



STEEL TECHNOLOGY CENTRE (STC)

The Steel Technology Centre (STC) was established to promote the effective use of steel in construction and manufacturing industries in Malaysia. The centre is based at level 1, Block C09, Faculty of Civil Engineering, Universiti Teknologi Malaysia, Johor Bahru, Johor. The location is very strategic due to the easy access to a large pool of experts, related sources and also its close proximity to Singapore. There are a number of qualified academic staff or fellows in multi-disciplinary fields such as science, mechanical and civil engineering who teach and conduct research and consultancy on subjects related to steel including metallurgy, production and building structural analysis and design.

The current research area at STC includes structural engineering and computational mechanics. Structural engineering can be divided into semi-rigid construction, cold-formed steel construction, industrialized building system (IBS) and composite construction. In computational mechanics, the research involved solid mechanics, fluid mechanics, bio-mechanics and vibration design. Complete back-up facilities for all kinds of steel research and consultancy activities have been made available to STC. Several laboratories for steel testing, production and metallurgy are also equipped with high tech and up-to-date equipments such as heavy structures laboratory, instrumentation laboratory, tower and multi-frame testing station and also steel/concrete structures fire testing laboratory.



In 2010, the Steel Technology Centre has conducted/jointly organized 1 seminar and 5 short courses, 1 colloquium, 2 workshops and 2 technical visits to Nanyang Technical University (NTU), Singapore and Srivijaya University, Indonesia to promote the latest technology and development in steel construction. All these activities receive much attention and appreciation from the industries and universities which is the aim of the centre. There is also 1 visiting professor, Professor Roger Plank from The University of Sheffield, UK on 28 November 2010 to 3 December 2010. The presence of visiting professor was meaningful to exchange experience and knowledge. Meanwhile, STC also managed to generate of RM27, 000.00 from the short courses conducted.





papers. Meanwhile, STC is actively involved in research publication, where 19 international journal papers, 2 national journal papers and 11 international conference papers have been submitted and under-review.

In terms of the relationship with industries and other related bodies, STC has been supported by a number of organizations and firms. Among them is the Steel Construction Institute (SCI) (UK) which is one of the world's leading organizations in steel construction. International linkages with Imperial College (UK), University Illinois (USA), Queensland University of Technology (QUT) (Australia), Srivijaya University (Indonesia), Nanyang Technological University (NTU) (Singapore) and The University of Sheffield (UK) provide assistantship to STC in any matter related to steel. This may include the technical expertise and vast information pertaining to steel. Along with that STC is also enjoying the support of the local industries especially Kiswire Sdn Bhd, Kemuning Structures Sdn Bhd, Pryda (M) Sdn Bhd, Schaefer System Sdn Bhd, T & E Project Consultancy Sdn Bhd, CIDB, KPerak Inc. and Mohd Asbie and Associates to ensure its success.

Throughout 2010, STC has conducted consultation works and structural testing with local industries, which generate of total income of RM51,100.00. The local industries consist of steel manufacturers, contractors and consultant firms that seek professional advisory and consultancy on subjects related to steel including metallurgy, production and building structural analysis and design.

In 2010, STC has published 1 book, 6 international journal papers, 5 national journal papers and 4 national conference

