--|